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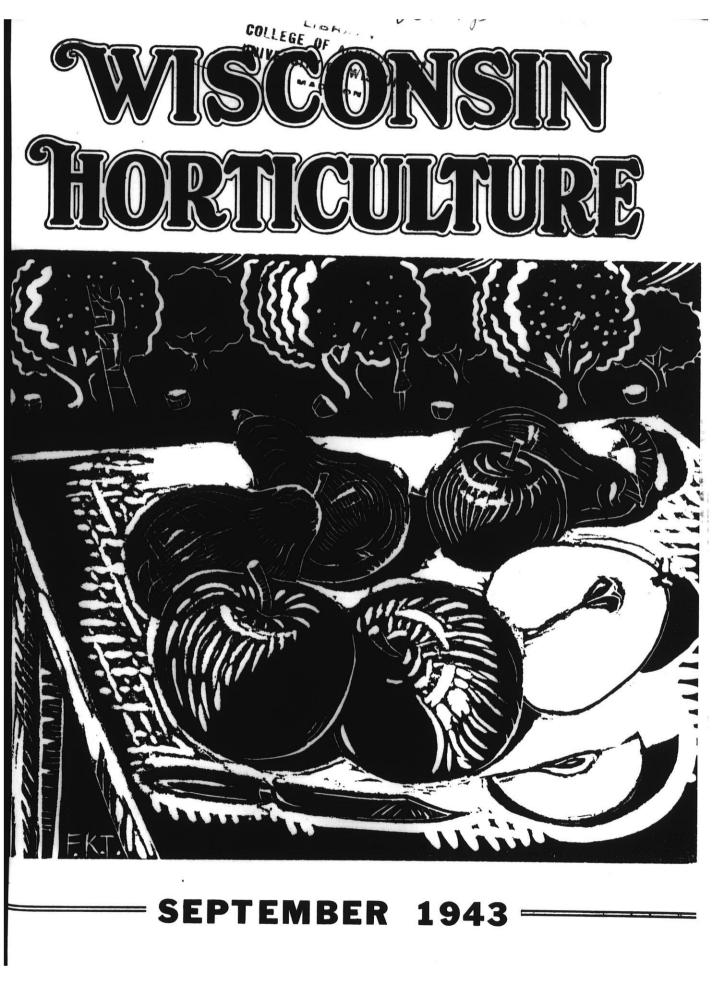
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POISON IVY SPRAY SUCCESSFUL

EXPERIMENTS in New Hampshire during the past three years indicated that spraying with ammonium sulfamate affords an easy and practical method of controlling poison ivy. One application at the right time and concentration accomplishes almost entire eradication.

In making the tests, Profs. Yeager and Callahan used ammonium sulfamate at a concentration of three-fourths pound to one gallon of water. This material is being sold under the name of DuPont Weed Killer.

Man has built many and marvelous machines. And he is proud of them, for he knows that they hold the promise of a better life. But he has not had the courage to make them fulfill that promise.—R. M. Evans, U. S. Department of Agriculture.



Wisconsin Horticulture

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PLEASE DO NOT SEND STAMPS

Get Your Mouse Bait Now

PLAN to put out poisoned baits for mice before winter snow blankets the orchard this fall and to be sure that your poison preparations will be on hand when you need them, order them now. Every year a certain number of growers put off the job of baiting until late and as a result mice manage to nip some of the orchard trees. Last year early snowfall caught a good many orchards unbaited and it was iortunate that only slight damage resulted. An ordinary snowfall in late fall or early winter does not prevent mice from finding their requirements of food but if rain turns to ice and snow covers it. mice turn to fruit tree bark as a source of their food. Thus, a person is taking considerable risk of severe damage in letting the mouse control job go until late November or December. It may be difficult to find the time, but try to get over the orchard before the end of October, in fact it would be a good idea to mark on your calendar the last week in October as the time to treat the orchard. If this is done, after the first of November any kind of bad weather can be expected and there will be a lot of satisfaction in knowing that the orchard will be safe from mice for the winter.

If you want to use only a grain hait you can prepare wheat with a strychnine-starch paste, or you can get the ready-prepared oats bait. There is not much money saved in mixing your own grain baits and it takes considerable time and trouble. Many middle west growers last year exposed, at the same time, both the ready-mixed oats bait and an apple bait prepared with the new zinc phosphide mixture. The placement of two different kinds of bait in the mouse runways to give mice a choice, is a good idea. It makes the cost of G. C. Oderkirk



mouse control somewhat higher but it takes care of situations where mice might reject one kind of bait if it were used singly.

How to Place Bait

To obtain thorough coverage of the orchard, it is best to walk down the tree row, placing bait at perhaps one or two points in runways between each tree and at two to four well-spaced points around each tree. Mice will find the bait easily and one can judge by the number of runways and the amount of travel whether two, three, or four bait placements are needed near the tree. A heaping teaspoonful of oats, or if zinc phosphide coated apple is used, a few small pieces of apple bait should be placed in the runway at each bait spot. Don't waste time and effort in placing bait in tin cans or other containers previously recommended as bait stations. Confine your efforts to the placement of bait in active runways.

It should not be necessary to rebait if plenty of bait is used and otherwise a thorough job has been done in treating the orchard. One can tell usually in a week or ten days whether mice are present by the appearance of runways and the presence of fresh droppings.

Zinc Phosphide

Growers have asked about the use of the zinc phosphide mixture to destroy rats and mice around packing sheds and other buildings. This poison has given good results in many cases when prepared with foods desired by rats and mice. You can try it if you wish, preferably mixing the poison with butter or lard and spreading it on slices of bread or other food. The slices can be quartered and then placed along walls where rats and mice will find it. Be extremely careful in exposing this poison in and around buildings as it is deadly to all animals. Pick up and dispose of uneaten baits the day after their exposure.

MOUSE BAIT PRICES

The Wisconsin State Horticultural Society, 424 University Farm Place, will handle at cost for the benefit of members, two types of mouse bait this fall.

Zinc Phosphide Bait

A small can of zinc phosphide, enough to prepare bait for ten acres of orchard, will be sold at the following prices:

1 can _____ 20c

More than 1 can, 15c each plus 10c handling charge. All poison bait must be sent express collect because it cannot be sent by U. S. mail. Minimum charge on 1 package by express is 35c.

Strychnine Rolled Oats Bait

We are stocking a small supply of rolled oats bait. There will probably not be any strychnine available after this year, so we recommend all growers test the zinc phosphide bait. Our prices on the rolled oats bait, while it lasts, are as follows:

25 lb. bag _____\$3.00

10 lb. bag _____ 1.30

This bait must also be sent express collect as it cannot be sent by mail.

Handling The 1943 Fruit Crop

THERE is a story of little Johnnie, who was excitedly telling his teacher about a fox that chased a rabbit so relentlessly that the tired rabbit finally climbed a tree. "Now, Johnnie," said the teacher, "you know that rabbits don't climb trees." "I know they don't," replied Johnnie, but this rabbit just had to." In this time of labor shortage and many unusual conditions, maybe the fruit grower will have to learn some new "tree climbing" ideas in handling his orchard operations.

One Maryland grower advertised for women to pick apples, stating that no ladders would have to be handled. He put an experienced picker in charge of several women, this man supervising picking, also moving and placing ladders in safe positions. The women picked fruit from the entire tree, instead of from the lower part of the tree, as was done in some orchards. Peculiarly, this grower found women much rougher in handling apples than the regular pickers, and there was much bruised fruit. All picking was done on a piece-work basis. Some growers offered a bonus at the end of the season for pickers who stayed on the job. Probably there were many more schemes followed, that brought results, but space will not allow discussion. Growers reported that women were dependable, and would work even in the rain, if necessary. Close supervision must be maintained to keep workers busy, to avoid fruit-throwing, or even prevent the gentle art of picking up dropped fruit from the ground to help swell the total.

Spot-picking of apples may have to be abandoned if labor is scarce. Harvest sprays to prevent apple dropping will probably be advisable, since they showed some excellent

By A. F. Vierheller, Maryland

results last year. Then too, there were some poor results with this spray but these were due to weather conditions, poor spray coverage, untimely application, and other causes beyond human control. Nevertheless, the harvest sprays are here to stay, but their use will always call for judgment and good, common sense.

Maybe we will have to crowd the grader, and this will cause bruising. Possibly some relief may come if all work is on a piece-work basis, so that the packers will speed up their operations and keep the apples moving into packages. In fact, it might be well to place all work such as pruning, thinning, etc., on a piece-work basis, with the possible exception of spraying where good coverage rather than speed is essential.

Growers must also consider the importance of keeping the employees contented. Clean toilets, good drinking water, or an occasional few minutes' rest. might be considered. One grower served a picnic supper free, and held the packing crew on the job for a few more hours in the evening. Another grower built good houses for his year-round help, and they stayed on the job. Possibly a good house or camp, kept clean and comfortable, would attract a high-grade type of labor. War industry is serving tea, milk, light sandwiches, or candy bars at intervals during working hours. Some are even using good radio music at times, to pep up the employees.

All of this may sound funny, but it has brought increased efficiency and output. We are in a war and competition for labor is keen. We must not lose a trick to keep our laboring force intact. There is an old political saying, "If you can't lick 'em, then join 'em." Our orchard product is full of vitamin M—that means Morale. Give our troops good apple pie, and they can lick anybody. Devise, improvise, or do anything to get and hold sufficient labor to produce that fruit crop. We can't say, "It can't be done," for we will probably be pushed roughly aside by the fellow who is doing it.

Condensed from August 7, Rural New-Yorker.

WHAT TO DO ABOUT FIREBLIGHT

IREBLIGHT has been rather serious in many orchards this year. Since it is bacterial and resides in the cambium area of the bark, the only thing that can be advised is to cut away the blighted portion of branches, limbs, and twigs and to remove the cankers elsewhere in the tree. Preferably, this should be done in the dormant season any time after the leaves have dropped. It will be relatively easy to find the affected portions even though there are no leaves remaining on the trees, as the sunken dead bark of the cankers is darker than the surrounding live bark. As you know, the cuts should be made so that the wound will be in nonaffected wood. A cut six to eight inches below the canker is satisfactory in most cases. The trees usually recover quite rapidly through new sprout growth below the affected portions. This new growth may escape reinfection if the blight cankers were removed from the tree during the dormant season. Remove entirely the trees which blight badly from year to year, particularly if the variety is not desirable anyway.

Condensed from Wisconsin Orchard Letter No. 6, July 19, 1943, by Conrad L. Kuehner.

National Apple Institute Holds Annual Meeting

THE National Apple Institute, composed of apple growers all over the United States and to which the Wisconsin Horticultural Society contributes, held its annual meeting in Washington in June. Much important business was transacted.

Mr. Reuben Benz of Yakima, Washington, was elected president. He is an outstanding leader in the apple industry in the Northwest, being general manager of Cowiche Growers, Inc., a large apple growers' cooperative in Yakima, a member of the Washington State Apple Commission.

Some of the statements made by members at the meeting pertaining to the apple industry were as follows:

It was said there were 36 million orange crates floating around the country. These could be converted to apple crates quickly and cheaply by cutting down the length.

Machinery

Government spokesmen said that a new order allows an increase in production of spraying machines and equipment to 63% of the 1940 or 1941 production, whichever was the greater.

Crop Reports. In Northeastern states Baldwins are lighter than last year; McIntosh somewhat lighter; and early varieties fairly normal.

In the Southern Atlantic Area early apples are fairly abundant, but Delicious are extremely light.

Central states reported good prospects for Golden Delicious, other varieties showing a decline, with early varieties generally better than winter varieties.

In the Northwestern states the principal reason for the decrease in production is due to a 50% reduction in the Delicious crop.

In California a 50% increase in Gravenstein is reported.

Labor. Growers who need extra help this year should register their requirements with their county agent. Sixty-three thousand foreign farm hands are expected to help harvest crops. Fifty thousand of these are Mexicans available in the West. There are also 10,000 Jamaicans, and 3,000 Bohemians for farm work in the East.

There are 38,000 war prisoners in the United States and more coming. Plans are being made to make them available for work on farms. War prison camps will be established in various parts of the country. Camp Commandants may release prisoners for farm work by the day within a radius of 50 miles, in units of not less than 15 men with guards.

President Benz said that it is the duty of every grower to see to it that when his crop is harvested his neighbor shall receive his and his family's help.



How We're Fighting the War Against Fungi By A. J. Riker

MANY a famine down through history can be traced to the ravages of plant-disease fungi.

One Example—Potato Blight

Perhaps one of the most spectacular was the Irish famine of 1847, begun when much of the potato crop was destroyed by the late-blight disease. Widespread and catastrophic death from starvation followed this crop failure. The public enemy to blame was *Phytophthora infestans* — more generally known as late-blight.

This fungus has been highly destructive at irregular intervals ever since. It was a real, though little known, factor in deciding the first World War against Germany. It broke loose in the upper Mississippi valley in 1942 and destroyed over a fourth of the potato crop in the field and more of that in storage. Scarcity and high prices followed last winter. *Phytophthora infestans*, then, is no "small potatoes."

But this fungus is only one of hundreds ready and waiting to attack the produce of the good earth all over the globe.

Many Are Good Citizens

Many fungi are ordinarily good citizens, performing an essential work. For example, they attack dead plants and animals, breaking down their tissues and returning them to enrich the soil so that more plants may grow.

All this is a good thing. But some of the fungi, when they have a chance, start breaking down our food, clothing, and shelter. Everyone knows how bread moulds, and what happens to the washing left damp too long or to unprotected wood left in contact with the damp ground.

We've Lost Some Battles

The history of plant diseases shows clearly that fungi are not enemies to be underestimated. In many of their battles, the fungi

have won a clear victory.

In the days when automobile travel was common, very few people in the eastern United States failed to see the skeletons of blighted chestnut trees in the Appalachian highlands.

The best varieties of pears, such as the Bartlett, have been practically driven out of the northeastern and north central United States because of fire blight.

A thriving hop industry in Wisconsin was destroyed by mildew.

In 1865, the thriving coffee industry in the island of Ceylon was wiped out by the coffee rust.

But Ceylon is pretty far away. Turn to the rubber industry in tropical America, which was ruined by the blight on seedling rubber trees. The industry was forced to shift to Malaya and Sumatra. Thus the fungus attack, the transfer of crude rubber production, and the consequent rubber shortage is keeping us at home.

The fight against the fungi requires a different counter offensive for each type, depending upon how that particular fungus attacks. And the victory goes to the one that "gets there first with the most." Although it takes about seven years to train a technical man as to details, the broad strategy in the fight against the fungi is quite simply stated.

We Learn the Fungus Plan of Attack

First the fungus is identified and its potential importance determined. Then, technical men investigate in detail: (1) the way the fungus enters the plant, (2) where in the plant it works and the damage it does, (3) how it comes out to the surface again, and (4) how it moves from one plant to another, not only in the growing season but from year to year. With the secret strategy of the enemy thus deter-

mined, its action can be predicted and control measures taken a jump ahead of it.

Cures for plant diseases are usually ineffective no matter how many pounds are applied. The chief hope is through ounces of prevention.

Keeping Invaders Out

Where they enter the plant, some of these fungi can be stopped by poison. The common and destructive smut of wheat is restrained by a dusting of the seed with organic mercury or a form of copper. The fungi causing apple scab and brown rot of peach are kept out quite effectively by protecting sprays.

Plants With Resistance

After getting into the plant the fungi are sometimes overcome because, by special plant breeding. resistance has been developed which makes continued fungus attack impossible. For example, the sauerkraut industry in southeastern Wisconsin was threatened with extinction by the cabbage yellows disease. It was restored with yellows resistant plants. Rust and smut resistant oats have been developed.

Stopping Migration

The exit of the fungus from the host plant is often stopped by sanitary measures. Fallen plums and peaches, decayed by brown rot, are destroyed. When citrus canker threatened the fruit industries of Florida a few years ago, it was literally liquidated before firing squads. Men used torches instead of guns and actually burned up the diseased trees.

When Diseases Appear, Prevention Is Past

When plant diseases appear, it shows that the fungi have already gained much ground. Preventive measures are too late, but sometimes a counter offensive can be undertaken. In any case, one can learn how to forestall or fight back at the next year's attack. The situation is complex and often the right

Continued on page 7

September, 1943

The Apple Exhibit At the State Fair

T^{HE} apple exhibit at the State Fair was up to its usual high quality, but there were fewer exhibitors probably due to transportation problems.

THE WINNERS Ten Tray Exhibits

McIntosh. 1st, A. K. Bassett, Baraboo; 2nd, Arthur Lonergan, West Bend; 3rd, Waldo Orchards, Waldo; 4th, Meyer Orchards, Hales Corners.

Northwestern. 1st, A. K. Bassett; 2nd, Waldo Orchards; 3rd, Meyer Orchards.

Wealthy. 1st, A. K. Bassett; 2nd, Waldo Orchards, 3rd, Meyer Orchards.

Duchess. 1st, Waldo Orchards; 2nd, Meyer Orchards; 3rd, A. K. Bassett.

Dudley. 1st, A. K. Bassett. Wolf River. 1st, A. K. Bassett.

Single Tray Exhibits

Northwestern. 1st, Waldo Orchards; 2nd, A. K. Bassett; 3rd, Meyer Orchards; 4th, George Sherman, Edgerton.

Duchess. 1st, Waldo Orchards; 2nd, A. K. Bassett; 3rd, Meyer Orchards; 4th, George Tehan, Milwaukee.

Famcuse. 1st, A. K. Bassett; 2nd, Meyer Orchards.

McMahon. 1st, A. K. Bassett; 2nd, George Sherman.

McIntosh. 1st, Arthur Lonergan; 2nd, A. K. Bassett; 3rd, Waldo Orchards; 4th, Meyer Orchards; 5th. George Sherman.

Wealthy. 1st, Meyer Orchards; 2nd, A. K. Bassett; 3rd, Waldo Orchards; 4th, Arthur Lonergan; 5th, George Sherman.

Dudley. 1st, A.K. Bassett; 2nd, Waldo Orchards.

Wolf River. 1st, A. K. Bassett.

Delicious. 1st, A. K. Bassett; 2nd, George Sherman; 3rd, Meyer Orchards.

Melba or Early McIntosh. 1st, A. K. Bassett; 2nd, Waldo Orchards; 3rd, Meyer Orchards.

Milton. 1st, A. K. Bassett.

Cortland. 1st, Waldo Orchards; 2nd, A. K. Bassett; 3rd, Meyer Orchards.

Any other variety. 1st, A. K. Bassett; 2nd, Meyer Orchards; 3rd, George Tehan.

Pyramids

Wealthy. 1st, A. K. Bassett.

McIntosh. 1st, A. K. Bassett; 2nd, Arthur Lonergan.

Northwestern. 1st, A. K. Bassett.

Space of 30 feet arranged as roadside stand or sale booth: 1st, Meyer Orchards, Hales Corners; 2nd, A. K. Bassett, Baraboo; 3rd, Waldo Orchards, Waldo.

(Continued from page 6) thing to do in Michigan may be the wrong thing to do in Kentucky.

The grower who wants to learn more about fungus strategy can turn to one of the numerous reference books on the subject or to the local agricultural high school teacher or county agricultural agent, who are kept posted.

The plant pathologists of his state Agricultural Experiment Station or in the United States Department of Agriculture can help with the diagnosis. If small specimens are sent in by mail, it is best to include root and all, well wrapped in plenty of newspaper. An explanatory letter placed under the string of the package will give the pathologist further information and make it possible for the grower to learn without charge just what enemy is attacking and what is to be done.

5

Condensed from July, 1943 Special Circular.

THE CHERRY SEASON IN DOOR COUNTY L. Stedman

The cherry crop in Door County this year was little short of disastrous. An overall estimate of the final harvest would approximate 12% of a normal crop. The entire county harvested slightly over 3,000,000 pounds.

Picking was more of a problem than it has ever been before because most of the harvesting had to be done by youngsters, totally inexperienced and often easily discouraged. Those that persevered deserve the appreciation of not only our growers but of all people fortunate enough to obtain cherry pies this winter.

The rainy weather prevalent throughout the spring and summer brought rather severe shothole infestation in those orchards which were unable to follow a vigorous spray program although for the most part leaf spot was fairly well controlled and a majority of the orchards came through to the end of the season in good condition. The quality of the fruit was above average.

Fogs and heavy dews contributed to the difficulties of control especially where the trees dried off slowly. Good air drainage proved of value under these unusual conditions just as it is proving itself every spring in minimizing late frost damage.

Leaf Spot Control

Some orchards this year found good results in early control of shothole by putting on a spray just as the blossoms were beginning to come out. Most orchards have applied a post harvest spray. Both of these sprays could well be recommended for another year, whenever possible. Arsenate of lead should be left out of the early blossom spray or bees and wild insects will be killed.

Let us never forget that cultivation of the earth is the most important labor of man. Unstable is the future of a country which has lost its taste for agriculture. If there is one lesson of history that is unmistakable, it is that national strength lies very near the soil.—Daniel Webster.

September, 1943

Fertilizers For 1943-44

By Dillon S. Brown, Department of Horticulture, University of Illinois

ERTILIZER distribution for the period from July 1, 1943, to June 30, 1944, is to be regulated under Food Production Order No. 5 Revised. Under the provisions of the order, all fruit growers are eligible for fertilizer whether or not they have used it in the past, provided they use it at a rate of application customarily used on their orchard or on other orchards in the locality, provided further that the rate of application does not exceed the rate of application recommended by the State Experiment Station. In order to obtain the fertilizer, a written application must be filed with the fertilizer dealer supplying the material: application blanks are furnished by the dealers.

No Sulfate

Information has been received that no sulfate of ammonia is to be released for direct application during the 1943-44 fertilizer year. All sulfate of ammonia, except that now in dealers' hands, is to be used in the production of mixed fertilizers. Instead of sulfate of ammonia, ammonium nitrate is to be released for direct application; in addition there will also be some nitrate of soda and a small amount of cyanamid available. At the present time, however, it looks as though many fruit growers will be using ammonium nitrate instead of materials with which they are more familiar.

High In Nitrogen

Ammonium nitrate fertilizer contains approximately twice as much nitrogen as nitrate of soda, so that growers will need to use only about one-half as much ammonium nitrate as they customarily use of nitrate of soda, or even of sulfate of ammonia. Although ammonium nitrate, as it is now being prepared, is in good physical condition, there is no assurance that it will not absorb moisture and cake up on prolonged storage. Therefore, growers should plan to use the material soon after it is received. The cost of ammonium nitrate will be the same as sulfate of ammonia on the basis of the units of nitrogen it contains.

Apply Soon

Growers are urged to apply immediately to their fertilizer dealers for the fertilizer they will need. Applications can be filed with the dealers for either spring or fall delivery, or both. Because the supplies of nitrogen fertilizer are good at the present time, it is advisable for growers to plan on using fertilizer this fall rather than waiting until spring, when the supply situation may be considerably different. It is believed that the fall application of nitrogen fertilizers in Illinois will, in the long run, prove as satisfactory as spring applications; when cyanamid is used, fall application is especially essential. Regardless of the time at which they plan to use the material, whether fall or spring, growers should order their fertilizer now

From Illinois State Horticultural Society, August, 1943.

Two little mites of about six and seven respectively were gazing with considerable interest at the storks in the zoo, when the usual interfering old lady ambled up.

"Those are storks, my dears," she purred. "The clever birds that brought you to your mother and father!"

The youngsters looked at one another, and one whispered: "Poor old thing! Shall we tell her?"

My wife is asking for pin money—and the pin she wants has 12 diamonds in it.

-Col. Stoopnagle (CBS)

HORTICULTURAL NOTES By H. B. Tukey

B^Y Federal ruling, apple boxes have been standardized into three dimensions, namely:

Western apple box $10\frac{1}{2}x11\frac{1}{2}x18$ Michigan apple box $11x12\frac{1}{2}x16$ Eastern apple box 11x13x17

The measurements are inside measurements. Bushel and halfbushel baskets are allowed as usual. Containers must not be dyed, stained or otherwise colored to limit their usability as "used containers."

Out in the great stretches of soil in the western fruit sections of the country, nursery companies are not only raising fruit trees for orchardists but are also undertaking the planting of the orchards as a part of the services. For digging holes, a tractor-drawn hole digger has been contrived which secures power from the tractor and which steps across the valley floors like some prehistoric animal burrowing holes into the soil by means of a gigantic augur and a pneumatic lift.

Monthly Science News from England reports that large-scale tests by farmers in weed control in onion plantings show that annual weeds can be destroyed by spraying with solutions of sulphuric acid. Concentrations even as high as 14% have not depressed onion yields. The reason the spray does not hurt the onion is that the onion leaves are cylindrical, upright and waxy, so that the drops of spray either tend to run off or fail to penetrate. Further, the growing region from which new leaves are formed are basal and protected. On the other hand, most weeds have flat leaves set in a more or less horizontal plane, possess no waxy surfaces, and the growing point is more or less exposed.

From August 7, The Rural New-Yorker.

"Prejudice is a great time saver —it enables one to form opinions without bothering to get the facts."

The Future For the Apple Grower By J. H. Gourley

W^E predict" that the trend of progressive orchardists will be toward maintaining younger trees and following a rotation of planting so that the oldest ones come out with replacement to young trees of most popular varieties. Too much emphasis has been given to "permanent" trees. They have often been too permanent.

Along with this concept goes one of smaller trees. If an understock could be found which would enable apple trees to attain about twothirds the size of present standards, the orchardists of America would welcome it. Smaller, as well as younger, trees would mean easier and better control of insects and diseases, more economic handling of the orchard, probably more trees per acre, and hence lower cost of production.

Diversification of crops should be studied in planning the orchard of the future. Not everyone should diversify but frequently it means more profitable use of labor, a wider market outlook and more cash returns throughout the year. Diversification may be accomplished with other fruits, with certain vegetables, with bees, poultry, livestock, nurseries, according to the ingenuity of the individual and local opportunities which present themselves.

A still better marketing system for fruits and vegetables must be devised. Tree ripened fruit of high quality and undamaged by handling must be placed in the hands of the consumer. Grower and merchandiser have been inclined to blame each other for the damaged condition of fruit. This gets nowhere with the consumer. He wants perfect fruit. This is going to be a bother, impossible some will say, but that is the goal of the future. The lower grades of fruit of which there always will be considerable must be processed at a profit. Laissez-faire methods will be regulated to the marginal producer who will have a poor show, as usual, in the ideal but practical orchard industry which we envisage for the future.

Finally, let us not lose sight of the grower and his family. His interests are paramount. A good home with all modern conveniences which sets him and his family off as a cultured comfortable group is fully in the picture of the future. No one has a finer vocation, a more delectable product, or more desirable associates than the American fruit grower.

Condensed from The American Fruit Grower, July, 1943.

An old farmer and his wife were standing before their pig-sty looking at their only pig, when the old lady said: "Say, John, it will be our silver wedding tomorrow. Let's kill the pig."

John replied with disgust: "What's the use of murdering the poor pig for what happened twenty-five years ago?" — The Earthworm.



In The Berry Patch

HARDY RASPBERRY VARIETIES

THE raspberry varieties Chief, June, and Latham, came through the past winter satisfactorily, according to C. L. Kuehner, in his Wisconsin Orchard News Letter.

Two other varieties, Ontario and Taylor, came through only moderately well. The varieties Newburgh, Viking, March, Washington, and Tahoma were very nearly a total loss.

These results were obtained on the experiment station grounds at Madison. The soil is relatively heavy and there was considerable moisture last season. The patch was a young one, so the plants should have been vigorous and healthy.

On the sandier soils of the state, even much farther north, results may be different. Some of the varieties such as Newburgh have been reported satisfactory by growers.

However, it is a very serious financial loss to have a patch of raspberries winterkill, resulting in a poor crop or no crop at all. Consequently we should plant only those that come through the best, even on the best soils.

With the price of raspberries likely to be high for a few more years, it will pay growers to take the best of care of their raspberry patch. If labor can be secured, it would be advisable to lay down the tips of the canes in the fall and at least partially cover these plants, especially if the season has been one with plenty of moisture for late fall growth.

Removal of Fruiting Canes After Harvest

Mr. Kuehner recommends in his news letter on the subject of cane removal, the following:

"The canes which are bearing this year's crop should be removed

from the patch as soon as the picking season is over. They will not bear again. Their removal at this time also serves to eliminate disease and insect harbor and allows more sunlight and better air circulation for the young canes which are to bear next year's crop. In addition to removing the fruited canes, all young canes showing galls or swellings, caused by the red-necked cane borer, as well as all other diseased or insect-infested canes should be cut out and burned. These pruning recommendations apply to the black, the purple raspberry, and the blackberry as well as the red varieties.

Raspberry Cane Borer

"While the harvest is on, it is easy to find the wilted tips on the new canes. These are infested with the raspberry cane borer. Break off these wilted tips about once each week and destroy them. This practice carried out with care and persistence until fall will result in the elimination of the pest.

Cultivation After Harvest

"Cultivate immediately a f t e r picking stops to loosen the soil and to eliminate weeds. This cultivation should be shallow so that the roots of the plants will not be cut or disturbed more than is necessary to keep the row in its place. Cultivation should be discontinued in late summer so that the growth of the raspberry plant will slow up and thus result in better matured canes for winter.

Cover Crop May Help To Ripen Canes For Winter

"In case of a rainy, late summer and early fall, it may help the raspberry plants to mature more satisfactorily for winter if a cover-crop of oats or weeds compete with them through the months of September and October. If the cover-crop tends to grow too tall, it may shade the lower part of the canes too much for early maturity. To avoid this danger, the cover-

crop should be tramped down before it can grow very tall."

CAN WE PLOW UNDER SOY BEANS FOR STRAWBERRIES? SEVERAL years ago one of our leading strawberry growers plowed under soy beans in the fall, planting the bed the next spring to strawberries. These plants did not do well at all. They appeared stunted and dried out.

Suspecting that plowing under the soy beans might have been detrimental, we asked Prof. C. J. Chapman of the Soils Department to comment on this matter. Here are some of his comments:

"Soy beans, of course, if plowed under in late fall when they have pretty well matured, contain considerable amounts of cellulose and while the protein and nitrogen content should be fairly high, yet part of this nitrogen in a wet fall, could easily be leached out. The fiber or cellulose material left in the soil has the effect of stimulating the activities of fungi and bacterium which tend to decompose and rot this cellulose material. Furthermore, these organisms are tremendous feeders on nitrogen and may tie up temporarily the nitrogen content of your soil. The matted material which was plowed under may have interfered with moisture relations in that capillary moisture did not come to the surface through this mass of soy bean material which was plowed under.

"Strawberries are especially sensitive to this indirect influence of fiber or cellulose material. The action of these fungi and molds in decomposing the soy bean material may have indirectly attacked the roots of the young strawberry plants when you set them, bringing about so-called brown root rot. We have observed this same condition frequently on tobacco. Strawberries are in the same class as tobacco from the standpoint of this indirect root rot disease due to soil organisms.

"I observed on my brother-inlaw's farm years ago a condition similar. Shavings had been used as a mulch and cover for the strawberry bed in the fall. The following spring this strawberry bed was yellow and sick and growth was poor. The crop of berries was the poorest in history. The effect of the shavings was to stimulate the growth of these molds and other fungi which indirectly fed into the soil and competed for nitrogen with the strawberry roots.

"Had you reworked this field in the spring and reset new plants I'm sure there would have been no injurious effects for the soy bean straw by this time would have been completely decomposed.

"An application of ammonium sulphate on this patch would have aided the decomposition of the soy bean material and might have prevented the injurious effects apparently resulting from this crop which you plowed under."

WHITE-WASHING TREE TRUNKS

Question: Do you believe that white-washing the tree trunks would cause less absorption of sunlight tending to reduce winter injury?

Dr. Heinicke: White-washing trunks of trees will undoubtedly cause less absorption of sunlight and thus tend to reduce southwest injury of the trunk. Such whitewashing however, is not necessary unless the trees are trained with a very high head. It is usually much more satisfactory to have the limbs originate not more than 2 feet from the ground. Shadow cast by the branches will prevent any undue heating of the shorter trunk.

From Annual Report New York Horticultural Society.

Customer: Gimme a dollar dinner.

Waiter: Yes, sir; on white or rye?

WHITE PINE BEING PROTECTED

BLISTER rust—most deadly of all diseases that attack the white pine—is being found more extensively in Wisconsin this year than ever before, the state department of agriculture reports.

Despite labor shortages, so far this year 4,218 acres of white pine have received initial protection against blister rust by the removal of 160,000 ribes bushes—hosts to the rust—from 10,251 acres of control area, according to T. F. Kouba, state leader of white pine blister rust control. Efforts to control the disease in Wisconsin are supervised jointly by the state department of agriculture and the bureau of entomology and plant quarantine of the U. S. department of agriculture.

Several crews of Indian girls have been at work this summer removing ribes bushes from the forested Menominee reservation. One crew of Indian girls has been doing blister rust control work on the Bad River reservation in Ashland county.

In all, 272,299 acres of white pine in 53 counties have received initial protection against blister rust since the control program was inaugurated in Wisconsin during the first World war.

APPLE ICE CREAM

Apple ice cream is a recent addition to the list of delectable apple products. O. C. Roberts submits this recipe which he recommends:

8 qts. 20% cream, 24 whole eggs, 31/2 lbs. granulated sugar, 1 teaspoon salt, 5 lbs. whole apples. Mix all ingredients except apples and cook in a double boiler or steamer until they just barely reach a boil, then cool. Slice the unpeeled and uncored appleand cook in as little water as possible until they are soft enough to run through a sieve. After this allow to cool and add pulp and juices to the cream mixture. Pour into freezer. This mix will make approximately 5 gallons of apple ice cream.-From News Letter of the Illinois State Horticultural Society.

PROTECTING THE GRAPES

RAPES are often preyed upon by birds and insects. Garden makers who wish to obtain extra fine bunches bag them. Bags for the purpose may be purchased, and probably are the most satisfactory, although ordinary paper bags from the stores may be employed with success. They are to be drawn over the bunches and tied around the stems, not too tightly but still without leaving an opening for insects to enter. Bees have often been charged with damaging grapes, but this is a libel on these insects. They are not physically capable of puncturing a grape skin, even if their desires led them in that direction. But when they find grapes which have been pecked into by birds, they are likely to take toll of the exuding juices.

—From Horticulture Illustrated, August, 1943.

"I never go to the movies any more. My wife comes home so tired. Besides, they're mostly airplane pictures now, and she always criticizes the spot welding out loud."—Groucho Marx (CBS).



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Walter Diehnelt, Menomonee Falls, President Corneluis Meyer, Appleton, Vice-president H. J. Rahmlow, Madison, Cor. Secy. Mrs. Louise Brueggeman, Box. 60, Menomonee Falls, Recording Secretary-Treasurer DISTRICT CHAIRMEN Robt. Knutson, Ladysmith Newton Boggs, Viroqua C. C. Meyer, Appleton Ivan Whiting, Rockford

September in the Bee Yard

A LL colonies should have plenty of ventilation during September, especially if we get much rain and dampness. Small entrances make it difficult for the bees to evaporate moisture and so the honey may be thin for winter stores unless it can be well ripened.

September is an important month for brood rearing. The bees produced during this month are the young bees which will come through the winter best. Old field workers will die off and unless there are plenty of young bees produced this month, we will have very weak colonies or dwindling colonies in spring.

In order to enable colonies to produce plenty of brood, we must have plenty of room for the queen to lay. Two ten-frame hive bodies are hardly enough, especially if we plan on leaving enough honey to last us until next June and also store some pollen. Many beekeepers are using three hive bodies this month for stores and brood rearing.

Colony Weight

Since most beekeepers prepare their colonies for winter during September, we must be very cautious to see to it that we are not fooled by the weight of the hive if we should have a lot of pollen brought in. That was the case last year. The bees brought in lots of pollen but very little honey. Consequently, with strong colonies in addition, the hives appeared very heavy, but actually there wasn't as much honey as we expected. It is best to examine each colony by taking out the frame to see what is there.

What To Do With Weak Colonies

One of the big questions in the minds of many beekeepers now is what to do with weak colonies. If we re-queen a weak colony now, it will not build up into a strong colony by October when brood rearing stops. Then too, we have the problem of the cost of the queen and the cost of the honey that the weak colony will consume. It only takes about 25 pounds of honey at present prices to pay for a package. At that rate, it might be best to kill the weak colonies.

How To Obtain Pollen For Next Spring

If we plan to kill the weak colonies, here is one way we can obtain some pollen for feeding packages and colonies next spring. Kill the queens of the weak colonies at once. Allow queen cells to be produced so that the colony will continue to bring in pollen. This pollen will be stored in the combs and none of it used after the larvae have been fed to maturity. Such a colony may store quite a bit of pollen. Later the young queen may be killed again before she lays, which will make the colony queenless, but the pollen will have been stored by that time. Along about April 1st next year these pollen frames will be very valuable for feeding. Two or three of them with honey are both excellent for package bees.

Beware of the Wax Moth

This is the month to watch your old combs to see that the wax moth does not destroy them. Stacks of supers stored outdoors can be treated with calcium cyanide, but inside of buildings this is very dangerous and not advisable. For combs stored inside, the paradichlorobenzine is the best.

WISCONSIN BEEKEEPERS ASSOCIATION ANNUAL CON-VENTION, PLYMOUTH, OCTOBER 27-28

THE annual convention of the Wisconsin Beekeepers Association will be held in Plymouth, in the City Auditorium, on Wednesday and Thursday, October 27-28.

Accommodations at Plymouth are excellent. The hall is especially good, with an adjoining room for the Women's Auxiliary meeting. The Sheboygan County Association which has a large membership. has pledged its full support, and the Manitowoc Beekeepers Association are also a large group and will take part. The meeting should. therefore, be well attended.

Let this be your vacation and attend the meeting.

Florist: "This corsage would be better for a blonde, and that one for a brunette."

Customer: "Well, I haven't seen her for two days—I'll take both of them."

The Bee and Honey Exhibit At State Fair Educational

THE Bee and Honey Building at the Wisconsin State Fair was, as usual, as attractive and interesting as during the past year. This year, instead of competitive entries, exhibitors were paid a set amount to put in an educational and decorative display.

Jim Gwin operated the everpopular Honey Bar, and also had a splendid display of 24 varieties of plants, in flats, showing the importance of the cross-pollenization of the bees to raise food so vital for victory.

The highlight feature of the Bee and Honey Building was the Extracting and Bottling of Honey. A load of honey was extracted daily, and was then heated, pumped, bottled and labeled. This small scale unit was complete in every detail, and the demonstrations of showing the honey from the hive to the consumer attracted a large and interested crowd. This was prepared by Walter Diehnelt and staff.

The beekeepers' displays showed the Fair goers that the bees are necessary for the winning of the war, as they are needed to crosspollinate fruits, vegetables and most all plants, and the beeswax is now in great demand by the Government for use in the manufacture of war machinery, for medicinal purposes, and many other important and essential uses.

The booth of Gilbert Schultz, Reedsville, Wisconsin, was very attractive, and showed a very fine display of comb and extracted honey, also giving the many uses of beeswax. Daffodil Bee Farm, Mount Horeb, Wisconsin, showed the many ways the bees are aiding the war effort, and also had a fine display of comb and extracted honey. Johnson's Hearts of Clover, Hales Corners, Wisconsin, gave the ladies Maine Idea.

a fine display of how honey can be used in baking and canning, and also had a display of extracted honey. Brown Brothers, West Allis, Wisconsin, specialized in extracted honey, having a large and attractive display. Frank Eickstedt, Cedarburg, had an unusually fine lot of apples with his honey display, showing that the bees are essential to pollinate the fruit bloom. Figge's Apiaries, Milwaukee, put up an interesting display of extracted honey in the V for Victory design, so popular at the present time. Howard's Honey House, Milwaukee. furnished the public with a fine display of extracted honey, and signs informing the people of honey's many uses. Honey Acres, Menomonee Falls, Wisconsin, having a little different display, showed complete colonies of bees, and the fruit and vegetables grown as a result of the pollenization of the bees.

An earnest worker, newly employed by an aircraft plant in Ohio, was informed that the factory was on a 24-hour-day basis. He went to work and when his foreman came in the next morning he was still on the job.

"Well, boss," he reported, looking distressed, "I got along O. K. for the first 24 hours, but between you and me, I'm pretty worried about the next 24."

THE MAINE IDEA

When the Maine farmer was told how Andrew Carnegie came to this country with only 25 cents in his pocket and died leaving \$250,000,000, all he said was:

"He must have had a very savin' woman."

er, Hales —Keith Warren Jennison, *The* the ladies *Maine Idea*.

BEE SWARM IN A BOMBER

WORKING round a Halifax plane at its dispersal point, the ground crew heard a strange buzzing noise. One of the aircraft hands went to investigate and found a procession of bees entering and leaving a small hole in the tail of the plane.

The Halifax had to be ready for the night's operations, but nobody on the station knew how to handle a swarm. It was a problem rather beyond King's Regulations, but at last the station padre remembered a vicar in a local village was a beekeeper and asked him to come over and help.

First of all the fabric had to be stripped from the tail plane. Then the vicar, wearing gloves, found the queen bee, surrounded by her drones and workers. Bees were continually flying in from the hedgerows. But as soon as the vicar had removed the queen the other bees followed her in search of a new home.

The fabric was then patched up and a few hours later the Halifax took off and returned safely. The pilot remembered that there is a belief among country people that wherever bees swarm they bring luck.

Bees once swarmed in one of the wings of a Whitley in Coastal Command. The aircraft carried out several operations before the hive was discovered, and seven pounds of honey were extracted and shared among the crew.

-Air Ministry News Service.

REALLY GOING PLACES

Perkins: "How's your Victory Garden coming along?"

Gherkins: "Oh, splendidly. My cutworms, cabbage worms, Japanese beetles, green aphis and potato bugs never looked better, but my corn ear worms and Mexican bean beetles seem a little droopy and under-nourished."

Factors Affecting the Usefulness of Honeybees in Pollination

A NEW bulletin with the above title, of considerable interest to beekeepers, is circular No. 650, published by the U. S. Department of Agriculture, Washington, D. C. The bulletin discusses the insects which gather pollen and nectar from fruit blossoms, plant characteristics, flight activity of the honeybee colony, and compares over-wintered colonies with package bees in pollinating efficiency.

Summary Of Bulletin

The behavior of honeybees in visiting blossoms for nectar and pollen has been observed over a period of years in various parts of California and Oregon, especially in experimental orchards at Camino, Calif., to obtain informantion that would aid orchardists and seed growers in improving the pollination of their crops.

In the Camino district honeybees were by far the most common blossom visitors (62 percent), blowflies were next 23 percent), and other insects were scarce. The bees were practically the only distributors of pear pollen. The closer bees were placed to the pear trees, the more effective they were as pollen distributors.

Considerable numbers of honeybees were observed visiting blossoms that had been emasculated. It is therefore unsafe to depend on emasculation for plant-breeding purposes, without covering the blossoms.

Between species of plants there is a wide range in the quantity of nectar secreted and in its sugar concentration. As the relative humidity decreased, there was a consequent increase in the percentage of sugar in all nectars, although not a proportional increase because of the difference in the structure and position of nectar glands in various blossoms.

Apple Blossoms Have Rich Nectar

For 1 day at Davis, Calif., the following average sugar concentrations of nectar from fruit blossoms were obtained: Apple 46.2, peach and nectarine 28.9, plum 25.8, sour cherry 23.5, Winter Nelis pear 9.9, and Bartlett pear 7.9 percent. The low sugar concentration for Bartlett pear may be below the point of attractiveness to the honeybees, at least where richer nectars are available. The nectars of apple and sweet cherry blossoms, on the other hand, are especially attractive, for at times the bees practically abandon all other fruit blossoms for these two kinds.

Data indicating the characteristics of the pollen of some plants show a wide range in quantity, color, and size of the bee load.

Plant Competition

Plants that blossom simultaneously must compete for insect visitors. Bees shift from one plant to another in search of nectar having the highest sugar concentration, but the reason for their selection of certain plants for pollen is not yet established.

Wind greatly reduces the activity of field bees, and as a rule bees do not fly out heavily when it is cloudy..

Distances Of Flight

From a long-established hive the bees go a mile and a half and sometimes much farther in search of nectar and pollen, but after being moved to a new location they do not fly far for the first 3 or 4 days.

The honeybee is an important pollination agent because in visiting a blossom for either nectar or pollen it brushes the flower parts, covering its body with pollen, and also because it usually collects only one kind of pollen on a trip. One bee was observed to visit 84 Bartlett pear blossoms to secure her full load of pollen. It was estimated that on a good flight day 822,720 bees issued from the 16 colonies placed in the Caldwell orchard.

Overwintered Colonies Best

Strong overwintered colonies were found to surpass the package bees in population, flight activity, and the amount of pollen gathered, and 5-pound packages were more effective than smaller units. Therefore, where winter conditions prohibit the maintenance of overwintered colonies, the larger packages should be purchased.

She was being shown through the railroad shops. "And here." said her guide, "we have the locomotive boiler." "But why do they boil locomotives?" she asked. Her guide was not non-plussed. "To keep the engine tender, ma'am," he replied.

PROGRAM FOR YOUR BEE. KEEPERS' MEETING

WE like the idea put out by Gleanings in Bee Culture of having a beekeepers' for um at county association meetings. This forum is to be composed of questions which have been discussed in the magazine. Some excellent programs can be arranged for county meetings in this way, not only by using Gleanings, but the American Bee Journal, and this magazine as well.

The way to go about it is to have either the secretary or the president write or phone a committee of about three people well in advance of the meeting and ask them to come prepared to discuss articles which the officer thinks will be of interest and value to the members. After the topic has been presented, the president can call upon other beekeepers in the audience to give their experience along the same line. Some interesting discussions should develop.

Beekeepers' meetings can be made very popular if something of value is presented each time.

TOP SUPERING

By Lloyd C. Gardner, Michigan

W^E want plenty of room next to the brood nest and not on top of the pile. I know that some have claimed that they could get good results from top supering, but we have never found that this was so for us, and the only time we do any top supering is when we find that the colony has started well in the last added super but not enough so that we think that it could stand the additional room of another super underneath the one being worked. In that case, we place another super on top which we term a "safety valve" to hold them until the next visit.

From The Beekepers' Magazine (Mich.), August. WHY BEES ARE BUSY hooklet "Why Bees Are Bus

A booklet, "Why Bees Are Busy," a story for boys and girls, with many new honey recipes for their mothers, is just off the press. The authors are Susan Burdick Davis, formerly Instructor in Children's Literature and the Art of Story Telling, University of Wisconsin, and Harriet M. Grace. A copy may be secured by sending 25 cents to the American H o n e y Institute, Madison 3, Wisconsin. Prices on quantities may be had by writing Mentzer, Bush and Company, 2210 South Park Way, Chicago, Illinois.

MONROE COUNTY BEEKEEP-ERS PICNIC

The Monroe County Beekeepers Association held their annual picnic in the park at Tomah on August 29th. The following officers were reelected: President, Leonard M. Schultz, Tomah; Vice - president, Herbert Anderson, Wilton; Secretary-Treasurer, Mrs. Edw. Scheppa, Kendall. Mr. Virgil Rand was appointed entertainment chairman.

An interesting program was held and plans for a bigger picnic made for next year.

EXTRACT HONEY AT THE STATE FAIR

W^E wish to compliment Mr. Walter Diehnelt, Menomonee Falls, and Mr. James Gwin, superintendent of the Bee and Honey Building at the State Fair, for the educational exhibit of uncapping, extracting, and bottling honey at the State Fair. It was a splendid educational exhibit.

It acquainted the people with the sanitary methods in which modern beekeeping is done and will help greatly in promoting the use of honey.

I called up a friend in Washington and said, "Where can I get a room tonight?" He said, "Where are you calling from?" I told him a telephone booth and he said, "Happy dreams!"—Henry Youngman, Kate Smith Hour (CBS).

MORE SUGAR AVAILABLE FOR BEES

A^S we go to press, a notice is received from the U. S. War Board that an amendment to Rationing Order No. 3 of the OPA makes it possible for beekeepers to obtain an additional 15 pounds of sugar per colony this fall for feeding bees.

Beekeepers, however, must comply with certain regulations as follows: (1) obtain from your Rationing Board OPA Form R-315 which must be filled out. The beekeeper must certify that the additional sugar is required to prevent loss of bees. Then you must apply to your local War Board who must certify that the additional sugar is required to prevent loss of bees. Your County Agricultural Agent is probably the one to see or write.

County War Boards have been given instructions by the U. S. War Board on this matter. Beekeepers at some distance from the county seat can no doubt correspond with their county agents to get help.

SEASONAL NOTES Top-Supering Didn't Work This Year

W^E wonder if many Wisconsin beekeepers observed that topsupering didn't work this year.

The reason was that the most colonies were relatively weak when the honey flow started in June. Consequently, they placed the honey right above the brood nest where it acted as a barrier and they did not go through this barrier freely to store honey above it.

Of course colonies with big populations will place honey in any available space, but not so with the smaller colonies. We observe colonies with the brood nest and the super above it jammed full of honey with much burr comb, but with the super on top of the hive practically empty. If the beekeeper does not watch this condition, swarming can easily result or the brood nest becomes so small that brood rearing is greatly reduced.

HONEY WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company, Oconomowoc, Wisconsin.

HONEY CANS

We can give you immediate delivery on 60# cans.

Order your glass supply for the new crop now, as it takes from 3 to 6 months to receive same from the factory. We now have a good supply of 5#, 2½#, 1# and ½# on hand, and can make immediate shipment.

To insure prompt service, order your Association labels now for your new crop of honey.

Write for Complete Price List.

Order Through Your State Beekeepers Association

HONEY ACRES Menomonee Falls, Wis.

HONEY CONTAINERS

Prompt Shipping Service Glass Jars

We carry a complete line of "Utility" style jars with white coated covers, lacquered and wax paper lined.

PRICES

Reshipping	case	of	12 - 2#		e Wt. 10 lb.
**		99	12 - 1#	.38	6 lb.
**	**	**	24 - 1/2#	.67	7 lb.
**	**	**	12 - 21/2#	.67	11 lb.
**	**	**	6 - 5#	.42	10 lb.
**	**	**	4 - 10#	.45	13 lb.
	(No 60 lb. ints—	ca 5%	ls)	ders	· 8.

PRICES

Standard square American cans, well seamed and soldered, with 2½" screw cap wax board lined.

Box of 2-60# cans.....\$1.00 Carton of 24-60# cans.. 7.44

AUGUST LOTZ COMPANY BOYD, WISCONSIN



BOARD OF DIRECTORS OF WISCONSIN HORTICULTUR-AL SOCIETY HOLD MEETING IN AUGUST

THE annual summer meeting of the Board of Directors of the Wisconsin Horticultural Society was held at Madison on August 17th. Members present were Arno Meyer, Waldo, President; E. L. Chambers, Madison, Treasurer; H. J. Rahmlow, Secretary; Theo. Ward, Fort Atkinson; Mrs. H. S. Bostock, Madison; Jos. L. Morawetz, West Bend; N. A. Rasmussen, Oshkosh; Virgil Fieldhouse, Dodgeville; Peter L. Swartz, Jr., Waukesha; and Walter Diehnelt, Menomonee Falls.

Some of the business transacted is as follows: It was decided to continue the contribution of \$25.00 to the National Apple Institute.

Two prominent persons were selected to receive the honorary recognition certificate of the Society at the convention this fall, the names to be announced at the convention banquet.

The dates and place for the annual convention to be held jointly with the Wisconsin Garden Club Federation were not definitely set. It is hoped to have the convention in Madison, but final arrangements will be announced in the October issue.

Five members were accepted as life members, as follows: Mrs. Walter Diehnelt and Walter Diehnert, Menomonee Falls; Robert O. Heinrich, Racine; Clarence Lewis, New York City; and H. J. Rahmlow, Madison.

Mr. Arno Meyer, President, was appointed the Wisconsin representative to the meeting of the National Apple Planning Committee August 24th.



SEBAGO'S THE BEST LATE POTATO FOR WISCONSIN

THE best late potato for Wisconsin—best even for light soils in the central part of the state if they are reasonably fertile and scab-free.

That's the high recommendation the new Sebago variety gets from Gus Rieman, John McFarlane and Wayne Weber, after several years of trials.

The important shortcomings of Sebago are only two: (1) It is rather susceptible to scab, although not more so than most popular varieties. (2) It is not a good yielder on poor, sandy soil.

Sebago is an excellent yielder on fertile soil; it is of high quality, being one of the few varieties that tend to "cook white;" it is resistant to yellow dwarf disease, and also to the late blight which causes a form of tuber rot; it seldom shows either hollow-heart or internal discoloration and hardening; and it grows very true to type.

From Bulletin 460, What's New in Farm Science, April, 1943.

Jack Benny's Victory Garden report: My potato crop turned out well. Some are as big as marbles, some as big as peas, and, of course, there are quite a few little ones.

NOMINATING COMMITTEE FOR HORTICULTURAL SOCIETY OFFICERS APPOINTED

MR. Arno Meyer, President, Waldo, appointed the nominating committee for the nomination of officers and members of the Board of Directors of the Wisconsin Horticultural Society at the annual meeting of the Board of Directors in August.

Members appointed are: Theo. Ward, Fort Atkinson, Chairman; D. E. Bingham, Sturgeon Bay; and Charles Patterson, Franksville.

The above committee are board members whose terms expire this year. It has been the custom for some years past to appoint these members of the Board as members of the Nominating Committee, since they cannot succeed themselves. Nominees should be from the section of the state which these Board members represent, and represent the same branch of horticulture.

Suggestions may be sent the nominating committee by any member.

The slate of officers and the official ballot will be printed in the October issue of Wisconsin Horticulture, so that all members may vote by mail. Voting may also be done the first day of the convention.

JOINT ANNUAL CONVENTION MADISON, NOVEMBER 17 - 18 THE 75th annual convention of the Wisconsin Horticultural Society will be held jointly with the convention of the Wisconsin Garden Club Federation at the Loraine Hotel, Madison, Wednesday and Thursday, November 17-18.

The program will be published in the next issue.

The Story of a Bushel of Transparents

A good friend of ours, a lady whose veracity is unquestioned, and who insists she is not Scotch, tells us she bought a bushel of Transparent apples to make applesauce. It seems that the members of her family rate clear, smooth, tartish, almost fluffy, Transparent applesauce "tops" on any menu. "For breakfast," she says, "it makes eating ordinary dry cereals worth while. For a filling dessert for our 'teener's lunch, a slice of buttered bread, covered with applesauce and splashed with cream, makes a most satisfactory stopper. At dinner, it may be relish for the meat course, or the dessert. It is the one dessert for which every one of us seems to have room." Now, here's the story:

This bushel of Transparents graded U. S. No. 1, clean, sound, carefully-handled apples. They were washed, peeled on a mechanical peeler, and quartered and cored by hand. Transparents cook very quickly, and soon there were thirty-four pint jars of applesauce on the cook table and a generous bowlful set aside for immediate consumption. In case you happen to be interested in points, these 34 jars on your grocer's present chart have a value of exactly 714 ration points!

Then there was a large kettleful of peelings and core parts. The mechanical peeler had been a bit generous, and there was just too much "meat" on the skins to throw away, so they were covered with water and set on the stove to cook slowly for an hour. Taking enough applesauce to make a round of desserts for the family next door, the lady went a-borrowing, and came home with a dilver, a rotary type food press. The cooked peelings were strained, the juice put back on the stove to simmer, and the meat was sieved from the skins

through the dilver. Spices and brown sugar (and some sugar substitute) were added to the sieved apples and, after an hour's bubbling and stirring, nine pints of delicious apple butter were added to the family larder.

Meanwhile, the juice had been boiling away on the back of the stove. The lady had plans for that, too. She was looking forward to the day when her sugar reserve had built up, and when blackberries and other low-pectin fruits would be available for jellies, so she filled seven quart jars with the boiling juice.

Everything was gone now but a couple of quarts of seeds and skins. "Sis," she said to the 'teener, "spread these out on Daddy's compost pile, and cover them with a shovelful of lime from the garage." When the slaughterhouse people have figured out a way to save the squeal of the porker, we will bet that this lady will have figured out a way to capture aroma, and, some winter day when cabbage is on the menu, she'll turn loose in the kitchen the delightful odor you get when you "put up" a bushel of Trans-parent apples. — From July 15, Tennessee Horticulture.

THE FRUIT SHOW AT THE ANNUAL CONVENTION

T^N keeping with the times, the fruit show at the annual convention of the Wisconsin Horticultural Society will be reduced to an exhibit of educational value, in showing the new varieties which are becoming leaders among the orchardists of this state.

Plate exhibits of five of the leading standard varieties, McIntosh, Delicious, Golden Delicious, Wealthy, will be the only ones on the schedule this year.

We hope growers will save three specimens of their new varieties

and exhibit them at the show, and five specimens of the standard varieties.

MORE MOISTURE BENEATH MULCHES

A S explained in Hoosier Horticulture by Dr. George D. Scarseth of Purdue University, there is increased moisture beneath a mulch because the mulch shades and cools the ground causing condensation of water into the soil from the air. Because mulch also holds water in the ground it is possible in this manner for the soil to contain more water than that provided by rainfall. This process is more pronounced during the cool nights of spring. Dr. Scarseth illustrates his point as follows:

You have all perhaps noticed that as you watered your lawn it didn't seem to need as much in the spring and fall as during the hottest weather. In mid-summer, you never got enough water on. This difference is not all because of the losses by evaporation but because in the fall and spring a lot of condensation occurred as a result of the difference in temperature during days and nights we do not get much condensation into the ground to take care of the requirements. Under a mulch cover during the hot month of July we find an advantage from the mulch in drawing more moisture into the soil.

A mulch will also promote the availability of phosphate and potash in that increased moisture separates the disc-shaped clay particles to which potash, phosphorus calcium and magnesium are stuck. If the soil becomes dry these particles are not held apart and the chemical plant fiods become unavailable to plant roots. The presence of mulch can prevent drying out and hence, loss of availability of phosphate and potash, two of the three most important plant food elements.

From April 1 Horticulture.



By the WISCONSIN GLADIOLUS SOCIETY

OFFICERS Harold Janes, Whitewater, President Bernard Nichels, Sheboygan, Vice-President H. J. Rahmlow, Madison, Cor.-Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Illinois Ave., Sheboygan

DIRECTORS DRECIONS Oren Baxter, Edgerton Ffed Hagedorn, Sheboygan Dr. Geo. Scheer, Sheboygan Archie Spatz, Wausau Frank Blood, Stevens Point Chester Harrison, Waldo Walter C. Krueger, Oconomowoc E A Lins, Spring Green Walter Miller, Sun Prairie Noel Thompson, Madison

The Fourteenth Wisconsin Gladiolus Show

Sheboygan Armory Ideal Show Place

THE 14th annual Wisconsin Gladiolus Show was held in the spacious Armory in Sheboygan, August 21-22. Situated but a few hundred feet from the shore of Lake Michigan, the climatic conditions were the best for maintaining the bloom throughout the show. Though the quantity of bloom was smaller than usual, due to restrictions of war travel, the quality was good.

Some 3,000 spikes were on display, entered by 75 exhibitors from four states-Wisconsin, Minnesota, Illinois and Pennsylvania.

Mr. J. R. Hopkins, Deerfield, Illinois, led in points won, having 110. Dr. F. X. Graff of Freeport, Illinois, was second with 87, and Gladys Sprecher of Spring Green was third, having 66. As the donor of the Paddy Hopkins Trophy for most points won, Mr. Hopkins graciously relinquished this trophy to Dr. Graff.

Probably the variety of most interest at the show was Leading Lady, the new white sport of Picardy, entered by Dr. Graff. This glad won first in both 1 and 3 spike classes. The one spike was later awarded division championship, grand championship, and the most beautiful spike of the show. For grand championship, the contender was a beautiful spike of Marion Pearl, a 1943 release, grown by Mr. Hopkins.

There were but three commercial entries at the show, Dr. Geo. H.

Scheer showing three lovely baskets of White Gold; Walter C. Krueger with an array of baskets and vases of his own creation, and Harold Janes featuring the new creations. The latter was awarded first prize in this division, with Mr. Krueger second, and Dr. Scheer third.

When the three-spike entries were selected for consideration, three tall spikes of Golden State were taken from the table of Harold Janes and later were awarded the three-spike grand championship.

In the seedling class, Dr. Graff won in the large exhibition class with Seedling P 39, another white sport of Picardy, and David C. Puerner, Milwaukee, was first in the decorative section.

For having the highest number of points, 14, in artistic arrangement, Mrs. George Scheer, Sheboygan, received the Wisconsin Horticultural Society silver trophy.

Other varieties which aroused great interest were King William, a spike of which grown by Rev. Schulz of Van Dyne, was a strong contender against Leading Lady; Eglantine, New Zealand Splendor, Crinkle Cream, Badger Beauty, Show Queen, Diane, and Magnolia. One of the most beautiful baskets in the show was one of Criterion in Mr. Krueger's exhibit, not entered in competition.

Mr. C. D. Fortnam, Tyler Hills, Pennsylvania, sent a large exhibit

bad condition so that his entries could not rate. Those who attended the Lake Geneva show last year will remember the high quality of Mr. Fortnam's exhibit.

Exhibitors attending from outside the state were: Bob White. Waterloo, Iowa; Dr. and Mrs. F. X. Graff, Freeport, Illinois; Mr. and Mrs. J. R. Hopkins, Deerfield, Illinois, and L. E. May, Chicago.

At the banquet at the Grand Hotel, following the show Saturday evening, Mr. Hopkins and Dr. Graff were co-toastmasters.

Much credit for staging and arranging the show should be given to the Sheboygan County Chapter, to Mr. Fred Hagedorn and Mr. Walter Axel for their painstaking work, to Mrs. Scheer as chairman of the banquet committee; to Dr. Francis Graff as supervisor of judges; to Bernard Nichols as chairman of the ticket and finance committee; and last but not least, to our faithful and unselfish secretary. Mr. Otto Kapschitzke, who as we all know, shoulders the big load in any event in which our Society participates.

OTHER WINNERS AT THE SHOW

Division Champions

Late Introductions, 1 spike, Rev. J. Schulz, Van Dyne.

Late Introductions, Section D, J. R. Hopkins, Deerfield, Ill.

Open Classes, three spikes, Secby express, but this arrived in very tion E, Otto Kapschitzke, Sheboy-

gan, on White Gold.

Open Classes, three spikes, Section F, Dr. Francis Graff, Freeport, on Pink Paragon.

Open Classes, 1 spike, Section G, Dr. F. X. Graff, Freeport, on Leading Lady.

Open Classes, 1 spike, Section H, Henry Zabel, Jr., Sheboygan, on Golden Goddess.

Open Classes, 1 spike, Section I, L. E. May, Chicago, Illinois, on Nadia.

For resident members of the Sheboygan County Gladiolus Chapter, Section J, Walter Axel, on Red Giant.

Novice Section, Section K, open to residents of Sheboygan, and vicinity, Mrs. E. Biesing, on Bagdad.

Exhibitors in the artistic arrangement classes were: Mrs. Hobson, L. E. Larson, Walter Axel, Mrs. Geo. H. Scheer, Fred Hagedorn, Sheboygan; Mrs. A. J. Radloff, Plymouth; and Miss Olive Longland, Lake Geneva.

OTHER HIGHLIGHTS

The Sheboygan Victory Garden committee of the Sheboygan Defense Board sponsored an exhibition of vegetables in connection with the Gladiolus Show, and the home economics department of the Sheboygan School of Vocational and Adult Education had canned goods on display.

Posters with information about the value of vegetables in the diet were shown. These were captioned, "It's Patriotic to Be Healthy," "Health For Victory" and "Vitamins For Victory."

There was considerable competition in the vegetable classes shown by the fact that there were 26 entries of carrots, and 19 of potatoes. Other vegetables exhibited were pumpkins, rutabagas, squash, Swiss chard, tomatoes, turnips, peppers, parsnips, parsley, onions, kohlrabi, green kale, endive, egg plant, pickles, cucumbers, corn, celery, root and stalk, cauliflower, beets, beans, broccoli, cabbage.

There were 50 varieties of canned goods displayed including meats and chicken.

Judges

Judges for the gladiolus show were as follows: David Puerner, Milwaukee; Curtis Beech, Mazomanie; Archie A. Spatz, Wausau; Walter Miller, Sun Prairie; L. E. May, Chicago; L. E. Shaw, Milton; Walter Krueger, Oconomowoc; Ben Robinson, Kenosha; E. A. Lins, Spring Green; Frank Thomas, Kenosha; Mrs. A. J. Radloff, Plymouth; Constance Graff, Freeport; Dixie Janes, Whitewater; J. R. Hopkins, Deerfield.

Judges of the artistic arrangements were Mrs. Ben Robinson, Kenosha, and Mrs. Frank Thomas, Kenosha.

OTHER WINNERS

Other winners were: Legion Trial Gardens, Spring Green; Otto Kapschitzke, Sheboygan; A. A. Spatz, Wausau; Peter DePagter, Cedar Grove; Miss Gladys Sprecher, Spring Green; L. E. May, Chicago; Walter Axel, Sheboygan; Fred Hagedorn, Sheboygan; C. Holzman, Sheboygan; A. Bogen, Sheboygan; Henry Zabel, Jr., Sheboygan; David Puerner, Milwaukee; Al Hinz, Sheboygan; Rev. J. Schulz, Van Dyne; A. E. Piepkorn, Plymouth; Otto Hagedorn, Sheboygan; P. E. Hoppe, Madison; Mrs. Hobson, Sheboygan; Joe Pitsch, Manitowoc; Henry Wolfert, Sheboygan; Walter Sprangers, Waldo; Rev. Otto Scheib, Elkhart Lake; A. A. Fiedler, Cudahy; Rob. E. White, Waterloo, Iowa; Betty Ogle, Sheboygan; O. Reimer; C. Lemkuil, Oostburg; C. Holtzman; L. C. Dietsch, Plymouth; Mrs. J. E. De Master; E. H. Osborn, Downers Grove, Ill.; Emil Jaschinski, Sheboygan; Rev. A. C. Baumgartner, Baileys Harbor; Frank Oldenberg, Baileys Harbor; Henry Boltz, Chilton; Irvin Wood, Mazomanie; F. J. Blood, Stevens Point; Mrs. C. H. Prueter, Baileys Harbor; H. D. Lauson, New Holstein; Quinn Wood, Mazomanie.

GLADIOLUS BULB AUCTION GLADIOLUS bulb auctions seem to be very popular. We read in the Supplement of the New England Gladiolus Society of the auction held by that organization last spring. There were 850 lots of bulbs put up for sale. Mimeographed copies of the list were provided everyone and there was enthusiastic and good natured bidding. Some members who could not attend had sent in requests, and the president made bids for them.

The Wisconsin Society has had two very successful bulb auctions due to the efforts of Secretary Otto Kapschitzke. They will no doubt be enlarged and improved as time goes on.

MADISON CHAPTER HOLDS VERY BEAUTIFUL GLAD-IOLUS SHOW

THE Madison Gladiolus Chapter held a very beautiful gladiolus show on August 9-10 in the lobby of the First National Bank of Madison.

Outstanding were the artistic arrangements. There were some beautiful blooms exhibited as well.

Crowds streamed in both day and evening in such large numbers that it was difficult to get close to the exhibits at times. The First National Bank provided the funds necessary and three silver trophies.

Leading exhibitors in the spike classes were: Theo. Woods, Madison; A. S. Haugen, Stoughton; Paul Hoppe, Madison; Roy L. Straus; Clarence Field; R. B. Russell; E. A. Lins, Spring Green; Geo. Morris; John F. Flad; Gladys Sprecher, Spring Green; James Torrie.

Winners in the artistic arrangement classes were: Adeline E. Lyster, De Forest; Mrs. R. B. Russell, Madison; Mrs. H. S. Bostock, Madison; Mrs. F. C. Middleton, Madison; Albert Haugen, Stoughton; Theo. Woods, Madison; Roy L. Straus, Madison; Paul E. Hoppe, Madison; Geo. C. Morris, Madison; Mrs. E. N. Hein, Madison; Mrs. A. L. Thurston, Madison; Mrs. G. L. Harbort, Madison; Alma E. Weiss.



HERB CHART "A PINCH IS ENOUGH"

Thyme

Sprinkle lightly in chopped meats, on roast or fried fish.

Use in all stuffing for meat, fish and poultry.

A pinch in cottage cheese or cream cheese.

Savory

Rub beef roast lightly with savory. Sprinkle a little in hamburgers.

A pinch when frying sausages. Use with pork chops and fried apples.

Use in stuffings.

Use with Basil in stuffed tomatoes.

Basil

For all tomato dishes, raw or cooked.

Use in green and vegetable salads.

A pinch in string beans and in

Peas—add during the last few minutes of cooking.

Use in all spaghetti dishes.

Marjoram

In white sauce for carrots, peas, onions and potatoes.

Sprinkle a little in chopped meat balls.

A pinch in boiled onions or peas. Rosemary

Beef and pork roasts.

In all white sauce for vegetables. Stuffing for fowl or goose.

Use in pickles and jams.

Season biscuits and corn muffins; have it finely powdered, use a little sugar.

Herbs are really coming into their own place again with the need to make every-day meals tasty and perhaps unusual, and a pinch is enough.

Victory Gardens

Out here on the coast, victory gardens are reaching their high peak and gardens are being judged, Mrs. C. E. Strong



shows are being held in every small town as well as in the larger cities. Newspapers, Chambers of Commerce, Kiwanis Clubs, Women's Clubs, and Garden Clubs all have offered prizes for the best gardens, both large and small, for the best planned garden with a succession of crops. There are prizes for the canned fruits and vegetables. Also for the largest display from one garden. Food lockers are bought to store the food so carefully raised. Many adobe brick cool houses are being made to store root-crops. Cellars or basements are not so common in this state as they are back East. Hence the cool house made of adobe bricks. There will be no chances taken with those many cans of vegetables, fruit, chicken, rabbit.

Just a day or two ago a neighbor told of friends who spent their vacation at the beach, and went deep sea fishing. Results—nearly a hundred cans of tuna. A pleasant and profitable vacation. In many of the schools home economics teachers and their students have been busy canning vegetables, chickens and rabbits raised on the school grounds.

One young newly-wed said: "Do you know this food shortage is really an awfully good thing for us young married folks. We are learning to cook, and to save. We have to cook, for you cannot hire anyone to cook for you. They are working in the defense plants and we have to save. Actually by the time the war is over we will have become quite set in our good, sensible way. Bill and I are planning and saving for a home much more sensibly than we would if conditions were not as they are. All things considered, we are really getting some lessons that were needed (knowing our dispositions)."

A home and a garden is quite the common topic and desire of many young people today.

Many people went to the ranches to pick berries because they could get them cheaper. Some were quite surprised to find this was real work—back aching work in the hot sun. As one man and his wife said, "We earned these berries by picking them. Why should we pay anything for them?"

"Well," said the owner, "where would I get paid for the work of getting the land ready, the cost of the plants, the cultivation, weeding, irrigation, to say nothing of taxes?"

There are a few moments of surprised thinking. Then—"You win. I guess we are lucky to get the berries," said the other man, and laid down the money with a "Thank you."

There just cannot help being a better understanding when someone finds out that the man or woman who raises food doesn't just sit around doing wishful thinking.

We were all sitting around the living room in a Cape Cod home awaiting supper one Saturday night when our host came to the door and announced: "For those who don't like beans, supper's over."— George W. Walsh.

THE TEN BEST LILACS

ARRY A. Graves, Secretary of the North Dakota Horticultural Society, and extension horticulturist for that state, writes in the August issue of the North and South Dakota Horticulturist, giving his choice of the ten best lilacs. His opinion will be of interest to our readers because certainly they must be hardy if they are grown in North Dakota.

Leon Gambetta, a clear double pink, is close to leading the lot. Paul Thirion, a double claret-red, especially beautiful in the bud. Congo, a large red single. Reaumur, single pinkish-violet buds opening into a rosy-carmine. Vestale, early single white, as far as I am concerned the best white. I will have plenty of argument on this one with some folks, however.

Mme. Antoine Buchner, similar in many respects to Leon Gambetta, but darker. Lucie Baltet, a jngle pink, nothing else just like it, in a color class by itself. Every good lilac collection should include this one. Decaisne, a late single azure blue, a very rich color. While Decaisne is excellent, it has tough competition from two or three other good single blues.

Hiawatha, Frank Skinner's excellent late, single pink hybrid. A beautiful clear shell pink, appreciated the more because it blooms after most of the Frenchmen are through. Last but by no means least, I must list Dr. C. I. Nelson's seedling, Dianne. It is a single that I guess we shall have to call red. Individual florets are very large and one of the outstanding characteristics of Dianne is its dwarfish growth. It propagates itself quite freely from suckers - a desirable character in anything so valuable. Not available from nurseries as vet, it is being propagated and should be listed soon.

You have probably gathered by this time that I think a good single beats a good double any time. Colors in these lilacs are hard to describe. Mr. Porter's set of color plates for accurately identifying colors would be a big help in determining what color some of these lilacs are. I think most every lilac fancier will agree that there have been too many varieties named.

CAN WE CONTROL DISEASES OF FLOWERS WITH THE GROUND SPRAY?

MEMBERS of the Wisconsin Horticultural Society have no doubt noticed during spring months articles by Dr. G. W. Keitt and J. Duain Moore on the value of Elgetol as a ground spray to assist in the control of apple scab.

Now comes an item from plant pathologists at the University of Minnesota that Elgetol sprayed on the ground is effective for the control of black spot or botrytis disease of peonies. The next question is, will it be effective for the control of such serious diseases as **black spot** of roses, leaf spot of iris, and many others.

This is the way the ground spray works. Overwintering spores of many diseases are carried from one season to another on the old dead leaves and stems. Even though the plant tops are burned, we are not always sure of getting all of the tops or leaves, and a leaf or two may be enough to cause the spread of disease because there are so many spores even on one leaf.

Elgetol is a penetrating material which will kill the spores in or on the leaves and stems. As many as 99% of the spores have been killed in experiments with apple scab. In the future, therefore, we may find it desirable to spray the garden area early in the spring just before the buds open to assist in the control of diseases.

ROSE HIPS HIGH IN VITAMIN C

Rose hips are very high in vitamin C. In England certain rose hips have 5,000 milligrams of vitamin C per 100 grams of fresh pulp. This is in comparison with 39 to 56 milligrams in citrus fruits.

BROWN SPOT ON THE LAWN

DURING the damp weather in May and early June, many people complained of brown spots on the lawn. If these spots are not stationary and seem to come in unexpected places, they are probably due to a fungus. The damage seems to come mostly at night. In the morning a smoky appearing spot is evident, resembling grass that h a s been burned by dry weather or scalded with water. It does not always entirely kill the grass.

Fungus diseases spread most rapidly and thrive best during a period of wet or damp weather. Consequently, it is during such times that we see the brown spots.

The control consists of spraying or dusting with Bordeaux mixture every two or three days, especially after a rain. Seed dealers also have a mercury compound especially recommended for brown spot.

As dry weather comes, however, it may be that the grass will re-establish itself and the difficulty be overcome without treatment.

This brown spot should not be confused with spots which may be due for example, to large stones just under the soil which shut off the water supply during the summer and cause a drought condition on certain small areas. The only remedy here, however, is frequent watering.

TURNIPS

Turnips may be pulled within 60 days from date of sowing. They may be sown as late as August 1st. In the northern part of the state rutabagas make a better crop than turnips, but they do not do as well in the hot weather of southern Wisconsin. Turnips also grow best in the cooler weather of fall. Hot weather is likely to produce bitter roots.

GARDEN GLEANINGS

I^N this issue we have the report that the preserving of food by drving is not as successful as we might expect. Canning, pickling and salting are much better methods. That is something to think about before going on any extensive program of drying vegetables and fruits.

Then comes a statement that there are on the Wisconsin markets chemical preservatives and canning powders which should be avoided in home canning, by the State Department of Agriculture. There are strict laws banning the sale of food products containing benzoate of soda, boric acid, various sulfites, and other substances that are a menace to health, according to R. R. Crosby, Supervisor of Food Inspection.

He says that we should can our fruits, vegetables and meats by a recommended procedure such as pressure cooking, and effective heat treatments.

Growers of house plants claim that fuel rationing is right in line with the successful culture of the plants in the home because the plants like it best in temperatures below 70 degrees. Many experts say that that is also best for human beings. We should keep the air moist with vapor pans or some other method. Plenty of house plants of course will help in this respect.

One of the most serious handicaps in the successful growing of house plants is escaping gas from gas burners. It's almost impossible to grow the average house plant successfully in a kitchen in which there is a gas range.

In spite of the fact that we see frequent recommendations we have never sown the seeds of annual flowers in fall. It is well known, of course, that Sweet Alyssum, Calendula, Cornflowers, Cosmos, Pansies



and Sweet Peas may well be sown in the fall. But there is the problem of having the soil available because the area may be filled with other plants in the fall, and then too, it seems we would rather work up the soil in the spring, thereby killing weeds and loosening it to provide better tilth. After the winter snows the soil is packed and hard and we can't imagine that the flowers would be as happy in such a soil as one that is worked up in the spring.

Do you have any seeds left over from last spring? If so, take good care of them and try to use them again next spring. Of course we should not plant such seeds without testing to see if they will grow. That is easy. Simply take some blotters and two enamel pie tins. Moisten the blotters, place about 25 seeds between them, cover with the second pie tin, and set in a warm place for a few days. Then the number of seeds which have germinated may be counted. It is entirely possible that old seed was purchased last spring in which case the germination will be poor and should not be used.

All seeds should be placed in rodent-proof containers in which air can penetrate. They should of course be labeled carefully and stored in a cool, dry place.

Some very important plans for next spring's victory garden should be made this fall. There is the matter of selecting the site especially. If you plan on a new location, the fall of the year is the time to select it-not the early spring when one cannot see how much quack grass there is, and how many other faults the area has. Then there is the matter of how much seed to buy. Did we buy too much this last spring? Did we fertilize the soil sufficiently and properly? Did we sow some crops too thickly, requiring too much hand labor for thinning? Did we get as many vegetables from the area as is possible? Perhaps a better garden plan would be desirable next year.

There are many good ideas, but so often they have flaws. We have been advocating mulching tomatoes with hay, straw, or other material to conserve the moisture in the soil which prevents blossom end rot. It's a good idea in that respect. However, one of our gardeners reports injury to the tomatoes by mice which make nests under the marsh hay she used.

To determine whether injury is caused by mice, one need only look under the straw nearest the eaten tomatoes to find the mouse runways. Field mice always build runways and keep hidden from their enemies under a cover as much as possible. A little poison bait placed in the runway would, of course, be of help.

-H. J. Rahmlow.

WATERING DEVICES

Watering devices which will water the surface of the soil in the perennial border and not the leaves of the plants, are most desirable. Wetting the leaves promotes the growth of fungus diseases such as mildew and leaf spot, as well as black spot of roses.

In Los Angeles, business is so good that a union, wanting some pickets, had to apply to the county employment agency.-Gladwin Hill. September, 1943

PRESSING HERB SPECIMENS

PRESSED and mounted specimens of all types of herbs are to be made by the Oregon Herb Society to be used by members for displays and use in their talks. Each member is to press the herb she grows best in her own garden.

Instructions for the proper method to be used in pressing the specimens are given as follows:

Include the full bloom if possible, and also the seed. If it is not possible to include the root stock. indicate the type of root. The most successful method is to press the specimens between several thicknesses of newspapers. Newspapers are more absorbent than smooth papers. Change the papers every day or so at first. Place a board over the papers to press evenly. If possible, place a brick on the board as the weight of the brick can be evenly distributed and will make for better specimens. Be sure the plant is flat before starting to press it.

—From Horticulture Illustrated, August, 1943.

NEW ZEALAND SPINACH

T seems to be customary or in any case common practice to cut the growing shoots of New Zealand spinach, and the result is a mass of tender shoots and small leaves. I prefer to let the shoots or branches grow unchecked stripping off the developed leaves up to about two inches of the tip of the shoots. A good plant unchecked will eventually grow to three feet or more in diameter, completely covering the ground.

Growth is very rapid in late summer and fall. Moreover the plant can stand cool weather and some frost. With slight protective covering, one can keep picking all through November.

---From Horticulture Illustrated, by Arthur Herrington, August, 1943.

PLANT GROWTH PROMOT-ING SUBSTANCE OBTAINED FROM CORN POLLEN

A N EXTRACT from ripening corn pollen has been found to greatly stimulate the growth of plants and is much stronger than recently discovered chemicals known as growth regulating substances, according to the U. S. Department of Agriculture. Research workers made an extract of corn pollen and on applying it to seedling bean plants observed a much stronger stimulation of growth than could be induced by chemicals.

The pollen collection this year is being made by honey bees. Pollen traps are placed in front of the hives through which the bees must pass. The pellets of pollen are dropped in the collecting box and then sorted. The corn pollen can easily be distinguished from other types.

When a ring of corn poller, extract was applied around the stem of the seedling bean plant it caused elongation of from $1\frac{1}{2}$ to $2\frac{1}{2}$ times as great as was caused by other synthetic regulators.

The effect of the corn pollen in causing an unusual elongation of the stem suggested one practical use might be made of it, by florists in spraying to cause a lengthening of the stems of flowers. This extract has also been found effective in *preventing the drop of unfertilised fruits* and debladed leaves, and may therefore prove of value to the plant breeders. It may also be effective as a harvest spray if it can be produced cheaply enough.

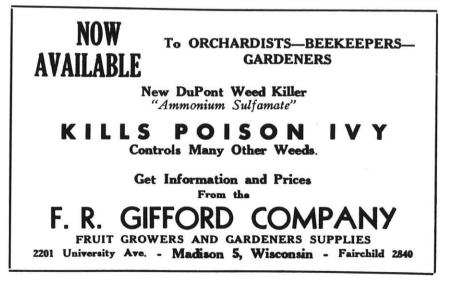
Kale is a fall and winter plant. Sown in June, the plants set out in rows two feet apart, they will produce leaves which stand freezing, and are improved in flavor by that experience. Collards are a member of the cabbage family which do not make heads, but leaves with cabbage flavor.

All these varieties of greens are rich in minerals and vitamins, and are valuable in the diet. It is well for the home gardener to plant a small quantity of several kinds so that the family does not grow tired of greens. All produce a surprising quantity of food on small space.

-By the National Garden Bureau.

A little girl who was attending a progressive school had a cold one morning and her mother suggested she remain home from school.

"But I can't Mother," the child insisted. "This is the day when we start to make a model of a cow and I'm chairman of the udder committee."—*Thesaurus of Anecdotes*, edited by Edmund Fuller (Crown).



Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

Mrs. H. S. Bostock, President 15 W. Main St., Madison

Mrs. R. H. Sewell, 1st Vice-President, 957 No. 70th St., Wauwatosa Mrs. F. E. Willard, 2nd Vice-President, Oakfield

OFFICERS Mrs. Floyd E. Ballard, Recording Secre-tary-Treasurer Badger Park, Route 62, Madison

H. J. Rahmlow, Corresponding Secretary, 424 University Farm Pl., Madison

PRESIDENT'S MESSAGE

Dear Garden Club Members:

Some of our time during the past three months has been given over to filling the requests of Central Region and those of the National Council of State Garden Clubs. Inc.

Mrs. W. A. Peirce of Racine, Wisconsin's Historian, has graciously accepted the additional task of gathering important achievements from Wisconsin's past history which will be sent to the vicepresident of the Central Region to be incorporated into a history of the Central Region. We know that all past presidents, officers and chairmen of Wisconsin will readily cooperate with Mrs. Peirce if she calls upon them for help.

It is hoped that our members have found time to read the National Council Bulletins since the new National officers took over in May. Many articles of interest for the coming two years are in these last Bulletins.

Wisconsin's chairmen have given freely of their time and have done an excellent job both in accomplishing tasks they set out to do, and in cooperating with the Central Region, the National Council, Civilian Defense and other outside groups. We are justly proud of them, especially at a time when so much is asked from all of them. Elsie M. Bostock.



GARDEN QUIZ FOR YOUR **CLUB MEETING**

Is it true that-

1. Hot peppers near sweet potatoes will make them hot?

2. New varieties of iris planted near old ones will be changed in color?

3. All gladiolus slowly revert to pink?

4. All phlox revert to a purplishmagenta color?

5. Cucumbers, squash, melons, planted near each other will mix and ruin the melons?

6. Popcorn will ruin sweet corn if planted too close?

7. Plant diseases and bugs suddenly develop from nothing?

8. Tobacco dust is an excellent control for pests?

9. Moth balls keep away rabbits?

10. The signs of the moon should be followed in planting your garden?

By Victor H. Ries, in June, 1943 Farm and Home Garden Club News Letter.

DISTRICT PRESIDENTS

DISTRICT PRESIDENTS Mrs. F. J. Fitzgerald, 649 Broad St., Menasha; Fox River Valley District Mrs. Martha Lowry, Lakewood, Madison Madison District Mrs. Geo. Adami, 2466 No. 46th St., Mil-waukee; Milwaukee District Mrs. Gilbert E. Snell, 414 Erie Ave., She-boygan; Sheboygan District Mrs. Bentley Dadmun, 604 Main St., Whitewater; South Central District

ROSES ON THE BATTLE FIELD

A queer thing happened this aft-ernoon. I was on a most recent battlefield of North Africa and had stopped to admire three of the most wonderful plants of Herbert Hoover I have ever seen. While looking at it the mail orderly brought me my mail and in it was the March-April issue of the Magazine. I have just finished reading it in a tent by candlelight, and have enjoved it so much. So you see you even reach soldiers in the field.

There were three of these Hoovers in a yard. The house was in shambles, for a terrific battle had passed over it only a few days ago. but marvelous to relate, the rose bushes had not been touched. They stood six feet high, and I counted 83 blooms on one of them. I gathered some and have them in my tent now, stuck in water in a tin helmet. Although the setting is incongruous, the roses look prettier to me than any I have ever seen.

This is a wonderful rose country, but they have a great deal of powdery mildew. However, they seem to thrive on it. The predominant types seem to be Hoover, Red Radiance, Rome Glory, and a white I cannot name.

Lt. Jas. W. Blanks in The American Rose Magazine, July-August, 1943.

Slogan Wanted By National Council of State Garden Clubs, Inc.

THIS administration needs your help in a slogan contest. Out of all our plans, our objectives, our hopes and our war time activities, we want a slogan, short and compelling, that will inspire every member to faithful and ceaseless effort in working out our plans to win the war and help build a better world. We want you to participate in this contest by sending in the best possible slogan. The award to the winner—

\$50.00 War Savings Bond

to be presented at the fall meeting of the Board of Directors, October 6, 1943.

Here are the objectives of the National Council:

- 1. To cordinate the interests of the garden clubs of the states and to bring them into closer relations of mutual helpfulness by association, conference and correspondence
- To aid in the protection and conservation of our natural resources
- 3. To encourage civic beauty and roadside beautification
- 4. To study in all aspects the fine art of gardening
- 5. To cooperate with other agencies furthering the interests of horticulture and conservation

and for the duration, we are pledged to gear our activities, as outlined in this issue of the Bulletin, to the war effort. Of course we are planning and working for a victorious peace. This gives the background from which the slogan must come.

Contest Rules

- Contest must be cleared through state organizations. State Presidents are asked to immediately appoint State Slogan Committee.
- 2. Each state may send in the three best slogans.
- 3. This is a National Council contest. Only affiliated members are eligible to participate.

- 4. National Council Board members will send their slogans direct to National Council Slogan Committee, Room 577, Hotel Roosevelt, New York, N. Y.
- Slogans must be typed with full name and correct address of person or club submitting and mailed to National Council Slogan Committee, Room 577, Hotel Roosevelt, New York, before midnight, September 25th.

Won't you please help us get just the right slogan for our great organization?

Faithfully Yours,

Mrs. E. Wesley, Frost, President.

President's Note: We have listed above the objects and rules of the slogan contest and ask that our members cooperate and send entries to the Wisconsin committee. The committee will pass on them and send the three best from Wisconsin. I am sure that with Wisconsin's past record we have every reason to expect some excellent slogans. We shall be waiting to hear the results of this contest with a great deal of interest.

The following members will judge the slogans: Mrs. Irving Seaman, Station F, R. 9, Box 312, Milwaukee 9, Chairman; Mrs. Sam Post, 2930 University Avenue, Madison 5; Mrs. H. J. Anderson, 317 West Blvd., Racine; Mrs. E. R. Durgin, 1815 Park Avenue, Racine. Entries may be sent in to any member of the committee.

Elsie M. Bostock.

MORE PLANTING AT TRUAX FIELD

THREE donations to our Truax Field Planting near Madison came in after I submitted my last report.

In early July Sears Roebuck's Madison store gave Truax all their surplus plant material, aggregating \$600 in value, largely French lilacs. The Radio School men planted them to good advantage.

To the victory gardeners at the Guard house went several flats of vegetable plants from the F. R. Gifford Co., and 6,000 tomato plants from Harry Turville, Madison.

We have been asked to do some planting at the non-commissioned Officers' Club which is in process of construction.

Genevieve Clarke Dakin, Madison District War Service Chairman.

POWELL DAFFODILS

will be doing Flower Grower readers a good turn by directing their attention to the splendid kinds, novelties and his own introductions obtainable nowhere else so far as I know, as well as the popular ones, to be found in the catalogue of Edwin C. Powell, R.F.D. 2, Rockville, Maryland. I have to take into account that Daffodils are one of my favorite flowers when I write about them or I become overenthusiastic in their praise; even so, they are one of the most dependable producers of beauty available to northern gardeners.

C. W. Wood in July, 1943 Flower Grower.

C	General Landscaping	e Tree Moving
Cavity Treatment	We are insured	a Tree Moving
Fertilizing	Lakeside 2907	Removal
Pruning	Wisconsin Tree Service	Spraying
	2335 N. Murray Ave. Milwaukee	

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PROGRAM SUGGESTIONS

Prepared by the State Program and Lecture Chairman

KATHERINE MELCHER

1. At the beginning of the season give each member a certain number of seeds of two or three kinds of annuals, the members to take the seeds home and grow them in their gardens. In the late summer have a flower contest show of the flowers raised from the seeds given out in the spring.

2. Arrange a yearly competition of gardens and lawns in which every resident is asked to take part.

3. Lawns. Round table discussion, each member talking over his lawn problems and telling what kind of seed he uses, what sort of care he gives, what weeds he finds most troublesome and how he keeps them checked, etc. Exhibit of tools for the care of lawns (seeding, watering, weeding, cutting) from the local hardware store, also catalogs selling lawn seed.

4. Each member brings, written on a piece of paper, some garden problem which has been bothering him and which he would like to have answered, and puts it in the box by the door. Then, each member, as he leaves, draws a slip of paper from the box, and gives the answer to the question he has drawn at the next meeting.

5. Study groups. Divide the club into sections and make a study of some practical horticultural subject, each group taking up a different phase of it. Then, at the end of an allotted time, the groups come together and make their reports. In this way a great deal of ground may be covered in a much shorter time than if the whole club were to work together. This is particularly valuable in large clubs where the interests are diversified.

6. Have a flower show in a member's home. This is a most popular program. The schedule consists of all the different places in the house where flower arrangements may be placed, dining room table, hall table, living room mantle, bedroom dressing table, etc. The arrangements may be judged by qualified club members, by outside judges, or by local criticism. A show of this sort is very difficult to judge except by points. Point the arrangements up separately, not against each other.

7. Have a contest of naming wild flowers, perennials, shrubs, or trees. This may be done in the club room with either specimens or pictures, or, better still, a field trip may be made and the contest carried on out-of-doors, using actual growing specimens. A prize may be awarded to the winner, such as a book on wild flowers for the wild flower contest, one on shrubs, etc.

8. A catalog meeting. Have the members bring plant and seed catalogs and make out their winter order lists. This gives them an opportunity to talk over their orders and also to order the seeds or bulbs in large quantities, thereby getting a discount.

Garden Tour

9. Arrange with the owners of prominent gardens in your locality to have your club visit their gardens. Or have the club visit the gardens of some of its own members.

10. Make a study of weeds, their identification and control.

11. Make a study of the pronunciation of botanical and common names of plants, flowers and shrubs, etc.

12. Have a contest of fruits, flowers and vegetables arranged in any combination in kitchen utensils. This makes a very entertaining program. Prizes may be awarded, one for the most artistic arrangement, and one for the most original.

Plant Sale

13. For a fall meeting have a plant sale. This is the time when

members will be dividing their perennials and thinning them out, so there is plenty of material available. These sales may be open to the public or merely an exchange a m o n g members. However, the plants must be inspected before they may be sold.

14. October meeting. Each member brings a list of five house plants with cultural notes about each. As each list is read the other members may take notes of those they do not have. This is a good time to have a demonstration of indoor planting.

15. November meeting. Trees the need of their conservation and planting as a drought preventative, and as an asset to the beauty of our highways.

Christmas Meeting

16. Design Christmas wreaths, and plan Christmas decorations for the home. Have a contest of table decorations, following conservation regulations.

17. Winter birds and planting for winter birds in our state—a bird's Christmas tree in every yard.

18. History of holly and other Christmas greens—where holly may now be obtained with proper conservation stipulations.

19. Wild flower and bird sanctuaries assets to the community.

20. Design, the backbone of the garden.

21. Discussion of garden types, formal or informal, examples shown in photographs or in slides by lecturer.

22. Plant material for a formal or informal garden.

23. Study of appropriate garden accessories, urns for terraces, sun dials.

24. Plants and ferns for shady places.

25. The herb garden, plans and lists for members.

26. Tulips to plant in combination with other flowers for the spring garden.

Garden Centers

27. The garden center—its wartime responsibility and how it will function.

28. Preparation of soil for victory gardens.

29. Varieties and kinds of vegetables from the standpoint of nutrition.

30. Diseases and bugs and their control.

31. Varieties for late planting. Vegetables for storage.

32. New methods of processing and storing. Home drying of vegetables.

33. Compost heap. Soil conservation in our own back yards.

BORAX KILLS POISON IVY

Borax applied to the soil at the rate of 10 pounds per square rod will kill poison ivy, according to L. W. Kiphart of the Bureau of Plant Industry, Beltsville, Maryland. However, borax applied at this rate may also kill other plants growing on the area, so it should be used only where one is not concerned with danger to other plants.

At the New Hampshire Experiment Station the above application has not killed apple trees, but did completely eradicate wild strawberries.

Spraying with ammonium sulfamate, 3/4 pound per gallon of water, is still the most efficient means of eradicating poison ivy.

TO MCGREDY SUNSET

- Fragile flower of the month of June,
- With petals like the sun at close of day;
- That hides your timid beauty from the passerby.
- But look into your heart of rarest gold,
- And one can see just why you are a lover's choice;

Always lovely, tranquil and serene-

- You are crowned the "Sweetheart's Queen."
- -Marion F. Haugseth, Hayward.

Storage of Vegetables Questions and Answers

By. A. E. Hutchins, L. E. Longley,

QUESTION: Why is it so important to have proper temperature, humidity, and ventilation in the vegetable storage?

Answer: Vegetables when stored are not dead but are living organisms, and the growth functions continue in storage. Since the plant is no longer able to draw nutrients from the soil, it has to use the materials stored in itself for these functions and finally shriveling and break-down occurs. Proper control of the temperature, humidity, and air circulation, helps to retard these internal activities and lessens moisture loss, thus prolonging the life and usability of the stored product.

Storing Radishes

Question: Can radishes be stored in sand like carrots?

Answer: Ordinary summer radishes are usually not considered a storage crop. However, they could be stored for a short time under the same storage conditions as other root crops. Radishes belonging to the so-called winter group (some varieties of which are White Chinese, China Rose, Long Black Spanish, Round Black Spanish, and Sakurajima) can be stored for several months under the same conditions that should be used for storage of carrots, beets, rutabagas, turnips, and other similar crops.

Storing Cabbage

Question: How are whole heads of cabbage stored?

Answer: Cabbage for storage should have compact, hard heads which are mature and free from disease. Usually the roots are removed just below the head as well as all loose, broken, and diseased leaves. If stored in bins the bins should not be larger than 4 to 5 feet wide, 5 feet deep, and as long as desired. Separate the bins by slatted walls with air spaces between to

and J. D. Winter, Minnesota

permit air circulation. The bins may be made in tiers if space is left between them for air circulation. A good method is to pile the heads one to two layers deep on slatted shelves, especially if stored in the same cellar with root crops. Some people leave the roots on, tie a string around the stem and hang the head, roots up, from the ceiling.

Cabbage stores best at a temperature of 32 degrees to 40 degrees F. with a relative humidity of 85 to 90 per cent, and with little air circulation.

Fruit Jars for Frozen Storage

Question: Are glass Mason type jars suitable to use for packing fruits and vegetables in the frozen food locker?

Answer: Glass jars of this type with tight covers make excellent containers as far as preserving the food in good condition is concerned. However, there are other considerations that generally make it inadvisable to use glass jars for this purpose. For example, a well filled quart paperboard carton of strawberries will weigh about 2 pounds while the same quantity of berries in a glass jar will weigh about 31/4 pounds with the container. As freezing charges usually are made by the pound it will cost close to 2 cents more for the berries packed in the glass jar. Then the storage cost will be higher as the glass jars take up more room and are very difficult to stack in a crowded locker. Many a glass jar has fallen and broken because of this difficulty in stacking them securely in a locker. There is no actual saving made, in most instances, by using glass jars that may be on hand as compared to the purchasing of special frozen food containers.

Condensed from August, 1943 issue The Minnesota Horticulturist.

What Other Garden Clubs Are Doing

By Katherine Melcher, State Chairman of Program and Lectures

It was with great interest and pleasure that I looked through the programs sent to me by the State Garden Clubs—programs packed full of ideas, showing that we are striving for more knowledge of the things for which we are organized: gardening, horticulture, conservation, and civic beautification. Many of you are planning next year's program, and it is with this thought in mind that I want to tell you what some of the other clubs are doing.

The Iola Club included its Constitution and By-Laws in its year book. It has six study groups and four members participate in each program. The Lodi Club has flower arrangements at each meeting. Shorewood Hills program is divided into morning and evening meetings, with two meetings in September and October.

Sunset Garden Club of Madison was fortunate in securing Professors Longnecker, Moore, Vaughan, Simmons, Mr. Rahmlow and Dr. Lindsay for meetings. Hawthorn devoted some time to the preparation of May Day baskets. Menomonee Falls has music on many programs. This club is to be congratulated on a book compiled and published by members called "Garden Hints." It contains 28 pages of garden information and has six blank pages for notes. There are seven pages of advertising in the back, which, no doubt, paid for the book.

The Milwaukee County Horticultural Society took advantage of the Wisconsin Horticultural slides by using them at six meetings. Bluemound and Ravenswood have their own libraries. Edgerton has five meetings scheduled on insects and their control and nine meetings include displays of flower arrangements, material suitable to the month.

"Wauwatosa had a "Symposium of Roses." This was a garden tour of homes noted for their gardens and interiors, showing how various types of rose arrangements could be used effectively in different rooms of the house. Ravenswood is in its second year of Garden Design in which members participate. The club also started a scrap book project which includes 13 different subjects such as lilies, iris, shrubs, etc. Each year different members take these books and compile new information, they are then judged and placed in the library for reference. The Elm Grove Club solved the transportation situation this year by forming block groups.

Slide Sets Used

It was interesting to note that most of the programs included talks on perennials and annuals, some of them using the slide sets prepared by the Wisconsin Horticultural Society free of charge. A complete lecture goes with each set. It is advisable to plan an entire program around one topic by having members prepare reports on their experiences with the variety under discussion. These slides include talks on annuals, chrysanthemums, delphiniums, gladiolus, hemerocallis, iris, lilacs, perennial phlox, peonies, perennials, tuberous-rooted begonias, roses and tulips.

I hope all of the clubs have taken advantage of the talk on "Victory Gardening" by Mr. Rahmlow. (If not, you have missed something.) Victory Gardens are flourishing throughout the country, but it will be necessary to have more of them next year and they must be better planned and larger, too, if the increased quotas for vegetable crops for 1944, now proposed by the government, are to be met. I wonder how many of you have taken pictures of your Victory Gardens and kept records to determine what kinds of plants, and what varieties are most useful in your area. Such information would serve as a basis for highly interesting, entertaining and valuable discussion in club meetings.

If you have grown good vegetables this year, learn how they may be better grown next year. Make your gardens interesting with something new and different in both flower and vegetable gardens, your meetings also by showing what you have done. The old standbys will, of course, be grown, but the new add a flavor. Maybe you would like to try growing some herbs and fruit next year.

Have one or two meetings on Conservation, for instance: Soil Improvement, Forest Conservation, Water Conservation, Bird Study, Nutrition. For special projects: Planting of Memorial Highways, special plantings of annuals in your gardens for use in War Service Centers or hospitals. In planning talks on Flower Arrangements study new arrangements for use in Church, Hospitals and Recreational Centers.

Plan a program to suit the needs of your membership. Questionnaires are useful. Ask the members what kind of programs they would like, and by all means give them what they want. Many clubs meet in the homes and serve a dessert luncheon. If this will get them to the meeting on time. allow a half hour for this social angle, maybe you will have a more successful meeting and better attendance. Have your members participate in the program. They will be more interested in the club if they have a part to play rather than listen to outside speakers. Of course, it would be nice to have one or two meetings a year with good speakers and open them to the public. In this way we spread the knowledge of gardening. Give your club good publicity and the members a fair share of it.

Have an emergency program ready for all meetings so that your members will not be disappointed. It is easy to prepare a program. It need not be expensive. With the exception of two or three printed programs which I received, all others were either mimeographed or typewritten, using wall paper or other simple materials for covers. Every club should have a program for its members and the State Program Chairman should be sent one. Those of you who have not sent them in, will you please do so now? Please write to me if I can help you in preparing your programs.

NEW BOOK ON HOME FOOD PRESERVATION

A new book is just off the press entitled "Home Food Preservation" by Frederick W. Fabian, Ph.D. It covers four phases of preservation—salting, canning, drying, and freezing. It is published by the Avi Publishing Company, Inc., 31 Union Square, New York 3, N. Y., and sells at \$1.50.

It is unlike other books on the subject because, for example, it contains full and precise information on salting, and covers the other phases—canning, drying, and freezing.

Dr. Fabian has had considerable experience and is an authority along this line. He was at one time food inspector with the Detroit Board of Health, and has been a teacher and research worker in bacteriology and hygiene.

NEW METHOD OF PRESERV-ING FRUITS

THE British made a request when we began to ship them fruits under the Lend-Lease program. Would we please just preserve them in sulphur dioxide solution, and ship them over in wooden casks? That was a big surprise for our food men. Wouldn't the British prefer fruits canned in bright tin containers? No, the British really wouldn't. Well, the British were eating the fruit, so let them have it the way they wanted it. And the sulphur dioxide method is saving tin.

So the big American canners turned out the British fruit orders the way they wanted them: 250,000 barrels have gone to them in this sulphur dioxide solution during the past three years. The sulphur dioxide method is simple. Take strawberries, for example. The berries roll straight from the field to the freight loading platform, alongside the railroad tracks. They're washed, hulled, and dumped into wooden barrels with a 2% sulphur dioxide solution. The barrel is sealed, put on the freight car, and it's on the way to England. The whole thing takes half an hour. Millions of pounds of these sulphited strawberries are being shipped to England this season.

Last year we shipped, in this manner, citrus pulp, peaches, strawberries, raspberries, and dewberries. This year we'll add cherries. Fruits preserved in sulphur dioxide are used for preserves, jams, ice cream, and pies.

These sulphited foods, such as strawberries, have to go through a special step when they're taken out of the wooden casks to start on their way to jams and pies. They must be boiled vigorously for 45 minutes. That drives off the sulphur dioxide in the steam. And with it, the bitter sulphur taste. Oddly, the sulphur dioxide solution takes most of the color out of fruits. But when they boil for 45 minutes, the color comes back. And that's important, because who wants to eat pale yellow strawberry jam?

Reprinted from Fruit Notes, Extension Service, Massachusetts State College, Amherst, Massachusetts.

PLAN YOUR 1944 GARDEN THIS SUMMER

By Paul R. Krone, Michigan

AN inspection of quite a good many Victory Gardens and Victory community plots throughout the state makes us realize more than ever the necessity of planning vegetable gardens a year in advance.

Many gardeners this year found quack grass and other difficult weeds to be nearly insurmountable obstacles. It is extremely unfortunate that the need for gardens was not foreseen last summer, so that these plots might have been summer fallowed to eliminate particularly the quack grass.

There is no question but that the need for Victory Gardens in 1944 will be greater than it was in 1943. With the serious shortages of canned foods that we foresee for the coming winter, we know that there will be many new gardeners next spring. If your friends haven't gardens this summer, urge them to locate a plot and have it summer fallowed for the balance of the season to control the weedsthen fall plowed, and it will be in good condition for next summer. The cost of summer fallowing will be very little compared to the greater saving in labor and expense in 1944.

From Horticultural News, August, 1943.

The chief problem in acclimating greenhouse plants to a home atmosphere is maintaining a uniform not-too-high, temperature and to give the soil about the plants the right amount of moisture. It is helpful to set the pots on moist peat moss.

-By the Master Gardener.

HOW TO WORK WITH JUNIOR GARDENERS

D^{OROTHY} Biddle makes the excellent suggestion in Flower Grower that when there is something for the juniors to do outdoors, that meetings be dropped. During the months when there is nothing to do outdoors, then meetings should consist of things to do -things to create. Young people do not like to sit and listen, but they do like to create something. In the flower season, she says, the collection of petals for rose jars will intrigue them. Making small and large Christmas wreaths and sprays are excellent work. Flower arrangements will always appeal to children. There is native material for them to use at any time of year. Making their own holders and containers will stimulate creative effort.

The thing to remember in working with juniors is that they want to do things. That, of course, is a real challenge to the leaders.

AMERICA LOVES ITS FLOWERS

WITH 181 florists reporting in a survey, it was found that there was a gain of 32% in business during the first six months of this year over a like period of last year, according to the U. S. Department of Commerce.

The volume of sales on Mother's Day this year was extraordinary as can be expected.

Then we find that the 1943 season will provide a new high in the total number of gladiolus shows. In fact, gladiolus shows lead the nation in popularity of flowershows.

All this points to the fact that America loves flowers, and that they add something to our lives during this period, which is invaluable.

Let us grow our victory gardens, but let us have flowers, too. There will always be flowers.

Color Schemes with Dried Arrangements

THE element of color was given first consideration in planning the two dried arrangements illustrated herein.

Echinops, artemnesia (Silver King) and an oxidized pewter vase set the scheme for the silver-tone arrangement. While it is, as you will notice, almost twice the height of the container, it is not topheavy, due to the lightness of the material at the top and the addition of the pewter plate below the container. The shadow and leaf on the right of the plate add weight to the composition, which otherwise would have been slightly "off balance."

A copper-tone color scheme was effected by the use of cattails, dock, in its green and rust stage of development, magnolia leaves and tansy, arranged in a copper container of Oriental inspiration. The soft green and light rust color of the magnolia leaves form a pleasing contrast to the darker brown of the cattails and blend perfectly with the dock, besides creating a "strong center of interest." Note too how all of the material radiates out of the central axis, giving an example of how rhytinm is achieved or expressed by means of radiation.

The right container can do much to enhance the color value of a dried arrangement. A good illustration of this was furnished us at our last convention flower show. A two-tone, very shallow bowl, wine color on the inside and sand color on the underside, was a happy choice for an arrangement consisting of three cornstalk tips, each cut a different length. The wine color found its repetition in the corn tassels which were tinged with this same color, and the sand color on the underside of the bowl harmonized with the leaves and stems of the cornstalk tips. An unusual

Emma C. Schipper





treatment to conceal the needle point holder, which is always more or less a problem when used in a shallow bowl, was devised by pegging short lengths of the cornstalk stems, about one and one-half inches long, into the outer edge of the needle point holder. Altogether, an arrangement of distinction!

There are plenty of possibilities for color-scheming with dried plant material. Now is the time, so why not experiment?

PLANT RELATIONSHIP

S^O many people have mistaken ideas on plant relationship and particular plant families that it might be well for us to check up on the meaning of some of the terms used. Each individual kind of plant, say the Pussywillow, the Orange Milkweed or the Dandelion, is called a species, just as man is a species of animal. Each group of very closely related species, such as the different kinds of roses, are grouped together to form a genus, as the Rose genus. Then a number of related genera (the plural form of the word genus), are grouped together to form a family as, for instance, the pea, the bean, the clover, the locust, the lupine, the wisteria, the baptisia, and the redbud are all grouped together to form the Legume or Pea family. So, it is incorrect to say the Bean Family or the Redbud Family; you should say the Bean Genus or the Redbud Genus, and so on.

All of these relationships are based, not on looks, not on similarity of habit of growth, but on the reproductive parts and other parts of the flower. Incidentally, plant relationship and classification, or taxonomy, is a most fascinating subject.

By Victor H. Ries, Columbus, Ohio.

An old gentleman asked a splendidly attired Negro at a wedding. "Pardon me, suh, is you de groom?"

"No, suh," replied the young man gloomily. "Ah was eliminated in the semifinals." — The Franklin News.

Home Dehydration Starts to Lose Some of Its Glamor

HORTICULTURISTS will be interested in the following discussion of home dehydration which appeared in "The Canner" for July 3, under the above title. The article, it will be observed, centers around a circular recently published by the Departments of Home Economics and Horticulture of the University of Illinois.

"The University of Illinois in Circular 558, prepared in the Departments of Home Economics and Horticulture, urges housewives not to rush into dehydration thoughtlessly. 'As a way of preserving fruits and vegetables at home, dehydrating is recommended only when better methods are not practicable,' it asserts. Freezing is selected as the preferred method for home preserving methods. Canning is the next choice, followed by salting or pickling and common storage for root crops. 'Where none of these methods can be used, derydration can be resorted to. Anyone considering this process should know, however, that: (1) it is not simple; (2) the flavor of the finished product will be different from the fresh product; (3) the appearance and taste will be different from commercially dried or dehydrated foods and (4) the food will deteriorate in storage even under the best conditions known.'

"A few days ago Dr. Donald K. Tressler, one of the best-informed scientists in the field of food processing, told a group of home economists and food editors at Bridgeport, Conn., that successful home dehydration is largely a matter of tollowing correct procedures. The housewife who doesn't do the job right won't like the results she obtains.

"As is generally known, there is a tremendous wave of interest in home dehydration as a means of saving surplus foods raised in family gardens this year. Apparently many thousands of women are determined to try their luck, if their gardens actually produce a surplus and if they can obtain or build home dehydrators. Pressure cookers for use in canning are not easy to obtain.

"Commercial dehydrators have, of course, little to sell the consumer this year beyond the limited range of familiar soups. They do have the feeling that: (1) there may be a considerable waste of good food by women who won't learn how to dehydrate in the right way; (2) needed metals and other materials that the commercial food packer wants are being diverted into the manufacture of home food dehydrators and (3) disappointing results of home dehydration may easily cause deep prejudice against all dehydrated foods and thereby make the future of the commercial dehydrator more difficult in the post-war period.

"There would seem to be more than a fair possibility that the housewife who goes to the trouble of learning some of the facts about home dehydration will decide that some other method of food preservation is more to her liking."

From Illinois State Horticultural Society, August, 1943.

ANT CONTROL IN THE GARDEN

"P.D.B." USEFUL IN ANT CONTROL. In response to numerous queries, the Department of Agriculture advises the use of "P.D.B." as a fumigant for ant colonies in Victory gardens or on home grounds. P.D.B. is the popular abbreviation of the name of the c h e m i c a 1 paradi-chlorobenzene, often used for control of clothes moths. For control of most species of ants that are active in gardens, lawns, and on trees and shrubs, relief depends on exterminating the ant colony in the soil. The Depart-

ment's Bureau of Entomology and Plant Quarantine for years has recommended the use of carbon disulfide poured into small holes punched to a depth of several inches and spaced about a foot apart in the vicinity of the ant holes leading into the colony. This is still a rapid and effective way of killing ants. But P.D.B. may serve practically as well and is likely to be more convenient to buy and safer by far to use and store.

P.D.B. crystals are obtainable at drug stores, are not expensive, and the fumigating gas which they release in the soil is not inflammable or explosive, as is the gas from carbon disulfide. To treat an ant colony, punch holes in the soil as for carbon disulfide and pour into each a small quantity of P.D.B. (2 or 3 teaspoonfuls) and fill the holes with soil. It is not necessary to cover the surface with a gas-proof cover, as is desirable when carbon disulfide is used. P.D.B. evaporates during the course of several days to free a gas that will kill the ants or make them so uncomfortable that they will move elsewhere. The warmer the soil, the more rapidly will the evaporation take place.

For ants living in galleries in decaved wood of trees and shrubs. carbon disulfide injected into the holes from a small oil can is likely to be the most convenient remedy. Either carbon disulfide or P.D.B. may have an injurious effect on growing plants, but if there are only one or two ant hills in the garden, it is advisable to treat them, even though a few plants are killed. In lawns the injury to grass usually is not severe enough to offset the gain from eradicating the ants. In many cases ants may be controlled by use of poisoned baits or sirups, exposed on a wad of absorbent cotton in a suitable container which ants can enter and leave easily.

From release by U. S. Department of Agriculture.

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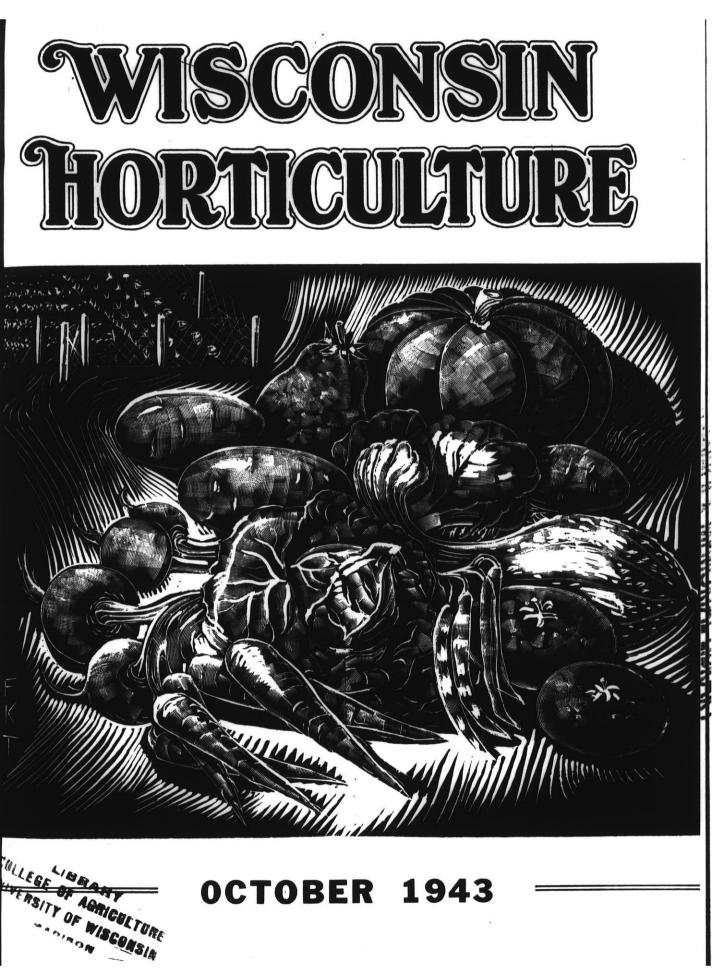


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AGRICULTURE

TRUE TO NAME **APPLE TREES**

OR the 23rd consecutive year, men from the Massachusetts State College have completed the examination for trueness-to-name of nursery fruit stock in the Northeastern part of the country. This vear 18 nurseries located from New England to Michigan and Virginia were examined and misnamed trees correctly named or cut down.

A list of the nurseries examined may be obtained on request from the Department of Pomology, Massachusetts State College, Amherst, Massachusetts.

By J. K. Shaw.

Cedric Adams, Minneapolis columnist, ran a 240-line want ad for a maid in the local Sunday Tribune. He got 643 calls-26 of them from applicants, 617 from people wanting to hire any applicants he didn't hire.



Dept. D, Cumberland, Wis.

Wisconsin Horticulture

The Official Organ of the Wisconsin State Horticultural Society

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Officers Wisconsin State Horticultural Society

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Subscription to Wisconsin Horticulture is obtained by membership in the Wisconsin State Horticultural Society for which the annual dues are \$1 per year or \$1.50 for two years. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Fifty cents of the annual dues paid by each member is for a year's subscription to Wisconsin Horticulture.

PLEASE DO NOT SEND STAMPS

34

The Apple Maggot Situation in 1943

B^{AIT} traps to determine the presence of apple maggot flies in orchards were set out in nearly all sections of the state. Some of the results of the catches are as yet not available but enough are in to get a picture of conditions for the season.

Many growers have had splendid results, collecting flies without trouble and what is far more important getting good control by spraving when the traps showed that the flies were numerous. A few growers have had disappointing results; some catching few flies vet securing poor control even with repeated sprays.

First Flies July 14

The first or earliest captured fly was caught at Antigo on July 14 and by the 17th flies were taken in almost all sections of the state. Originally we anticipated a strong lake influence, delaying the flies along the shores of Lakes Michigan and Superior. But apparently there is very little difference, at least this year, between the emergence of the flies at Madison, Port Washington, Antigo, and even Bayfield although at the last named the records indicate a few days later than in other sections.

When to Sprav

In other words sprays are necessary the last week of July and again about the 10th of August. Even with these two sprays it has not been possible always to secure perfect results. The heavy infestation of last year will not be cleaned up in one or two years of careful work. Remember some of the maggots remain in their pupal cells throughout the summer and will not appear as flies until the second summer. Those of you who got good control this year must not let down next year. Plan now to do C. L. Fluke



even a better job next year. Pick up all fallen apples, pile them in some out-of-the-way place and next spring sprinkle the old flattened-out piles with discarded lubricating oil, using 1 gallon to 10 square feet of surface.

We have learned that traps hung well out on the outside on the sunny sides of the trees caught more flies than those suspended in the shade near the trunk of the tree. Some of you have neglected your traps, failing to keep the liquid up to the original level and some have used so many stones that there was very little room left for the solution. It is better to have the pails full of the solution than to use very many rocks. The more liquid the more ammonia fumes given off.

A few tests using household ammonia and soap indicate that this type of trap can be used instead of the more expensive and more difficult to obtain glycine. Sodium hydroxide should be used to keep the solution clear. Ammonia traps need to be renewed often, every 3 to 4 days to be continuously active. After all data are in we will decide the best trap to use for next year. Den't throw away your pailsclean them out and store them for future use.

We want to thank all those who have cooperated with us this year and hope that you will send any additional records if you have not already done so. We will also be glad to discuss with you your spraying tractice if you failed to get sotisfactory results. Most of the

failures are due to wrong strengths of lead arsenate used, improper timing of sprays; or most important, poor coverage.

PRICE CEILINGS ON FRUIT Many Difficult Problems Involved in Placing Ceilings

Many charges of "bungling" have been hurled at OPA for the way in which they handle price ceilings on fruits and some other products of interest to our members.

We will not hurl any missiles. There are two reasons for this. First, we have tried to place ourselves in the position of an official of OPA and wondered what we would do if confronted by the various demands of the producer, broker. commission man, wholesaler, retailer, and processor. We believe the officials of OPA are trying to do what they think is right. Sometimes they have no doubt been misled by strong demands from one or another of the pressure groups, and the decisions have been to the detriment of some other group. Their job is not easy and no doubt their rulings will be changed from time to time as experience is gained.

We wish to point out some of the problems encountered in the hope that they will give us all a better understanding of what is involved, and perhaps lead to better decisions.

A One Price Ceiling

The apple growers of America have consistently requested the OPA to establish only a one price ceiling-that to the consumer or retail buyer, allowing all other ceilings to take care of themselves. They argue that you cannot solve all the problems by placing a ceiling at every outlet all along the line. After all, why do we have price ceilings? The answer is, only to prevent inflation and to prevent food prices from rising too high to the consumer. Looking at it from this standpoint alone one would think that a consumer ceiling would be enough. However, OPA argues that unless there is a producer ceiling with perhaps more ceilings for wholesaler and broker, someone in between is pinched. While that may be true, experience is teaching us that someone is going to be pinched anyhow.

Let us take a case in point, that of the beekeeper. Separate ceilings have been established for the producer, the (Continued on page 37)

National Apple Planning Committee Meets In Washington

M^{R.} Arno Meyer, President of the Wisconsin Horticultural Society, was appointed by the Board of Directors of the Society to be a member of the National Apple Planning Committee. This committee met in Washington on August 24-26, 1943, to consider with representatives of the government the proposed ceiling prices for fresh apples and apples for processing.

Mr. Meyer reports a great deal of discussion on the setting of a price ceiling, and that the problem is a very difficult one.

On Thursday, August 26th, a special committee, acting for the National Apple Price Committee, met at the office of the National Apple Institute and prepared a statement setting forth some of the recommendations. On this committee were: Henry W. Miller, Jr., West Virginia; A. W. Peters, Oregon; Paul Stark, Missouri; and C. C. Taylor of Michigan .

What Growers Recommend

The following are some of the statements of the committee:

"In support of allowing the market to proceed normally, the committee calls attention to the fact that the law of supply and demand is right now maintaining consumer prices of apples at reasonable levels. The normal differentials for different varieties, grades and sizes are in effect. Increased purchasing power has not destroyed the proper relationship between values.

"However, if in spite of the prevailing favorable situation, the Government decides it must impose a ceiling now, a simple plan of price control for apples which we believe offers maximum protection to consumers, and encouragement to production and crop conservation, can be effected by establishing one retail ceiling price for the whole nation for the 1943-44 season based on the best grade of the

leading commercial variety and by placing such ceiling at a level to assure maximum production in the most remote producing areas.

Retail Ceiling

"It is the considered opinion of the committee that a retail price of $12\frac{1}{2}$ cents per pound, with appropriate advances to insure proper distribution seasonally, is required if a ceiling is to be imposed immemediately. This price, with the apple industry's support, is needed to maintain production and to secure the greatest amount of food from this crop.

"Again, the complications inherent to the apple industry show the difficulties of effectuating any price ceiling program. For instance, apples are grown commercially in hundreds of counties, in 36 states, by hundreds of thousands of growers. The growers produce several hundred varieties and market them under many Federal and State grades and sizes. Each variety has many values, depending on the locality in which it is produced, the type of soil it is grown on, the climate, how it has been packaged, stored and handled, and the producing location in relation to market. In fact, it can literally be said that each bushel of apples has its own value, depending on the above factors.

"The single consumer price method plus industry support will be needed, if a control program is to succeed where such complicated conditions prevail."

Retailers' Mark-Ups On Apples Limited

Amendments to M.P.R. 422 and 423 limit retailers' mark-ups on apples to 33 per cent of the net cost to the retailer.

More than 90 per cent of all species of flowers in the world have either an unpleasant odor or none at all.—*Collier's*.

LARGE APPLE PROMOTION TN what is said to be the largest

T^N what is said to be the largest "tie-in" campaign ever given a fruit, General Mills, Inc., with their Wheaties breakfast food are going all out for apples in a nation-wide press and radio campaign in late September titled "4 Exciting Ways to Eat an Apple."

The ads, in color, feature slicing, grating and kindred uses of fresh apples on Wheaties; an especially valuable promotion angle, since the fresh apple preserves all its health values, and brings the grower most of his profit, if any.

From August, 1943, The Eastern Fruit Grower.

ACCIDENT LIABILITY FOR ORCHARDISTS

"RURAL New Yorker" magazine reports that following several accidents on New York farms in which farmers were sued for damages, the farmers tried to get a State insurance plan at reasonable cost. They failed, but now several state insurance companies have set up a liability plan with a minimum annual premium of \$23. The rates are based on farm payroll, acreage, etc., and the policies are written only in connection with Owners', Landlords' and Tenants' Liability Insurance, covering general liability of the farmer in connection with any farm accidents or property damage (to property other than the farmer's) resulting from accident. There is little question but that farmers should have protection in case of accidents. The facts and figures given above are for New York State only, but any growers interested in farm liability should contact their insurance agents for rates and information.

From July-August-September The Maryland Fruit Grower.

National Apple Week

This year, the dates are from October 23 to 31 inclusive. The celebration of the week that extolls the virtues of the apple is now international, and its observance is expanding rapidly.

Price Ceilings on Fruit

(Continued from page 35)

broker, commission man, and retailer. At each step a mark-up is allowed. Theoretically, that seems fine for the packer and those in between. However, we find that the difference in price between the wholesale price to the beekeeper and the retail price is so large that the beekeepers have turned retailers. They are either selling directly to the consumer, or in quantities to retail stores. Can we blame them? When confronted with a 50 per cent honey crop, which means they have some spare time on their hands, it is inevitable that they will attempt to obtain some of these higher retail prices. As a result, the packer has not been able to buy the honey that he expected. Many packers cannot meet the demands of their trade ior commitment.

Raspberry Ceiling Prices

The Minnesota Horticulturist recently discussed editorially, the ceiling prices on raspberries which caused much confusion. At the beginning of the Minnesota crop season, early varieties sold for the unusually high price of \$7.50 to \$8.00 per crate of 24 pints. On July 13 the ceiling price was established by OPA of 18 cents per pound at the farm, or \$3.24 per crate, with mark-ups allowed to the wholesalers, but without any ceiling on the price to the consumer. First of all, says the Minnesota Horticulturist, the ceiling price was clearly below the cost of production, which, according to experts at the University of Minnesota, is about \$3.85 per crate, and in the Duluth area, still higher. A ceiling price below the cost of production would undoubtedly destroy the raspberry industry.

The other objectionable feature was the price at the production level and not at the retail level. The producers were penalized and the consumers were not protected. The producers immediately began to sell only at retail, thus threatening to break up splendid marketing organizations.

Later the ceiling price on the farm was raised to \$4.00 per crate, and \$4.15 at the market. This was later rejected, however, by the Washington office of OPA. The retailer was allowed 34 per cent mark-up, and the wholesaler 72 cents per crate.

Need For Producers' Organization

Obviously, there is need for strong producers' organizations to represent them with OPA and prevent continuance of such bungling.

HOW TO MAKE STANDARD CONTAINERS FROM SECOND-HAND BOXES

THE U. S. Department of Agriculture, Food Distribution Administration, Washington 25, D. C., has issued a pamphlet entitled "How to Make Standard Containers From Second-Hand Boxes." It is well illustrated and will be of value to those who wish to use orange crates and other used boxes for making apple boxes and other standard containers.

The bulletin states: "The remade boxes help to get much-needed foods to market in good condition. It saves critical materials for other uses."

A recent survey made among almost 2,500,000 American soldiers to determine their food preferences revealed that the majority of them like frankfurters more than any other meat, mashed potatoes more than fried, cake more than pie, and that they prefer cocoa to coffee.— *Collier's*.

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R. 2

STORAGE TEMPERATURES FOR APPLES

MAGNESS and others found that the rate of respiration largely governs the rate of ripening and softening of apples in storage. They found that at 40 degrees Fahrenheit this rate is approximately twice as rapid as at 32 degrees, at 50 degrees it is almost double that at 40 degrees, and at 70 degrees it is twice as fast as at 50 degrees. At 30 degrees, on the other hand 25 per cent longer time is required for apples to ripen than at 32 degrees. From these results, therefore, the extreme importance of quickly cooling apples to the minimum safe temperature for storage is readily apparent, because the apples will ripen as much in 1 day at 70 degrees as they will in 10 days at 30 degrees. Holding apples at 70 degrees for only 3 days after harvest thus will cut off about a month of their potential storage life at 30 degrees. If 30 degrees storage is not immediately available, every opportunity should be used to cool the fruit. such as stacking it in the shade and providing good ventilation, especially at night.

Storage With Other Products

Apples absorb odors very readily, and it is therefore undesirable to store them with other products that have pronounced odors. This is particularly true of potatoes and other root crops, which often impart an "earthy" flavor to apples. Since apples give off ethylene, a gas that stimulates respiration and ripening the potential keeping quality of other products stored with apples may be adversely affected.

Condensed from U.S.D.A. Circular No. 659.

CARE OF FARM TRUCKS

The Stude b a k e r Corporation, South Bend 27, Indiana, has issued a fine booklet on "Care and Maintenance of Farm Truck" which every truck owner should have. Write R. G. Hudson, Manager, Truck Division of Studebaker Corporation, for free copy, sent postpaid.

75TH ANNUAL CONVENTION WISCONSIN STATE HORTICULTURAL SOCIETY Fruit Growers Program

Waukesha, Avalon Hotel, November 16-17, 1943

Tuesday, November 16

8:00-10:00 a. m. Setting up fruit exhibits. See premium list.

10:00 a. m. Call to order by President Arno Meyer, Waldo.

Experiences With Apple Maggot Control. What We Learned From This Season's Tests. Dr.-C. L. Fluke, Chief, Department of Entomology, Madison

10:45 a. m. What Can We Do For Apple Scab Control in 1944? Further Experiences With the Ground Spray for Scab Control. What To Do With Severely Blighted Trees. Dr. G. W. Keitt, and J. Duain Moore, Department of Plant Pathology, Madison.

12:00 m. Meeting Board of Directors Wisconsin Horticultural Society.

1:30 p. m. Experiences in Minnesota With the Apple Maggot and Experiments With Bait Traps. Recommendations for 1944. Prof. A. C. Hodson, Department of Entomology, Minnesota College of Agriculture.

Further discussion on apple maggot control in Wisconsin. Dr. C. L. Fluke.

2:30 p. m. Government Regulations Affecting the Fruit Grower. Price Ceilings. Work of the National Apple Institute. Minard Farley, Jr., Secretary-Manager, Michigan State Apple Commission, East Lansing, Michigan.

3:30 p. m. How to Control Mice and Rabbits in the Orchard. G. C. Oderkirk, Rodent Control Specialist, Lafayette, Indiana.

ANNUAL BANQUET

Avalon Hotel, 6:30 p.m.

Entertainment arranged by Waukesha County Fruit Growers Association.

Toastmaster Mr. J. F. Thomas, County Agent, Waukesha.

Honorary Recognition Services. Certificates awarded to two outstanding horticulturists. Presentation to fruit grower by oldest living president; to garden club member by Mrs. H. S. Bostock, Madison, Federation President.

Down to Fundamentals. Major Issues and Objectives of the War. Prof. C. V. Easum, Professor of History, University of Wisconsin.

Program in Honor of 75th Anniversary. Details to be announced.

Wednesday, October 17

9:30 a. m. Results of an Orchard Improvement Campaign in the Minnetonka District This Year. Dr. A. C. Hodson, University Farm, St. Paul.

10:30 a. m. Future of Apple Marketing. Continuation of Discussion of Work of National Apple Institute. Minard Farley, East Lansing, Michigan.

12:00 m. Luncheon.

Afternoon Program

1:30 p. m. Annual business meeting Wisconsin Horticultural Society.

2:30 p. m. Fundamentals of Apple Tree Pruning. Some Orchard Observations During the Past Season. Dr. R. H. Roberts, Dept. of Horticulture, Madison. October, 1943

SUBSIDIES FOR FRUIT

ITATE believe in times of stress there is a place for subsidies, by whatever names they are called, guaranteed prices, government purchases or incentive payment. If because of accumulative shortages, or because of increased demand due, for example, to our occupation of starved foreign countries, the need should arise for any product far beyond the normal expected production, we would want our government to subsidize the industry expansion to meet the war needs, just as shipbuilding, munition and war material industries have been subsidized in this emergency. So far as fresh fruits and vegetables go, however, no subsidy is needed provided no extraordinary demand develops, or no repressive ceilings are imposed, because these products are so sensitive to the law of supply and demand that production will balance the normal requirements."

John Chandler, Executive Secretary, National Apple Institute.

Fruit Show

WISCONSIN STATE HORTICULTURAL SOCIETY CONVENTION AVALON HOTEL, WAUKESHA, NOVEMBER 16-17, 1943

Committee in charge: C. L. Kuehner, Madison, Chairman, assisted by Peter L. Swartz, Waukesha, and LeRoy Meyer, Hales Corners

NEW APPLE VARIETIES

Plate of 3 Apples

Judges: Prof. J. G. Moore and C. L. Kuehner, Madison

The following premiums will be offered on each class for varieties recommended for trial by the State Horticultural Society:

1st prize, \$1; 2nd, 75c; 3rd, 50c; 25c for each additional entry of merit.

1.	Milton	6. Kendall
2.	Macoun	7. Perkins
3.	Cortland	8. Lobo
4.	Haralson	9. Hume
5.	Secor	10. Black Jon

11. Any other variety

STANDARD VARIETIES

Plate of 5 apples

Premiums on classes 12 and 13 offered by the Niagara Sprayer and Chemical Company; J. Henry Smith, representative, Waupaca

12. McIntosh 13. Delicious-any type of red

Premiums, classes 12 and 13, each: 1st, \$1.50; 2nd, \$1; 3rd, 75c; 4th, 5th and 6th, 50c.

14. Golden Delicious 15. Snow

16. N. W. Greening

Premiums on each variety, classes 14-16: 1st, \$1; 2nd, 75c; 3rd, 50c; 4th, 25c.

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New DuPont Weed Killer-"Ammonium Sulfamate"

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Mulching the Strawberry Patch

By A. S. Colby, Department of Horticulture, University of Illinois

 \mathbf{I}^{T} has been generally known for some time that strawberry plants need some winter protection from cold in this latitude. However, the close correlation between a good mulch applied on the right date, and prevention of damage to the crowns of the plants by cold has not been understood and appreciated until recently. Growers are now finding that low temperatures, even as early as November, cause sufficient crown injury in unmulched patches to seriously curtail production the next year. Mulching, then, is now being considered necessary for other reasons than keeping the fruit clean and retaining soil moisture during the picking season.

Last year one of my students obtained additional evidence on the value of strawberry mulches as they influence the gross returns received from the sale of fruit. In one study, Mr. Thompson used six different mulching materials, threshed soybean refuse, mixed leaves, cut corn stover and wheat, rye and oat straw. These were applied to depths of 3 to 6 inches respectively, measured after settling.

We first computed the total cost of each material used, based upon its nutrient value, if it had been plowed under, added to the expense involved in procuring the material (cutting the corn stover, raking the leaves), hauling and applying it. Gross returns per acre over the total cost of each mulch were then determined, after the fruit had been picked and sold. The row mulched with 3 inches of wheat straw was, all things considered, the most profitable, since the yield was highest and mulching costs were relatively low. Sixinch mulches tended to retard ripening of the berries, resulting in

lower prices, and this disadvantage, together with the high cost of material for such covers, reduced gross returns in every case. It was found that yields were the lowest under six inches of corn stover. However, there were no dirty berries found in the rows where six inches of straw (wheat, oat or rye) was used. The lowest percentage of dirty berries, where a 3-inch mulch had been applied, was 6.3 per cent under the wheat straw. The highest percentage was 52 per cent, in the check row.

There is still another phase of the mulching question to which I do not think sufficient attention has been given. I refer to the use of strawberry plants, for setting out new plantations, which have gone through the winter unmulched, excepting for their own leaf cover. Last winter Mr. Armstrong sent me Blakemore plants from mulched and unmulched patches in Kentucky. Those which had not been protected had been injured by cold, as evidenced by medium browning of the crown. The crowns of the mulched nursery stock were creamy white in color. I set both lots in the field and gave them all good care. By late summer the runner formation from the uninjured mother plants was approximately double that from those which had suffered from lack of proper mulching treatment. By late fall the number of runners in the winter injured mother plant plot had begun to catch up with the other lot. However, those late set runner plants will probably be relatively unproductive this coming season.

Condensed from bulletin—Some Recent Developments in Strawberry Growing.

WINTER PROTECTION FOR RASPBERRIES

Trend Is Toward Protection In Minnesota

J. D. Winter

THERE is a distinct trend toward more winter protection for red raspberry canes in Minnesota, either by complete covering or by bending down the canes and throwing a couple of shovelfuls of soil over the tips to hold them down. The latter method has been particularly successful in regions of ample snowfall such as the Duluth area in northeastern Minnesota.

Tip Covering Beneficial

Dr. Brierley conducted some experiments last fall near Duluth and found the average winter injury in tip covered planting did not exceed 5 per cent as compared to 40 per rent in jury to unprotected canes in the same plantings. A complete covering job requires about 50 man hours of work per acre plus some horse labor. Tip covering requires less labor.

(Continued on page 45)

Not one of the 8000 newspapers published in Soviet Russia carries crime news, comic strips, or gossip columns.—*Collier's*.



working Neva - Clog stapler. Get everything you need for fruit or truck shipments at Sheboygan—as leading growers have for 63 years.

Write, now, for low prices and free facts on new shipping regulations.

Sheboygan Fruit Box Co.

593

Sheboygan, Wisconsin



LADINO CLOVER MAY HELP THE BEEKEEPER

ADINO white clover is being Lested in Wisconsin by the Agronomy Department of the College of Agriculture.

Beekeepers will be especially interested because Ladino promises to be a good honey plant. In September Gleanings in Bee Culture. Charles Dirks, of Maine, said, "Ladino clover this year is unquestionably secreting nectar heavily and is being freely worked by the bees. One beekeeper states that he has fully 150 pounds of surplus honey on his strong colonies which has come largely from Ladino. Ladino clover when used for pasturage or seed purposes blossoms during all of July and most of August.'

Then, Mr. J. L. Byer, Markham, Ontario, in the same issue, writing on August 6th, said, "That big field of Ladino that we have had under observation this summer, has been worked by the bees ever since bloom appeared, and there are still a lot of blossoms.

We learn from our Agronomy Department that Ladino is a giant form of white clover which is a little later than the White Dutch. It comes from Italy. It came through well last winter, but the Department says they want to try it one more winter, or through a test winter before recommending it further to Wisconsin farmers, as there has been some question about its hardiness here. If hardy, it will no doubt be grown by farmers for pasturage. It likes a rich soil, and will do best on low land where there is plenty of moisture. It must not be pastured too heavily.

H. J. Rahmlow, Madison, Cor. Secy. Mrs. Louise Brueggeman, Box. 60, Menomonee Falls, Recording Secretary-Treasurer

Robt. Knutson, Ladysmith Newton Boggs, Viroqua C. C. Meyer, Appleton Ivan Whiting, Rockford

65TH ANNUAL CONVENTION WISCONSIN BEEKEEPERS ASSOCIATION City Hall, Plymouth

October 27-28, 1943

– PROGRAM –

Wednesday, October 27

9:30 a. m. Registration.

10:00 a. m. Call to order by President Walter Diehnelt, Menomonee Falls. What Was Accomplished in Disease Inspection Work This Year. Plans For The Future. James Gwin, Chief, Division of Bees and Honey, Madison.

10:45 a. m. Comments and Observations About Beekeeping Among Wisconsin Beekeepers. John F. Long, Madison.

11:30 a. m. Interesting Things About Beekeeping We Saw While Inspecting Bees. Ten-minute discussions by Inspectors.

12:00 m. Luncheon. Business meeting Board of Managers.

Afternoon Program

1:45 p. m. Welcome by Mayor W. H. Eldridge, Plymouth.

Post War Plans For the Honey Industry. Mrs. Harriett Grace, American Honey Institute, Madison.

2:30 p. m. Overwintering of Productive Colonies. Causes of Winter Losses. How Bees Winter. Basic Requirements. Dr. C. L. Farrar, Central States Bee Laboratory, Madison.

3:30 p. m. Information Please Hour. Leading Beekeepers and Experts Will Answer Questions on Practical Beekeeping Problems. Conducted by H. J. Rahmlow, Madison.

4:30 p. m. Program to be announced.

THE BANQUET

Hotel Curtiss, 6:30 p. m. Price, \$1.00 per plate (chicken).

Music and entertainment auspices Sheboygan County Beekeepers Association, Mr. Strauss Chairman.

Short concert by the Kraft Choral Society of 30 voices. Thomas Baily Director.

Moving Picture "Queen Rearing" produced and loaned us by the Georgia Department of Entomology, C. H. Alden, Director, Atlanta. Colored movie.

Additional program to be announced.

Thursday, October 28

10:00 a. m. Next Year's Honey Crop. 1943 and 1944 Crop Prospects Compared. Funudamentals of Management During An Active Season. Dr. C. L Farrar, Madison.

11:00 a. m. Government Regulations Affecting Beekeepers. Honey Prices The Future of Beekeeping and Honey Marketing As I See It. Walter Diehnelt, Menomonee Falls.

11:30 a. m. Practical Observations by Wisconsin Beekeepers. Cornelius Meyer, Appleton; Ivan Whiting, Rockford; and Frank Greeler, Neillsville. 12:00 m. Luncheon.

Afternoon Program

1:30 p. m. Annual business meeting and election of officers. Reports of committees.

Report of Association Honey Labels and Sales of Tin and Glassware by Walter Diehnelt.

Possibilities of Ladino Clover for Beekeepers. What Has Happened to Sweet Clover? Speaker to be announced.

Rooms available at the Curtiss and Laak Hotels. Rates: Single, \$1.50; Double, \$1.00 each.

How to Prepare Bees for Winter

From Paper by Dr. C. L. Farrar in Gleanings in Bee Culture

"During a protracted cold period, the temperature of the air surrounding the bee clusters approaches the outside temperature regardless of the degree of hive insulation," writes Dr. C. L. Farrar in an article on problems of wintering in the September issue of Gleanings in Bee Culture. This fact was established by a number of experiments, including one he carried on in Massachusetts from 1929-31.

"The winter cluster," he says, "provides its own insulation against heat loss. The insulating shell of closely packed bees, filling the interspaces between combs and any empty cells, ranges from 1 to 3 inches in depth, and the more loosely grouped bees in the center generate heat."

As the air temperature surrounding the cluster declines the cluster contracts, reducing the surface exposed to heat radiation, and increasing the depth of the insulating shell, and concentrating additional bees in the center to generate heat. As the temperature of the air rises, the cluster expands, and is conducted from the center of the cluster to the outside shell so as to maintain a normal surface temperature.

Packing retards the rate of temperature change. A packed hive, by cooling off slowly, allows the bees time to contract their cluster to the most favorable position and have some advantage in that way. However, it may not benefit from a rise in the outside temperature which allows the cluster in an unpacked hive to shift its position or the bees to make brief flights.

Kind of Bees Most Important

"The basic problem is not how or where bees are wintered, but what kind of colonies are wintered. Losses resulting from inferior colonies that survive the winter exceed by far the losses from colonies that die out. Small colonies, poor queens, insufficient honey and pollen, and Nosema infections all contribute to a high winter loss of bees, sometimes reaching 50 to 75 per cent, although only a small percentage of the colonies may die out."

A strong colony will use about 60 pounds of honey from the close of the honey flow in the fall until the beginning of the flow next June. Honey converted into bees will bring a higher price than honey sold on the market because those bees contribute to a much larger vield, writes Dr. Farrar. Brood rearing that begins in January or early February is normal and beneficial to the colony, but it is limited by the amount and position of the reserve pollen. At least 40 pounds of honey should be stored in dark brood combs in the top hive body for best wintering. From one to three of the middle combs should contain small areas of about three by five inches free from honey so the cluster will occupy this space during cold weather. Pollen near the center of the upper hive body or where it is available to the bees in mid-winter will aid in brood rearing.

Auger Hole

An auger hole about one inch in diameter placed just below the hand-hole in front of the upper hive body as an additional entrance is rapidly being adopted by beekeepers and has considerable merit. Only the upper hole is left open in winter. The bottom-board entrance is reduced to $\frac{3}{8}$ by 1 or $1\frac{1}{2}$ inches. A lower entrance is also desirable so that the bees can clean out the dead and to prevent molding of the combs.

Wind Protection

Protection from the wind, whether by natural surroundings or wrapping the hives with paper, and maximum sunlight are desirable. The sun shining on the hive permits expansion or shift of the cluster, and sunshine on an upper entrance may allow a brief flight for the bees. Therefore, the hives should face towards the sun during the warmest part of the day.

If the bees have a flight during cool weather and many are lost on the snow, this may be beneficial. Such bees often show a high degree of infection with Nosema. If these infected bees are thus removed from the colony it may help reduce the infection.

OCTOBER A GOOD MONTH IN WHICH TO FEED BEES

B^{ROOD} rearing usually stops some time in October. We should be very careful to observe whether the brood rearing has taken place in the upper hive body and whether or not bees have used the honey in the center frame of this hive body so that when they cluster on them during the winter there is danger of starvation during very cold weather in case they cannot move upward onto the food.

Strong colonies should have as much as 60 pounds of honey for use from now until next June. If they are light, the best way is to feed sugar syrup, two parts sugar to one part of water, thoroughly stirred and mixed while hot and fed in a 10-pound pail with holes in the cover in the standard way. The bees will store this syrup now in the empty combs in the middle of the brood nest where it will be available during the winter months.

In fact, every colony should be carefully examined now. We must not again have the serious losses we had last winter from starvation.

ADDITIONAL SUGAR FOR FEEDING BEES

On September 3, the War Board issued a memorandum, No. 412, amending rationing order No. 3 of the OPA by which beekeepers may obtain additional sugar not to exceed 15 pounds per colony for this year for feeding bees.

Application must be made to the OPA Rationing Board on OPA Form R-315. It shall state: (1) The amount of the additional sugar requested; (2) the number of colonies of bees for which the allowance is requested; (3) that the beekeeper has obtained and used the allowance already provided, and (4) that the additional sugar is required to prevent loss of bees.

Such application must contain the certification of the local USDA War Board that the additional sugar requested is required to prevent the loss of bees.

The County Agricultural Agent is a member of the War Board and it will be best for the beekeeper to contact the county agent in person or by mail in regard to the matter.

It should be remembered that beekeepers were allowed last spring 10 pounds per colony for feeding. The additional 15 pounds is only available after the original 10 pounds has been used up.

BORAXO REMOVES PROPOLIS FROM HANDS

T is reported that when the hands become soiled with propolis, which they often do when working in the apiary, it may be removed with Boraxo which is available at grocery stores. Dampen the hands, shake on some Boraxo and rub well. ()ctober, 1943

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WOMEN'S AUXILIARY MEETING WISCONSIN BEEKEEPERS ASSOCIATION

City Hall, Plymouth

October 27-28, 1943

- PROGRAM -

Wednesday, October 27

10:30 a. m. Call to order by President Mrs. A. H. Seefeldt, Kewaskum.

Roll call. Members to respond by giving experiences in using honey for canning and baking. Round table on uses of honey. Comments by Mrs. Harriett Grace, American Honey Institute.

12:00 m. Luncheon. Plans to be announced. A special luncheon for women may be arranged.

Afternoon Program

1:45 p. m. Attend men's program. Post War Plans for Beekeepers. Mrs. Harriett Grace, American Honey Institute, Madison.

2:30 p.m. Tour of interesting places in Plymouth. Arranged by Sheboygan County Beekeepers Association.

THE BANQUET

Hotel Curtiss, 6:30 p. m. Price, \$1 per plate. See beekepers' program.

Thursday, October 28

10:00 a. m. Business meeting and election of officers, Women's Auxiliary. 11:00 a. m. What We have Learned About Honey Through Research. Mrs. Harriett Grace.

12:00 m. Luncheon.

Afternoon Program

1:30 p. m. Attend business meeting Wisconsin Beekeepers Association.

Sweet Fruit Pickles

2 cups honey

1 cup vinegar

2 inches of stick cinnamon

6 whole cloves

apples

Combine honey, spices, and vinegar, and heat to boiling. Have ready 8 to 10 cups of quartered apples (pared or not, as you like). Cook 2 or 3 cups of apples at a time in the syrup, handling them gently so they will not mash. When transparent, lift out and place in a jar or bowl, and continue until all are cooked. Take out spices, pour remaining syrup over the apples, and store until needed. Serve cold with chicken or turkey, or with meat loaf, roast pork, or baked ham.

I could prove God statistically. Take the human body alone—the chance that all the functions of the individual would just happen is a statistical monstrosity. — George Gallup.

WHEN WHITE CLOVER YIELDS NECTAR WELL

D^{R.} C. C. Miller in his book "Fifty Years Among the Bees" tells about the season in which he produced the world's record crop of comb honey. He said that white clover bloomed throughout June, July, and into August because it was favored with plenty of rainfall which occurred largely during the night, and was followed by clear, sunshiny days. How true that is.

This year around Madison white clover yielded very well until a little past the middle of July when it turned dry and the flow stopped. Farther north, however, there were rains, largely at night, and the flow continued, resulting in a much better crop than where this was not the case.

Bachelor Uncle: Baby six weeks old, you say? Talk yet?

Proud Father: Oh no, not yet. Bachelor Uncle: Boy, eh!—The Earthworm.

HONEY WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company, Oconomowoc, Wisconsin.

HONEY CANS

We can give you immediate delivery on 60# cans.

Order your glass supply for the new crop now, as it takes from 3 to 6 months to receive same from the factory. We now have a good supply of 5#, 2½#, 1# and ½# on hand, and can make immediate shipment.

To insure prompt service, order your Association labels now for your new crop of honey.

Write for Complete Price List.

Order Through Your State Beekeepers Association

HONEY ACRES Menomonee Falls, Wis.

HONEY CONTAINERS

Prompt Shipping Service Glass Jars

We carry a complete line of "Utility" style jars with white coated covers, lacquered and wax paper lined.

PRICES

				Pric	e Wt.
Reshipping	case	of	12 - 2#	.42	10 lb.
**			12 - 1#	.38	6 lb.
••	**	**	24 - ½#	.67	7 lb.
••	**	**	12 - 21/2#	.67	11 lb.
**	**	**	6 - 5#	.42	10 lb.
••	**	**	4 - 10#	.45	13 lb.
	(No 50 lb.	CB	ns	ders	
	1	10%	on \$50 on \$100	order	rs.
	P	RI	CES		
Standard well sear					

AUGUST LOTZ COMPANY BOYD, WISCONSIN

Editorials

OFFICIAL BALLOT

For The Election Of Officers of the WISCONSIN STATE HORTICULTURAL SOCIETY

For President

Arno Meyer, Waldo	
For Vice-President	
Don W. Reynolds, Sturgeon Bay	
For Director to Succeed D. E. Bingham, Sturgeon Bay	
Murray H. Bingham, Sturgeon Bay	Ц
Leland Brown, Sturgeon Bay	
For Director to Succeed Charles Patterson, Franksville	_
R. G. Dawson, Franksville	Ц
Arthur Kittinger, Caledonia	
For Director to Succeed Theo. Ward, Fort Atkinson	
Frank Guttenberg, Jefferson	
Albert Kracht, Lake Mills	
E. L. White, Fort Atkinson	
	1 1

Instructions: Mark an X after the name of the person for whom you vote, for each office. You may fill in the name of a new candidate on the blank line if you desire. Cut out the ballot and mail to Mrs. A. E. Steinmetz, Wisconsin Horticultural Society, 424 University Farm Place, Madison 6, Wisconsin, acting as Secretary for the Nominating Committee.

ALL MAIL BALLOTS MUST BE MAILED ON OR BEFORE NOVEM-BER 12th. Voting may be done the first day of the annual convention at Fort Atkinson, November 17th, where extra ballots will be available. Voting closes at 5 p. m.

Notice: YOU MUST SIGN YOUR NAME, as only members may vote. Your name on the ballot will not be divulged by the Nominating Committee Secretary. The names will be cut off the ballot before being turned over to the committee. Both the signatures and ballots will be examined by the committee.

Sign name _____

SOCIETY PRESIDENT ON NATIONAL APPLE PLAN-NING COMMITTEE

O^{UR} president, Mr. Arno Meyer, Waldo, was appointed a member of the National Apple Planning Committee by our Board of Directors, and attended a meeting in Washington arranged by the OPA. A report of the meeting is given in this issue.

Mr. Meyer stated that the OPA has been ordered to place price ceilings on apples, but at the time we go to press nothing further has been decided.

Mr. Meyer writes about the trip to Washington on August 24th and 25th: "It was dreadfully hot in Washington and everything was dried up—no rain since June. Crops were all dried up and fruit growers in Virginia were complaining about the effect of drought on their small crops.

"There seemed to be no shortage of manpower in Washington."

Writing on September 5th, Mr. Meyer states: "My early McIntosh apples were very fine this year. We are picking our Wealthies now."

MRS. C. E. STRONG DISCON-TINUES PAGE

A letter from Mrs. C. E. Strong, who is now in Alhambra, California, states that because she has taken up residence in that state, she thinks it best to discontinue editing her page in Wisconsin Horticulture—"About The Home and Garden."

For more than 15 years Mrs. Strong has faithfully written very valuable material each month for this page. Many of our members October, 1943

looked forward to reading her good advice on culture and the new varieties she was testing in her garden during the many years that she lived in West Allis.

Mrs. Strong had one of the most beautiful and well arranged gardens in this section of the state. She tested many new varieties and gave advice about their value to Wisconsin gardeners through her page. She was an expert gardener, and not only through her writing, but as a speaker to garden clubs, she gave much helpful information. Hundreds of gardeners visited her garden each summer, and obtained from her not only information, but often valuable plant material.

For her services, the Wisconsin Horticultural Society presented her with the honorary recognition certificate of the Society in 1932.

The Wisconsin Horticultural Society wishes Mrs. Strong happiness in her new home.

WOMAN'S AUXILIARY EX-HIBIT PREMIUM SCHEDULE

ANNUAL CONVENTION WISCON-SIN HORTICULTURAL SOCIETY

Avalon Hotel, Waukesha, November 16-17

CLASS 1. An individual display of 12 jars of canned vegetables, fruits, jams or jellies, Wisconsin grown, prepared by the exhibitor and arranged on a table without accessories.

First prize, \$5; 2nd, \$4; 3rd, \$3; 4th, \$2; each additional entry of merit, \$1.

CLASS 2. A centerpiece for dinner table, composed of fruits, vegetables, gourds, etc., arranged on tray or suitable base.

CLASS 3. Arrangement for living room or dining room in vase or bowl composed of any type of dried materials such as flowers, shrubs, wild plants, etc.

Premiums for classes 2 and 3, each: 1st prize, \$4; 2nd, \$3; 3rd, \$2; 4th, \$1; each additional entry of merit, 50 cents.

WOMAN'S AUXILIARY PROGRAM ANNUAL CONVENTION WISCONSIN HORTICULTURAL SOCIETY AVALON HOTEL, WAUKESHA, NOVEMBER 16-17, 1943 Tuesday, November 16

10:00 a. m. Call to order by President Mrs. Arno Meyer Waldo.

What We Can Do To Control Garden Insects in 1944. E. L. Chambers, State Entomologist, Madison.

11:00 a. m. The Rabbit and Mouse Problem in Our Gardens, and What We Can Do About It. G. C. Oderkirk, Rodent Control Specialist, Lafayette, Indiana. Ouestions and Discussion.

12:00 m. Luncheon. Plans to be announced.

1:30 p. m. Recommendations for Our Vegetable Gardens for 1944. Prof. J. G. Moore, Department of Horticulture, Madison.

2:00 p. m. Demonstration on Artistic Arrangements of Fruit, Vegetables, Dried Materials and Flowers for Special Occasions. Mrs. E. A. St. Clair, Wauwatosa.

ANNUAL BANQUET

Avalon Hotel, 6:30 p.m.

Entertainment arranged by Waukesha County Fruit Growers Association.

Toastmaster Mr. J. F. Thomas, County Agent, Waukesha.

Honorary Recognition Services. Certificates awarded to two outstanding horticulturists. Presentation to fruit grower by oldest living president; to garden club member by Mrs. H. S. Bostock, Madison, Federation President.

Down to Fundamentals. Major Issues and Objectives of the War. Prof. C. V. Easum, Professor of History, University of Wisconsin.

Program in Honor of 75th Anniversary. Details to be announced.

Wednesday, November 17

10:00 a. m. Annual business meeting and election of officers Woman's Auxiliary.

Comments on judging of exhibits by the judges.

11:00 a. m. Strawberries, Raspberries, and Other Small Fruits for the Garden. Recommendations on Varieties and Culture. C. L. Kuehner. Department of Horticulture, Madison.

12:00 m. Luncheon.

1:30 p. m. Attend business meeting and program Wisconsin Horticultural Society.

WINTER PROTECTION FOR RASPBERRIES

(Continued from page 40)

Tepee System Popular

There is not much change in the training systems used. If anything there is a trend toward more extensive use of the tepee system which growers are finding to work very well for hill system culture provided the canes are *tied tightly*. One tie should be made about 3 to $3\frac{1}{2}$ feet from the ground, with a

second tie placed 6 to 8 inches above the first tie. The canes should be cut off about 2 inches above the top tie. If left longer they are likely to break at the top tie when loaded with fruit. The canes should not be cut until early spring unless they are very tall and likely to break, in which case they may be cut back part way at the time of tying.

GARDEN GLEANINGS

WE hear that an outlet has been given to those victory gardeners who like to tell about the large pumpkins, the wonderful yield of tomatoes, or potatoes, and the long cucumbers they produced this year. In Watertown, New York, a Victory Garden Liars' Club has been organized. No doubt we will hear some tall tales from now on. Perhaps garden clubs can give victory gardeners an opportunity to tell about their accomplishments as a part of their program.

Do not attempt to store onions with thick necks. These are commonly called scallions. Only onions which are thoroughly ripened and dry will store well. Others should be consumed at once. Store onions in a cool, dry place.

There are several reasons for onions developing thick necks and which do not mature well, but the most common cause is too much moisture or nitrogen in the soil.

Maude R. Jacobs writes in Horticulture that she has a suspicion that clumps of peonies reported as having bloomed for decades without any division, have had what is known as clump division from time to time. We think she is right. By clump division is meant, digging down along one side of a clump to lay bare a part of the root system. A portion of the root stock, rhizome or root system is cut from the main growth and planted elsewhere. Many perennials, especially iris, perennial phlox and peonies require dividing from time to time. This method of clump division is an easy way of doing it.

Now is the time to *plant your peonies*. W. A. Sisson of Rosendale has always contended that peony roots may be purchased and planted any time from late September until freeze-up. They do not make any growth in the fall and will come through well, especially if

planted with the buds about two inches below the surface of the soil and then hilling with a mound of dirt 4 to 6 inches high. This mound of dirt prevents frost penetration and heaving. In the spring, of course, the mound is smoothed over, and the new growth then has only two inches of soil to penetrate. Too deep planting will stunt the new growth.

However, we do not recommend transplanting iris at this late date. It will now be better not to disturb the iris clump, but to wait until spring. The best time for purchasing or transplanting iris rhizomes is within a few weeks after they are through blooming in June.

We hear that the Ohio Association of Garden Clubs is organizing "Victory Garden Clubs." The object is to give an opportunity for those who have victory gardens to exchange ideas, listen to speakers, and learn more about making victory gardens successful. Most of these gardeners have been holding informal gatherings over the back fences or within their own community garden areas. There is a good opportunity for meetings of such groups, especially in late winter and early spring.

A National Flower. Some time ago a National Radio Ouiz broadcast that the goldenrod was the national flower. They gave as authority for this statement, "The Lincoln Library of Essential Information" which says that the goldenrod is the national flower for the United States by popular choice. Another statement has been made that a nation-wide pool to determine the national flower was held, and that the wild rose was given first place, and the columbine second place. Well, perhaps we should have another pool and get some other flower designated as the national flower-or perhaps we should

forget about it entirely because there may not be any one flower at the moment which would meet with the approval of enough people in the whole United States to be acceptable as a national flower.

Certainly from the standpoint of interest, the number of shows held and the number of fans going to them, the gladiolus is today in first place as a flower which attracts the attention of flower lovers. We know of no other flower that has had as many shows this year as has the gladiolus.

No less a magazine than The Reader's Digest contained a short item recently answering a question as to whether or not food not removed from a tin can would be rendered unfit or harmful by the action of the tin in contact with the food. The answer was that there is no bad effect from the tin being in contact with the food, and that the only way the food would be spoiled would be by bacteria from an outside source getting in contact with it.

However, the opinion that food must be removed from a tin can immediately the can is opened is so widespread among housewives that we have yet to see one who will put an open tin can of food in the refrigerator and use it at the next meal.

During the past few months 1 have had occasion to try this out. I removed a portion of condensed canned soup from a tin can, closed the can and placed it in the refrigerator. No one else in the particular family where this happened would eat of the food at the next meal. I ate it for several meals thereafter, always of course heating it first.

Bacteria or their toxins can be killed or removed by heating to the boiling point. Canned vegetables should always be heated in that way. Home - canned vegetables, (Continued on page 47)

October, 1943

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ROVING WITH ROSES By Richard S. Wilcox, Chairman, Test Garden Committee, Minnesota Rose Society

THERE have been many new roses introduced that are claimed to be as good as or better than Crimson Glory, but none so far has come up to the advance claims. The reason, of course, is that Crimson Glory is such a satisfactory rose that one better has to be just about perfect.

Henri Jacobs of St. Paul has been trying out Crimson King, but, while it is much like Crimson Glory, he does not like it as well. The flower does not seem to have as good form as with the older variety. My experience has been like Mr. Jacobs'. Crimson Glory, with a nearly perfect bloom, combines fair freedom of bloom, unusual hardiness and much freedom from disease. This is a very unusual combination.

Frequently the so-called improved selection of a variety is no improvement. This is not so, however, in Grootendorst Supreme. This rose is much darker than the original Grootendorst and seems to bloom more freely on a small plant. It does not fade to the objectionable washed-out pink.

A Shrub Rose

As a shrub rose, Nearly Wild seems to be in a class by itself. This rose of Brownell's is always in bloom, grows low and spreading and makes an ideal low shrub for foundation planting, something of which we are now short. While the rose is single, beautiful bouquets can be picked for the house and they keep for a long time.

The new roses that we have this year at the Test Garden are more interesting to us than any group we have ever received. There are some really unique varieties.

One is Brownell's Shades of Autumn, which is much like Condesa de Sastago but has many more blossoms and more disease-resistant foliage.

From August, 1943 The Minnesota Horticulturist.

The Future for Victory Gardens

By H. W. Hochbaum, Chairman, Victory Garden Committee, U.S.D.A.

Are Our Gardens Big Enough?

THE 1943 Victory Garden Campaign beat all the records we thought would be set. As early as April the Gallup poll told us that their surveys showed that we would have 21,000,000 Victory Gardens this year as compared with our goal of 18,000,000. Our retail and wholesale seedsmen, after what they have been through in filling orders, can well believe that even Gallup's figures might be too low. Thus, when you ride through the outskirts of some of our cities, everywhere you look, every vacant lot has been made into a Victory Garden.

The public attention that the Victory Garden movement is still receiving is phenomenal. Day after day cartoon strips of all kinds are plugging for Victory Gardens in serious as well as comic vein. Every well-known radio star or commentator again and again calls Victory Gardens to the attention of the great public. Many thousand persons have given freely of their time and money in fostering Victory Gardens and in helping others to succeed with their efforts. Institutional and good will advertising contribute tremendously in keeping Victory Gardens in the public eve.

Can We Do Better?

Good as the Victory Garden Campaign was this year, large as the store of food that will be produced, Victory Gardeners and all of us will have to do even better things next year. The demand for food will be very great. In fact, we can hardly produce too much food considering the amounts that we will need to send abroad for the military forces and for civilian needs on top of what we must have for our own population. So Victory Gardeners can think that they have gotten into the swing of things now.

A garden 20 by 30 feet looks big to the beginner. His time for gardening may be limited too because of the longer hours he puts into his business or at his job. But a plot 30 by 50 feet, better 50 by 100 or even larger, yields much more and we do need to raise all the food we can. In the larger garden there is less tendency to crowd stuff. A larger plot is also easier to work. We should like to recommend furthermore that more people try to get enough space to grow potatoes, at least some early ones, dry beans and more of the easily stored root crops. Generally, too, people ought to plant enough tomatoes for the family's yearly supply.

What Can Garden Clubs Do?

Every garden club and every garden club member must play the largest part possible in making the Victory Garden Program for 1943 and 1944 succeed. For good nutrition, for health's sake, for recreation and for an abiding interest in gardening and more attractive homes and communities, we must begin now and help to make successful and more permanent devotees. The success of Victory Gardens depends so much upon the local volunteer help and direction.

Condensed from August-September, 1943 Bulletin of the National Council of State Garden Clubs, Inc.

GARDEN GLEANINGS

(Continued from page 46)

canned in a water bath and not a pressure cooker are not safe unless brought to the boiling point before being heated, regardless of the kind of can used.



OFFICERS Harold Janes, Whitewater, President Bernard Nichels, Sheboygan, Vice-President H. J. Rahmlow, Madison, Cor.-Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Illinois Ave., Sheboygan

By the WISCONSIN GLADIOLUS SOCIETY

DIRECTORS Oren Baxter, Edgerton Fred Hagedorn, Sheboygan Dr. Geo. Scheer, Sheboygan Archie Spatz, Wausau Frank Blood, Stevens Point Chester Harrison, Waldo Walter C. Krueger, Oconomowoc E A Lins, Spring Green Walter Miller, Sun Prairie Noel Thompson, Madison

My Favorite Gladiolus

The first of October seems to be the time we look over our glads and decide what to throw out next year and make plans to have larger and better show spikes out of our gardens. I'm thoroughly convinced that glads need a lot of nitrogen for those long flower heads that Paul Hoppe and Ted Woods keep bringing over to make me jealous. I'm plowing under soy beans on the ground that I'll use for glads next year, and I expect that to help.

Top Varieties

I saw several spikes of Aladdin this summer that were perfectly marvelous. You grow 25 bulbs of Aladdin to get one really swell spike, but that one spike is certainly worth it. Algonquin is a very worth while glad. Alsace has beautifully shaped florets, good color and spike. American Commander is tops. Autumn came good last year, but very poor for me this year. I like its color very much and hope it will do better next year. Avalon is very good. Rev. Heberlein's Baby Sue is a very beautiful basket glad.

There is little choice between Badger Beauty and Elizabeth the Queen, I am very fond of both. B C Giant is really a lovely big thing, an oversized Mrs. Leon Douglas. Belmar is worth having. Marshall's Blaze is a fine red. Bluet is the prettiest blue I've grown. Buckeye Rose has beautiful florets and makes an excellent spike, the color is good and the whole spike is pleasing. Chamouny is always lovely, as is Coho.

Corona is my nomination for the most gorgeous glad. It makes impressive spikes and lasts well. I didn't care for Bancroft Winsor. Coutt's Orchid, in its second year with me, rates high and I'm scratching for bulblets of it. C. W. Gaunett is huge and that is all. I've had fun with Eglantine this year—bought six bulblets and the good Dr. Scheer threw in a bulb—coddled the bulblets along until I got disgusted and then on Sept. 20 one of the bulblets germinated. The rest of the bulblets are in good condi-

Roger B. Russell, Madison

tion but not sprouting. I'm going to pot them and see what growth I'll get on them in the house.

The bulb of Eglantine gave a lovely long spike and I hope my experience with the bulblets is not natural with the variety, for I certainly want to increase my stock of it.

Elwood, a very late lavender, is quite like Minuet, but more beautiful, and doesn't bloom for me until Sept. 25, when it is badly needed, and then comes fine. One medium bulb of Genghis Khan gave me two grand spikes and 17 out of 17 bulblets germinated and made large growth. I was going to throw out Golden Poppy until I cut a bunch of tips for an arrangement and realized what a swell glad it could be in arrangements. Green Light is rather early and made some very excellent spikes this year. Gun Powder and Leading Lady are the best sports of Picardy I've seen. H B Pitt is supposed to take the place of l'icardy, but I'll still take Picardy.

I saw some beautiful spikes of High Finance at Geneva in 1942, grew it this year and didn't like any of the six spikes I grew. Hopedale and Hurricanc are both very good. Ieka gives good spikes and grand color late in the fall. indian Princess is a bright red, highly ruffled, small, very pretty. Ivory Keys has an exquisite floret and builds a fine spike. The color of Jeannie is very good, a pink that has lots of life. King Lear and King Tan both give lovely spikes. King Tan is really a tan. I almost threw out Lavender Ruffles last year, and am now glad that I kept it, for it really makes some good spikes. Midnight Red is a very dark red, better than Oegenda. After seeing the way Ted Woods grows Minuet, I'm growing it again. Mrs. Mark's Memory isn't as good as I had expected it to be. Mt. Index was the first to bloom for me, July 18, and is a very good white. Krueger's Novelette has no definite spike form, but the color is beautiful, the shape of the florets is unusual, and it is a honey for arrange-

ments.

I don't grow many small ones (1 mean small varieties!) but of the small ones *Nadia* is the favorite with *Pinoc-chio* a fair second and *Orange Butterfly* a good third. *Osmond*, a Heaton glad that is not well enough known, is a fine orange, much better than most of the older orange stand-bys.

I wish I could get more stock of Pajarito or could get it to propagate faster for me. It has a floret that appeals. Parnassus burns badly. The color of Paula Ann is most beautiful and the spike is good. Pink Ribbon is one I forgot about in mentioning the small ones. the spike is so long. The individual florets are small but there are so many open it is a ribbon of color. R. B. is a very beautiful glad-I bought it a year ago for the name but will continue to grow it for its beauty. Red Lightning is somewhat like Firefly only better. There is no color quite as fine as Rima. Rosa van Lima is a most prolific glad with King Lear and Hindenburg's Memory right behind. I haven't seen as good spikes of Sensation this year as I had last; mine bloomed very late and came double. There was a spike of Shirley Temple in Geo. Morris' garden that was the most beautiful Shirley I've ever seen. It can come big and good.

The best yellow in my garden this summer is Tahlahneka. I have bulblet stock of Oregon Gold, and expect it to be tops in yellows next year. Thunderbird makes a whale of a spike, so does Treasury Gold. Vagabond Prince is always in a class by itself—always loved. Wish Vassar would make a longer spike. for the color and form are grand. Vec Cream is just as beautiful as Sir Galahad. Vela, a grand scarlet, produces almost 100 per cent cuttable spikes. When Walk Over makes a good spike it is a glad to talk about. White Eagle is a mighty good ruffled white glad.

I saw ten thousand spikes of *White* Gold in bloom in Scheer's garden August 22 and it made a marvelous sight.

Hoppe's seedling *Alla* is a very fine smoky show glad, and his *Flamingo* makes up into about the most beautiful basket possible.

Fine White Seedling

The finest seedling of the summer was a pure white with a small purple feather, an exquisite floret and a long spike from Ted Woods. You'll hear more about this one in about three years! The most unusual seedling was a lavender, 8 inch florets, 441/4 inch flowerhead, spike 73 inches tall—from Hoppe.

I hope I haven't stepped on anyone's toes or pet glads—if I don't like your iavorite that's my hard luck.

WANTED! LETTERS COM-MENTING ON GLADIOLUS GROWING

THIS month we found it impossible to obtain articles from those to whom we wrote asking for comments on glad varieties in their gardens and at the State Show. Our glad growers were too busy to write.

We are not acquainted with all the glad growers in the state. There may be growers who could write very interesting articles on the subject of experiences with the new varieties and gladiolus growing.

Won't you write us a letter telling about some of these things which could be used on this page?

WISCONSIN GLADS WIN AT N.E.G.S. SHOW

TN the report of the New England Gladiolus Society's Show at Horticultural Hall, Boston, Massachusetts, we find the following statement:

"In the amateur classes a number of midwestern and western originations took first places, including Stoplight, Rose Defiant, Ohio Nonpareil, Mrs. Richard Mc-Govern, Redwin, Marguerite, Master Myron, Badger Beauty, Miss Wisconsin, White Gold, Golden Goddess, Helen of Troy, Sir Galahad, Jeanie, James FitzJames, Crinkle Cream and Vista Bonita."

White Gold Wins Medal

At this show a larger number of baskets and vases than ever before were shown this year. Wendell Wyman, Sharon, Mass., again took the Society's medal for the best basket of 25 spikes, one variety, with *White Gold*.

MIDWEST SHOW AT CHICAGO VERY SUCCESSFUL

THE Midwest Gladiolus Society show at Garfield Park, Chicago, had an estimated 3,000 to 4,000 entries. Following are some of the highlights of the show.

Grand champion spike was the beautiful white Myrna, entered by C. D. Fortnam, Tyler Hill, Pa. Second was Marion Pearl entered by Mr. J. R. Hopkins, and third was a spike of 452-11 entered by Walter Krueger, Oconomowoc.

The display of Dr. Geo. Scheer of Sheboygan featured three large baskets of White Gold, his own origination, and other seedling varieties.

Harold Janes, Whitewater, exhibited baskets of Diane, the oldrose Changeable Silk, Elizabeth the Queen, Red Charm, and Wanda.

Krueger's Seedlings Attract Attention

Mentioned especially in the report of the show was Walter Krueger's new seedling 447-10, a white bloom with pink throat which is to be introduced this fall. There was also a basket of seedling 447-11, a ruffled salmon, and a basket of Miss Wisconsin, a lovely rose variety introduced last year.

Officers Reelected

At the business meeting it was decided that present officers should continue another year. They are: President, E. A. Lins, Spring Green; Vice-president and Editor, J. R. Hopkins, Deerfield, Illinois; Secretary and Show Manager, L. E. May, Chicago; Treasurer, Ray Moss, Waterloo, Iowa.

SCHEER'S SEEDLINGS WIN AT ILLINOIS SHOW

A^T the Illinois Gladiolus Society's annual show. Momence, Ill., we find that J. R. Hopkins, Deerfield, took first in the seedling classes with one spike of the ruffled salmon Scheer seedling 166-28, and also with Scheer seedling 171-09, a light pink.

AMERICAN IRIS SOCIETY AWARDS

TO a Nebraska farmer goes the honor of winning the highest award in the iris world—the Dykes Medal for 1943, given by the American Iris Society. The breeder is Hans Peter Sass of Elkhorn, Nebraska, and the variety is Prairie Sunset.

Mr. Hans Sass is the first American to have won the medal twice. He received the Dykes Medal in 1932 for his origination, Rameses.

Prairie Sunset is a blend of peach, apricot, rose, copper and gold and is a wonderful iris and able to stand up under the sweeping prairie winds of Nebraska.

Dykes Medal

Varie	Originator			
Prairie	Sunset	Η.	Ρ.	Sass

Award of Merit

American Varieties	s—Tall Bearded
Daybreak	Kleinsorge
Captain Wells	Paul Cook
Stardom	D. Hall
Copper Rose	Paul Cook
Red Valor	Nicholls
Mary E. Nicholls	Nicholls
Tiffany	H. P. Sass
Brown Thrasher	Kirkland
Garden Flame	H. P. Sass
Violet Symphony	K. Smith

Other Than Tall Bearded

Black Hawk (Intermediate)	Schreiner
Nelson of Hilly (Oncobred)	C. White
Peshawar	Schreiner
(Hybrid)	

WISCONSIN FLORISTS TO MEET IN OCTOBER

THE annual meeting of the Wisconsin - Upper Michigan Florists Association will be held in the Plankinton Hotel, Milwaukee, October 27-28, according to Carl P. Menger, Secretary. The organization did not hold a summer meeting this year.

October, 1943

Garden Roses Winterkilled By Low Temperatures

Experiments Give Information On Wintering

At a temperature of 20 degrees below zero, the rose varieties **Radio**, **Radiant**, **Frau Karl Druschki**, and **Dorothy Perkins** were completely winterkilled, according to observations in experiments conducted at Cornell University by Allen and Asai, reported in the Proceedings for the Society for Horticultural Science.

At a temperature of -10 F. the pith and inner bark of Radiant and Radio were injured, but they made normal growth later, showing that such injury was not sufficient to affect subsequent growth.

Drying out or desication did not seem to be a factor in the winterkilling of roses, according to the experimentors. They found, in fact, that the desication occurred largely after the canes had been winterkilled by the cold.

The hardy varieties **Ames No. 6**, and **Rosa Multiflora** were not injured at the temperature of -20 F.

If cold weather comes suddenly early in the season, tender roses are winterkilled at a much higher temperature than later. In freezing chambers Radiance and Radio were winterkilled at 3 degrees F. on October 27th, November 10th, and November 24th, but earlier on October 12th, following a period of mild weather, these varieties were killed at 21 degrees F.

No Spring Injury

The experimentors also conclude that what sometimes is considered spring killing of roses, is really winterkilling. They state as follows: "Much of the evidence for desication as a factor in winter injury is based upon the observation that frequently rose canes appear normal in the spring, but the buds fail to develop normally or grow for only a short time for wintering. This response is usually attributed to periods of hot, drying winds just prior to the time the buds start growth. They point out that the outer cortex is the most resistant of the tissues to low temperatures. Because of this, rose stems may appear uninjured from the outside, while the inner tissues may be severely injured."

The problem of winter protection, they conclude, is one of keeping the canes above the critical minimum temperature.

Protect Roses In Wisconsin

Hybrid Tea or any semi-hardy roses must be protected from low temperatures if they are to winter successfully. Tender climbers should be taken from their trellis and placed on the ground and covered with marsh hay, being careful about mouse injury. If possible, placing an inch or so of soil over the canes would protect them from mice if placed on late in the season.

Hybrid Teas should first be mounded with a cone of soil at least 10 inches high around the stems of the plants. Following this, about three inches of marsh hay should also be placed over all. If the canes are more than 15 inches tall they should be pruned, but several inches projecting above the cone of earth will aid in holding the mulch.

Protecting roses in this way is not a difficult task and many beautiful varieties can be grown which have otherwise been considered non-hardy in this state, if properly protected.

DEEP PLANTING METHOD FOR TULIPS By Harry Nelis Holland, Mich.

D^{URING} the planting season of 1942 our customers were advised that tulips planted deeper than the customary four to six inches would outlast those planted at the regular depth. There is reasonable logic to explain this statement: Bulb growers know that tulips, kept too warm in summer, produce numerous "splits" the following year, which are too small to bloom. If tulips are planted 10 to 12 inches deep instead of four to six, and left in the ground throughout the summer, they will be kept cooler, producing fewer "splits," and remaining of blooming size. Also, moisture is important to tulip bulbs, and there is more moisture available over a longer period of time at the deeper planting level. Last of all, when planting our Species (wild tulips) we find that they frequently work down, trying to find a deeper planting level, so that we sometimes have to dig down six inches deeper than the original planting, to find the

bulb. Which indicates that tulips in their natural state prefer deep planting.

When planting deep, we mean 8 to 10 inches in heavy soil, 10 to 12 inches in light soil. The ground should be well prepared; adequate drainage is necessary. Each individual bulb should not be dropped into a little hole, where the bulb may hang suspended, unable to put forth roots into the soil.

It is our belief that every tulip lover should at least experiment with deep planting in his own garden, for assuredly tulips will not become more plentiful for some time to come.

Condensed from September, 1943 issue Horticultural News by Michigan Horticultural Society.

TEMPERATURE A N D CLI-MATE AFFECT PLANT GROWTH

D^{R.} A. F. Yeager, formerly of the North Dakota Experiment Station, now in New Hampshire, writes in the Flower Grower about how differences in day length, type of soil, and amount of water and altitude cause variations in plant growth. They all affect the work of the plant breeders.

Last year, for instance, Dr. Yeager sent a watermelon which had ripened in 65 days at Durham, New Hampshire, to Texas where it was planted beside ordinary varieties. Instead of being earlier than others down there, it failed to produce fruits until much later than varieties which are ordinarily grown in Texas.

APPLE SAUCE JELLO

- 1 package red Jello
- 11/4 cups hot water
- 1 cup cream
- 2 cups apple sauce (not too juicy)

Whip Jello when it begins to set. Whip the cream very stiff. Fold the apple sauce into the cream and the whipped Jello.

Put into a mold to harden in refrigerator for about an hour.

Sent in by Mrs. Arno Meyer, Waldo.

What's A Vegetable? What's A Fruit? J. H. Gourley, Chief in Horticulture, Ohio State University

INTEREST never seems to wane in the popular question: "What is a fruit, and what is a vegetable?" There are lawsuits over the matter; people are fined for selling "vegetables" on Sunday when they claimed they were selling fruits; radio quizmasters lash out at those who miss the question—and so the matter will not down.

The dictionary cites courts as holding "that all those (products) which, like potatoes, cabbage, carrots, peas, celery, lettuce, tomatoes, etc., are eaten (whether cooked or raw) during the principal part of a meal are to be regarded as *vegetables*, while those used only for dessert are *fruits*." Then an apple eaten during the meal would be a vegetable, but one eaten for dessert would be a fruit!

It is not a great stretch from the word "vegetative" to "vegetable," which denotes rather closely the real meaning. Bailey gives a usable definition when he says that a vegetable is the more or less succulent and edible portion of a plant not intimately associated with the flower in its development. This term would cover a root, a stem, a bud, and a leaf or part thereof; for example, a sweet potato (a root), Irish potato or cauliflower (both stems), cabbage and Brussels sprouts (both buds), spinach (a leaf), etc. Peas and lima beans as they appear on the table are neither vegetables nor fruits, although most people think of them as vegetables, but seeds. This term would not include the tomato, which is as truly a fruit as a peach, a watermelon, or an orange.

One of the few stumbling blocks in this classification is sprouting broccoli, which consists mostly of stem, but also of flower buds and, often, opened flowers. This is a transition type.

What, then, is a fruit? In the first place, a fruit is derived from a flower. It represents the enlarged or developed pistil or ovary of the flower. Other parts may be so intimately associated with it as to be "part and parcel" of the fruit. It is by no means necessary that it be edible, for the little berries on poison ivy are as truly fruits as are the berries in a cluster of grapes. Neither is it necessary that the structure be "ripe," as is often indicated, for do we not eat "green" olives, pickles, sweet corn, peppers, okra, and many others? Neither is it necessary that they contain seeds, for we have seedless oranges, tomatoes, grapes, and many others. They always do possess ovules, however, the structure that becomes a seed upon fertilization.

Hence, we can say that a fruit is a developed pistil together with any intimately associated parts. Complicated fruit structures are found in the fig, pineapple, pomegranate, and others.

Now we grant that we do not want such fruits as tomatoes, cucumbers, and peppers in our "fruit" salad but in sist that they be served as "vegetables." Actually, however, the distinction in origin of a vegetable, a fruit, a seed, and a flower is all clear cut from a botanical or technical standpoint, and the distinction is relatively simple in most cases.

From the May-June, 1943, Bimonthly Bulletin, Ohio Agricultural Experiment Station.

HOW TO IDENTIFY FERNS

THE Ferns of the Morton Arboretum" is the title of Vol. 18, Nos. 7-8, the July-August, 1943 Bulletin of Popular Information by the Morton Arboretum, Lisle, Ill.

This bulletin is the most complete we have ever seen and the most practical for the identification of ferns, since the key to identification not only is plainly written, but has pictures and drawings illustrating the terms used so that anyone will be able to identify ferns by using it.

Single copies of the bulletin are 10 cents. Subscription fee to the Bulletin is \$1.00 per year.

WILD LEEKS GAVE NAME TO CHICAGO

THE late Dr. Huron H. Smith tells us that in the language of the Menominie Indians Wild Leek (Allium tricoccum) is "pikwu'tc sikaku'shia" (the skunk) and that "The word "shika'ko' or 'skunk place' is the origin of the word Chicago, which in aboriginal times was the locality of an abundance of these wild leeks."

From Edible Wild Plants of Eastern North America.

A government employee finally won a raise from \$2300 to \$2400 a year, celebrated, then discovered it was all a mirage. The raise put her in a higher withholding-tax bracket, added \$96 a year in tax deductions, \$5 to her retirementfund. Her semi-monthly pay check before the raise: \$78.24. After: \$78.20.—Jerry Kluttz in Washington *Post*.

	— S A V E	TR	EES-		
Cavity Treatment	General	Landscap	ing	Large	Tree Moving
Fertilizing		e insure side 29	-		Removal
Pruning	Wisconsin				Spraying
	2335 N. Murray		Milwauke		

Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

Krs. Floyd E. Ballard, Recording Secre-tary-Treasurer Badger Park, Route 62, Madison

H. J. Rahmlow, Corresponding Secretary, 424 University Farm Pl., Madison

OFFICERS

Mrs. H. S. Bostock, President 15 W. Main St., Madison

Mrs. R. H. Sewell, 1st Vice-President, 957 No. 70th St., Wauwatosa

Mrs. F. E. Willard, 2nd Vice-President, Oa**kfield**

PRESIDENT'S MESSAGE

Dear Garden Club Members:

It was decided at our convention last year that the Federation join with the Wisconsin Horticultural Society in celebrating their 75th anniversary.

Every effort was put forth to carry out these plans, even as late as the first part of September. However, in trying to carry out such plans, numerous handicaps presented themselves, the chief one being transportation. We found that this difficulty would lower our attendance and limit us as to our program.

No Convention This Year

Consequently, after conferring with several Directors of the Horticultural Society, and after a thorough discussion at a meeting of the Federation Board of Directors on Sept. 14th, we voted not to have a convention this year.

A one-day streamlined business meeting was decided upon, to be held in Milwaukee at the Plankinton Hotel, from 10:00 a. m. until 4 p. m. on Wednesday, October 20. Official notice to this effect was sent to all club presidents and others concerned.

The state officers, district presidents, state chairmen and delegates are urgently requested to attend to give their reports, since this meeting will climax the year's work. We will, of course, welcome club presidents and any other members who can attend.

Last year's Board was of the



opinion that the 1942 convention might be our last until the war was ended. We have also had many similar expressions from our members since that time.

We appreciate fully, that it is always somewhat of a shock to deviate from long established customs. However, in view of all these expressions and opinions, we trust that we have acted wisely and ask the cooperation of our membership. Elsie M. Bostock.

AWARD FOR ORGANIZING **NEW GARDEN CLUBS** DISCONTINUED

N recommendation of the Garden Club Federation, the Board of Directors of the Wisconsin Horticultural Society voted at their meeting in August to discontinue the appropriation of \$100 for prizes to individuals or groups who organize garden clubs. This took effect the beginning of this fiscal year, July 1, 1943.

It was felt that the prize of \$5.00 for the organization of a new club was not practical during these times.

DISTRICT PRESIDENTS Mrs. F. J. Fitzgerald, 649 Broad St., Menasha; Fox River Valley District Mrs. Martha Lowry, Lakewood, Madison Madison District Mrs. Geo. Adami, 2466 No. 46th St., Mil-waukee; Milwaukee District Mrs. Gilbert E. Snell, 414 Erie Ave., She-boygan; Sheboygan District Mrs. Bentley Dadmun, 604 Main St., Whitewater; South Central District

GARDEN CLUB FEDERATION **CANCELS CONVENTION**

HE Board of Directors of the Wisconsin Garden Club Federation voted to cancel their annual convention which was to have been held in conjunction with the Horticultural Society convention in November. The reason was transportation difficulties. It was felt that it would be impossible to get an attendance at a convention in Madison this year.

The Wisconsin Horticultural Society will hold its convention in the Avalon Hotel, Waukesha, November 16-17. Garden club members wishing to attend the annual banquet will be welcome, but should send in their reservations in advance. All garden club members are invited to attend the auxiliary program.

A garden club member of the Federation will be given the honorary recognition certificate this vear by the Society at the annual banquet.

FEDERATION AUDITING **COMMITTEE APPOINTED**

RS. H. S. Bostock, President M of the Wisconsin Garden Club Federation, appointed the following committee to audit the books of the Recording Secretary-Treasurer:

A. L. Thurston, Madison Garden Club, Chm.; Mrs. Martha Lowry, Madison District President: Mrs. D. R. Mitchell, West Side Garden Club.

1943 BUSINESS MEETING WISCONSIN GARDEN CLUB FEDERATION PLANKINTON HOTEL, MILWAUKEE WEDNESDAY, OCT. 20

Mrs. H. S. Bostock, President, Presiding

9:30 a. m. Salute to the Flag. Address of Welcome by Mrs. Geo. Adami, Milwaukee District President.

Response by Mrs. R. H. Sewell, Wauwatosa, 1 s t Vice - President Wisconsin Garden Club Federation.

10:00 a. m. Five-minute reports by District Chairmen.

10:45 a. m. Announcements.

11:00 a. m Board of Managers Meeting.

The Board of Managers consists of one delegate from each affiliated garden club with a membership of 50 members or less, or two delegates per club having 51 or more members. This Board acts on all matters of business and makes recommendations on all important matters to come before the business session.

Voting closes at 11:30 a.m.

12:00 m. Luncheon. Plans to be announced.

Afternoon Session

1:00 p. m. Report of elections committee, consisting of 1943 District Presidents.

Annual business meeting Wisconsin Garden Club Federation.

Reports of standing and project chairmen. Mrs. F. E. Willard, Oakfield, 2nd Vice-President, presiding.

NOTICE TO GARDEN CLUB MEMBERS

TF you receive this magazine you are a member of the Wisconsin Horticultural Society, and as such, have a special invitation to attend the annual convention of the Society at the Avalon Hotel, Waukesha, November 16-17.

The Auxiliary program will be of special interest to garden club members, and all gardeners.

THE FEDERATION BOARD OF MANAGERS TO ELECT OFFICERS

The Board of Managers of the Fedcration consists of one person duly elected by each affiliated local organization having 50 members or less, or two persons duly elected by each affiliated local organization having 51 or more members. It meets prior to the annual business meeting and acts upon all matters of business to come before the meeting, making recommendations to the convention for the disposal of such business.

Each delegate shall present proper credentials signed by the local president or secretary. The Executive Board members are ex-officio members of the Board of Managers.

Voting For Officers

At our 1942 convention we adopted a resolution which stated that voting for officers in this organization be done by delegates and not by the assembly. This year, then, the delegates will elect the officers. The election committee, consisting of the 1943 District Presidents, will announce the results at 1:30 p. m., October 20th.

NEW GARDEN CLUB IN WAUKESHA

THE Waukesha Spring City Garden Club was organized this summer and joined the Wisconsin Garden Club Federation. The Board of Directors of the Federation take pleasure in welcoming this new group to membership in the Federation.

Officers of the club are:

President: Mrs. Ervin Kulow, R. 2, Box 464.

Vice-Pres.: Mrs. Jeff Johnson, 213 W. Newhall Ave.

Secretary: Mrs. R. E. Brower, 415 N. Greenfield Ave.

Treasurer: Miss Martha Hartleb, 421 N. Greenfield Ave.

DOGS LEARN QUICKLY

A resident of Mansfield, Ohio, has reported to Lawn Carc that a half-dozen unbaited mouse traps placed on the ground at twofoot intervals protected a matched pair of evergreens from visiting dogs. The dogs smelled around the traps, sprang them and now avoid that particular yard.

From September 1, Horticulture.

REPORT OF NOMINATING COMMITTEE

THE Nominating Committee of the Wisconsin Garden Club Federation submits the following candidates for officers, to be voted upon by delegates at the annual business meeting to be held in Milwaukee, Plankinton Hotel, October 20.

For President

Mrs. Roy H. Sewell, Wauwatosa For 1st Vice-President

Mrs. Robert Alder, Elkhorn

Mrs. Tom Browne, Waupaca

Mrs. F. E. Willard, Oakfield

For 2nd Vice-President

Mrs. Walter Dakin, Madison

Mrs. H. W. Schaefer, Kenosha

Mrs. Curtis Wilson, Milwaukee

For Recording Sec.-Treas.

Mrs. Floyd E. Ballard, Madison The Nominating Committee consisted of the following: Mrs. Chas. Jahr, Elkhorn, Chairman; Mrs. A. B. Jensen, Menasha, Fox River Valley District; Mrs. H. R. English, Madison District; Mrs. H. Freudenberg, Wauwatosa, Milwaukee District; Mrs. Gilbert E. Snell, Sheboygan District; and Miss Olive Longland, Lake Geneva, Southern District.

FORT ATKINSON CLUB BUYS BOND FOR 'CITY BEAUTI-FUL' PROJECT

A \$75.00 war bond was purchased in September by the Fort Atkinson Garden Club as an initial amount to inaugurate a "City Beautiful" Fund, a post-war planning project of the club.

The money was raised on a sale table conducted by the women of the club at the annual Victory Harvest Festival held September 11-12. White elephants were sold which had been donated, consisting of potted plants, garden aprons, wearing apparel, etc.

The fund will be used following the war to make Fort Atkinson a more beautiful city; also to conduct Christmas lighting contests, flower boxes on the main street bridge, and to add spots of beauty on the river banks throughout the city.

Racine Has Successful Victory Garden Program

Mrs. E. R. Durgin

THERE a r e thousands u p o n thousands of cans of vegetables in the homes of Racine as a result of a most successful Victory Garden Campaign carried out during the spring and summer.

This campaign was promoted by the Citizens Service Corps under the Racine County Council of Defense. After an executive committee mapped out a plan of procedure, a general committee made up of representatives of the Racine Garden Club, Real Estate Board, Farm Machinery manufacturers, Racine County Agricultural School, Labor Unions, the local newspaper, the Wisconsin Agriculturist, city engineers, assessor, and other volunteer workers carried out the work.

The Racine County Board of Supervisors turned over about 2,000 vacant lots for this purpose.

More than 500 persons applied for gardens, many of whom asked for more than a single lot.

In the meantime the plowing committee made up of members of the J. I. Case Company and the Massey-Harris Company were busy. They agreed to plow and disk lots for those who desired it.

A fee of \$3 was charged to avoid competition with 1 o c a 1 plowmen. Each company donated two sets of equipment and the services of two men. The money from the fees, approximately \$1,000, was given to a number of social, charitable and war emergency agencies.

The tomato crop exceeded everything else, and was quite successful. Potatoes came next, and in nearly every case was disappointing, due to the lack of rain at the right time. The rest was devoted to every vegetable grown in this area.

Many of the lots used for gardens were filled with quack grass, which made many a back ache. One such garden was labeled "Back Achers." A number of these gardens were abandoned, but many others produced bumper crops.

Gardeners are healthy after being out in the open all summer, and proud and happy with the satisfaction of doing their bit in the battle of food for Victory.

LILACS FOR AMERICA New Book Available For Lilac Lovers at a Low Price

JOHN C. Wister, well known horticultural author, has written an excellent new book on lilacs, entitled "Lilacs For America." It may be obtained from the Arthur Hoyt Scott Horticultural Foundation, Swarthmore College, Swarthmore, Pa., price \$1.00. Make checks payable to Swarthmore College.

The following are some of the valuable items in the new book:

(1) A list of 100 varieties of common lilacs and their early hybrids which the committee recommends for general planting.

(2) Complete color classification of over 500 kinds of lilacs with numerical ratings as computed by the committee from the votes of 38 collaborators.

(3) History of Lilac Growing. Notations about the most important lilac breeders, past and present. Comparisons of various types of lilacs. Typical dates of blooming. Propagation and cultivation.

(4) Alphabetical check list of names. This includes 25 species and over 700 varieties. There is a list of public gardens in which the kind is grown, and of nurseries which offer it for sale.

Over a dozen public collections of lilacs are listed; information concerning over 60 lilac breeders is given.

MILWAUKEE DISTRICT HOLDS ANNUAL MEETING

T^{HE} Milwaukee District of the Wisconsin Garden Club Federation held their annual meeting on October 4th at the YWCA.

Club presidents and committee chairmen gave their annual reports. During the afternoon 15-minute talks were given by members on the subject, "Flowers of Our Nations." Nations represented were Africa, Australia, Alaska, England, and South America. Suitable flower arrangements were made to accompany each talk.

Dorothy H. Miller, District Publicity Chairman.

THE FEDERATION BOARD OF DIRECTORS MEETS IN MILWAUKEE

That garden club people are fully conscious of war conditions was evidenced at the Board of Directors meeting in Milwaukee, September 14. The important question we discussed was the convention, of course, and our president has told you about that in her letter.

In addition to the usual business and payments of bills, we voted to pay dues of 5 cents per member to the National Council for all 1943 members of the Federation. Formerly we have paid only for those who had paid dues as of April 1st

It was decided to discontinue prizes for year books, at least for this year.

The Board members started a courtesy fund by voluntary contribution. This fund has been banked and will be handled the same as the other funds.

Mrs. Bostock gave us a report of the recent meeting of the Horticultural Board at which it was decided to discontinue the prize for organizing new garden clubs.

Appreciation for the splendid cooperation of committee chairmen this past year was expressed by all the Board members. There was definite work for each to do, and much has been accomplished.

District presidents were asked to send in the names of their new officers as soon as possible.

Mrs. F. E. Ballard, Secretary-Treasurer, Wisconsin Garden Club Federation.

The Milwaukee Harvest Festival

Mrs. Chester Thomas, War Service Chairman

The Milwaukee County Garden Clubs had the fortunate opportunity to display their talent and ingenuity by taking an important part in the Harvest Festival sponsored by the Milwaukee (O.C.D. Victory Garden Committee with the Milwaukee Journal cooperating, at the Milwaukee Auditorium, August 27-28-29.

As always, the members of the participating clubs responded wholeheartedly and the result was an excellent showing in the various classes which, irom all reports, was a major part of the Festival.

Twenty or more set tables were prominently placed in pleasing arrangement and the many clever ideas in colorful and harmonious settings, with artistically created centerpieces, were a conspicuous feature of the Festival and greatly admired.

The large still-life pictures featuring harvest themes were a part of the garden club section and the members did excellent work to make each entry a composition of pleasing effect and highly artistic and attractive in the various portrayals.

Flower arrangements were numerous, and the quality of work of the same high standard for which the garden club members are noted.

Artistic arrangements with screen backgrounds were used to advantage and added color and beauty to the garden club contribution, as did several special displays cleverly done and interesting to a high degree.

The entire garden club section was a beautiful and attractive feature of the show, fitting in nicely with the many other displays and exhibits, and, judged by the many ribbon awards, all members taking part did outstanding work.

The Gladiolus Society added charm and color with hundreds of blooms, as did the Dahlia Society with a vast display of dahlias in varied types and colors.

Never was more beautiful work done by the Milwaukee florists, and the many bouquets of special design, placed effectively on the stage and in other spots to decorate and add color and beauty, were strikingly an outstanding part of the Festival.

The woodland setting with wateriall was a most fitting highlight and an object of much admiration, as was the very large display of vegetables in beautiful design and arrangement, with an evergreen "V for Victory," which welcomed the many visitors.

The Milwaukee County Park Commission's creation of a natural and realistic picnic setting was an elaborate piece of work very suitably adapted to the Festival atmosphere.

At no time was a Harvest or flower show publicized to the extent that this one was, and I am certain that all of us connected with the enterprise, and especially garden club members, are of the opinion that a grand show was presented and each and every one of us can feel justly proud.

NATION'S VICTORY GARDENERS

Secretary Wickard said at Chicago's Victory Garden Harvest Festival, September 9, that the 1943 Victory Garden program has been an outstanding success. Victory gardeners have served their country well. When the Victory Garden Campaign was opened last spring, the goal was set at 6 million farm gardens and 12 million town and city gardensa total of 18 million. A nation-wide poll has placed the total number of Victory Gardens at 20 million. The total harvest from the Victory Gardens and steps taken to save food produced also have been remarkable. At a conservative estimate, all the Victory Gardens grown this year total about 4 million acres and they will produce 8 million tons of food.

The 1944 Victory Garden outlook now appears bright. Several million new Victory gardeners will have a year's experience to guide them. They will be able to plan more effectively, and with average growing conditions should increase their production substantially. Last year at this time we were concerned over the possibility that we would not have enough garden seed and fertilizer for all who wanted to grow gardens. Right now our best information is that we shall have an ample supply of both next year. We are expecting a better supply of garden tools and equipment for spraying and dusting. All things considered, Victory Garden production should set another new record in 1944.

Secretary Wickard urged that where practical the gardens for next season should be larger to produce still greater quantities of food. He emphasized the desirability of community gardens in supplying more adequate space for gardeners whose backyards are too small or poorly adapted for food production. He said he would like to see every Victory Gardener have a plot of at least 1,000 square feet next season — 1,500 square feet would be better.

From U.S.D.A. Summary.

RADIO PROGRAM FOR FOX RIVER VALLEY DISTRICT KFIZ, FOND DU LAC, WIS. 1450 KC

Last Friday of each month at 11:15 a.m.

October 29. Just Hobbies. Mrs. Harry Eaton, Fond du Lac Community Garden Club, Fond du Lac.

November 26. Your Garden Today. Mr. Herman Sonn, Oakfield Garden Club, Oakfield.

December 31. To be announced later. Mrs. Uriah Ammell.

By Mrs. U. F. Ammell, Fond du Lac, Fox River Valley Radio Chairman.

FOX RIVER VALLEY DIS-TRICT HAS SUCCESSFUL MEETING

WITH an attendance of 71 members, the Fox River Valley District had a very successful annual meeting at Ripon on September 2. The Ripon Garden Club members were most gracious hostesses, according to members from other clubs in attendance.

The following officers were reelected for the coming year: President, Mrs. F. J. Fitzgerald, Menasha; Vice-president, Mrs. S. Engbretson, Stevens Point; Secretary-Treasurer, Mrs. G. A. Loescher, Menasha.

Mrs. Fitzgerald reports that the district has been as active as possible considering present conditions. Clubs in the district worked on harvest shows, victory gardens, scrap and war bond drives, conducted canning schools, and established community drives.

Reports were given by district chairmen on the various phases of work. A poster exhibit on victory gardens was held and prizes were awarded Robert Spirce of Menasha, and Charlotte Walker of Oakfield.

SISSON'S

PEONIES-

International reputation. Our peony roots correctly planted and cared for will outlive the owner.

TYPEWRITERS-

All makes including portables rented. Largest rental service in the state. We teach "Touch Typewriting" through booklet in your home.

ORGANS-

Peonies in-pire music so we added a line of portable organs in all sizes for sale or rent.

Write



ROSENDALE, WIS.

Hi-ways 23-26 intersection

The Dionne QUINS use our Estey organs exclusively



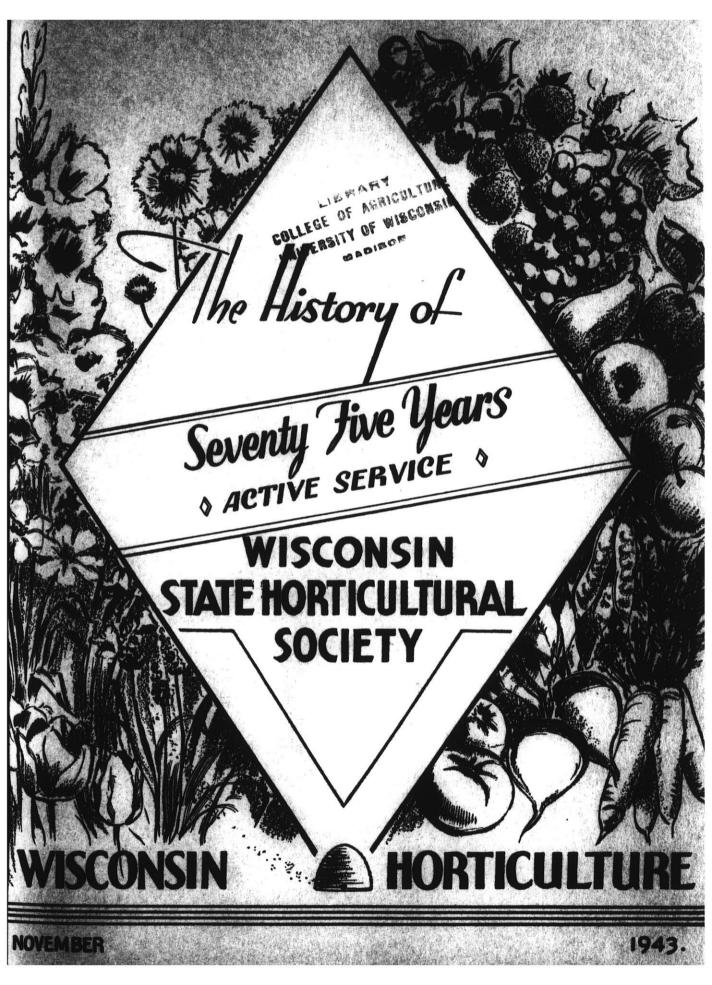
SMALL SIZE ORGAN for homes, schools, hospitals, etc.

We have a two manual organ with chimes on exhibition.

We have advertised in Wisconsin Horticulture since 1928

THE MOST WIDELY READ BEE MAGAZINE **GLEANINGS IN BEE CULTUR** 64 PAGE MONTHLY-ILLUSTRATED FEATURE ARTICLES, QUESTIONS AND ANSWERS, TALKS TO BEE-KEEPERS, NEWS ITEMS, HONEY FOOD PAGES, CROP REPORTS ETC. ONE YEAR, \$1.00; TWO YEARS, \$1.50; THREE YEARS, \$2.00 ONE YEAR IN COMBINATION WITH BEGINNER'S BOOK, "STARTING RIGHT WITH BEES" (102 PAGES), \$1.25 PLAN NOW FOR HONEY CONTAINERS, HONEY LABELS, FOLDERS, ETC. -WRITE FOR PRICES-NEW HONEY FOLDER FROM AMERICAN HONEY INSTITUTE "FORTIFIED WITH HONEY"-PRINTED IN 2 COLORS-60 CENTS PER 100 A. I. Root Company of Chicago The A. I. Root Company CHICAGO, ILL. QUALIT 224-230 W. Huron St. MEDINA, OHIO BEE SUPPLIES

÷ (.



Dedication

FOR TH

To those early Wisconsin horticulturists who devoted their lives to the task of finding the varieties of fruits and flowers which would grow here, and how to grow them, and who unselfishly gave that information to their neighbors ... We respectfully dedicate this volume.

A History

of

Seventy-Five Years of Service

by the

Wisconsin State Horticultural Society

Brief Histories of the: Wisconsin Beekeepers Association; Wisconsin Cranberry Growers Association; Wisconsin Gladiolus Society; Wisconsin Garden Club Federation; Wisconsin Nurserymen's Association; and Wisconsin Fruit Growers Associations.

Written for

the Society in Commemoration of its Seventy-fifth

Annual Convention

by

H. J. Rahmlow, Secretary

Contributions by Prof. J. G. Moore,

Prof. C. L. Kuehner, Horticulture Department, Wisconsin College of Agriculture,

Vernon Goldsworthy, Wisconsin Rapids,

and Thos. S. Pinney, Sturgeon Bay

Madison, Wisconsin

1943

Ten Cents a Copy

TO AUTUMN

I love the crisp of the autumn air, With yellow skirted maples everywhere; And the chatter of crows in the big cornfield, Feasting upon the summer's yield. Only Asters survive the frosty night And nod and dance in the morning light; Autumn has come in gaudy array While winter beckons her time away. —Marion F. Haugseth, Hayward.

A FINE FRUIT SHOW AT WISCONSIN'S FIRST STATE FAIR

Janeville, October, 1851

WISCONSIN'S first State Fair was featured by fine exhibits of apples, pears, and other fruits of various kinds, as well as wheat, corn, and potatoes. This is the report of Rufus King, editor of the Milwaukee Sentinel in the early 50's.

The first State Fair was held three years after the State was given statehood, and ten years before the beginning of the Civil War. It was conducted by the State Agricultural Society of Janesville, October, 1851. Early in that year an Agricultural Society had been organized at the village of Madison, and it held its first fair in Madison in 1852.

It is reported that over 12,000 people were in attendance at the second State Fair which was held in Milwaukee.

Herb Magic . .

For 1943-44 is just off the press, nicely illustrated with pen sketches by Mrs. Reubey Ferris of Rio, Wisconsin. Decribes many items suitable for gifts, culinary herbs, herb flavored jellies, herb flavored vinegars, fragrance jars, sweet bags, and pillows. Free on request.

THE TOOLES OF GARRY-NEE-DULE

Baraboo, Wisconsin

WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Horticultural Society

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Secretary Wisconsin State Horticultural Society

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TO H. H. HARRIS OF WARRENS, WISCONSIN

We dedicate this page to our oldest living horticulturist.

M^R. H. H. Harris of Warrens whose picture is shown on this page, is 92 years old. He is still testing strawberries and worked in his trial plot this year. He has never lost his interest in strawberry growing and variety testing.

Mr. Harris set out his first strawberry bed on the home farm (Oak Hill Farm) at Warrens just 62 years ago, in 1881. At that time it was only a small patch for their own use. When the family had a surplus they took them along with their market supply of butter for their customers. At that time Warrens was called Warrenmill.

Mr. Harris joined the Wisconsin Horticultural Society about 1890. A little later he grew apples and frequently exhibited some of them at the annual conventions of the Society. He has contributed many valuable articles on strawberry growing to Wisconsin Horticulture.

During his lifetime Mr. Harris has tested approximately 175 varieties of strawberries. For more than 50 years he has set a new patch every spring, or helped with the patch on the Oak Hill Farm.

The standard strawberry at Warrens from 1891 until the arrival of Beaver and Premier some 15 years ago, was the Warfield.

In 1941 Mr. Harris had a total of 18 varieties on test set that spring.

Mr. Harris writes that the Warrens Fruit Growers Association was organized in 1926 and that year strawberries brought the highest price of any year until the present year.

IN THE BEGINNING The First Apple Trees Grown From Seeds Planted by Early Settlers

W^E HAVE been unable to find any written record of who planted the first apple trees on Wisconsin soil. There is no doubt, however, that the first settlers brought with them, or had sent in soon after reaching here, apple seeds which they planted. The first apple trees, therefore, were no doubt seedlings and the establishment of the first orchard coincides with the establishment of the first farm. It might even have gone back before that period to the era of lead mines.

History of the First Apple Tree at Dubuque

Because Dubuque is directly across the Mississippi River from Wisconsin, and because the southwestern corner of the state was in the country of the Ioway Indians, a history of the first apple tree, in what is now Dubuque, will be of interest here. We are indebted to the *Iowa State Horticultural Society* for this information. It was published in the book "Pioneers in Iowa Horticulture" by Kent Pellett, written for the 75th anniversary of the Iowa Society.

The Sour Apple Trees

"For the first apple tree and the first orchard in the soil of Iowa, one must go back to the days when this was not Iowa at all, but wilderness belonging to Spain, known only as the country of the Ioway Indians.

"In 1783 a wiry little French-Canadian named Julien Dubuque, smelling lead, settled with a band of Fox Indians on Catfish Creek within the confines of the county now named after him. Accounts of the exploits of this adventurer over a period of nearly 30 years read less like sober history than the pages of some old romance.

"Dubuque was adopted into the Fox tribe. He took to wife Potosa, the daughter of the chief. Soon he had persuaded the Indians to turn from hunting and trapping to lead mining. Bringing other French- Canadians to help with the enterprise, in time he controlled all the mines in the region, not only in Iowa, but also the lead regions of what later became Illinois and Wisconsin. He drove all competitors from the Mississippi River. Those were ruthless days. Since his smelting operations were the largest in the west, almost fabulous wealth flowed through his hands.

"Near the banks of the Mississippi stood his

fortified settlement, with his barns, his warehouses, his stables, the cabins of his helpers, all within palisades guarded by an old brass cannon he had picked up from some ship in St. Louis.

"This picturesque figure was Iowa's first farmer. He had cleared an extensive tract which he cultivated, and he operated a horse mill. And he or one of his followers planted an apple tree, probably the first on Iowa soil. Dubuque died of pneumonia in 1810, and the lead mines were taken over by the Indians. The apple tree remained.

"When the settlers began to come into Iowa in the 1830's, that tree was found by W. H. Guilford of Dubuque. It was 14 inches in diameter in 1835, and was accounted an enormous bearer of fine winter-keeping apples.

"As late as 1915 samples of the Dubuque apple were brought to a meeting of the Iowa State Horticultural Society by Elmer M. Reeves, though apparently they were not from the same tree."

The Oldest Apple Trees in Wisconsin

In 1935 the Wisconsin State Horticultural Society made an attempt to find the oldest apple trees in Wisconsin. Articles asking for locations of old trees were published in Wisconsin Horticulture and in the Wisconsin Agriculturist and Farmer. A number of persons sent information. The following were listed in the February, 1936, issue of Wisconsin Horticulture:

Mr. Charles Johnston, R. 2, Racine, Wisconsin, had an apple tree in an orchard planted in 1844 by Mr. Norman Fuller. This tree would be 100 years old next year.

Mr. James P. Small, R. 4, West Allis, reported a tree which would now be 94 years old.

Mr. Charles Hill of Rosendale reported a tree which would now be 90 years old.

Mr. E. R. Lea of R. 1, Amherst, reported a Prussian crab now 88 years old, 46 feet in width, and 23 feet in height.

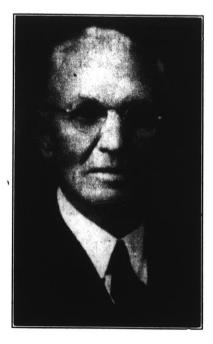
Mr. I. G. Pfanku of Arena, Wisconsin, reports a Russet tree now about 85 years old.

Mr. A. L. Wagner, R. 2, Cleveland, Wisconsin, reported several Snow trees and Golden Russets over 80 years old, with trunks 2 feet in diameter, and a spread of branches of about 40 feet.

Officers and Early Members

PRESIDENTS OF THE WISCONSIN HORTICULTURAL SOCIETY

1865-66 Hon. B. F. Hopkins 1866-71 Dr. Joseph Hobbins, Madison 1871-75 J. S. Stickney, Wauwatosa 1875-77 A. G. Tuttle, Baraboo 1877-91 J. M. Smith, Green Bay 1891-94 M. A. Thayer, Sparta 1894-99 L. G. Kellogg, Ripon 1899-1901 Franklin Johnson, Baraboo 1901-07 T. E. Loope, Eureka 1907-09 R. J. Coe, Fort Atkinson 1909-11 Wm. Toole, Baraboo 1911-13 D. E. Bingham, Sturgeon Bay 1913-15 J. S. Palmer, Baraboo 1915-20 N. A. Rasmussen, Oshkosh 1920-21 A. Martini, Lake Geneva 1921-22 J. A. Hays, Gays Mills 1922-24 H. C. Christensen, Oshkosh 1924-26 W. A. Toole, Baraboo 1926-28 J. E. Leverich, Sparta 1928-30 C. J. Telfer, Green Bay 1930-32 M. B. Goff, Sturgeon Bay 1932-34 James Livingstone, Milwaukee 1934-36 M. S. Kellogg, Janesville 1936-38 Karl Reynolds, Sturgeon Bay 1938-40 R. L. Marken, Kenosha 1940-42 S. S. Telfer, Ellison Bay 1942-43 Arno Meyer, Waldo



L. G. Kellogg of Ripon, President of the Society, 1894-99.

SECRETARIES OF THE WISCONSIN HORTICULTURAL SOCIETY

- 1865-67 J. C. Plumb, Madison
 1867-73 O. S. Willey, Madison
 1873-75 G. E. Morrow, Madison
 1875-82 F. W. Case, Madison
 1882-84 William Trelease, Madison
 1884-85 Mrs. H. M. Lewis, Madison
 1885-86 William Trelease, Madison
 1886-88 H. C. Adams, Madison
 1888-94 B. S. Hoxie, Evansville
 1894-1900 A. J. Philips, West Salem
 1900-03 J. L. Herbst, Sparta
 1903-26 Frederic Cranefield, Madison
 1926-27 W. A. Toole, Baraboo, and E. L. Chambers, Madison
- 1927- H. J. Rahmlow, Madison

EARLY LIFE MEMBERS AND HONORARY LIFE MEMBERS

It will be of interest to many of our present members to see the names of early life members of the Wisconsin Horticultural Society, as no doubt some of them were known to present members.

In 1890 we find the following list of life members and honorary life members:

LIFE MEMBERS

Geo. J. Kellogg, Janesville; F. W. Loudon, Janesville; H. S. Woodruff, Janesville; Mrs. Ida Tilson, West Salem.

HONORARY LIFE MEMBERS

Dr. Joseph Hobbins, Madison; O. S. Willey, Madison; F. W. Case, Chicago, Illinois; Prof. William Trelease, St. Louis, Mo.; J. S. Stickney, Wauwatosa; A. G. Tuttle, Baraboo; B. F. Adams, Madison; F. K. Phoenix, Delavan; Peter M. Gideon, Excelsior, Minn.; E. Wilcox, La Crosse.



T. E. Loope, Eureka, President from 1901-07.

PRE-CIVIL WAR ORGANIZATION

With the exception of the name, the Wisconsin State Horticultural Society no doubt had its real beginning before the Civil War. It was to reorganize the *Wisconsin Fruit Growers Association* that the first meeting was held, so the membership and program were no doubt the same.

It is therefore fitting that a short history of the Association be given here.

Fruit Growers Organize In 1853

The Wisconsin Fruit Growers Association was organized in November, 1853, at Whitewater, with Hans Crocker, Esq., of Milwaukee as the first President; Mark Miller of Janesville, Recording Secretary; D. J. Powers, Corresponding Secretary; R. M. Parker, Treasurer.

The first Fair of the Association was held in the city of Milwaukee on October 5-6, 1854, in Young's Hall, during the time of the Fair of the State Agricultural Society in the same city. In the November issue of the *Wisconsin Farmer* it is stated:

"This exhibition of the fruits of Wisconsin exceeded the expectations of everyone who looked in to see it. It is no exaggeration to say that the show of apples, as a whole, taking into account the number of varieties, size, fairness and perfectness of maturity, could not be beaten, by any other state. A visitor remarked that he had attended like exhibitions in New York, but that this show of apples far surpassed any he had ever seen before. *Over* 100 varieties were on the tables. The show of pears and grapes was excellent, and could not be beaten in quality. There were also some good specimens of peaches and quinces."

The second exhibit was held in Milwaukee on September 18th to 20th, 1855, in connection with the Milwaukee Horticultural Society.

The annual meeting of the Society in 1855 was held at Janesville on November 27th, when H. J. Starin of Whitewater was elected President.

In 1856 Mr. Charles Gifford of Wauwatosa was elected President. There is no record in 1857, but in 1858 A. G. Hanford of Waukesha was President. During these later years the fruit growers exhibited with the State Agricultural Society in Milwaukee.

We find, too, a note that the winter previous to 1858 had destroyed the quince trees so none were exhibited.

Evidently there was no meeting in 1859, but in 1860 J. C. Brayton of Aztalan was elected President at a meeting which was the last ever held by the fruit growers association under that name.

THE FIRST LOCAL HORTICULTURAL SOCIETIES OF WISCONSIN

The organization of a State Horticultural Society was not the first step. Local societies were organized first. A State organization usually follows the organization of local units in different sections, the function of the State organization being to give opportunity for wider contacts and larger exhibits.

THE MADISON SOCIETY

So we find that on July 7th, 1858, the Madison Horticultural Society was organized under the name Madison Horticultural Association with the following officers:

President, A. L. Collins; Vice-President, J. G. Knapp; Treasurer, D. J. Powers; Secretary, D. S. Curtis.

The first exhibition was held on Saturday, August 12th, 1858. Following its organization, J. G. Knapp, W. T. Leitch, and Wm. H. Watson were Presidents of the organization.

This society held 32 exhibitions in the 10 years before 1868. Three or four exhibitions were held each year. Exhibitions were financially successful and there was \$500 in the treasury on September 24th, 1868. T. D. Plumb was Recording Secretary in 1868, and made a report for the annual proceedings of the Society.

GERMAN HORTICULTURAL SOCIETY

On June 28th, 1865, the German Horticultural Society of Madison was organized with 30 members. Officers were: President, John F. Hauser; Secretary, F. A. Pfaff; Treasurer, Samuel Klauber.

The first exhibition was held at Turner's Hall, July 18th, 1865, and was a success. Another exhibition was held on September 19th of that year.

In 1866 the Society held a spring exhibition on June 26th, a summer exhibition on July 24th, and a fall show on September 18th at the City Hall. The exhibitions were financially successful. Mr. R. Baus, Mr. Bruno Schneider, and Mr. F. A. Pfaff were Presidents in succeeding years, with Mr. Wm. Helm as Secretary.

JANESVILLE HORTICULTURAL SOCIETY

On October 8th, 1866, the Janesville Horticultural Society was organized. Officers were: President, Hon. I. C. Sloan; Vice-President, S. G. Williams, Esq.; Secretary, F. S. Lawrence; Treasurer, S. W. Smith.

In 1868 this Society reported 40 members, most of whom are life members. A number of exhibits and fairs were held. In the report in 1868, Mr. F. S. Lawrence stated, "The show of fruit, both small and large, and of flowers also, was magnificent and elicited the commendation of all who had the good fortune to witness the display."

GRANT COUNTY HORTICULTURAL SOCIETY

The Grant County Horticultural Society of Platteville, was organized December 16, 1867. Officers were: President, J. E. Rountree; Vice-President, Jacob Wernli; Secretary, Chas H. Allen; Treasurer, L. L. Goodell.

The objectives of the Society as expressed in the constitution were: "The advancement of the science of Horticulture in this vicinity, and the collection, comparison and preservation of the culture of fruits, flowers and garden vegetables."

KENOSHA HORTICULTURAL SOCIETY

Organized in 1867, the Kenosha Horticultural Society elected as its officers, President, H. P. Hinsdale; Vice-President, Stephen Galt; Secretary, H. T. O'Farrel; Treasurer, S. Y. Brande.

Monthly meetings were held and the first spring exhibition was on June 30th, 1868, with an excellent showing of strawberries. Another exhibition was held September 25-26, with a magnificent show of vegetables, grapes, apples, and flowers.

OSHKOSH HORTICULTURAL SOCIETY

The Oshkosh Horticultural Society was organized April 16, 1868, and held two successful exhibitions that year. The first labor of the Society, it is stated, was to encourage the setting of shade trees, and in this was very successful. The Society started with about 40 members and its officers were: President, Geo. Hyer; Vice-President, O. H. Harris; Corresponding Secretary, I. J. Hoile; Recording Secretary, Jacob Fowler; Treasurer, B. Harkell.

OTHER LOCAL SOCIETIES FOLLOW

In order to qualify for a supply of the annual reports of the Wisconsin Horticultural Society printed by the state printer, it was necessary for local societies to send to the state organization, an annual report, whereupon the copies were then sent. We find the local organizations listed in the earlier reports.

1872: Mazomanie Club; Sheboygan County Horticultural Society; Richland County Horticultural Society; St. Croix Valley Horticultural Society; Grand Chute Horticultural Society.

Later in the 1870's we find the following: Winnebago County Horticultural Society; Waupaca County Horticultural Society; Lemonweir Valley Horticultural Society of Tomah; Freedom Horticultural Society; Brown County Horticultural Society; Sauk County Horticultural Society; Fountain Horticultural Society at New Lisbon; Vernon County Horticultural Society; Milton Horticultural Society; and Northwestern Horticultural Society at La Crosse.



D. E. Bingham, Sturgeon Bay, President of the Society, 1911-13. Our earliest living President.



N. A. Rasmussen, Oshkosh, President from 1915-20. Next earliest living President.

The Organization Meeting

The Wisconsin Horticultural Society Organized in Janesville In 1865

TN THE year 1865 one would hardly have expected to find a "large and beautiful exhibit of fruit" at the Wisconsin State Fair. Yet, in that year horticulturists made a fine showing and laid the cornerstone for the organization of the *Wisconsin State Horticultural Society*.

It is recorded that at the meeting and exhibition of the Wisconsin State Agricultural Society at Janesville on September 25-29, 1865, a total of \$165, certainly a large sum in those days, was awarded for apples, pears, grapes, plums and quinces, \$20 for wine, \$20 for delicacies, \$55 for flowers, and \$16 for watermelons.

This was the first exhibit and meeting of fruit growers since 1859. The Civil War had put a stop to practically all meetings of agriculturists. During the fair at Janesville the fruit growers held a short meeting to reorganize the *Wisconsin Fruit Growers Association which had flourished from* 1853 to 1859. Mr. F. C. Curtis of Columbia County was Chairman and O. S. Willey, Madison, Secretary.

A committee was appointed to *devise measures* of reorganization and then adjourned to the evening of September 29, 1865.

THE BEGINNING

It was on this evening, in the Court Room in Janesville, Thursday evening, September 29th, with Mr. F. C. Curtis, Rocky Run, in the chair and Geo. J. Kellogg, Janesville, acting as Secretary pro tem, that the Society was officially launched upon a career which has been successful to this day.

The committee on reorganization proposed the name Wisconsin State Horticultural Society for the new organization and nominated a slate of officers, which were duly elected. They were:

President: Hon. B. F. Hopkins; Vice-President: One in each county named; Secretary: J. C. Plumb, Madison; Treasurer: F. C. Curtis, Rocky Run; Executive Committee: Geo. J. Kellogg, Janesville, and L. P. Chandler, Madison.

MUCH FRUIT GROWN IN 1865

It may be surprising to many to find that Wisconsin orchardists grew much fruit 75 or more years ago. A special committee appointed by the Society reported the following at the 1868 convention:

"On examination of returns from the several counties as made by the several town assessors in the month of June last, and as compiled by the Secretary of State it appears that there was raised in the state in the year 1865, 272,452 bushels of apples, valued at \$386,363. These returns only include thirty-seven counties, leaving some sixteen counties which made no reports.

"It also appears that in the same counties there were 114,001 pounds of grapes raised, valued at \$28,144, also 27,942 gallons of wine made valued at \$48,625."

The following counties produced the most apples, in the order named: Walworth, Kenosha, Fond du Lac. Rock, Waukesha, Jefferson, Winnebago, Green Lake, Columbia, Dane, Grant, and Dodge.

Dane County led in grape production, reporting 60,206 pounds.



George J. Kellogg, Janesville, who acted as Secretary pro tem of the organization meeting. A very active worker and one of Wisconsin's first nurserymen.

"WHAT varieties shall I grow?" That question was uppermost in the minds of the earliest horticulturists, as it is today. To find the answer to that question led to the organization of county as well as state Horticultural Societies.

So we find that the discussion at the first convention of the Wisconsin Horticultural Society, held in the parlor of the Wisconsin Mutual Insurance Company at Madison, *February 6*, 1866, was devoted largely to this topic.

THE FIRST LIST OF VARIETIES

The following varieties were recommended as worthy of general cultivation in Wisconsin by the 1866 convention:

Apples: Red Astrachan, Fall Stripe, Duchesse of Oldenburg, St. Lawrence, Fameuse, Cider, Sweetwine, Golden Russet, Tolman's Sweet, Red Romanite, Rawle's Janet, Willow Twig, Fall Queen, Perry Russet, and Northern Spy.

Plums: Lombard, McLaughlin, Jefferson, Imperial Gage, Green Gage, and Bleeker's Gage.

Cherries: Early Richmond, Donna Maria, Red English, and Early May. At the convention of 1867 the following were added:

Grapes: Concord, Delaware, Hartford, Diana. Amateur List: Allen's Rogers, Nos. 3, 4, 9, 15, 19; Northern Muscadine; Isabella. For Trial: Creveling, Iona, Union Village, Adirondac.

Crabs: The Transcendent and Hyslop Crabs were recommended for general cultivation; Soulard and Sweet Crabs for trial.

Pears: Flemish Beauty for general cultivation and the Early Bergamot, White Doyenne, Belle Lucrative, Winter Nellis and Onondaga for amateurs.

Currants: The White Grape, Victoria, Knapp's Madison, Black Naples, Red and White Dutch.

Strawberries: Wilson for general cultivation, and Russells, Monitor, Brooklyn, Burr's New Pine —Fillmore and Agriculturist, for amateurs.

Raspberries: Doolittle and Purple Cane, without protection, and Orange, Philadelphia, Vice President and Franconia, with protection.

Blackberries: It was recommended to mark the choicest wild blackberries, and transplant for cultivation.

PROTECTION AGAINST TREE PEDDLERS

The "subject of the hour," at the second annual convention of the Society held January 22, 1867, in the Agricultural Rooms, State Capitol, was on the topic of "Protection Against Swindling Tree Peddlers." The experiences related are described thus:

"Many had grievous stories to tell—and the way was shown by which the people of this city were recently swindled in a most outrageous manner by a desperate man, who purchased without regard to variety, and sold anything people wanted."

PREMIUM LISTS AT EARLY FLOWER SHOWS

TN the 1860's, the Wisconsin State Fair was conducted by the Wisconsin Agricultural Society. In the late '60's the Horticultural Society was given a certain amount of money to pay the premiums on the horticultural exhibits.

In 1874 there was a large flower show, and it is interesting to compare the premium schedule on arrangements and flower varieties with those of today.

For "professional cultivators" the premium list called for: Pyramidal bouquet; pair round bouquets; pair flat bouquets; bouquet everlasting flowers; display of named verbenas; show of asters in quality and variety; show of petunias, dianthus, gladiolus, geraniums, fuchsias, and carnations.

For the amateurs, premiums were offered on selections of cut flowers, baskets of flowers, pyramidal bouquets, dahlias, roses, verbenas, asters, perennial phlox, pansies, petunias, dianthus, gladiolus, and greenhouse plants.

The sum of \$800 was offered for premiums in the horticultural department that year.



A. L. Hatch. Ithaca, nurseryman and fruit grower, who became the father of the commercial fruit industry of Sturgeon Bay.

Varieties Recommended in 1915

AFTER 50 YEARS

The Recommended Fruit Variety List Has Changed Greatly During This Period

Fifty years is a long time in the life of man. Likewise, fruit varieties come and go during such a period. This is especially true with the varieties requiring only a few years to reach maturity such as bush fruits. With apples it is not such a long time, and so we find varieties of apples that have been with us for more than 100 years, and are still considered the best. This is notably true with the McIntosh of which the original tree lived to be more than 100 years old.

It is, however, interesting to compare the list of iruits recommended for culture in Wisconsin about 50 years after the first list was published, or in 1915.

The following varieties are listed in the annual report of the Wisconsin Horticultural Society for the year 1915:

APPLES (General List) FOR 1915

Alexander, Astrachan (Red), Autumn Strawberry, Dudley, Fall Orange, Fameuse (Snow), Golden Russet, Lowland Raspberry, Longfield, Lubsk Queen, McIntosh, Malinda, McMahan, Newell, Northwestern Greening, Oldenburg (Duchess), Patten Greening, Perry Russet, Plumb Cider, Scott, Tetofski, Talman (Sweet), Utter, Wealthy, Westfield (Seekno-Further), Windsor, Wolf River, Yellow Transparent.

APPLES (Lake Shore List)

In addition to the above many other varieties including the following may be successfully grown in the southern part of the state and in the counties bordering on Lake Michigan: Baldwin, Eureka, Fallwater, Gano, King, Northern Spy, Pewaukee, Willow Twig, York Imperial, Bellflower.

APPLES (Commercial Orchard List)

It is generally conceded that a commercial orchard should consist of but few varieties, the following are suggested: Dudley, Fameuse, McMahan, McIntosh, Northwestern Greening, Oldenburg, Scott, Utter, Wealthy, Yellow Transparent.

CRABS

Brier Sweet, Hyslop, Lyman, Martha, Sweet Russet, Transcendent, Whitney.

PLUMS

Of the classes commonly cultivated, viz.: European, Japanese and Native or American, the last named is the most reliable.

NATIVE PLUMS

De Soto, Forest Garden, Hammer, Hawkeye, Orcheeda, Quaker, Rockford, Surprise, Wyant, Wolf.

EUROPEAN PLUMS

(Not recommended except along Lake Shore.) Lombard, Green Gage, Moore's Arctic.

JAPAN PLUMS

(Not recommended except along Lake Shore.) Abundance, Burbank.

CHERRIES

Early Richmond, Montmorency.

GRAPES

Brighton, Campbell's Early, Concord, Delaware, Diamond, Green Mountain, Moore's Early, Niagara, Worden.

BLACKBERRIES

Briton (Ancient), Eldorado, Snyder.

STRAWBERRIES

(Varieties starred have imperfect flowers and must not be planted alone.) Aroma, Bederwood, *Crescent, Clyde, Dunlap, Enhance, Gandy, Glen Mary, *Haverland, Lovett, *Sample, Splendid, *Warfield.

TWO VARIETIES STRAWBERRIES FOR FARM GARDEN

Dunlap, *Warfield.

RASPBERRIES

Black: Conrath, Cumberland, Gregg, Older, Plum Farmer.

Red: Cuthbert, Loudon, Marlboro. Purple: Columbian.

CURRANTS

Red: Red Cross, Red Dutch, Long Branch Holland, Victoria, Perfection.

White: White Grape.

Black: Lee's Prolific, Naples.

GOOSEBERRIES

Downing.

PEARS

On account of the prevalence of blight and winter killing, pears are not generally recommended for Wisconsin. Good crops occasionally produced under favorable conditions, especially in the southeastern part of the state. The following list includes both early and late varieties:

Anjou, Bartlett, Clairgeau, Clapp Favorite, Early Bergamot, Flemish Beauty, Idaho, Kieffer, Laurence, Louise, Seckel, Sheldon, Vermont Beauty.

Regents of University Present Plan to Society For Horticultural Experiments

HE meeting of the Wisconsin Horticultural Society in February, 1868, was a memorable one. Dr. Paul A. Chadbourne, president of the University of Wisconsin, delivered an address in which he did two important things. First, he offered the Society a plot of ground on the University Farm for experiments in horticulture, notably, fruits and plant testing. Second, he suggested that members of the Society give lectures on horticulture before the student body. Said President Chadbourne: "As the Regents have no money to spare and I have made a little by farming in past days. I propose to present the land to you ready for planting. And if you will occupy that piece of ground and tell us what you would like to have done, I promise all the aid in my power in bringing out results that can be relied upon, so that every experiment shall be real progress. The aid of the chemist, in the analysis of soils or manures, shall be at your service. We want as a basis all that you know, and for experiment all that you 'guess to be true' if Wisconsin people ever guess. I can fancy a vast benefit to flow from this to the University and to the State." * * *

At the annual convention in 1869 held in the State Agricultural rooms February 9, a recording secretary, O. F. Willey of Madison, reported as follows:

"At the meeting of February, 1868, new life seemed to inspire the actions and motives of every member present, and with renewed energy they went to their task, feeling there is a pleasure in horticulture, in the spread of the 'useful and the beautiful,' which we have but half realized. * * * First of all, we look at the resolution of the last meeting, accepting the use of five acres of the agricultural farm—kindly tendered to us by the regents for horticultural experiments. We are not aware that there is another society in the United States that has undertaken such a work. * * *

"A resume shows that there were 108 apple trees, 4 varieties of apple-tree scions, 163 raspberries, 56 currants, 54 ornamental shrubs, 150 deciduous hedge plants, 1,599 evergreens (of which 1,450 were contributed by one firm for a hedge experiment), 107 grapes, 16 crab trees, 36 strawberry plants, 47 gooseberries, 178 papers of seeds, 6 assorted deciduous trees, 32 plum trees, making a sum total of 2,560 trees, plants and shrubs.

"These are all doing well; but very few died. Grapes, berries, some of the shrubbery and all the apples are well mulched for the winter.

Lectures Given

"Another task undertaken by a portion of the society, and which we trust may meet with the hearty support of all its members, has been the carrying on of a system of lectures before the students of the university, or the male members of the same. And we would say here by way of parenthesis, that we were very sorry to see this discrimination; for we believe that as a rule, the subject of horticulture treated of in a proper lecture, with a view to its encouragement at home. would be of incalculably more benefit to the ladies than to gentlemen. * * * Of lectures, Judge Knapp read two, Messrs. Hobbins and Willey, one each." * *

NATURAL TIMBER PLANTING ENCOURAGED

At the 1867 convention the Society encouraged the growing of natural timber. The Society offered a premium of \$100 for the best 10-acre plantation of timber, and \$50 for the best five-acre plantation in the State—all to be planted the next spring and awards to be made at the expiration of three years.

The subject of varieties of natural timber trees was fully discussed and the following were recommended as most valuable:

1st, Deciduous Trees-Oak, in variety; Ash, white; Maple, sugar; Maple, Silver leaf; Butternut, Black Walnut, Hickory, Elm, in variety; Cherry, Black.

2nd, *Evergreens*—Red Cedar, White Cedar, White Pine, Yellow Pine.

Of foreign trees, the Norway Spruce and European Larch were recommended.

THE ALEXANDER MITCHELL HOME DESCRIBED IN 1871

RESIDENTS of Milwaukee know well the old Alexander Mitchell home, now known as the Wisconsin Club, located between 9th and 10th Streets on Wisconsin Avenue in Milwaukee. In the early days it was one of the most pretentious homes in Wisconsin, with large greenhouses and beautifully landscaped grounds. It is therefore of interest to note that in the annual report of the Wisconsin Horticultural Society of 1872 seven pages were devoted to describing the residence and the pleasure grounds by Mr. H. W. Roby.

The frontispiece in 1872 is a lithograph showing the entire grounds and home. The residence is still standing and interested members will find the article by Mr. Roby in the annual report for 1872 worth reading.

EARLIEST REPORT ON THE ENGLISH SPARROW

BY 1869 residents of Wisconsin had heard of the importation of the English Sparrow, and were greatly interested because it promised to take care of the insect problem, becoming serious in orchard and garden.

At the annual convention of the Society in February, 1869, the following statements were made in regard to the English Sparrow:

Judge Knapp stated that the English Sparrow had been introduced into New York city for the purpose of clearing the streets of the insects that destroy their ioliage. He would like to be informed by someone if they would eat any kind of fruit, and if they could be kept in this state.

One member stated he thought the blue jay would destroy them as it does some of the other small birds.

Dr. Hobbins remembered the bird in England, that it lived about the houses and ate the grain in winter. He had known bounties offered for their destruction.

A committee consisting of Dr. Hobbins, Willey and Knapp was appointed to correspond on the subject, and if possible to procure a pair or more of sparrows. Dr. Hobbins stated he would correspond with the Royal Horticultural Society and perhaps could obtain a pair direct from England.

At the convention in 1870 Dr. Hobbins reported that he had found it quite questionable whether or not the introduction of sparrows would be beneficial. They were generally declared a nuisance in England, but however desirable they might be, they could not be procured at present in this country.

BAD WINTERS RECUR AND AFFECT HORTICULTURE

W HAT may be called "test winters" recur periodically and have changed horticulture in Wisconsin as well as some adjoining states more than any other factor. These bad winters eliminated tender varieties and in many cases forced horticulturists to start over again with more hardy material.

So in the annual report for 1874 we find the following statement by the president:

"No subject will occupy so much of our time at this meeting (February, 1874) as the effect of the bad winter of '72-'73.

"We have much to learn from the lessons the injury to our nurseries and orchards have set before us. We had forgotten the similar lessons of '56-'57; had grown careless and were planting what we ought not. We have recommended some varieties we ought not. Let us not by too sweeping condemnation reject varieties which are of great value."

SOCIETY INCORPORATED IN 1871

IN 1871 the Wisconsin Legislature passed a bill providing for the incorporation of the Wisconsin State Horticultural Society, and directing that the State printer print the transactions of the Society.

In 1872 the act was amended so that \$150.00 was appropriated out of the general printing fund to have the transactions printed. This is the first direct appropriation to the Society.

WISCONSIN RANKS HIGH IN HORTICUL-TURE AT WORLD'S EXPOSITION AT NEW ORLEANS IN 1874-75

TN 1884, the Wisconsin Horticultural Society decided to make an exhibit of fruits and other horticultural products at the World's Exposition at New Orleans. Mr. J. C. Plumb of Milton, and George C. Peffer of Milwaukee were appointed to gather the fruits, trees, branches and shrubs for the exposition. Wisconsin was in competition with all fruit-growing states east of the Rocky Mountains. Fourteen states were represented with their apples for competition.

Out of a total of 79 premiums awarded, Wisconsin took 24, or by far the largest number. Of 17 medals awarded, Wisconsin took 6. Mr. J. P. Roe of Oshkosh was appointed to help the committee. Agricultural commissioner E. B. Holton provided some of the funds and president of the Society, J. M. Smith of Green Bay, worked diligently for the exhibit.

Of all the new varieties of apples on exhibit at the Exposition, none excited so much attention as the Wolf River. The secretary of the Society that year made this statement: "After hearing the reports of failures and losses in other states, I am better satisfied than ever before that we have not only a good state to live in, but a good state in which to grow all the fruits adapted to northern climates."

Premiums Not Paid

Approximately \$500 in premiums were won by the Wisconsin Horticultural Society at New Orleans. However, on June 17, 1885, president of the Society, J. M. Smith of Green Bay, received a letter from Mr. S. P. Merrill to the effect that the payment of debts would absorb all of the \$335,000 appropriation, with nothing left to pay premiums. A New Orleans lawyer wrote the Society offering to act as representative to obtain premium money for the Society. This, however, was turned down.

FIRST SUMMER MEETINGS HELD

On June 27-28, 1876, the first summer meeting of the Society was held at Tomah at the invitation of the Lemmonweir Valley Horticultural Society. Attendance of the local group was good, but not many state members attended.

Early Membership and Finances

A LESSON FROM EARLY SOCIETY MEM-BERSHIP AND MANAGEMENT IN 1876

O^N reading the annual reports printed by the Wisconsin Horticultural Society containing papers of a highly educational nature, one is impressed with the horticultural knowledge of our early leaders and the educational work they obviously did in improving methods of culture of fruits, flowers and vegetables.

Yet, from the report of Secretary F. W. Case of Madison for 1876, one learns that memberships can dwindle unless the organization is properly managed. In that year he stated that the membership was very small, fifty-seven regular members being listed, with a number of honorary and life members.

One reason for this stated, was that the meeting was held in the same place—Madison—each year, and that the same group always attended, and that if the meetings were held in different parts of the state where local societies could take part, interest would be greatly increased and the benefits extended. He urged that other groups be taken into the Society.

The Legislature had authorized publication of 2,000 copies of the report, which were distributed according to law, to local horticultural societies. Since they were distributed free, these local horticultural societies did not necessarily become members of the state organization.

In 1877 funds were provided to publish 3,000 copies of the annual report. In that year the secretary stated, "It has been stated that the organization of certain local societies is kept up for the sole purpose of getting the 50 copies of our report." This free distribution obviously was not successful in building up the Horticultural Society as in that year there were only 56 actual members.

THE FIRST APPROPRIATION BY THE LEGISLATURE TO THE HORTI-CULTURAL SOCIETY IN 1879

TN the laws of 1879 the Wisconsin Legislature appropriated the sum of \$600 for the aid of the Society in carrying out its functions. This was the first appropriation made directly for the use of the Society. Previously appropriations had been made to have the annual proceedings printed and distributed according to law. The Society received no benefits from this and in fact, paid the postage for distribution out of its own treasury.

In his letter of transmittal to Governor Wm. E. Smith, transmitting the transactions of the Society for 1878-79, the Secretary of the Society, F. W. Case of Madison, makes this statement:

Annual Reports

"From the commencement of its history in 1853. when the first organization was effected, as the Wisconsin Fruit Growers Association, down to the present time, this work has been energetically and faithfully carried on by a small band of practical and amateur horticulturists. They have not only given their time to this work, but have also borne the necessary expenses. The publication of their annual report by the state has been a great assistance in this labor, but aside from this, not a dollar has been drawn from the public funds to aid in its work or for its support. The members of the society, feeling that the amount of labor and the expense necessary to carry on this work had become too heavy a burden for its numbers and its means, and feeling that, as the end sought was the general public good, it should be sustained and carried on by the personal and pecuniary aid of the state at large, made application to the last legislature for an act of reorganization. * * * The reorganization was secured. The application for aid was in part granted. The amount asked for was an annual appropriation of \$1,000; a special one for \$600 was given."

Secretary Case pointed out to the Governor that Minnesota had bought a farm and appropriated \$1,000 per year to carry on experiments in fruit culture, and that Iowa, Michigan and Illinois grant their societies amounts of from \$1,000 to \$4,000 per year.

APPROPRIATION FOR SOCIETY INCREASED

 $\mathbf{I}_{M.}^{N}$ 1885 on the recommendation of Gov. Jeremiah M. Rusk, the appropriation to the Society by the Legislature was increased to \$2,000 per year. Until then it had been \$600.

It is interesting to note that the number of printed copies of the transactions of the Wisconsin State Horticultural Society "together with such abstracts of reports of county and other horticultural societies. and such other matters pertaining to fruit growing and horticultural interests of the state, not to exceed 300 pages," gradually increased, so that in 1886 the laws of Wisconsin read that 16,500 copies were printed. These were distributed throughout the state by various organizations such as the Legislature, agricultural societies, historical societies, state experiment stations, university library, and each public library in the state. It is obvious that up to this time these transactions contained the only authentic educational material on horticulture published in Wisconsin. The annual reports were very important as they guided people throughout the state in varieties to plant.

ANOTHER DISASTROUS WINTER RESULTS IN THE ELIMINATION OF POOR VARIETIES

W^E have mentioned the severe winters of 1856-57 and '72-'73. This recurrent problem was discussed by the Society at the annual convention February 2, 1886, when President J. M. Smith of Green Bay said in his annual address:

"The winter of 1884 and 1885 was one of almost unprecedented length and severity. When the spring at last came, the complaint of dead or damaged fruit trees was almost universal.

"The question has been asked of men over and over again, what shall we do? One gentleman of long experience residing in the western part of the state, said to me not long since: 'You must give us something better.' I need not say that this is something we are all of us very anxious to do, and really hope and trust that we are upon the eve, at last, if not upon the dawn, of a brighter day. I cannot but trust and believe that between the many varieties of new Russisan, and new seedlings, we shall find a few varieties that will endure our most severe winter with perfect impunity. And yet the experience of many years bids us be very careful about what we recommend."

Mr. Smith continued in his report the observation that in some parts of Wisconsin the varieties came through much better than in others, even though temperatures were not greatly different. This is the first evidence that a state must be divided into districts for the growing of varieties of fruit. He stated that in Brown County the Golden Russet and Snow did well. Yet in St. Croix and adjoining counties, the destruction was almost complete, including even the Duchess and many crabs.

Growers Search For Hardy Varieties

The efforts of the Society during this period were devoted largely to finding varieties of fruit which were hardy and which would do well in the various parts of the state. It was, after all, a very important project at that time and much loss was sustained by many growers who planted varieties which winterkilled or failed for other causes. With no help from experiment stations during those days, it evolved upon the growers themselves to undertake this work. Many growers lost their trees and became discouraged. It was, after all, a time when state funds could have been used advantageously to establish trial orchards in various parts of the state so that horticulture could have been advanced more rapidly, and the growers relieved of much loss. It set the day, in fact, for the next step undertaken by the Societythe establishment of trial orchards.

TREND IN FRUIT VARIETIES Russian Varieties Most Popular in 1870's. Lose Their Favor in 1880's.

BEFORE the year 1880 much effort was expended on the part of horticulturists in introducing varieties which were hardy enough to withstand the severe climates of our Wisconsin winters. Horticulturists in Iowa and Minnesota were working along the same lines. Varieties from Russia which were said to withstand temperatures of 60 degrees F. below zero, swept the country in the 1870's. It was said that tree peddlers cashed in on their popularity and sold many old standard varieties as Russian.

Russian Varieties

This controversy about the Russian varieties was very heated in the state of Iowa, Prof. J. L. Budd who had the chair of horticulture at Ames when there were no text books, had written about Russian apples and at first all was enthusiasm. Fruit men thought they could turn their backs on the bugbear of Iowa winters. Soon however, these Russian varieties encountered their own peculiar troubles. There was dissension in the ranks of the Iowa Horticultural Society, and two camps were set up, the Russian and anti-Russian groups. Prof. Budd was forced to resign as Secretary of the Iowa Horticultural Society. In the end, his opponents proved right. Only a few varieties such as Charlamoss and Hibernal still remain, but the Russian varieties have served as a hardy foundation for apple breed stock and as parents in innumerable crosses.

Further West, as in the Dakotas and northern Minnesota, the Russian varieties fared better, and in these colder sections most of the varieties are either Russian or of Russian descent.

Mr. A. J. Philips of West Salem was the delegate to the meeting of the Minnesota Horticultural Society in 1882. He reported at our convention in 1883 that in Minnesota the growers had lost faith in securing from the Russians what they needed and were looking with confidence to experiments being made in crossing or hybridizing the hardy varieties of Minnesota and northern Wisconsin.

PROF. TRELEASE RECOMMENDS CUTTING DOWN LIST OF VARIETIES

Prof. Wm. Trelease for several years secretary of the Horticultural Society, was the first Professor of Botany and Horticulture at the University of Wisconsin. While he did very little work in horticulture, he was of considerable help to the Society as its secretary and advisor.

Commenting upon the winterkilling of fruit varieties in 1886, he said:

"From the wrecks of old orchards will be saved a small percentage of truly hardy varieties. With these as a basis, new orchards must be constructed. Let our fruit list be cut down to a statement of what we know to be hardy and then reconstructed on new experience.

How to Obtain New Varieties

"Two ways of effecting this offer themselves. Originating and propagating seedlings of merit adapted to our climate is not only possible but imperatively necessary if our state is to be what we fondly hoped for it only a year ago. This is not work for the novice or dilettante. While an indiscriminate process of raising seedlngs has resulted in the Wealthy, and may bear still better fruit, it cannot be disputed that the man who leaves success to chance is likely to find himself doomed to disappointment after a life of expectant and laborious work. The principles of cross-fertilization as it is understood and practiced by the most successful hybridizers should be understood and acted upon by the orchardist who hopes for success; even then he must expect many disappointments, and must be content to see many years consumed in faithful work before it can be proved by its fruits. I do not doubt that some of our choicest apples will be produced in just this way.

"The other method of securing hardy varieties is by profiting by the work and disappointment of old world orchardists, who have long contended with climatic conditions similar to those that prevail in this part of America. Parts of Russia present these pretty nearly, and their best apples will soon be widely disseminated for trial in the Mississippi valley, through the efforts of Professor Budd, of the Iowa Agricultural College."

FRUIT TESTING NECESSARY, BUT EXPENSIVE

Experiment Stations For Horticulture Needed A T the annual convention of the Wisconsin Horticultural Society in 1886, President J. M. Smith of Green Bay in his annual address, talked on the subject, "Do We Need Experimental Stations For Horticultural Purposes?"

He told of the experiences in testing varieties of fruits for the region of Wisconsin. When the first settlers came here there were no guide boards of warning set up. The road to success was yet unbroken. There were many varieties of fruits that would not succeed here. To find the right kinds was a greater undertaking than was realized.

The State Horticultural Society was organized at an early day and its members worked faithfully and well. But results were often disastrous. The state itself provided no money for the testing of varieties. Faithful working horticulturists purchased such varieties as they could obtain only to find that they were not suitable. Many were completely ruined financially.

The knowledge so gained by these men was made available to all the people of the state who were guided in future plantings to avoid those that were not suitable to this region.

Mr. Smith stated, "My friend Tuttle has been experimenting for years at heavy expense with many varieties of Russian apples. He is, as many of us are, hopeful that there are some that will prove very valuable. If this is not the case, he has added another to the long list of experiments that have added much to the knowledge of our people, but at heavy expense to himself.

"Had there been experiment stations he could have obtained within a brief period of time—and at almost no expense—the knowledge that is now costing him much time and money to obtain."

We can readily see, therefore, that there was a demand at that time for the state to take over some of this work because Mr. Smith said, "Fortunately, the financial condition of our state is such that there can be no doubt of its ability to grant these interests all necessary aid. We must be careful, however, to ask for nothing that is unjust or unnecessary."

WISCONSIN EXPERIMENT STATION AGREES TO HELP IN 1887

In his annual report for 1887, Mr. B. F. Adams, Madison, Secretary of the Society, made the following statement: "At the last annual meeting the Society appointed a committee to confer with the professors in the agriculture department of the State University and the Board of Regents with reference to beginning some experimental work in horticulture upon the University Farm. Professors Henry and Armsby expressed entire willingness to aid in this work, but united in saying that the location of the farm was such that little or no fruit could be raised and secured because of lawless trespassers.

"It was finally decided that a trial would be made of the effects of three kinds of fertilizers on three varieties of strawberries upon a variety of soils, this to be done by sending the fertilizer to eight members of the Society."

Secretary Adams concludes in his report, that the time has come when unless experiment stations with trained men conduct experiments, that we will not progress very rapidly, and he insists that if experiments in horticulture cannot be carried on at the state university, the work should be done at some other point. It should be done under the direction of Prof. Henry and his assistants, and stated that it rests largely with the Society whether or not horticulture obtained its proper recognition, because horticulture is of sufficient importance to deserve the aid of the state experiment station and to keep abreast of the advance being made in other departments on agricultural knowledge.

MULCHING FRUIT TREES IN 1875

IN 1875 Mr. A. L. Hatch, then of Ithaca, presented a paper at the convention of the Wisconsin Horticultural Society entitled "Mulching Fruit Trees." The benefits he said were, first, to retain moisture; second, to shade the ground during the summer and preventing excessive heating by sunshine. He said that heating the roots of trees above 70 degrees is injurious. Where the sun shines directly on clean, dark-colored soil it is often heated to a high temperature. With the mercury at 95 degrees in the shade we found the soil temperature 120 degrees in the sunshine.

Third, to retain the tilth of the soil, to prevent baking and hardening of the surface.

Fourth, to render the soil fertile and to retain fertility.

Fifth, to prevent extreme freezing of the ground. It is interesting to see such ideas advanced at so early a date, since in late years experiment stations all over the country have advocated mulching fruit trees. In fact, we have listed the advantages of mulching in Wisconsin Horticulture many times.

FIREBLIGHT OF APPLES AND PEARS CAUSES EARLY CONTROVERSY AS TO CAUSES

IN 1880 or about 60 years ago fireblight of apples and pears made its appearance in Wisconsin. Much time was devoted at horticultural meetings to its probable cause and control. In 1880 scientists reported that it was caused by bacteria. Fruit growers, however, did not accept this view immediately.

At a summer meeting in La Crosse in 1881, we find a typical discussion on the subject. One member

had come to the conclusion that there were various causes which tended to favor producing blight. Lack of hardiness was one; another that the trees were set too close together. Another member immediately inquired if weakness or lack of vigor was the cause of blight, why the hardiest trees such as Transcendent Crabs, one of the hardiest of all trees, was subject to it, the same being true of Siberian.

Mr. Philips of West Bend had not at first regarded blight as contagious, but recently had seen it develop under such circumstances as to lead him to change his mind.

DISCUSSIONS ON CONSERVATION AND FOREST PRESERVATION IN 1881 Senator Price Defends Lumbermen

DISCUSSIONS on conservation and preservation of our tree resources were fully as vigorous 60 years ago as they are today.

At a summer meeting in La Crosse in 1881, Senator W. T. Price, a lumberman, was present. He was asked to say a few words, but stated that he had come to learn about horticulture.

Thereupon Mr. J. F. Stickney of Wauwatosa, a former president of the Society, called upon him to give an account of the misdeeds and waste caused by the Senator and his fellow craftsmen. Mr. Stickney stated not only were the largest and most valuable trees rapidly disappearing, but a large amount of young timber, standing in the forests, was being destroyed in cutting the trees most suitable for lumber. If the cut-over land and young growth of trees could be protected, the evil effect which will result from the present course would be averted, the fertility of the land would be preserved, and again soon be covered with a valuable growth of timber.

Senator Price responded in defense of the lumbermen. He said they contributed more largely than any other class of labor to the production of value and the wealth of the nation. It is true, he said, that much of the young and growing timber in the forest is destroyed by cutting larger trees, but this is largely a matter of necessity, to be regretted, perhaps, and avoided when possible. Where native timber is cut off and another crop comes in, it is of another kind. Few if any of the native stock remain. The idea he said, expressed in the oft quoted lines, "Woodman spare that tree," may be very fine, but they are wanting in good, sound sense. He regarded it as a duty to cut a crop of timber whenever it is at its prime, as much so as to harvest a crop of wheat or of fruit. Some of the native forest growth should have been cut years before, as it is now depreciating in value. Coming generations, he said, would take care of themselves. Materials regarded as valueless for certain purposes, are becoming adapted to common use. Paper and glass are now used for car wheels and building purposes.

And that was more than 60 years ago.

THE ADVENT OF FARMERS' INSTITUTE AND AGRICULTURAL EDUCATION

Change in Wisconsin Agriculture

In the annual report of the Wisconsin Horticultural Society for 1888, we find an address by Superintendent W. H. Morrison, Madison, superintendent of Farmers' Institute which had begun to take an important part in agricultural education. A real effort was being made at that time to convert Wisconsin from a grain growing state to a dairy state. Mr. Morrison said, "Holding Institutes in different parts of the state I hear farmers saying that their business no longer pays, that the opening of the bonanza grain fields of the Northwest and the cheap production of Cereals in California and India has taken the profit from grain and that the ranches are fatal to the livestock business. * * *

"Dependence on exclusive grain raising must cease, and livestock and dairy products must take the first place in our farming."

Mr. Morrison called attention to what was being done by some of the horticulturists when he said, "We have one man in Wisconsin, Mr. J. M. Smith of Green Bay, who knows the possibilities of production.

"He says the more you spend on land, the more you make. In 1874, when cultivating 14 acres, he expended \$384 per acre, and then cleared from \$100 to \$200 per acre, but after the second year, an acre of land will pay 10 per cent on \$1,000 and some acres twice that. Last year, during the most severe drouth northern Wisconsin ever saw, $3\frac{1}{2}$ acres of this land bore 29,000 quarts of strawberries, that sold for \$2,215.24. This same piece of land was immediately plowed and planted to cabbage and celery, that sold for \$1,000. His 40 acres average an annual production of \$14,000."

Mr. Morrison said that 80 Institutes were to be held in different parts of the state during the year 1889.

STATE LEGISLATURE GIVES WISCONSIN HORTICULTURAL SOCIETY QUARTERS IN STATE CAPITOL

TN the Transactions of the Society in 1890 we find published, legislation passed by the State Legislature, providing for permanent quarters in the old State Capitol. The following is the wording of the act:

"WHEREAS, the Wisconsin State Horticultural Society has many valuable books which it is desirable shall be preserved; and

"WHEREAS, Many such have heretofore been lost in moving from room to room; therefore,

"Resolved by the assembly, the senate concurring, That room number twenty-seven (27) in the capitol, is hereby set apart for the permanent use of said horticultural society."

RECOMMENDATIONS FOR MARKETING STRAWBERRIES IN 1890 AS SOUND AS THOSE OF TODAY

TN the 1890's it was customary for the Society to have both a winter meeting and a summer meeting. The summer meeting of 1890 was held in the Court House at Black River Falls on June 26-27.

One of the leading strawberry growers at that time was Mr. M. A. Thayer of Sparta. He spoke on the subject of "Picking, Packing and Marketing Fruit" and made these significant statements:

"Uniform prices, so far as possible, should be paid to pickers; and one thing bear in mind, large fruit can be picked at one cent per box, easier than inferior fruit at one and one-half or two cents. Therefore, good varieties in good soil, well cultivated, will save you money in picking.

"Packing fruit is comparatively easy, provided the picking has been well done, and the packer is himself honest. The fruit grower must be prepared to handle his fruit promptly, and know just what to do with it.

"All boxes and cases must be prepared before *hands and help* are engaged.

"Boxes and cases should be well made, clean and neat, without dirt or stain.

"Let your boxes be well filled and *don't* put poor fruit in the bottom.

"Select out all imperfect, soft or green fruit and throw it away.

"Always give good honest measure and a uniform quality throughout the package.

"Make it a rule never to market poor fruit, and your reputation in a few seasons will be worth many times the value of all poor fruit sold.

"You will command the best prices and your packages will be accepted without question as containing the best the market affords.

"Fruit for long shipment should never be picked when wet or damp, and in hot weather should be left in cool, airy places as long as possible before packing in cases.

"The marketing will cause us more anxious thought than any other part of the small fruit business."

Mr. Thayer continued that already a fruit exchange had been established at Sparta, and most of the growers in that vicinity were making use of it. Its purpose was to encourage the growing of small fruits in Sparta by selling such fruits on the best markets.

"You should buy an encyclopedia now that your little boy is going to school."

"Not on your life. Let him walk, like I did."

The New Era in Horticulture

Prof. E. S. Goff Becomes Chairman of the Department of Horticulture, Wisconsin College of Agriculture, in 1889

A^T the annual meeting of the Wisconsin Horticultural Society held in Madison, February 6, 1889, President J. M. Smith made this statement:

"We are hoping to inaugurate a new era in horticulture with the election of Professor E. S. Goff to the chair of Horticulture at the University, and hope that there will be a great deal more work for the secretary to do. Professor Goff is to be here in the spring, and wishes to get acquainted in our state and I ask *every member* of the Society to help him in every way that he can."

The Low Point in Wisconsin Horticulture

Obviously, from remarks made at this convention, the subject of horticulture was not a very popular one with the average grain and dairy farmer throughout the state, but was carried on by a small group of horticulturists who loved the work. Evidence of this is found in the annual report of Secretary B. S. Hoxie of Madison, given on Feruary 6, 1889, in which he makes this statement:

"The successes of horticulture in our state now must be built very largely upon the failures of past years. For among the masses of our people who make agriculture their profession, horticulture has become a word of doubtful significance, for to their minds it suggests ruined hopes, and dead orchards; and our society meetings only afford an opportunity for some of its members to concoct new schemes to victimize the farmer. A prominent institute worker said in my presence three years ago that the quickest way to put a wet blanket over an institute was to introduce the subiect of horticulture.

"But owing to the zeal and high character of the members of this society, holding steadily in view the fundamental principles for which our society exists, Wisconsin horticulture stands for more today than simply planting an apple tree; and our experiences are as beacon lights to others who will reap rewards from these lessons."

Annual Reports Valuable

He further remarked that he was receiving numerous calls for the Annual Transactions from every state in the Union, as well as from foreign countries; that they were being sought after for the valuable information they contained, and because of the fact that the working members of the Society are men of high moral character and honorable integrity of purpose.

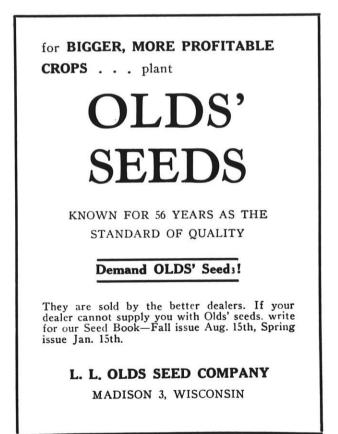
Success Built On Failures of the Past

This was probably the low point in Wisconsin horticulture. Great hopes had existed in the early years for the production of fruits of all kinds throughout the state. Bad winters, however, had ruined these hopes and many persons had lost money from dead orchards and winterkilled small fruits of varieties unsuited to our climatic conditions. Because no work was being done by the state itself, it was left to the horticulturists to carry on trials at their own expense. By 1889 the lesson had been learned, and from then on, horticulturists could proceed with every chance of success if they used the knowledge gained so far.

With the coming of Prof. E. S. Goff to the Wisconsin College of Agriculture in the spring of 1889, to head a new horticulture department, that department began to take a leading role in the development of horticulture in the state.

Fruit Growing On Sounder Basis

That fruit growing was on a sounder basis by 1889, can be seen from the recommended fruit list of that year. Only seven varieties of apples were recommended. They were: Duchess, Wealthy, Fameuse, Tolman Sweet, Wolf River, McMahon, Yellow Transparent. An additional list was recommended for special locations, but the recommended list is small and reliable.



ARBOR DAY INAUGURATED IN WISCONSIN IN 1889

A RBOR DAY for the planting of trees originated in Nebraska in 1872, and from there the movement spread to other states. Before 1889 the Wisconsin Horticultural Society had been considering the advisability of having a law passed in Wisconsin establishing Arbor Day; and so we find that the Legislature in 1889 passed the following statute:

"Section 1. The governor is hereby authorized to set apart by proclamation one day in each year to be observed as a tree planting or arbor day, requesting all public schools and colleges to observe the same by suitable exercises, having for their object the imparting of knowledge of horticulture, in the department known as arboriculture, and the adornment of school and public grounds.

"Section 2. This act shall take effect and be in force from and after its passage and publication.

"Approved April 16, 1889."

At the convention in February, 1894, Secretary B. S. Hoxie reports in connection with Arbor Day, the following:

Interest Developed By Arbor Day Exercises

"The work of interesting the schools in our state and inviting them to observe the day with proper exercises relating to trees and tree planting which was inaugurated by this society, met with a hearty response from the state superintendent, Oliver E. Wells, and with his able assistants in the department of education has been carried forward to a culmination far beyond our most sanguine expectations, and in whatever direction it is thought best in the future to prosecute this work I trust it will receive our support and cooperation."

ORNAMENTALS NOT OVERLOOKED THROUGHOUT THE SOCIETY'S HISTORY

FROM the earliest days, ornamentals for the beautification of the home grounds were studied and discussed by the members of the Wisconsin Horticultural Society. At almost every convention there were several talks on ornamentals.

A list of desirable varieties too, slowly took shape so that in 1890 we find the ornamentals recommended for Wisconsin gardens quite up-to-date. The following are the ornamental shrubs recommended in that year, the list having been published for several years past.

Ornamental Shrub List For 1890

Hardy Shrubs—Snowball, Syringa, Upright Honeysuckle, European Strawberry Tree, Fringe or Smoke Tree, Purple-leaved Barberry; Lilac, White, Purple, and Persian; Black Alder; Nine Bark.

Half Hardy Shrubs-Deutzia (Gracilis), Weigela

(Rosea), Flowering Almond, red and white; Spirea, Prunifolia and others, Flowering Quince, Cut-leaved Sumac, Hydrangea Grandiflora.

Climbers (Should'not be planted near grape vines) —American Ivy (Ampelopsis quinquefolia), Scarlet Honeysuckle (Lonicera sempervirens), Fragrant Honeysuckle (Lonicera caprifolium), Clematis jacmanna, Virgin's Bower (Clematis virginiana), Climbing Bitter Sweet and Ampelopsis veitchi.

Roses (with protection)

Climbers-Queen of the Prairie, Gem of the Prairie, Baltimore Belle.

Moss Roses—Princess Adelaide, Luxembourg and others.

Hybrid and June Roses—Persian, Yellow Harrison, Madam Plantier, General Jacqueminot, La France, General Washington.

HOW APPLES WERE MARKETED IN THE EARLY DAYS

JUST 50 years ago, in 1893, the annual report of the Wisconsin Horticultural Society had a paper entitled "Wisconsin Apples and How to Market Them" by A. L. Hatch of Ithaca. Mr. Hatch was one of the leading fruit growers of the day, who frequently appeared on the programs of the Society, and was also an officer for many years.

The following are a few of his remarks taken from his paper given June 29, 1892, in the Court House at Baraboo during the summer convention:

"Those who do not have wagons with springs may market by putting straw in the bottom of the wagon box, then raising the box and putting a bundle of hay or straw right under the box; this will do away with a large part of the jar. Sort as they are picked, put them into barrels; face up the barrel with fine apples; shake the apples down well every time you put in a half bushel. If you have good, careful pickers and superintend the work yourself, it will be very rare that a wormy or defective apple will go in. Apples properly picked and packed are half sold.

"It is better for the grower to sell direct to those who use them; that is, direct to consumers; in that way you would ship on orders. If we ship into Chicago we are dealing mostly with men who handle the fruit. I shipped to Chicago and was astonished to find that Wisconsin apples had a market value that was above Ohio and some other states."

The First Trial Orchards in 1890

A T the summer convention of the Society in 1890, Prof. E. S. Goff of the Horticulture Department, University of Wisconsin, reported on the establishment of trial stations. He stated:

"The committee, which consisted of President Smith, Secretary Hoxie and Mr. B. F. Adams, in conjunction with Professors Henry and Goff, of the Experiment Station, held a meeting at Professor Henry's office, early in March. At this meeting it was decided to establish two trial stations the present season, to act in conjunction with the Experiment Station at Madison; and it was later decided to add a third. It was then understood that one of these would be located on the farm of Mr. A. L. Hatch, at Ithaca; one on that of Mr. M. A. Thayer, of Sparta; and the third on that of Mr. William A. Springer, of Weyauwega, though as will be mentioned later a change was made in the location of the last.

Three Stations Selected

"On the 16th of April, Mr. Hoxie and myself visited Weyauwega, for the purpose of selecting a suitable piece of ground for a trial station. For a variety of reasons a plat was selected on the farm of Mr. F. A. Harden, instead of that of Mr. Springer, as had been previously decided. The day following we reached Sparta, and on the morning of April 18, selected a suitable plat for our work on the farm of Mr. M. A. Thayer. The day following I visited Mr. Hatch's place at Ithaca, and made a similar selection there. Each of these parties entered into a contract with the Society, leasing a given amount of land for the term of five years or longer, at the Society's option, for certain considerations, and agree to keep such land protected from the depredations of animals, and to cultivate and care for the trees or plants growing thereon, as directed by the Society."

Prof. Goff told further of the difficulty in obtaining the trees of the varieties desired, and that a long list of Russian varieties ordered by Prof. Budd of Iowa was not obtained because trees were not available.

Many Varieties Tested

That this was an era of testing many new varieties, especially Russian, can readily be seen by the long list of now extinct varieties planted in these trial stations. All varieties were supposed to be planted at each station, but in some cases, nurserymen failed to send the same varieties, so there were some differences.

Varieties Planted

The following varieties are listed in the report for 1891 as planted in the first three trial stations, or trial orchards, as they were later called:

Apples-Arabian, Baraboo, Barloff, Bell Pippin, Berlin, Borsdorf, Crocker, Duchess, Duchess No. 2, Fameuse, Forest, Glass Green, Gold Drop, Hartshorn, Hebbelwhite, Hoadley, Jenney, Johnson's Seedling, Kesha, Lewis, Lewis Blush, Long Arcade, Longfield, Manning's Blush, Manning's Red, Mary, Mathews' Fall, Mathews' Russet, McMahan White, Morris, Newell's Winter, Noble's, Northwestern Greening, Palmer, Patten's Greening, Raspberry, Repka Malenka, Sarah, Scott's Winter, Switzer Sweet, Transparent, Wallbridge, Walworth Pippin, Whitney's No. 20, Windsor Chief, Wisconsin Spy, Wolf River, Yellow Transparent, Zolotoref, Seedlings from Duchess Nos. 2, 3 and 4, an autumn seedling from Mr. Gale and three other unnamed seedlings.

Pear-Besseminka, Idaho, Sapouganke.

Plum—Mariana, Rockford, Wild Goose, seedlings from Mr. Gale.

Raspberry—Acme, Ida, American Everbearing, Hilborn, Lovett's Black, Muskingum, Palmer, Progress, Winona.

Strawberry—Crawford, Edgar Queen, Eureka, Great Pacific, Shuster's Gem, Thompson's Nos. 1, 5, 7, 8, 9, 11, 12, 25 and 26, Tippecanoe, Viola, Yale.

Blackberry—Freed, Gaynor, Thompson's Early Mammoth, Japan Wineberry.

New Varieties and Seedlings Propagated at Madison

"In addition to the work already outlined, a commencement has been made at our Station at Madison, in collecting scions of promising varieties of apples and plums—of which trees are not yet for sale, or are difficult to procure—and in propagating trees from these for use in our trial stations. Fifteen seedling apples and the same number of seedlings of native plums, believed to be of high promise, have already been secured. Most of these seedlings have been top-grafted upon old trees as a means of hastening their bearing.

"It is greatly to be hoped that an appropriation may be secured from our next legislature, which will make it possible for us to establish more trial stations, as well as to better equip those that we already have."

Twenty Years Of Orchard Experience in a Cold Climate

A MAN very often a speaker at the conventions of the Wisconsin Horticultural Society, and an officer of the Society, was A. J. Philips of West Salem. At the annual convention in 1891 he spoke on the above topic, and some of his remarks are so pertinent for fruit growers of today, that we publish them in part as a further guide, because they are sound.

"If all the disappointments, losses, discouragements, failures and successes of twenty years' experience in an apple orchard in a climate above referred to should be related at this meeting there would be no time left for any other business or papers.

"I have learned that the fall is the best time to dig apple trees, and the spring is the best time to plant them, in a cold climate; and that the trees should be kept in the cellar or buried in a suitable place where water will not stand or mice or rats be allowed to enter.

Recommends Topworking

"I have learned that topworked trees, done above the crotches, in a good, hardy stock will outlast the same varieties on their own stocks by at least 25 per cent, if they are of the half-hardy kinds—say Fameuse, Wealthy, Utter, Haas, Plum Cider, Fall Orange and St. Lawrence—and have learned that the *Virginia crab* is the best and most vigorous stalk I have tried, as compared with Whitney's No. 20, Transcendent, Hyslop, Orion, Duchess, McMahon's White, and several seedling crabs.

"I have learned that trees raised from grafts made with a long scion and a long root set in the ground and never moved are at least twenty-five per cent better.

"I have learned that it is more profitable to plant fewer trees, and give better protection and care, as it is very annoying to go into the orchard and find beautiful trees just coming into bearing girdled entirely around by mice, because they were neglected last fall and left unprotected.

"I have learned (though I've had hundreds of men say to me, 'If I could raise apples as you do I would plant trees') that if a man has a high location and clay soil, selects good hardy varieties, and will cultivate and protect properly, and plant from five to ten trees each year, he will have apples sufficient for his own family's use and some for his less ambitious and industrious neighbor as long as he lives. He will have these even though his lot has been cast in a cold climate; and what fruit he does raise will compare in size, quality, and appearance very favorably with fruit grown farther south.

Apples For the Family

"I have learned that raising apples means about one hundred bushels have been used in the family each year for the past ten years; and not raising them would mean the use of ten bushels per year or perhaps less. Never when apples are plenty are we subjected to doctor's visits—plenty of apples means health and happiness."

History Repeats Itself

The season of May and June of 1934 saw a great excess of moisture in Wisconsin, and many orchards failed to set fruit properly. This was similar to the season of 1892.

In the annual report of Secretary B. S. Hoxie, Evansville, in 1893, we find the following statements:

"The early spring of 1892 was full of hope and promise to the Wisconsin horticulturist. The very favorable winter had brought plants and trees to a fine condition of great promise of full fruitage, but the great *excess of moisture* in late May and June is now assigned as the principal cause for an almost entire failure of tree fruits in the southern part of our state, and in some localities with certain varieties of small fruits, a very meager crop.

"It is a noted fact in fruit regions that while some sections or townships were favored with good crops of apples, others adjoining were nearly destitute.

"In our own state the past year perhaps the counties of Oconto and Door produced the best crops of apples."

GREATLY INCREASED INTEREST IN HORTICULTURE IN 1893

T seems that within a few years sentiment toward horticulture in Wisconsin changed. Whether it was because of favorable fruit-growing seasons, increased publicity, because of the University's taking a more active interest in horticulture, or the establishment of trial orchards, it is difficult to say. However, in 1893, just 50 years ago, B. S. Hoxie of Evansville, then secretary of the Society, said in his annual report:

"It is very gratifying for your secretary to be able to report greatly increased interest in horticulture for our state. Four or five years ago horticulture hardly dared to ask a place in the program of the Farmers' Institutes. Now at almost every Institute the subject is up for favorable discussion, and at many an entire session is devoted to this branch of agriculture."

The First Spraying Experiments

Growers Predict That Eventually Every Orchardist Will Own Sprayer

A^T the summer convention at Baraboo in June, 1892, a paper, "Our Experiments at the Government Station, Ithaca, Wis." was given by Prof. E. S. Goff and A. L. Hatch.

Prof. Goff remarked, "When we commenced spraying early in the season we were successful; when late, we were not so successful. We tried two new mixtures—at least they were new to us. We found the Bordeaux mixture better than hyposulphite of soda."

Bordeaux Mixture Used For Scab

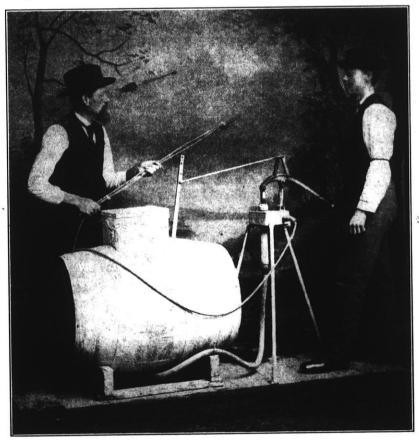
Mr. A. L. Hatch of Ithaca then outlined the method in which the spraying experiments were carried on in his orchard. We give his remarks in part:

"I have this year sprayed my orchard of twenty-five acres twice. The apparatus used is a barrel laid down sideways. I use a No. 2 tripod pump with an automatic stirrer attached to the handle of the pump, so that every stroke of the pump stirs the mixture. This year I have used Bordeaux mixture as a basis and put five gallons of water to five pounds of blue vitriol. I put in Paris green of which the amount most satisfactory was six ounces to a barrel. In using London purple or Paris green the lime you put in will prevent injury to foliage which would otherwise result. It is very essential to keep this mixture constantly stirring. The second spraying I did after the petals had fallen. Of course this summer has been the worst for fungus we have ever had.

Used One Gallon Per Tree

"It takes one gallon of mixture to spray a tree of from twelve to fourteen feet in diameter that will bear ten to twelve bushels of apples. You will need one man to help, and a team. I have sprayed for grape rot and mildew just after the vines were put up. You can buy blue vitriol for five cents per pound by the barrel; in less quantities for eight cents. On about 800 bearing vines I used over two barrels.

"Professor Goff has not told you half of what he has done. We are just on the threshold of the possibilities of spraying, and I expect the time will come when every farmer will have his own spraying apparatus. Insects are becoming more numerous all the time and we shall need to spray more."



An up-to-date spray rig in 1891.

A. L. Hatch and D. E. Bingham operating the first sprayer in a commercial orchard in Wisconsin. Capacity 6 barrels in 10 hours of steady work.

For 4 years 25 acres of orchard were sprayed with this outfit at Richland Center.

Work of Prof. E. S. Goff

THE name of Prof. E. S. Goff, Head of the Horticulture Department at the University, has appeared a number of times in the foregoing account of the Society. His untimely death on June 6, 1902, at the age of 49 was a great loss to horticulture in Wisconsin. And so we find in the proceedings for 1902, an account of his life and work.

The following statements as written by Mr. F. Cranefield, show how horticulture had incréased in popularity during his presence in Wisconsin:

"Emmett Stull Goff was appointed Professor of Horticulture in 1889. The equipment of the Department of Horticulture at the time of his appointment was very meagre. Less than a dozen students sought horticultural work at this time. During the past school year (1901) over three hundred students received instruction from Professor Goff in a splendid building devoted to horticulture, with the added advantages of field work and observation in several acres of nursery and fruit plantations."

He wrote two books while at Wisconsin, "Principles of Plant Culture" and "Lessons in Pomology." It was his long hours of work that left him without a reserve force to fall back upon during his last illness.

HOW TO IMPROVE THE STATE HORTICUL-TURAL SOCIETY

Prof. E. S. Goff Presents Paper On This Important Topic

PROF. E. S. Goff proved a vital factor in the improvement of the Wisconsin Horticultural Society in the days following his becoming chairman of the Horticulture Department at the University of Wisconsin. He headed many important committees, including the trial orchard committee, and presented valuable papers at the convention.

In 1896 he presented a paper with the above title. In his opening remarks he quoted from another speaker who had said: "I have come to tell you what I think on this subject; not what I think you think I ought to think."

Papers By Delegates

He then remarked on the custom of inviting local societies to send delegates and requiring each delegate to present a paper. He said: "We have no knowledge as to whom the delegate is to be, and no assurance that the so-called paper is worth the time of our society, or the space required to print it in our 'Transactions.' With rare exceptions, they are out of place in the meetings of a state society. What inducement has one to travel fifty or a hundred miles to attend a state meeting, if the papers presented are not of a higher order than those of the average local society? One way to overcome this is to spend money to pay to secure papers from specialists from our own and other states upon subjects in their chosen line." He then mentioned Prof. Bailey on Plant Breeding; Prof. Van Deman on Orchard Fruits; Mr. Galloway on Fungus Diseases, etc.

He remarked, however, that there were many members who have valuable information to give, and if carefully selected, such papers would be of great value. "However," he said, "with rare exceptions, a paper that has nothing to commend it except that it is entertaining is out of order on the program of a State Horticultural Society."

He said further, "There is no reason for publishing a report in the monthly journal of the Society, and also in the Transactions."

It was customary to give local societies the transactions of the State Society free of charge. Mr. Goff stated that this was suicidal. "The members of these societies have no inducement to join the State Society, nor to attend the meetings, so long as we give them all we have for nothing." He therefore recommended that the formation of local Societies be continued, but so arranged that they shall feed the State Society, and not feed upon it, as they were then doing.

Next he advocated that the secretary be paid a sufficient sum to take full charge of the work; because without this, the Society would never accomplish what it should.

In the discussion which followed the presentation of a paper on "The Vegetable Garden" by Mr. John Hauser, Mr. M. A. Thayer asked if it would be advisable to offer premiums for membership in the Society. Prof. Goff answered, "It seems to me the object of the magazine is not to put money into the pockets of the subscribers but to put some knowledge of horticulture into the minds of the people."

APPROPRIATION MADE TO THE SOCIETY TO MAINTAIN EXPERIMENT STATIONS

In 1897 the legislature appropriated the sum of \$250 annually "for the maintenance of experiment stations." This meant for the care and maintenance of the trial or experimental orchards established in various parts of the state. This sum was in addition to the \$1,500 annually appropriated to the Society by the legislature in 1893.

AN EARLY PAPER ON THE VEGETABLE GARDEN

John F. Hauser Gives Excellent Recommendations On Vegetable Growing

A T the summer meeting of the Society at Wau-Taca June 16-17, 1896, a man who is still with us and active in horticulture, Mr. John F. Hauser now at Bayfield, then of Onalaska, La Crosse County—gave a paper on vegetable gardens. His remarks were so similar to recommendations being given in the present day, that we publish a few of them here.

"The garden should be near the house so as to save steps in the cultivation and daily gathering of the produce; it should have good drainage and a warm exposure to bring it into condition for early cultivation. Ground that has been occupied with cultivated crops is easily brought into fine condition; sod land is difficult to till. Manure should be short, well rotted, so that it will not interfere with the hoe and cultivator. Plants will suffer more in dry seasons if coarse manure is used. Plow the whole garden as early as the ground is dry enough, and harrow frequently so as to kill the weeds and hold the moisture. Lay out the garden, taking care to plant varieties of the same family some distance from each other so they will not mix and thereby become deteriorated; this is especially important in planting cucumbers, melons, pumpkins and squash. Give plants, that are grown in hot beds for setting, plenty of air so they will not be weak and spindling; if the weather is so cold that the sashes cannot be lifted, they should not have much water.

Beans

"Plant beans when the weather is settled, and never cultivate them when the foliage is wet. Good varieties are: Early Valentine, Prolific German Wax, Golden Wax, Burpee's Bush Lima, Henderson's Bush Lima, Jackson's Wonder Bush Lima, King of the Garden, Pole Lima. They are best in the order named."

At the conclusion of the paper, Mr. Hauser was asked, "Of what benefit is it to put sand or dust on the leaves of squash?"

Mr. Hauser answered, "I do not know unless it is because it grinds their teeth and they do not like it."

WISCONSIN FORESTRY ASSOCIATION ORGANIZED

A T the close of the annual convention of the Wisconsin Horticultural Society on February 9, 1893, Secretary B. S. Hoxie invited those present who wished to confer as to the propriety of a forestry association for the state of Wisconsin, to meet in the library room, to take action.

A second meeting was held on April 6 in the State

Agricultural Society room in the Capitol. A constitution was adopted stating that the object of the association should be the discussion of subjects relating to tree planting; the conservation, management and renewal of forests; * * * the advancement of educational, legislative, or other measures tending to the promotion of these objects.

The committee made this statement: "There are millions of acres of hillside and sterile lands in the state that are worthless for agricultural purposes but are adapted to tree culture."

The association was to create a public sentiment leading to the planting and care of trees, by the wayside and over the waste places.

The officers of the Forestry Association for 1893 were: Paul Bechtner, Milwaukee, President; B. S. Hoxie, Evansville, Vice-President; L. S. Cheney, Madison, Secretary; and C. R. Barnes, Madison, Treasurer.

A number of important papers on forestry were presented at the meeting.

WEATHER OBSERVATIONS IN THE EARLY DAYS

The Season of 1895 Was Queer

MRS. D. Huntley of Outagamie County reported at the convention at Madison, February 4, 1896, on conditions in that county in 1895. She made some interesting observations on the weather. Whenever we today have unusual seasons, it is interesting to note that they are probably not more unusual than some in the past.

Mrs. Huntley stated that March 18, 1895, was remarkably pleasant, many farmers doing their seeding the last week in March. April was a continuation of the same pleasant weather. The weather was delightful, with no rain until the 3rd of May. Plum trees blossomed May 5, and apple trees three days later.

She states: "On the 8th we sprayed for apple scab with 'Ease Celeste,' and on the 9th sprayed grapes with Bordeaux mixture."

Snow In May

On the 10th of May the thermometer registered 90, but on the night of the 12th two inches of snow fell, and on the morning of the 13th, icicles 6 inches long hung from the eaves. Apple trees were in full bloom, their blossoms covered with snow and ice, and the frost continued for two days. Afterwards the leaves began to fall from the trees as they do in autumn. Every grape leaf was killed, and for three weeks the vines were bare. Then the weather became warm, the grapes bore new leaves and blossomed, and gave promise of a small crop. There was a small crop of grapes, and some trees had a few apples. Strawberries bore a light crop, and brought 16 cents per quart at the beginning of the season; and later 10 cents per quart. Apples brought \$1 per bushel.

THE ROOTS OF THE STRAWBERRY PLANT

Prof. E. S. Goff Reports On Study of the Strawberry Root System in 1897

THAT Prof. E. S. Goff began some experiments of great value to horticulturists, was indicated by his report on studies made of the strawberry root system. This study can be used today by growers in determining how to cultivate and fertilize the strawberry crop. First Prof. Goff explained in some detail the elaborate system used to expose the roots of the strawberry plants so that they might be observed.

"The roots of the strawberry are different from any other plant I have examined. They differ in two respects. First, they do not extend as far laterally as the roots of almost all the crops that we have examined, and not as deeply. While I was connected with the New York station I assisted in washing out the roots of almost all of our ordinary farm and garden crops. It is a common experience that the roots of most plants extend as far as its branches, sometimes farther; and the roots, instead of going downward, start laterally.

Have Short Roots

"The strawberry roots spread but a very short distance beyond the leaves and run downward mostly, and not as deep as I expected to find them. We find that the deepest roots scarcely extend deeper than two feet and most of them one foot from the surface. When we think that the top of the strawberry plant is almost the shortest of any crops that we can grow-that is why they do not run deeper and do not spread more. We washed out a section of a matted row two feet wide. The roots extended three inches on either side and the leaves extended about two feet. I make this statement of the strawberry plant that I cannot make of any other, and that is that the roots are beneath the leaves and not elsewhere to any great extent. Now, this fact has already caused the formulation of a new system of cultivation.

"We have found that the roots of strawberries are almost all small delicate roots, that they branch beneath the plants and do not extend beyond the plants. There are no large leaders. They are like the roots of grasses. The system is delicate and elaborate, and the closer we study it, the more delicate we find it. We can use but a small stream of water on the roots, and the stream will break them if there is too much water. The root hairs, which are really the part that takes in the water, are so delicate that it is practically impossible to remove them from the soil. We have found them by the use of a magnifying glass. It is difficult to do this. The root hairs take in the most water. The system is extremely delicate and extremely elaborate. If we compare it with our plumbing systems in our large cities, it would put them to shame. It is simply marvelous. Each hair root is a pump, in that it has valves. It absorbs water from the soil with considerable force.

Need Open Soil

"What then is the ideal soil for the strawberry plant? It should be a soil that these delicate roots can penetrate. Not heavy clay. These root hairs, it is very well proved, cannot exist any long time without oxygen. If it were flooded to a driving out of all the oxygen, it would kill them. If a corn crop is overflooded, it will kill the crop—so it is with the strawberry plants. The root hairs are then starved. It must be permeable. If soil is in its proper condition it is surrounded by a little layer of water. We should strive to make the soil as it should be."

THE SOCIETY STIMULATES HORTICUL-TURE BY OFFERING PLANTS TO SCHOOL CHILDREN

A^T the February convention of 1896 Mr. J. L Herbst of Sparta, then Corresponding Secretary, gave a report on plant distribution for 1895. Distribution of plants to school children had been inaugurated several years previously but had reached its height at this time. He said: "With new suggestions offered by members of our Society at our meeting here last winter, and with the gifts made by six more of our members, the number of applicants has increased to over 4,000."

The offers were as follows: The Wisconsin Horticultural Society would give to all school children of the state who would apply and send five cents, either six strawberry plants, three red raspberry plants, or two spruce trees. It would send all three for 15 cents.

Mr. J. Q. Emery, state superintendent of schools. aided by distributing the offers to all county superintendents.

The members giving plants were the following: Thayer Fruit Farms, Sparta; Geo. J. Kellogg & Sons, Janesville; Coe & Converse, Ft. Atkinson; J. D. Searles, Sparta; all gave strawberry plants.

L. G. Kellogg, Ripon; Parson & Loope, Eureka; Hanchett & Son, Sparta; all gave red raspberry plants.

W. D. Boynton, Shiocton, gave spruce trees.

The total number of plants sent out was 16,544.

In connection with the work, Mr. Herbst tells about the vast amount of correspondence in taking care of 4,116 applications, and remarked: "Be careful how you write to the lady school teachers. When you make any promises to them be sure they hold good. I received an application for plants from a certain teacher after the time had expired, and I returned the letter and money. I need not tell you what happened. Suffice it to say, she got the plants."

Dwarf Apple Trees in 1897

Early Comments Valuable Because of Present-Day Interest in Dwarf Trees

A T the meeting of the Society in February, 1897, held in Madison, Mr. S. H. Marshall of Madison presented a paper on "What I Have Learned of the Dwarf Apple."

In this paper Mr. Marshall reports visiting the nursery on the experiment station farm at Madison in 1896, with Prof. E. S. Goff. He found six dwarf apple trees, not over five feet high, planted four years previously, each tree bearing from half a peck to half a bushel of very nice looking apples. He remarked that to him, having a back lot of about 50 feet square, it opened up a new field; and so he asked questions as to whether the dwarf apple trees could be successfully grown in this state.

Grown Upon Paradise Stock

"The Paradise apple, which furnishes the stock upon which the smallest of the dwarf apples are grown, and which seems to be the only stock successfully used in this country, is, I presume the oldest of all apples as it is said to be the apple of Adam and Eve. The name 'Paradise Apple' has been transferred so many times that it may be said to cover a class rather than a variety.

"The dwarf apple has been known for centuries to gardeners, and used extensively in the old countries, where it seems to be more successful than it has been here. Thomas Rivers, the great English pomologist, says of it, in his 'Miniature Fruit Garden': 'Apple bushes, always very pretty and productive trees, may be planted three feet apart, row from row, and three feet apart in the rows, and when eight or ten years old every other one taken out and transplanted to new ground six feet apart each way, which gives 1,210 trees to the acre.' He had a plantation of 100 of these dwarf apples which were planted in 1862. They bore a fine crop in 1863 of most beautiful fruit, and in 1864 gave a crop almost too abundant. It might be interesting to state here that this same gentleman grew an apple tree in an eight-inch pot that bore fruit when only nine inches high. Another Englishman grew an average for ten years of four pecks to a tree or 320 bushels to the acre.

"W. C. Strong, in 'Fruit Culture,' writes as follows: 'Paradise apples, set eight feet apart each way, are well adapted to garden culture, giving the advantage of early fruitfulness and increasing the number of varieties that can be grown on a limited space'."

Bulletin On Dwarf Apples In 1897 By New York Experiment Station

It is very interesting to note that during the past

few years the New York Experiment Station at Geneva has carried on extensive experiments in the use of English rootstock, notably Malling IX, for fully dwarfing effect, and other Malling stocks for semi-dwarfing trees. Mr. Marshall stated in 1897 as follows:

"In Bulletin 116, Cornell Experiment Station, Professor Lodeman gives from his experience and information obtained by correspondence with men who have grown the dwarf apple throughout New York state, the following as to its cultivation:

"'All the varieties of the Paradise apple that are used as dwarf stock, can be propagated by layers or mound layering (same as used with quince and gooseberry), or by suckers and cuttings. While the dwarf apple tree never makes a rank growth, as the stock serves as a check to the return passage of the sap, yet it should be thoroughly pruned from the time it is set, because sometimes the vigorous growth of the scion seems to stimulate the growth of roots of the stock and you will soon have a large tree if not severely cut back. We should also prune to produce more wood that is capable of bearing apples, and because fruit spurs will be more evenly distributed over the lower part of the tree. The trees should be planted eight to ten feet apart each way. They bear in from three to five years; and when eight to ten years old they should bear from two to three pecks, and increase as they grow older. They fruit more regularly than standards in New York state. They are more easily sprayed, taken care of, and it is more convenient to thin out the fruit.' He further says: 'I cannot advise the planting of dwarf apple trees for commercial rewards, but it seems to me nevertheless that they are worth experimenting with for this purpose'."

Dwarf Trees Not Successful

Mr. Marshall was so enthusiastic about the possibilities of dwarf apple trees that he stated he was sure that they would become common in Wisconsin. However, they never did. We may find an answer in the discussion which followed the paper, in which Mr. A. G. Tuttle stated that the growing of the dwarf apple on Paradise stock was tried 40 years ago here. The first hard winter, however, that came along killed every dwarf tree that grew in this state, and the trial was never repeated.

Evidently the Paradise stock was not sufficiently hardy, and so for many years we heard very little about dwarf apple trees. We can only hope that the Malling stock will be hardier and will enable backlot city gardeners to grow these dwarf trees successfully.

Exhibit at Chicago and Omaha World's Fairs

THE Wisconsin Horticultural Society made a very creditable exhibit of fruits at the World's Fair at Chicago in 1893. Secretary B. S. Hoxie reported on the exhibit as follows:

An exhibit of summer fruits was made during the summer months, and a greater showing of apples in the fall. Lack of funds greatly hampered the committee consisting of M. A. Thayer, B. S. Hoxie, and E. S. Goff. However, beginning in August, apples and pears were shipped to the fair by various Wisconsin growers.

The Cranberry Growers Association made an exhibit of cranberries, showing improved methods of cultivation, with a transported section of bog or marsh in its entirety. A Medal of Award was granted this exhibit.

In all, 260 packages were received for the exhibit, from April 11th to October 14th. The exhibition was said to have created a great deal of attention and favorable publicity for Wisconsin.

SOCIETY EXHIBITS FRUIT AT EXPOSITION IN OMAHA

DURING the years 1897 and 1898 there was considerable discussion at both winter and summer meetings of the Horticultural Society, as to whether it would be possible to exhibit fruits at the trans-Mississippi and International Exposition to be held in Omaha in 1898. Many of the leaders in the Society were opposed to making an exhibit. There was very little money available. No premiums were to be offered by the Exposition. However, the governor had stated to the officers that he felt sure the *next* legislature would give the Society as much as \$1,000 if they made a creditable showing.

After much debate, the Society finally voted at a summer meeting in Appleton, June 23-24, that the Executive Committee borrow the sum of \$1,000 for the use of a committee to stage the exhibit of fruit at Omaha.

The committee in charge consisted of A. L. Hatch, Wm. Toole, A. J. Philips, L. G. Kellogg, and R. J. Coe.

Report By A. L. Hatch On Exhibit at Omaha

Mr. A. L. Hatch of Sturgeon Bay reported that he was informed on August 25th, 1898, that he was to select fruits for the Omaha exhibit. He tells of going to Ithaca in Richland County, and packing six barrels of 50 varieties, which he shipped to Omaha. The following are some of his remarks in regard to staging the exhibit:

"On arrival in Omaha September 1st, we at

once began the preparation for our exhibit. By the time we had tables ready, our fruit came. We ultimately had tables and shelving aggregating 220 feet of surface, upon which we soon had one hundred varieties of apples besides several varieties of plums, pears and peaches.

"We also added about fifty glass stands that we could place among the plates of apples, which. as they stood above them, added very much to the room and were utilized for grapes, plums. peaches and the smaller apples.

State Had Good Fruit

"The apple crop seemed to be very short west of the Mississippi river; and, as our state had a full crop, we were able to secure fine, perfect fruit, that made our exhibit take the lead from the time it was installed, which it easily maintained as long as I stayed with it, until September 26th, at which time Mr. Wm. Toole of Baraboo, took charge.

"To fill our tables it required about ten barrels of fruit and at the time we left we had the tables as full as possible and about eight barrels in store to use later on.

"As the only method of securing the necessary fruit was by correspondence, I had a few hundred circular letters printed; and upon appealing to the members of our society in Wisconsin, we were able to secure all the fruit we could use.

"The reason our exhibit attracted so much attention was that our space was narrow, and we placed our exhibit so that people could take it in at a glance. Professor Taylor came around and brought the governor of Colorado, who complimented us. Professor Henry looked at our exhibit and then went the length of the hall. He came back and said to me: 'Say, Philips, Wisconsin don't have to bow to any of them.' It was not a competitive exhibit. We did not compete with the other states, and did not compete with each other. It showed that we can grow seedling apples, and can grow nice ones."

Mr. G. J. Kellogg of Janesville reported on the exhibit in part as follows:

"The show was magnificent for the last month, and for the amount of table room nothing exceeded it, except a few exhibits from the mountains where irrigation adds to size and detracts from flavor.

"Wisconsin has a right to be proud of her seedlings. "In the matter of awards I am told we were to have had one gold and thirteen silver medals; but nothing but leather and bronze medals have been received, a very cheap way of paying for a thousand-dollar exhibit."

THE WISCONSIN HORTICULTURAL SOCIETY EXHIBITS AT THE PAN-AMERICAN EXPOSITION IN BUFFALO IN 1901

THE Wisconsin Horticultural Society was again prominent at one of the nation's large expositions, when in 1901 an exhibit of Wisconsin fruit was made at the Pan-American Exposition in Bufialo. A brief report by members of the committee in charge of the exhibit, taken from the proceedings of 1902, will be of interest.

The following is from the report of Mr. Wm. Toole of Baraboo:

"I reached Buffalo on the night of September 13th, and the next morning we were all griefstricken by the news of President McKinley's death. * * *

"During the sixteen days of my attendance, and to the moment when I left, it was over and again told us by visitors that Wisconsin had the best show of apples in the building, and the apple holds first place above all fruits in the hearts of the people.

"There are so many varieties of apples which have been practically brought to the knowledge of the world by Wisconsin horticulturists, that our exhibit went down as a standard with which to make comparison of that grown in other states.

"We had a good showing of other fruits besides apples. We had grapes in abundance and native plums in variety, and plenty of pears. A sod of cranberries in fruit from Berlin attracted much attention. Our Wisconsin State Commission took great interest in the show.

"The Wilder medal was awarded to the Wisconsin fruit exhibit by the American Pomological Society."

In his report of the exposition, Mr. A. L. Hatch of Sturgeon Bay quoted part of the *Milwaukee Sentinel's* account of the Wisconsin exhibit:

"The Wisconsin apples excelled all others shown at the exposition in beauty, as well as quality, and one of the humorous incidents of the big show was the charge made by apple-raisers from other sections of the country, that the apples in the Badger state exhibit had been artificially colored."

Win Wilder Medal

In addition to winning the much coveted Wilder medal for the state exhibit, Wisconsin won other distinctions. Individual exhibitors of the state secured four gold medals, or first prizes; four silver medals; and fifteen bronze medals; while ten other fruit exhibits received honorable mention.

State Commission Impressed With Showing

Committee members reported to the Society that the State Commission, which had charge of the fund for the Wisconsin exhibit, had at first refused to give any money for an exhibit of fruits. Mr. W. A. Van Bunt, President of the Commission, made the following statement:

"We were opposed to granting any money to the Society, thinking that it would be impossible for Wisconsin to make a creditable showing in competition with the fine fruit-growing states of the East. But the officers of the Society were persistent and we finally voted to allow them \$500, more to get rid of them than for any other reason. In the face of this lack of encouragement, the Society went to work and made an exhibit that won more medals than any other state in the Union."

Later the Commission voted to defray all the expenses of the exhibit.

EXHIBIT AT THE LOUISIANA PURCHASE EXPOSITION

FOLLOWING closely upon the Pan-American exhibit at Buffalo, we find the Society again interested in an exhibit at the Louisiana Purchase Exposition. At the annual convention at Madison, February 4-6, 1902, a resolution was passed, that the Society recommend an exhibit of fruit at the Louisiana Purchase Exposition if funds were granted it by the Wisconsin State Commission. The sum of \$2,500 was requested for the purpose.

The Wisconsin Board of Managers for the Louisiana Purchase Exposition allotted \$5,000 to the Wisconsin Horticultural Society for an exhibit of horticultural products. President T. E. Loope of the Society stated in his address, February, 1904:

"We have collected and put in cold storage in St. Louis about 600 boxes of apples, under supervision of Mr. S. H. Marshall, appointed superintendent of collections. We have the great fruit states to compete with, but if we do our best, we will make a good showing."

The Committee In Charge

The following committee was appointed to have charge of the exhibit of the Society at the St. Louis Fair: A. A. Parsons, T. E. Loope, J. J. Menn, S. H. Marshall, W. S. Hager, Wm. Toole, Geo. J. Kellogg, and Frederic Cranefield.

Mr. A. A. Parsons of Omro was made superintendent of the exhibit. He, together with Mrs. Parsons, began setting up the exhibit on April 24th, 1904. On examining the fruit placed in storage in St. Louis, he found that the McMahon apple was in very poor condition. He reported that those which kept best in storage were the Pewaukee, Wealthy, Ben Davis, Windsor, Golden Russet, Flushing Spitzenburg, and Snow. Northwestern Greening did not Mr. Parsons reported that the largest number of plates of fruit on the tables at any one time was 1,400. He stated:

"We had 87 varieties of apples, 81 of plums, 4 of crab apples, 7 of new seedling apples, 4 of pears, 2 of cherries, 5 of strawberries, 4 of currants, 1 of gooseberries, 1 of B. raspberries, 1 of R. raspberries, 1 of blackberries, 1 of blueberries, and 3 of cranberries."

Wealthy Popular In 1905

The Wealthy apple was considered supreme at this time—1905. President T. E. Loope of Eureka in his annual address to the Society made this statement:

"Wisconsin divided the honors of Apple Day at St. Louis with the great apple state of Missouri. We gave away twenty-five barrels of Wealthy apples, one by one, as the crowd passed by, and by this act heralded the fame of that northerngrown fruit over all the states. Wisconsin Wealthies was our slogan and we marched to victory. Their excellence was challenged by none. The wrapper and paster on each specimen was admittedly the neatest legend shown by any state."

Secretary Cranefield reported that in addition to the \$5,000 from the State Commission, the Society spent nearly \$1,200 of its own money in arranging and maintaining the exhibit. But for its exhibit the Wisconsin Horticultural Society received the grand award of the exposition, and orchardists who sent fruit received gold and silver medals.

STATE APPROPRIATION TO SOCIETY INCREASED IN 1903

A T the annual convention of the Society in February, 1904, President T. E. Loope stated in his annual address, that "the legislature during the past year increased the annual appropriation to the Society to \$4,000 per year. This places the Society in a position to perform still greater services for the people of the state than ever before. It calls for earnest progressive effort to develop the horticultural possibilities of our great commonwealth."

The appropriation made it possible to establish an additional trial orchard at Poplar, in Douglas County, about 20 miles east of Superior.

Appropriation Again Increased In 1907

At the annual convention of the Society in February, 1908, Secretary Cranefield in his annual report states:

"The big thing for the year 1907 was, of course, the substantial increase in our appropriation from \$4,400 to \$8,000. The bill finally passed both houses of the legislature without a dissenting vote."

Mr. Cranefield stated that the reason for this favorable vote was that "As a Society we have 'made good' to the people of the state."

PROF. N. E. HANSEN OF SOUTH DAKOTA SPEAKS ON TRIP TO RUSSIA IN 1898

BECAUSE of the present-day interest in Russia, a paper delivered by Prof. N. E. Hansen of the Horticulture Department, Brookings, South Dakota. on his trip for collecting new varieties of fruits in Europe and Russia, is of special interest. His talk will be found in the annual report of the Society for 1899 and contains much interesting description of the country through which he passed. We have room for only a few of his important remarks, as follows:

Sends Four Carloads of Seeds

"March 26, 1898, the writer returned from his trip of nearly ten months in Eastern Russia, the Caucasus, Russian Turkestan, Bokhara, Western China, and Siberia, where he was sent to collect new and rare varieties of seeds for the United States Department of Agriculture. Something over four carloads of seeds were secured, which were distributed all over the United States by the Agricultural Department at Washington.

"At St. Petersburg the Imperial Department of Agriculture furnished an expert scientific guide for a six weeks' tour of investigation of the agricultural experiment stations and schools, the forestry plantations and model farms of the east Volga region. Since the famine year of 1892, the Russian government has made strenuous efforts to discover the cause of the apparent increase in the drouths, and to find plants better adapted to the climate. Large areas are being planted with timber; irrigation experiments are being carried on, and especially the native plants of the Volga region are being brought into cultivation.

"The muskmelons of Turkestan were found to be of great size, many running from twenty-five to thirty-five pounds in weight, snow white in flesh, and quality superior to any American melon.

Travels In Wagon

"At Tashkent, the capital of Russian Turkestan. the overland journey of over two thousand miles was begun through northern Turkestan, western China, and western Siberia. Thirteen hundred miles in a wagon, and seven hundred miles in a sleigh, the northern route homeward being chosen because the Siberian railway could be reached by this means. From three to five horses were employed, changes being made at short intervals so that quick time was made."

A New Era in Horticulture

FREDERIC CRANEFIELD, MADISON, ELECTED SECRETARY

A^T the meeting in Madison, February 2-5, 1904, the Wisconsin State Horticultural Society elected Mr. Frederic Cranefield, Assistant in Horticulture at the Wisconsin College of Agriculture, as secretary.

Previous secretaries had served for only a few years, but with an increase in the state appropriation it had now become possible to establish a permanent office with a full-time secretary. Mr. Cranefield continued to serve for a period of 22 years—until 1926 —thereby starting a new era in the Society.

Previous to 1905 the Society had elected a corresponding secretary each year, but with the election of a permanent secretary the office of corresponding secretary was not considered essential and was abolished.

WISCONSIN HORTICULTURAL SOCIETY LIBRARY DESTROYED IN CAPITOL FIRE

A DISASTROUS fire in the Wisconsin State Capitol on February 27, 1904, destroyed the library of the Wisconsin State Horticultural Society which had been built over a period of many years. Mr. Wm. A. Toole, corresponding secretary of the

Society in 1905, made this report:

"The library of the Wisconsin Horticultural Society was destroyed in the capitol fire last winter. Before the fire a start was made towards cataloging the library and some letters were written for the purpose of securing missing numbers of reports. The destruction of the library of course changed plans entirely and the work of building up a new library was at once commenced. The first work taken up was to secure a file of the publications of the Society. The members of the Society were very generous in contributing their reports and a complete set of the reports from 1871 to the present time were soon received."

PUBLICATIONS OF THE SOCIETY

The Society Begins Publication of Monthly Magazine, The Wisconsin Horticulturist, In March, 1896

VOLUME I, No. 1 of *The Wisconsin Horticulturist* was published in March, 1896. In the announcement of its publication, A. J. Philips, West Salem, secretary of the Society, stated:

"The Wisconsin State Horticultural Society, incorporated under the laws of the state, has for its object the dissemination of horticultural knowledge, that being its only aim."

Mr. A. J. Philips was editor and manager, and Mrs. Vie H. Campbell of Evansville was assistant editor.

The first 24 pages of the magazine contained the

reports of the summer and winter conventions, and were the same material as that published in the annual report. Eight pages, edited by Mrs. Campbell, were new material. Although there was a duplication of the first 24 pages in the annual report, nevertheless the members received the information much earlier than by waiting for the printing of the annual report.

The Wisconsin Horticulturist was published in standard book size from March, 1896, until February, 1903.

Publication Discontinued In 1903

In the February, 1903, issue of *The Wisconsin* Horticulturist, we find this announcement:

"With this issue the magazine will be discontinued. After debating the question for some length, the executive committee of the society decided that the money expended in issuing the *Horticulturist* could be used to better advantage to the horticulturists of the state by the locating of more experimental orchards."

Evidently the publication had failed to meet the requirements of the members. This may have been due largely to the duplication of articles by publishing them first in the magazine, and later in the annual reports. In 1903 also, the Society did not have a permanent secretary to devote his time to the publication.

WISCONSIN HORTICULTURE ESTABLISHED SEPTEMBER, 1910

From February, 1903, until September, 1910, the Society did not issue a magazine, but did issue annual reports.

Wisconsin Horticulture, Volume I, No. 1, appeared on the latter date. Officers of the Society at the time were Mr. Wm. Toole, Baraboo, President; A. J. Smith, Lake Geneva, Vice-President; L. G. Kellogg, Ripon, Treasurer; Frederic Cranefield, Madison, Secretary.

Editor Cranefield, in his announcement of the publication, made this statement:

"The Wisconsin Horticulturist was a good little magazine, and its untimely end was greatly mourned by the members. We sincerely hope that the present venture will be more successful."

Wisconsin Horticulture took the place of bulletins which were issued from time to time, and later took the place of the annual reports. Its aim is to be educational and to give information to members and people of the state on horticultural practices adapted to Wisconsin conditions. Leading authorities in state and nation have found that there are two effective ways of carrying on an adult educational program. The first, and most effective, is by holding meetings at which speakers give information. This, however, is an expensive method, each meeting costing considerable in time and traveling expenses of the speaker. The second important method is through the printed word. While not so effective as meetings, it is, nevertheless, much less expensive and reaches many more persons. The Wisconsin Horticultural Society has, in the course of its history, adopted both of these methods of carrying on its educational program.

A "BLACK LIST" OF SHRUBS PUBLISHED IN 1906

THE following list, taken from the report of 1906, of varieties considered unsuitable for Wisconsin conditions, is still of value. These shrubs, all of which were tested on the grounds of the Experiment Station at Madison, were found unsatisfactory:

Scientific Name	Common Name
Azalea arborescens	Rhododendron
Azalea viscosa	Rhododendron
Azalea nudiflora	Azalea
Azalea mollis	Azalea
Calycanthus floridus	Sweet-scented shrub
Caryopteris Mastacanthus	Blue Spiraea
Chionanthus Virginica	White Fringe .
Clethra alnifolia	Sweet Pepperbush
Colutea arborescens	Bladder Senna
Cornus florida	Flowering Dogwood
Cydonia Japonica	Japanese Quince
Daphne Cneorum	Daphne
Daphne Mezereum	Daphne
Deutzia gracilis	Slender Deutzia
Eleagnus longipes	Goumi
Exochorda grandiflora	Pearl Bush
Forsythia suspensa	Golden Bell
Halesia tetraptera	Snowdrop tree
Itea Virginica	Virginian Willow
Kerria Japonica	Kerria
Ligustrum vulgare	Common privet
Paulownia imperialis	Paulownia
Prunus cerasifera var.	Purple-leaved Plum
(Prunus pissardi Hort.)	
Prunus Japonica	Flowering Almond
Prunus tribola	Flowering Plum (double)
Spiraea Arguta	Arguta Spiraea
Spiraea Thunbergii	Thunberg's Spiraea

The plants of certain of the above-named varieties made a good growth each year but did not blossom unless given thorough winter protection. In this class are Bladder Senna, Flowering Almond, Flowering Plum and Golden Bell.

COMMERCIAL APPLE GROWING BEGINS IN WISCONSIN

Increased Interest in Apples in Early 1900's Leads to Commercial Planting by 1910

T^N his annual report to the Wisconsin Horticultural Society in 1911, Secretary Frederic Cranefield made the following statements in regard to commercial apple growing in Wisconsin:

"Nearly one thousand acres of apples will be planted in Wisconsin in the spring of 1911 and an equal or greater acreage of cherries. This refers only to commercial orchards of 10 acres and upward. If the home orchards were to be counted, this acreage would be more than doubled. Of this, nearly four hundred acres will be planted by orchard companies and the remainder by individuals in lots of 10 to 50 acres. When we add to this what we already have, the Melville plantation of 60 acres, the Knight orchard of 135 acres, the hundreds of orchards of 5 to 40 acres, even the most skeptical must admit that we are 'going some.'

"Not in 20 years, never, in fact, since the first apple tree was planted in Wisconsin has there been so much real interest manifested in fruit growing as during the past year and this in spite of the most disastrous season in 75 years.

"Wisconsin indeed has arrived! Probably the most encouraging feature of the movement lies in the fact that with possibly one exception every dollar invested in the new planting is for the purpose of raising fruit and not for the purpose of promotion of 'unit share' schemes.

"While there is scarcely a county or a township in the state that does not afford more or less land suitable for small fruits or orchards yet three counties are distinctly in the lead in the 'new movement'; viz., Door, Bayfield, and Crawford and these three are destined to be the fruit counties of Wisconsin.

"Door County is now known as the cherry county, and while the orchards so far planted are mostly in the vicinity of Sturgeon Bay, the time is near at hand when extensive orchards will be planted all the way from Sturgeon to Ellison Bay and on Washington Island.

"Crawford County, with its thousands of acres of clay ridges, is at last coming to be recognized as one of the very best apple regions in the United States. The recently organized Gays Mills Fruit Co., which has acquired 130 acres of land all of which will be planted to apples within the next five years, is but the forerunner of other similar company and individual orchards which will enrich the hillsides of the picturesque and beautiful Kickapoo region."

Wisconsin Growers Not Impressed With Western Apple Regions

This period of commercial planting coincided with the development of extensive apple plantings in Oregon and Washington. In 1910 a number of Wisconsin fruit growers traveled to those states, and then reported at the annual convention on their observations and experiences. Their conclusion was that they would prefer to grow apples in Wisconsin—and so they did.

Large Acreage in Door County

In his report to the Society in **1912**, Secretary Cranefield made the following statement:

"Door county now has about 2,000 acres of cherries, to be exact $1,998\frac{1}{2}$ acres, and fully as much more will be planted during the next two years. Twenty-two cars of cherries, averaging 512 cases, and 48 carloads of strawberries of 512 cases each, were handled by the Sturgeon Bay Fruit Exchange this year. This, as can be readily seen, is but a beginning.

Strawberries at Bayfield

"Twenty-five carloads, 12,499 cases, of strawberries were handled by the Bayfield Fruit Shippers Association, which brought tde growers an average net price of $1.50\frac{1}{2}$ per case."

THE CODLING MOTH COMES TO WISCONSIN

Pest Serious In 1902

W^E find frequent mention of codling moth and apple scab damage in the 1880's. By 1900 codling moth had become so numerous that they were a serious problem. In the annual report of the Wisconsin Horticultural Society for 1902, Mr. Wm. Toole of Baraboo made this statement:

"The extremely hot weather had prepared us to expect a premature dropping of fruit, but gouger and codling moth were doing more to make good apples scarce than the off-year and hot weather combined. If it is true that damage to fruit by these insects can be prevented by spraying, then many hundred dollars were lost to Sauk county orchardists the past season by neglect. We could have saved enough in our counuty by spraying to have provided outfits and insecticides for all the orchards in Wisconsin."

Today the question is often asked, "Why can't we grow fruit without spraying as we did many years ago?"

The answer, of course, is that apple scab and the codling moth have become so well established throughout the apple-growing regions of the United States, that it is impossible to grow the fruit free from these pests without spraying.

HORTICULTURE AT THE UNIVERSITY Prof. J. G. Moore Becomes Chief of the Department, and Outlines the Work in Horticulture at the University

FOLLOWING the untimely death of Prof. E. S. Goff in 1902, Prof. E. P. Sandsten was chief for a time, and on his resignation Prof. J. G. Moore became Chairman of the Department in 1909.

Prof. Moore outlined the work of the Horticulture Department in an address to the Wisconsin Horticultural Society at the summer meeting held in Oshkosh, August 16, 1911. The following are some of his remarks pertaining to the work in horticulture at the University:

"While teaching is a very important part of our work, it is by no means the only line in which we are trying to do something for the state of Wisconsin. Our organization is placed under three heads, exclusive of executive work—instruction, extension, research and station work. Extension and station work come so close together that it is difficult to draw any hard and fast line separating one from the other.

"We usually speak of teaching work first because it is a line of work in which we have a chance to meet by far the largest number of people who are particularly interested in the lines of work which we follow. The teaching work in the department is not an entirety of itself, that is to say, in the college we have no course, or so-called course in horticulture. Anyone entering the university to take up work in the College of Agriculture is obliged to take other work besides pure horticulture even if he is desirous of taking only horticultural subjects."

Gradually the work in research and extension increased with the addition of more members to the staff.



Prof. J. G. Moore, Chairman, Department of Horticulture, Wisconsin College of Agriculture.

The Three Periods of Horticultural History in Wisconsin

A^S we study the history of horticulture in Wisconsin, we find that it may be divided into three distinct periods, as follows:

Development of the Home Orchard

The first period began in the pioneer days when early settlers brought in fruit trees or seeds to plant a home orchard, and continued through the testing of varieties in an effort to find kinds that would be hardy in this state. It continued through the beginning of the commercial orchard period which Secretary Frederic Cranefield describes in his report given in this history.

During these days there were no experiment stations with scientists devoting their full time to research in horticulture. The testing of new varieties and the making of new discoveries were the work of earnest, devoted horticulturists who spent much of their time and money in the trial and error method of investigation.

The Wisconsin Horticultural Society during this period had a small membership, often less than 100. However, these men were devoted to the cause and thousands of home orchardists throughout the state received the benefit of the work that was done.

The Second Period-The Commercial Orchard

In the late 1900's the horticultural picture changed. Commercial small fruit-growing had been developed and large orchards were being planted. Many horticulturists thought that it was the end of the day of the farm orchard, and the beginning of commercial orcharding. While this was true to some extent, nevertheless the farm orchard did not pass out of the picture. However, commercial fruit growing continued to develop rapidly and is still expanding in this year of 1943.

This period also marks the beginning of the scientific investigation of the problems of horticulture, as well as other branches of agriculture. Experiment stations were being expanded rapidly throughout the United States. Scientists added their findings to the experience of leading horticulturists at the conventions. There was an increase in the organization of horticultural clubs and societies.

During this period which lasted until the late 1920's, the Wisconsin Horticultural Society, under the secretaryship of Frederic Cranefield, increased rapidly in membership, until from approximately 200 or less it had reached a membership of more than 2,000.

Because of the interest in commercial orcharding, the experimental or trial orchards and small fruit stations had been very valuable. As a result, the legislature was willing to increase the appropriation to the Society. There came a time, however, when the trial orchard was no longer of value, because it had served its purpose. As soon as it was definitely decided which varieties were suitable to a certain region and which were not suitable, the greatest value of this project had been achieved. Then came the problem of orchard practices such as pruning, insect and disease control, soil management, and better marketing. The solution of these problems was definitely the work of the scientists in the experiment stations.

Beginning of Third Period

In the late 1920's, came the first indication of the beginning of a new period, when the Executive Committee of the Society recommended a change in the program of work as already described above. It was this demand for a complete change that led to the resignation of Mr. Frederic Cranefield as secretary, and the beginning of the third or last period.

Development of Horticultural Organizations

Important developments during this third period included the following:

(1) A rapid expansion of horticultural research by experiment stations, not only in Wisconsin, but throughout the nation, and we might say the entire world. One has only to read the massive volumes of reports issued each year by the American Society for Horticultural Science, containing often as many as 1,150 pages, to realize the amount of work that is being done to solve the problems of horticulture.

Trained men are now doing the work that was formerly attempted by commercial growers and amateurs who were not well equipped to make the necessary discoveries to solve the problems of the industry.

(2) In Wisconsin another important advance was made by the Horticulture Department, Wisconsin College of Agriculture. This was the organization of farm orchardists into spray rings and county fruit growers' associations. The organization was done under the leadership of Prof. J. G. Moore, Chairman of the Horticulture Department, and directly by fruit extension specialist C. L. Kuehner.

The reason for the failure of the farm orchard before this time had been the inability of the farmer to produce marketable fruit because of increase in injury from insects and diseases such as codling moth and apple scab. Individual farmers were not able to purchase power sprayers to carry on an efficient spray program. Mr. Kuehner organized spray rings with the aid of the county agents in many counties. The rings purchased suitable sprayers, and the operators were instructed in correct spraying methods. Pruning demonstrations were given, and consequently many farm orchards became profitable.

A Period of Specialization

When H. J. Rahmlow became secretary of the Society he soon realized after some study that horticulture had entered a period of specialization. On looking over the programs at conventions before this time, it will be found that each program consisted of talks on all branches of horticulture. The early horticulturists had often been growers of all kinds of fruits, such as apples, plums, strawberries, raspberries, and had often been interested in flower growing; but this was no longer the case. Commercial iruit men were growing one or two kinds of fruit. the Farm orchardist was a dairy farmer with a small orchard as a side line, or perhaps he was exdusively a strawberry or a raspberry grower. Although it was a period of increased development of garden clubs, these clubs were not interested in fruit growing.

The majority of the Board of Directors of the Society concurred with the secretary in the opinion that a change was necessary, not only in the organization, but in the type of program carried on by the Society.

Organizaton of the Wisconsin Garden Club Federation

In 1928 the Society decided to hold a special summer meeting for those interested in gardening. A meeting was arranged at Lake Geneva, and this is fully described in the history of the Wisconsin Garden Club Federation. The final organization of the Federation took place at the annual convention of the Horticultural Society in Milwaukee on December 5-7, 1928.

The reason for the Society's being interested in the organization of a Garden Club Federation was because it was felt that a union of clubs having the same interests, with a separate group of officers, would lead to the rapid expansion and development of that phase of horticulture. The garden clubs, now under the leadership of the Federation officers and Board of Directors, affiliated with the Horticultural Society because they saw many advantages in so doing.

Fruit Growers Organize

Affiliation of other state-wide groups soon followed. The county fruit growers' associations organized the Southeastern Wisconsin Fruit Growers Association and became affiliated with the Society. The Wisconsin Beekeepers Association did likewise, as did the Wisconsin Nurserymen's Association.

Membership increased very rapidly in the 1930's. In 1927 there had been less than 1,000 paid-up members. By the late 1930's there was an increase to approximately 5,000 members.

Change in Policies

The policies and entire function of the Society now underwent a number of radical changes. These changes may be enumerated briefly as follows:

(1) Specialized programs at the annual convention of the Society with separate sessions for the fruit growers and garden club members.

(2) A decided change in the kind of papers presented at conventions. With the development of researchers and experiment stations, horticulturists were interested in their findings, and so specialists from the Wisconsin Experiment Station as well as those of other states appeared in increasing numbers on the programs.

(3) The annual report of the Society was discontinued because of the high cost and the increase in membership, and because the important papers could be presented in *Wisconsin Horticulture*. The magazine was increased in size and carried departments for each branch of horticulture represented in the Society.

(4) The policy of the Society now became one of letting each branch of horticulture, through its special organization, manage its own business affairs. The Society, however, was to help each affiliated group in its educational program. A glance at the list of affiliated state and local organizations composing the Horticultural Society in 1943, as presented in this volume, will show the extent of the development of organizations and the vast amount of work which the Society is already doing and the even greater possibilities ahead.



The Racine County spray ring display of apples at the Racine County Fair.

Trial Orchard Work Expanded

EXPERIMENTAL or trial stations for fruits were first established by the Wisconsin Horticultural Society in 1890. At the meeting of the Wisconsin Horticultural Society held in Madison February 3-7, 1890, Secretary B. S. Hoxie reports that a committee had been appointed at the State Fair in 1889 to confer with Profs. Goff and Henry of the Wisconsin College of Agriculture, with reference to local fruit experiment stations. This committee met in Madison in November, 1889, and requested Mr. Wm. Springer, Mr. A. L. Hatch, Mr. A. J. Philips, and Mr. Geo. H. Robbins to continue the planning under the direction of Prof. E. S. Goff.

A motion was passed at the convention that a committee consisting of President J. N. Smith of Green Bay, Secretary B. S. Hoxie of Evansville, and B. F. Adams of Madison act with Prof. W. A. Henry and Prof. E. S. Goff to fully mature and complete all necessary plans for experiment stations.

This resulted in three stations being established. One was at *Sparta*, Wisconsin, with Mr. M. A. Thayer as manager. A number of varieties of apples, raspberries, blackberries and strawberries were set out in the spring of 1890.

Another station was established at *Ithaca*, Wisconsin, with Mr. A. L. Hatch as manager. There were 16 kinds of apples, two Russian pears, one plum, one chestnut, six black raspberries, and 12 varieties of strawberries.

A third station was established at *Weyauwega*, with Mr. Fred A. Harden as manager. This station also had a complete list of tree fruits and small fruits.

Valuable Information Gained

The three trial stations established in 1890 continued to provide information for the following six or seven years. Each year, the manager of the trial station, as well as a special committee, reported on results. They mentioned varieties which were unsuited to local conditions, and varieties which proved to be desirable. However, as is always the case, these stations eventually lost their usefulness. Many unsuited varieties died and were removed. Those which proved hardy and productive were reported on and the facts became a matter of record. The stations were later discontinued and in 1897, another and more up-to-date trial station was established in Wausau.

From 1897 until 1913 additional trial and demonstration orchards were established at regular intervals. This proved a desirable practice because facts learned from one venture could be used in establishing others.

Location of Later Trial and Demonstration Orchards

Wausau, Marathon county, 10 acres	Established	1897
Poplar, Douglas county, 7 acres	Established	1904
Maple, Douglas county, 3 acres	Established	1906
Manitowoc, Manitowoc county,		
6 acres	Established	1907
Gays Mills, Crawford county,		
8 acres (1A Grapes)	Established	1907
Whitehall, Trempealeau county,		
5 acres	Established	1908
Lake Geneva, Walworth county,		
8 acres	Established	1908
Sparta, Monroe county, 1 acre		
(Grape Station)	Established	1908
Pewaukee, Waukesha county,		
3 acres	Established	1912
Baraboo, Sauk county, 3 acres	Established	1912
Holcombe, Chippewa county,		
3 acres	Established	1913

TRIAL ORCHARD REPORT By N. A. Rasmussen

Reports were made by the trial orchard committees at practically every convention throughout the history of the Society. A report made by Mr. N. A. Rasmussen of Oshkosh in December, 1914, is of special interest, because it presents a keen analysis of conditions in the various orchards and a picture of what happened to them over the years. Below is a condensation of Mr. Rasmussen's 1914 report:

Report of Trial Orchard Committee December, 1914

Manitowoc Orchard

"At Manitowoc, trees had made a good growth; there was some blight and foliage injury but trees were in fairly good condition. Many of these trees are headed too high and badly crotched, many of which had split. Still the orchard shows that apples can be profitably grown at Manitowoc. The cherry orchard has been abandoned entirely as a complete failure, showing that cherries cannot be grown on the light sand in that section.

Gays Mills Orchard

"At Gays Mills the trees showed the same fine growth and vigor as in the past, with some very fine fruit. All varieties are doing well except the McMahan; these had blighted considerably but all blighted portions had been removed. This work will be watched with interest by many, as blight and its control is a very serious problem just at present. Grapes were also in excellent condition here. This orchard proves that commercial fruit growing can be successfully and profitably carried on in the Kickapoo region.

"The Medford orchard has been abandoned.

The Whitehall Orchard

"At Whitehall the apple trees on the top of the hill had not made as good growth as those on the hillside; this I think is due to the richer soil on the slope or rather the trees on the slope are getting the benefit of the fertilizer placed on the higher land. Here we found some blight and also some foliage injury; showing that spraying had not been as thoroughly done as might have been. This is probably due to the fact that the man in charge is a practical farmer, not an orchardist. This again reminds us that it is 'the man behind the tree.'

Lake Geneva Orchard

"At Lake Geneva the cherry trees, Early Richmond and Montmorency, were in good condition, showing fine foliage and plenty of fruit-buds. The trees showed good care and promise of a large crop for next year. The apple trees, however, are in a somewhat different condition. They have the wrong habit; one straight shoot from the terminal bud and no side shoots whatever but plenty of upright. The Talman Sweet, which proved to be Price's Sweet, have blighted badly, and have spread the blight, I think, to other nearby trees. About half these trees were removed last spring and were replaced by other varieties and I think the remaining portion will follow the others in 1915. Something must be done to bring these trees into bearing. One member said, 'They are starved, feed them and we'll get some fruit.' Another suggested, "Sow clover, check the growth, that would be my remedy," and the third agreed to compromise. He said, 'Treat half to a good coat of barnyard manure, sow the balance to clover and see if we can get some fruit and what kind.'

The Wausau Orchard

"At Wausau this year the crop was light but the orchard has done its duty; it has proven to the people of Marathon county that fruit can be profitably grown for home use and for the local market. It has also proven something of more importance. I think the orchard originally contained 138 varieties of apple trees, besides cherries and plums. When the time came to sell the crop the buyers placed the value on only a few varieties, such as Wealthy, Duchess and McMahan and perhaps one or two others. They said the balance would not more than pay for the picking. The crop would always have commanded a better price had there been only a few standard varieties-a good lesson for all Wisconsin as well as for Marathon county.

The Poplar Orchard

"At Poplar the orchard is still improving, showing that if this heavy clay soil is well drained, spraying, cultivating and pruning is properly done, such varieties as Duchess, Wealthy and Hibernal will give fairly good results in that section. Native plums in this orchard make good growth, produce some good crops of fruit but often get caught by frost before ripening.

The Maple Orchard

"The Maple orchard, though only a few miles away, is not doing quite so well. We will not blame the man in charge for this as the soil is not so well adapted to orcharding.

The Sparta Vineyard

"The vineyard at Sparta seems to be going astray, growing wood rather than fruit. New methods will be tried here to see if conditions cannot be altered.

The new orchards at *Baraboo*, *Pewaukee* and *Holcombe* are doing well. These have been planted to standard varieties of trees and all modern methods of pruning and cultivating will be followed in these orchards in hope that in future years they will be the finest in the land.

Poplar Trial Orchard Proves Many Varieties Not Hardy

Mr. P. A. Peterson, Superintendent of the Poplar Trial Orchard, reported at the annual convention in 1921, that commercial fruit growing in Douglas county was not feasible. The following are some of his remarks:

"The Poplar Trial Orchard has been, intermittently at least, the subject of much discussion and controversy ever since it was planted.

"Permit me to give a brief history of the Poplar Orchard: The first block of five acres was planted in 1904 and about the same amount in 1905, but a year or two later it was reduced to eight acres, its present size, and a three-acre trial orchard started at Maple.

"About thirty varieties of apples and crabs were set out, five or six of native plums, and three or four of cherries.

"Right from the beginning most of the trees showed a slow growth and commenced to 'black heart.' In a couple of years after planting we had only six or seven varieties of apples left; most of the plums and only two or three cherry trees. Of the varieties of apples now growing, there is only one that appears entirely hardy and that is Hibernal. The others come in about the following order: Duchess, Dudley, Patten Greening, Longfield (too small to have any commercial value), Wealthy and McMahan. I would also like to include as being fairly hardy Yellow Transparent. These have not been tried out in the Poplar orchard, but there are some in the Maple orchard and I planted some about twenty years ago. They seem fully as hardy as Duchess and so far have been free from blight. Of the McMahan only a few trees remain, but these seem to do fairly well. The Wealthies commenced to show signs of canker blight and decay several years ago and those of the original plantings are about 'all in.'

"The Duchess and Patten Greening, of which varieties we have the most trees, are also showing disease and are gradually dying out, so, if this orchard is to be maintained, it will be necessary in the future, as in the past, to replant many trees each year.

"The plums have done fairly well and for a time it looked as if they might prove profitable, but late spring frosts or early fall frosts have caught them several times, so only four crops have been marketed in 16 years.

"The Surprise, Wyant and DeSoto are the most dependable, in order named, with the taboo on Rockford.

"Last August I visited orchards at Oshkosh, Baraboo and Gays Mills, and, comparing them with our trial orchard at Poplar, I found that the trees had a healthier and smoother bark and that trees ten to twelve years old were as large as ours at sixteen, and came into bearing at an earlier age.

"I firmly believe that any farmer in our county, except on some of the light sandy soils, can have a nice little home orchard of twenty or thirty trees if he will plant the proven hardy kinds and plant them properly, prune, cultivate, fertilize, and, when they come into bearing, spray."

Report From Mr. Peterson in 1943

In August, 1943, Mr. P. A. Peterson of Poplar, wrote in regard to the varieties in the trial orchard as follows:

"Probably a little more than half of the trees remain at this time. They were planted too closely (20 feet square). The varieties remaining are, in order of hardiness, Duchess, Patten Greening, Hibernal, Dudley, McMahan, Wealthy, and N. W. Greening. Of the latter we have only a few left and while the fruit looks good, they mature too late for good quality.

"Our best crop came during the years 1916 to 1930."

THE BEST RUSSIAN APPLES FOR WISCONSIN NAMED IN 1898

IN the Wisconsin Horticulturist for September. 1898, we find a discussion of Russian apple varieties. A commission composed of delegates from Minnesota, Iowa, South Dakota and Wisconsin met in La Crosse in August of that year to consider them. Wisconsin's delegates were A. J. Philips, secretary, and A. G. Tuttle of Baraboo, who was stated to have a national reputation as a grower of Russian apples. Members of the commission included such prominent men as Prof. S. B. Green of Minnesota. C. G. Patten, then of Iowa, and Prof. N. E. Hansen of Brookings, South Dakota.

The following decision was published by the commission:

Nearly Identical Varieties Arranged in Groups

"It was decided that all the Russian apples that are nearly identical be arranged in groups or families, the members of each group to be called by the family name. For instance, Hibernal, Lieby. Juicy Burr, and similar kinds, shall all be known and propagated as Hibernal; all varieties that are of the Longfield type shall be called Longfield; the Yellow Transparent, White Transparent, Red Duck, Charlottenthaler, Enthaler and others shall all go by the name Transparent."

A List of Russians For Wisconsin

Mr. Tuttle of Baraboo named the following as the best six Russian apples he has tested, the varieties being in order of their value: Longfield, Anisim. Antonovka, Beautiful Arcade (sweet), Lowland Raspberry, Repka Malenka (for late keeping).

The Minnesota State Horticultural Society varies this list. At their December meeting only three varieties were recommended for general cultivation. Duchess, Hibernal and Charlamoff.

Comments On Russian Varieties

Looking at these statements in the light of our knowledge in 1943, one cannot help wondering why these men paid so much attention to the Russiar, varieties which were of such low quality even though hardy, and failing to try out the one variety at least that has become Wisconsin's leading apple, the Mc-Intosh. None of the Russians are being grown, or at least being planted today in Wisconsin with the exception of the Hibernal as a hardy stock for Delicious and some other varieties. Even the Yellow Transparent, which lived the longest, is now being replaced by McIntosh seedlings such as Melba, Early McIntosh and Milton.

Considering that the McIntosh had been in existence for more than 75 years in 1898, how did they miss it? We are speaking, of course, only for Wisconsin. The McIntosh is not the leading variety in some of the other states represented on the commission, but they too have largely dropped the Russian varieties.

Apples of Wisconsin Origin

TN pioneer lays the easiest way to start an orchard was to plant seed. Even to this day there are thousands of seedling trees scattered throughout the woodlots of Wisconsin. A hunter or anyone walking over undisturbed soil might throw the core of an apple on the ground and the seed produce a tree of unknown origin and character.

It is well known that fruit trees grown from seed do not produce fruit of the same kind as the parent. The reason, of course, is that cross pollination of the blossoms results in seeds which produce seedlings.

During the past ten or more years the Wisconsin Horticultural Society has held seedling apple shows at its annual convention. As many as 125 seedlings were exhibited at one convention. The judges have found a number of them which in quality are superior to many of the named varieties today, but not better than the best. It is a long, slow process to introduce a new fruit variety. Not only must the quality and color of the fruit be good, but the tree must be hardy, productive, resistant to disease, and of annual bearing habit to be fully satisfactory. To determine these qualities requires years of study and for that reason none of the seedlings discovered in recent years have met with acceptance on the part of growers. Instead, we have turned to new varieties introduced and tested by scientists at experiment stations and even here it has required many years before a new variety met with full approval.

Early Wisconsin Apples

Eight varieties of apples were named in the early days and found acceptance by growers. We present here a short history of each of them.

Apples of Wisconsin Origin Win Wilder Medal

Apples of Wisconsin origin won the Wilder Medal on an exhibit made at the meeting of the American Pomological Society in 1909.

Prof. J. G. Milward attended the annual convention of the American Pomological Society held at St. Catherine's, Ontario, Canada, September 14 to 17, 1909. It was the first time the Society had me outside the boundaries of the United States.

As a delegate, Prof. Milward reported at the annual convention in 1910 as follows:

"In connection with the American Pomological meeting a joint fruit exhibit was held with the local society at St. Catherine's. Your delegate entered an exhibit of apples to be passed upon for merit and for the Wilder medal. The exhibit included the apples of Wisconsin origin—Northwestern Greening, Wolf River, McMahan, Windsor Chief, Pewaukee, Milwaukee, Gem City and Newell. Professor Taylor of the Department at Washington passed upon the exhibit and awarded the Wisconsin State Horticultural Society the Wilder silver medal. Much favorable comment was passed by experts upon the apples exhibited, and the apples shown compared very favorably with any shown in the hall."

Origin of N. W. Greening Apple

Of all the apple varieties originated in Wisconsin, the N. W. Greening became the most popular and the most widely grown.

It originated near Iola in Waupaca County, and was introduced by E. W. Daniels of Waushara County in 1872.

In the annual report of the Society for 1895, A. J. Philips of West Salem, then secretary of the Society, tells of visiting Mr. Daniels, then 84 years old. He stated:

"You all remember him; he always used to come to our meetings and bring his N. W. Greenings. I supposed the N. W. Greening originated in Waushara County, but learned, while visiting Mr. Daniels that it originated at Iola, in Waupaca County. I find wherever the Greening has been planted that people like it, because as it grows older it grows better."

The Wolf River Apple

The Wolf River apple was originated by W. A. Springer, near the Wolf River and the village of Fremont, Wisconsin, hence its name.

In the annual report of the Society for 1875 we find the statement that "W. A. Springer of Fremont sent in a box of apples for exhibit, mostly seedlings, including the Wolf River which was large and red, with light yellow; tender, good flavor, and appeared to be a seedling, some like the Alexander."

It was therefore grown before 1875 and had already been named by that year.

The Wolf River was widely disseminated in the early days throughout the northern United States, especially in New York State, and of course, Wisconsin. It was one of Wisconsin's leading apples in the early days and largely superseded Alexander. The tree was very hardy and a good grower, and yielded good crops. The fruit was very large and sold well because of its attractive appearance. Therefore growers found it a profitable variety.

In late years it has been superseded by such varieties as McIntosh. It is considered a little too large in size for market use today.

THE HISTORY OF THE MCMAHAN APPLE

Presented by C. A. Hatch, Richland Center at the Annual Convention of the Society in 1905

The seed that produced this beautiful apple, and its twin, the McMahan Bloom, was planted by Mrs. Isaac McMahan in her garden, in 1860, the seed being obtained from a large red apple coming from Ohio, presumably an Alexander. The McMahans lived in the Town of Bloom, Richland County, one mile from what was then known as West Branch P. O. on the West Branch of Pine river.

In the fall of 1869, McMahan exhibited the two apples at the Richland County Fair, held in Richland Center. The fruit was so large and fine many could not believe it was a seedling, but A. L. Hatch, brother of the writer, visited the farm during the following winter and was so sure of the trees being seedlings he cut all the scions and sprouts from the roots and it was through these scions the varieties were introduced to the public through the Richland County Nursery, carried on by the late S. I. Freeborn and A. L. Hatch, now of Sturgeon Bay, Wisconsin.

In the year 1870, the Richland County Horticultural Society, at the request of Freeborn and Hatch, named the white apple McMahan's White and the red one McMahan's Bloom. The Bloom proved to be undesirable on account of blighting so freely and is no longer propagated. The McMahan's White proved so satisfactory that it became one of Wisconsin's leading varieties in the early days.

The **Pewaukee**

The Pewaukee apple was originated by George P. Peffer, Pewaukee, Wisconsin, by crossing the Duchess with the Northern Spy. It was first brought to the notice of fruit growers about 1870. As can be expected from its parentage, it is a very hardy variety, although it has not proven as hardy in the North and Northwest as was at first expected, being somewhat inferior to Wealthy in this section.

Its quality is fair to good for culinary or dessert use. It never became widely disseminated in Wisconsin or any other state.

The Windsor Chief

The Windsor Chief is reported to have originated in Wisconsin, but we have been unable to find any record of its origin.

History of the Gem City Apple

While the Gem City apple has never become extensively grown in Wisconsin, it is nevertheless interesting to note that at one time it was considered very promising and there are trees of this variety in Wisconsin orchards today. The seedling was discovered by the Society when in February, 1905, a premium was offered for "Best new apple named (locally) and in bearing for five years but not on Society fruit list."

The award was made to Mrs. Robert Ramsey and Mr. A. D. Brown of Baraboo, the apple being entered under the name "Townsend." This name, however, was abandoned because another Townsend apple had been in existence for more than 100 years. The name "Gem City" was therefore adopted.

The following statement was made by Mr. William Toole of Baraboo at the meeting in 1905:

"The original tree of the Gem City (Townsend) apple was a chance seedling which came up close to the house of Mr. Charles Dickinson, now dead, whose farm was near Dodgeville.

"The young tree being in the way, was cut down twice, but the third growth was allowed to stay until it had borne fruit. Mr. George Townsend of Baraboo, while visiting with Mr. Dickinson, was much attracted by the fruit, believing that it was a seedling of more than ordinary promise. Mr. Townsend seems to be the only one who realized at that time the possible value of the apple. He procured some scions and eighteen or twenty years ago planted two young trees in his orchard from this grafting. These trees seemed to be as hardy as any of the Russian varieties of which this orchard largely consists. Mr. Townsend distributed young trees of his own grafting to various persons, among them A. D. Brown and Mrs. Robert Ramsey, who exhibited from trees about fifteen years old, the fruit which attracted so much attention at the winter meeting of the Wisconsin State Horticultural Society in Madison, February 9, 1905."

The Milwaukee Apple

The apple variety Milwaukee was originated by George Jeffry, of Milwaukee, Wisconsin, from seed of the Oldenburg, or Duchess. In appearance it is a clear yellow, marked with bright red, somewhat after the manner of the Duchess. It is too tart for a good dessert apple, but suitable for culinary use.

The tree is very hardy, a good grower, and producer. It has never become widely disseminated.

The Newell Apple Originated Near Baraboo

At the annual convention in 1909, Mr. Wm. Toole of Baraboo reported on the origin and history of the Newell apple which was formerly known by the Society as the Orange Winter.

"Originated from seeds planted by Mr. Orange Newell in the town of Fairfield, about four miles north of the city of Baraboo. The seed was planted about sixty years ago, and I find, as is apt to be the case, that the younger members of the family have not paid much attention to these things, so they cannot tell much of the history.

"The first time that it was brought to the attention of the public, Mr. Orange Newell brought the fruit to the Sauk County Fair.

"A time came when it seemed desirable to make a change from the old name of Orange Winter to Newell, because of the confusion likely to result as between this and Fall Orange."

Others reported that the Newell was not a good dessert apple, but was very good for cooking purposes. In season it was late, being marketed around Thanksgiving. However, growers stated that it had no place in commercial orchards in Wisconsin, and the variety soon disappeared from nursery lists and is now no longer being planted.

The McIntosh Apple Comes Into Its Own Variety Discussed Thoroughly by Society in 1907

It is unfortunate that the McIntosh apple which is probably Wisconsin's leading commercial variety in 1943, was not more widely tested in the early days of the Society. The variety was first discovered by Allan McIntosh on his homestead in Dundas county, Ontario, Canada, about 1811. It slowly gained recognition but not until 1870 did Allan McIntosh, son of the homesteader, begin propagating it. By 1907 it was widely disseminated in New York State, and considered one of the leading varieties.

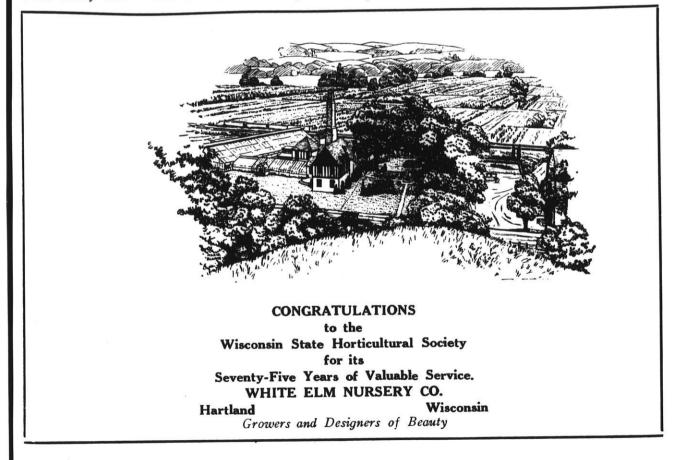
The Russian varieties and the hardy seedlings of Wisconsin had all been thoroughly discussed by the Society previous to 1907. In that year Mr. Frederic Cranefield changed the policy of the Society. Instead of discussing all known varieties at any one meeting, he took up a thorough discussion of one promising variety. So in the transactions for 1907, we find Mr. R. J. Coe, nurseryman of Fort Atkinson, and D. E. Bingham of Sturgeon Bay, discussing the McIntosh.

Mr. Bingham compared the McIntosh with the popular Snow apple. At the conclusion of his remarks he made this statement:

"I would sum it up about like this. For the thorough, practical commercial fruit grower the Fameause in my estimation still holds its place in the orchard.

"With my observation and experience the Mc-Intosh Red will no doubt give the amateur grower and the farmer better apples, less scab, larger apples and a better selling article when he has a surplus to dispose of.

"For us all I think the McIntosh deserves a place in every orchard with the Duchess, Wealthy, McMahan and N. W. Greening to the exclusion of many varieties that have no valid claim to a place."



Short History of Strawberry Growing at Sparta

Reported by Mr. F. Kern in 1921

WE HAVE heard a great deal about strawberry growing in the Sparta and Warrens section of Wisconsin. Berries have been grown there for many years. A brief history of strawberry growing at Sparta, presented by Mr. Frank Kern, manager of the Sparta Fruit Exchange, at the annual convention in 1921 will therefore be of interest.

Flood Market With Twelve Cases

"Back somewhere in the seventies, a Mr. William C. Wells began growing strawberries commercially in the town of Sparta, and one year he had two or three wagonloads. They were picked in tin pails and sold by the pail, or by the quart, and poured out of these tin pails. Mr. Wells is known to us as the pioneer fruit grower of Monroe county. About 1880, or possibly a year or two earlier, E. W. Babcock, who had planted a few berries, got in a few old style 24-quart crates and in 1880 began shipping to Minneapolis, and that year glutted the Minneapolis market. He shipped to C. G. Hillman, in one shipment, 12 of these 24quart crates of strawberries and received a letter something like this: 'Received the berries and sold them at pretty good prices but would advise you to be a little careful about making such heavy shipment to this market in the future.'

"From 1880 to 1909 there are no records of the fruit business available at this time, but it is a known fact that the strawberry industry grew and grew. From 1903 to 1907 growers began to drop out of the fruit business in this section, turning their attention to dairying on account of the very low prices then prevailing for strawberries, as low as 50 cents for good berries.

Growers Organize

"In 1896 a selling organization was formed, known as the Sparta Fruit Growers' Association, which continued in business until their charter expired, in May, 1919. This organization had no power to regulate the grading and packing of berries and for a number of years in its early history did very little selling, merely looking after the loading—each grower having his name on the crates shipped and returns being made direct to each grower.

Why Organization Was Needed

"Buyers from outside used to come to Sparta and at the very opening of the season, along about 1900, they used to buy from the grower on the street and several buyers from Minneapolis, for instance, would load their purchases all in the same car. These buyers were finally educatednot in Sparta-but before they came to Sparta each year. They would size up the situation and. after making good fellows of themselves for the first few days, when there was not enough fruit to go around, they would combine-'organize' and agree (among themselves) 'not to buy any berries today.' The growers would come in about the usual time with their loads and stand around on the street like lost turkeys. No buyers in sight, or, if they were in sight, they had orders from the house not to buy anything. But they would take the berries on consignment-just as a matter of accommodation to the grower-not that they wanted the berries. There was nothing else to do but consign to his house, as none were buying, and you know the rest of the story-about how the berries arrived 'soft,' many 'unsalable,' or it was rainy, bad weather and your berries 'struck an unusually bad market,' but 'we think by the time the next car gets here our market will clean up and we can probably please you on the next shipments.'

"Some of these growers have lived through all of this and are still in the business."

LEVERICH FRUIT FARM GROWS 15 ACRES OF STRAWBERRIES

AT THE annual convention of the Wisconsin Horticultural Society at Madison in 1920, Mr. Earl Leverich presented one of the important papers on the subject of "Strawberries Every Year." Some of his statements will give us an idea of the extent of his planting, and success in growing this crop. Here are a few of his remarks:

"I might say with much truth that I have partially, at least, grown up in the strawberry field. I cannot remember when we have not had at least five acres to pick each year, and for the coming season we have about fifteen acres.

"I am well aware that we have broken many old rules and methods brought along from the past in relation to the growing of a strawberry crop for profit, and some of our methods may be a severe shock to the sensitive strawberry nerves of some growers, but as a tonic for that distressed person. I have this suggestion — come to the 'Leverich Fruit Farm' during the picking season next June and eat of the fruit, and see about 100 pickers.

"We grow strawberries not one year, but every year. We had a crop the past season of nearly 3,500 16-quart cases from nine acres, with sales of nearly \$7,000."

HISTORY OF BERRY GROWING AT BAYFIELD

STRAWBERRY growing began in the Bayfield area a few years after the railroad reached there in 1883. According to Mr. Frank Holsten, one of the early pioneers, berry growing started in 1885. Among the early pioneers of those days were Frank Holsten, Harvey Nourse, and Nels Hagman, who started growing berries about 50 years ago.

Some of the varieties grown at that time were Bubach No. 5, Warfield, Senator Dunlap, Beederwood, and Wilson.

In 1898 Mr. Harvey Nourse grew 15 acres of strawberries, and hired 100 pickers to pick them. They picked 450 crates in one day.

Another large grower was Mr. John Hauser in association with his partner, Mr. Vollenweider. About 36 years ago they grew 22 acres of strawberries and employed 105 pickers.

The early days were the days of new soil, plenty of humus, and in most cases, good profits. There came a time, however, when many settlers began to grow berries. The Bayfield Peninsula Fruit Growers Association was organized. Then growers began to have their ups and downs. One pioneer recalls a hot day when there were six carloads of strawberries on the track, and no sale for them. This brought diversification in fruit growing and the beginning of the apple orchards, and raspberry growing in addition to dairying.



J. Earl Leverich, Sparta, President of the Society, 1927-28. Received recognition certificate in 1943.

NEW POLICIES ADOPTED BY SOCIETY

A N organization must keep abreast of the times. Unless this is done, and unless new policies are adopted to meet changing conditions, interest will lag and the organization cease to flourish.

Evidently these facts were realized by the Board of Directors of the Wisconsin Horticultural Society in 1925. And so they met and adopted some new policies aimed at rejuvenating the interest and work of the Society. The policies were published in the annual report for 1925, and also in Wisconsin Horticulture, April, 1925. We give here a brief and condensed report of the changes.

(1) The Society to enter into a vigorous campaign for the development of interest in ornamental planting for home grounds and civic improvement.

(2) Make a definite organized effort to stimulate the growth and activity of local horticultural and garden clubs.

Change Time and Place of Meeting

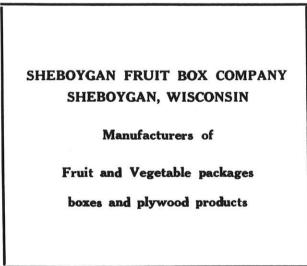
(3) That a more largely attended winter meeting be developed and for the following year the meeting to be held in November (formerly held in January and February), the week before Thanksgiving, and at some other place than Madison, the place selected to be one where active local cooperation can be secured.

(4) To conform with the spirit of the times, adopt a program to stimulate consumption of fruits and vegetables.

(5) Continue trial orchards until their purpose has been accomplished. Discontinue them when the proper time has come. There shall be no expansion of this department from now on.

(6) Adopt a budget system.

(7) Recommended hiring a part-time or full-time assistant for the secretary to make it possible to expand the usefulness of the magazine and to enlarge contacts with local horticultural groups throughout the state.



New Fruit Varieties From Experiment Stations Tested

A New Phase of Fruit Testing

THE first period of fruit variety selection by the early horticulturists consisted of testing varieties from many sources, and in planting seeds of these, from which seedlings by the thousand were grown.

The second phase consisted of testing the new seedlings and the best of the known varieties in trial orchards, by the Society.

The third period might be called the scientific era. It consisted of the Society's sending a committee of fruit growers to experiment stations in Canada, Minnesota, Iowa, and New York to study the varieties which had been introduced by the experiment stations, and having members test those of most promise. In this way, new varieties of merit from experiment stations have been selected by committees, and tested by growers all over Wisconsin.

Science In Fruit Breeding

Fruit breeding had taken a scientific turn. Scientists reasoned this way. If the McIntosh apple is the best variety for our conditions, then it should be a good parent from which to breed new varieties having additional desirable characteristics. These characteristics might be earliness, lateness, improved quality, or some other factors which the McIntosh lacks. One handicap is that the McIntosh does not hang to the tree well at picking time. Experiment stations at Ottawa, Canada, and at Geneva, New York, first used the McIntosh as a parent. One result was the Melba, introduced by the Ottawa Station, which is a very early summer apple produced as an open-pollinated seedling of McIntosh. It has become the leading early variety for Wisconsin. Two others from New York, are early McIntosh and Milton. Both are crosses of McIntosh and Yellow Transparent, and both are early and do well in Wisconsin.

A late McIntosh cross was produced at the New York Station by crossing this variety with Ben Davis, producing the Cortland, which hangs to the tree well and matures about a week later than McIntosh.

Fruit Testing Begun in 1931

In the March, 1931, issue of *Wisconsin Horticulture* it was announced that the Society would pay one-half the cost of two trees of the following varieties to any members of the Society who agreed to test them: *Melba, Lobo, Lawfam.* Scions were also sent for grafting on older trees. These varieties came from the Canadian Experiment Station. From the New York Experiment Station at Geneva came the following varieties: Cortland, Early McIntosh, Macoun, Newfane.

Minnesota variety: Haralson. Plums: Monitor, Underwood, and Tonka. Grapes: Minnesota # 11, and Fredonia. Raspberries: Chief, June, Viking. Strawberries: Beaver, Oshkosh, Bliss, Bouquet. Blackcap Raspberries: Logan and Quillan. Crab Apple: Dolgo.

Varieties for 1932

Early Apples: Melba, Early McIntosh, and Milton. Late Apples: Macoun, Medina, Orleans. Plums—Minnesota Hybrids: Monitor, Underwood, Tonka, and Red Wing. Pears: Beierschmidt and Patten. Grape: Fredonia. Strawberries: Aberdeen, Clermont, and Bellmar. Raspberries: Chief, June, and Viking. Blackcaps: Satisfy, Honey Sweet, and Quillan. Gooseberry: Fredonia. Currant: Minnesota No. 24.

Varieties for 1933

Apples: Secor, Newfane, Orleans, Macoun, Melba, Early McIntosh, Milton. Strawberries: Dorsett, Fairfax, Culver, Clermont, Everbearing, Wayzata. Red Raspberries: June and Newburgh.

Black Raspberries: Naples, Satisfy.

Plums: Stanley, Hall, Superior.

Currant: Red Lake.

Varieties for 1934

Apples: Melba, Milton, Orleans, Newfane, Secor, Macoun, Kendall, Sweet Delicious. Strawberries: Catskill.

Varieties for 1935

Apples: Melba, Milton, Kendall, Orleans, Newfane, Secor, Macoun, Sweet Delicious.

Strawberries: Dorsett, Fairfax, Catskill, Everbearing, Wayzata. For Commercial Planting in Wisconsin: Beaver, Premier.

Varieties for 1936

Apples: Melba, Milton, Kendall, Orleans, Newfane, Secor, Sweet Delicious.

Strawberries: Dorsett, Fairfax, Catskill.

Pears: Gorham. Hardy for the North: Parker, Patten, Mendel.

Plums: Superior and Stanley. Grape: Fredonia.

Varieties for 1937

Apples: Minnesota No. 1007. Beacon. Strawberries: Catskill.

Hardy Apricot trees from South Dakota Experiment Station.

Korean Cherries.

Raspberries: Taylor and Indian Summer.

Varieties for 1938

Grapes: Brocton, Hector, Yates, Seneca, Golden Muscat. Westfield.

Raspberries: Taylor, Marcy.

Varieties for 1939

Apples: Lobo, Hume, Alton. Strawberries: Mackenzie, Borden, Simcoe, Clari-

bel. Dresden.

Grapes: Eden, Athens, Buffalo, Van Buren.

Varieties for 1940

Raspberries: Taylor.

Strawberries: Dresden.

Apricot: Scout.

Grapes: Eden, Athens, Buffalo, Portland, Ontario. Apple Trees on Manchurian Rootstock: Cortland and Hibernal.

Varieties for 1941

Dwarf Apple Trees on Malling IX Rootstocks: Mc-Intosh, Delicious, Early McIntosh, Cortland, Wealthy. Apples: Alton.

Varieties for 1942

Apricots: Superb, Iowa.

Prunus tomentosa. Peaches: Sungold, Polly

Raspberries: Milton; the following from the Experiment Station, Ottawa, Canada: Nos. 262, 275, 272. 276. 264.

Strawberries: Borden, Louise, Claribel, Mackenzie.

A FEW RESULTS FROM FRUIT TESTING WORK

T TAKES many years before a new apple variety meets with acceptance by growers, and so results are slow in forthcoming, at least with tree fruits. Some of the results of this work are negative in that well advertised varieties were found to be unsuited to our climate or soil conditions. This information was given to members, resulting in saving of time and money to them and their neighbors. Some of the results have been quite positive and favorable.

The following are a few of the outstanding results of this work:

New Apples Replacing the Old

The apple varieties Melba and Milton met with a very favorable reception after our members began to produce fruits of these varieties in their orchards. and today both are considered the best early varieties of their season. They are recommended for planting in practically any part of Wisconsin.

Early McIntosh has been found good in some sections of the state where it develops a good size.

The Haralson apple from Minnesota has met with approval in central and northern Wisconsin as one of the best early varieties.

Macoun may become one of our best varieties providing it will produce well and come into bearing early enough, or methods of culture are found to give these desirable characteristics. It is a McIntosh cross of high quality.

Secor has met with approval from many growers as a very late keeping apple of high quality. It is recommended only for the southern part of the state because of its late maturity. It is an Iowa cross of Ionathan and Salome

Newfane and Orleans are crosses of Delicious from New York and have not met with favor, because they are not as good in quality as Delicious and have not seemed to have other desirable characteristics we want, such as hardiness and high productivity.

Kendall and Sweet Delicious, also from New York, are still on trial. Some growers consider the Sweet Delicious the best quality sweet apple they have grown.

Lobo and Hume from Ottawa, Canada, show promise in northern Wisconsin and may fulfill a great need in that section, especially around Bayfield.

Strawberry Varieties

Many varieties of strawberries have been introduced. However, new varieties are so quickly disseminated from many sources that the Society does not lay claim to much of the credit for introducing some of the new varieties.

The Beaver strawberry was grown extensively in Warrens and Sparta before this work was begun. Plants were disseminated to other sections, and wherever the soil was sandy and conditions favorable it has become the leading variety.

Many strawberry varieties were tested and found wanting. Information on this was given to our members and this no doubt prevented a loss to them because they did not grow such varieties.

Dorsett, Wayzata, Catskill and Dresden met with approval in some sections of the state. Varieties from Canada are still on trial and some show promise.

Raspberries

One of the few raspberries introduced for trial which met with approval is the Taylor from the New York Station. Many growers consider it an excellent variety for quality and size and find it sufficiently hardy. Many other varieties were found unsuited to our Wisconsin conditions. However, new varieties from the Experiment Station at Ottawa, Canada, are

showing considerable promise at this time. The early variety *June* was tested for a number of years by the Wisconsin Experiment Station and Prof. J. G. Moore recommends it highly.

Plums

The plum varieties from Minnesota were found to be satisfactory in many respects, but they have one fault in that they require certain varieties for pollination. These varieties are not always found in orchards. However, they are being extensively grown.

The variety *Stanley*, a blue plum from the Geneva, New York, Experiment Station, is a good cropper and has met with favor in southern Wisconsin.

Pears and Grapes

Pears and grapes are not extensively grown in Wisconsin. We believe many more could be grown, however. Not much information has been received from the varieties tested, largely because of a lack of enthusiasm for these fruits. Given some protection, we find that the Geneva, New York, varieties *Eden*, *Athens, Buffalo* and *Van Buren* show considerable promise.

Hardy Peaches

In 1941 our committee was highly pleased with the showing made by the *Sungold* and *Polly* hardy peaches at the Ames, Iowa, Experiment Station. However, conditions in Wisconsin must be different from Iowa because there has been considerable winter injury to these varieties in parts of this state during hard winters. Peaches are satisfactory only where temperatures do not go below about —15 degrees F. Such conditions may be found in highly protected situations in our cities.



THE TEN BEST PERENNIAL FLOWERS OF TWENTY-FIVE YEARS AGO

TEN Perennial Flowering Plants" was the title of a paper given by Mr. John Hauser of Bayfield at the annual convention of the Society in 1918. While we have made some changes during the past 25 years, it is, nevertheless, interesting to note that Mr. Hauser's recommendations at that time are still good. A few of his remarks will be of value to the garden lover. He said:

"As to the old herbaceous perennials that one should have, I think the following is the order in which they may be named: peony, phlox, iris, hollyhock, delphinium, digitalis, campanula, Shasta daisy, pyrethrum, gaillardia, and coreopsis. That is really 11, but I think they all go together very well. There are some other kinds very desirable and not grown very extensively. The lupine, I think, is one of the coming perennials. We can grow it as an annual and it has considerable bloom in the fall. It is perfectly hardy and we have a great variety of color, pink, white and blue and I think it is a very desirable perennial.

Winter Protection of Perennials

"As to the protection of perennials, I noticed the December number of 'Horticulture,' this, about the protection of herbaceous plants: 'Herbaceous plants that are really hardy, will come through all right without any winter protection, and no amount of cover will pay. A light covering over the roots may be made, but it should be removed in the early spring.' I do not know who wrote that, but I am sure you will not agree. We know that the most hardy plants in some localities, in some winters, will need protection and we know that a great many of the so-called half hardy varieties, if they are properly protected, can be grown in many places in our state."



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If your requirements for the season amount to a carload or more, let us quote you prices on spray material, nitrate fertilizer, baskets, or any other material you may need. We can SAVE YOU MONEY.

We were incorporated in 1931. Our purchases then were a few thousand pounds of dry materials, a few thousand gallons Lime Sulphur, but today we are carload buyers of Arsenate of Lead, Lime Sulphur Solution, Nitrate Fertilizers, Baskets, and power sprayers.

Write for prices.

All inquiries answered promptly.

SOUTHEASTERN WISCONSIN GROWERS CO-OP. FRUIT INC.

WAUKESHA, WIS.

Lester F. Tans, Secy.-Treas.

Telephone Big Bend 2821

R. 2.

Baskets Decorative Fringe Top Pads 19" Bottom Pads

We purchase and sell USED SPRAYERS of

Thumb Nail Sketches of Some Early Members Whom I Knew

James G. Moore

In 1865 the Fruit Growers Association, meetings of which had been suspended during the Civil War, was reorganized under the name of the Wisconsin State Horticultural Society. The secretary pro tem of that reorganization meeting was Geo. J. Kellogg, Janesville, whom I first met at the annual meeting of the Society in 1906. Mr. Kellogg was the only member of the organizing group that it was my privilege to meet but there were a number of the early members of the Society whom I came to know quite well and who left with me impressions of themselves and their principal contributions to the development of horticulture in Wisconsin.

Mr. Kellogg was the grand daddy of the Society in 1906 and a very active one too. He was one of the first nurserymen of Wisconsin and like all early Wisconsin fruit growers and nurserymen intensely interested in the finding of varieties old and new which were adapted to Wisconsin climatic conditions. Apparently his pet hobby was pears. I once heard him remark that he believed every pear he ever grew in Wisconsin had cost him at least a dollar apiece.

In a talk before the Society in 1875 on pear culture, he starts by saying that the members are aware that for 22 years his experience in pear culture has been a "successful failure." He assures them, however, that he has now discovered the secret of success. He closes his talk by saying "Gentlemen! The fact is, if you would grow luscious pears with profit, sell out and go to California." Mr. Kellogg never dodged the issue. If he was convinced of the truth of a thing he was fearless in asserting his belief. His contribution and influence during the early days of the Society must have been tremendous as his name appears either as an officer or member of important committees in a majority of the annual reports up to 1900.

A. J. Philips

Ten years after the organization of the Society, A. J. Philips of West Salem became a member. During the early years the outstanding problem in tree fruit culture in Wisconsin was getting trees that were able to withstand Wisconsin winter temperatures. Varieties brought from the East had largely failed and hardier varieties of desirable quality had not been found to take their place. One of the methods suggested for making it possible to grow desirable non-hardy varieties was propagating them on hardy stocks. Much of the winter injury, however, occurred on the trunks and basal portion of the foundation branches. Top grafting on hardy stocks was the proposed remedy for this trouble. The outstanding enthusiast and exponent in the Society of top grafting on hardy stocks was Mr. Philips. He was continuously discussing the relative merits of such varieties as Hibernal and Virginia Crab as stocks for producing hardy trees. His orchard at West Salem was a veritable experiment station for determining the desirability of various hardy varieties for use as stocks. At one of the annual meetings of the Minnesota Horticultural Society. Mr. Philips displayed over 20 different plates of Malinda each grown on a different stock.

It is interesting to note that at our last annual meeting Dr. Maney of Iowa discussed this same question which forty years ago was a chief topic of consideration at most annual meetings. Veritably history repeats itself.

A. L. Hatch

One year later A. L. Hatch of Ithaca became a member. Mr. Hatch was a nurseryman and fruit grower. He might also be said to have been a horticultural missionary for a few years later he emigrated to Sturgeon Bay and became the father of the commercial fruit industry of that section. Associated with him in this enterprise were two other men who share with him this distinction. One was Professor E. S. Goff, Professor of Horticulture at the University and the first actual horticulturist of the Wisconsin Experiment Station; for while Professor Trelease was officially the first horticulturist. he was really a botanist and the work which he did was botanical rather than horticultural. The other associate was D. E. Bingham, who has played an important part in the development of the Door County fruit industry.

R. J. Coe

One of the acquaintances which I prize most highly was R. J. Coe, Fort Atkinson, who became a member in 1883. The first time I met Mr. Coe was when I called at his office in the capacity of State Nursery Inspector. At that time he was president of the largest Wisconsin nursery, being associated with Messrs. Converse and Edwards who also were early members of the Society. To me Mr. Coe personified stability and dignity. His contribution to Wisconsin horticulture may have been greatest through his business relations but he contributed much to the Society through his sound advice and as a balance wheel at times when balance wheels were very much needed.

Wm. Toole

The year 1885 marked the accession of the Society's first noted florticulturist, Wm. Toole, an ardent lover of flowers and devoted to their culture, as is his son, W. A. Toole. His principal interest was in the pansy. For years he grew pansies on an extended scale, making numerous exhibits at fairs and flower shows and at one time probably produced more pansy seed for market than any other American grower. His interests, however, were not contined to flowers for he was well informed on other phases of horticulture.

L. G. Kellogg

Mr. L. G. Kellogg, whose membership dates from 1891, the same year in which Professor Goff joined the Society, always typified to me the early eastern horticulturist, who was drawn into horticulture as an avocation and for the pure love of fruit plants. Although at one time he did operate a small nursery, for the most part his work in the Society was because of his love for horticulture and the associations which he found among the Society's membership. For years he served as its treasurer. I remember Mr. Kellogg best as the Wisconsin authority on varieties and as a fruit judge at the Society's displays and at the State Fair. He was a man with a keen sense of humor and a twinkle in his eye, in whom you felt you could put absolute confidence.

H. H. Harris

Mr. Kellogg's recent passing advances Mr. H. H. Harris to the position of the Society's oldest member. For 50 years Mr. Harris has been a member and to us who are familiar with most of that period, I think that it is quite evident that during that time his devotion to and appreciation of the Society has been ever on the increase. That this is true is attested by the fact that although unable in recent vears to attend the annual meetings he always reveals that he is with us in spirit by the unique and friendly greetings which he sends. Mr. Harris might be characterized as the "Strawberry Man." His farm has been an experiment station for the testing of new varieties. His work has not been done primarily for his own advantage for he continuously gives freely the results of his studies that it may benefit his fellow fruit growers.

John F. Hauser

John F. Hauser, Bayfield, identified himself with the Society in 1894. At that time he was a vegetable grower at Onalaska. Later he became a pioneer horticulturist in northern Wisconsin and discovered the adaptability of that section for the propagation of herbaceous perennials. But Mr. Hauser still to many of us is the "Vegetable Man," the counterpart as regards vegetable phases of Mr. L. G. Kellogg to Three years later Irving C. Smith took his father's place on the membership rolls. J. M. Smith had been a power in the councils of the Society during its earlier history and for many years his son occupied a revered place among its members. To me Mr. Smith was the preacher of the organization. Soft spoken, rather retiring, always dignified, invariably wearing a broad white tie, he contributed a definite atmosphere to the meetings which could not have been given by any other member.

The membership roll of 1900 is the first to contain the name of H. C. Christensen and in 1901 M. S. Kellogg's name appears. With W. J. Moyle and D. E. Bingham they appeared to me in 1906 to be the younger members of the Society who were already taking an active part in its affairs and who later with new accessions as N. A. Rasmussen and A. W. Lawrence were to take the places of the older men in carrying on the work of the Society.

Frederic Cranefield

Frederic Cranefield apparently became a member of the Society in the year 1901-02. Sometime prior to 1906, when my acquaintance with the Society first began, he had become its secretary, a position which he filled for some 25 years. He was, I believe, the first full-time secretary of the Society. Under his direction the membership of the Society was materially increased. It was during the early years of his service that the trial orchard program was largely developed, from which the commercial apple industry at Gays Mills is a direct result. Before becoming secretary, Mr. Cranefield had for a number of years been an assistant in the Department of Horticulture working under the direction of Professor Goff.

One cannot get from sketches such as this an adequate impression of the men with whom it deals. It is only through personal contact and association that one comes to know men, to evaluate their contribution to an activity, to appreciate their character, to recognize their eccentricities, and to profit personally by having had the privilege of working with them. Then it is that each name recalls some trait, some incident, some objective gained through united effort and we have that which makes up true living.

List of Horticulturists Recognized With Statement of Services Rendered

TN 1929, the Board of Directors of the Wisconsin Horticultural Society adopted a plan of presenting certificates of honorary recognition to eminent horticulturists who had given valuable service to the state, to their communities, or to industry, in the field of horticulture.

This was an important step. It brought to the attention of the people of the state the work of these men which was so important in the development of horticulture. It gave recognition and some reward to the men for the services they had rendered.

It was voted that the certificates should be of such quality as to be suitable for framing. They are made by a Chicago firm. The certificates are beautifully decorated and each costs approximately \$15.

A copy of the one presented to our oldest horticulturist, Mr. H. H. Harris of Warrens, who is now 92 years old and is still with us, is presented here. The names of all those who have received the certificate, with the statement on the certificate for which it was given, is also published.

WORDING OF CERTIFICATE

To Herbert H. Harris, Warrens, small fruit grower, in 1929:

THE WISCONSIN STATE HORTICULTURAL SOCIETY

Recognizing the eminent services of HERBERT H. HARRIS

as a grower of small fruits, testing over 150 varieties of strawberries for his locality, and as a citizen and leader in rural life, presents this

TESTIMONIAL

upon the recommendation of the Board of Managers and Testimonial Committee and approval of the Executive Committee of the Wisconsin State Horticultural Society.

In Witness Whereof, it is sealed and signed by the Board of Managers of the Wisconsin State Horticultural Society.

> C. J. TELFER President M. B. GOFF Vice-President H. J. RAHMLOW Secretary

1929

John F. Hauser, Bayfield, nurseryman:

"As a grower of flowers and plants, and in appreciation of his public services as a citizen and as a leader in Horticulture."

George J. Kellogg, Janesville, nurseryman:

"In the Horticultural development of the State as a Nurseryman and as a Farmers Institute worker, and as one who devoted his life to the improvement of fruits and flowers."

1930

Louis G. Kellogg, Ripon, nurseryman:

"As a pioneer nurseryman and fruit grower, as a leader in the promotion of fruit culture in Wisconsin, and as an officer of the Horticultural Society over a period of twenty-two years."

William S. Knight, Bayfield, fruit grower:

"As a pioneer fruit grower, having tested many new varieties for his locality and as a leader in the promotion of Horticulture in Bayfield County."

Ernest W. Sullivan, Alma Center, small fruit grower :

"As a successful grower of strawberries covering a period of forty-six years, as a grower of other small fruits and vegetables, and as a leader in Horticulture in his community."

1931

Frederic Cranefield, Madison, general horticulturist: "As Secretary of the Society for a period of twenty-two years; for his efforts to improve the culture of fruits and flowers, and beautify the school grounds

William P. Longland, Lake Geneva, nurseryman:

"As a collector of wild flowers, ferns, and shrubs for Wychwood, a sanctuary for native plants and birds of Wisconsin over a period of thirty-three years, and as a member of its Board of Directors for fourteen years."

C. B. Whitnall, Milwaukee:

and homes of our State."

"As an untiring worker for the establishment of Public Parks and the preservation of our natural beauty spots; for his unselfish devotion to the cause of making our State a better and more beautiful place in which to live."

1932

Mrs. Frances K. Hutchinson, Lake Geneva:

"Whose love of God's great out-of-doors and His creatures led her to dedicate 'Wychwood' as a sanctuary for native plants and birds, and to promote organizations for their protection.'

Mrs. Caroline E. Strong, West Allis:

"For her unselfish devotion to the cause of amateur horticulturists, inspiring in them a love of plants, flowers and a more beautiful out-of-doors." 1933

Huron H. Smith, Botanist, Milwaukee:

"For his distinguished work in the field of Botany, and in appreciation of his public service in the advancement of Horticulture."

1934

Herman C. Christensen, Oshkosh:

"As a horticulturist who has devoted a lifetime to the search for better varieties and in promotion of Horticulture in his community and state."

Axel Johnson, Lake Geneva:

"As a hybridizer and originator of new varieties of flowers and whose accomplishments as a gardener have been an inspiration to greater interest in Horticulture."

Walter J. Moyle, Union Grove, nurseryman:

"As a nurseryman and horticulturist who devoted a lifetime to the fulfillment of his dreams of fruitful valleys and beautiful home surroundings."

1935

James Livingstone, Milwaukee, nurseryman:

"For distinguished work in the field of horticulture, who has devoted a lifetime to the creation and culture of plants and flowers, and has ever given liberally of his knowledge to others."

1936

Augustus W. Lawrence, Sturgeon Bay, fruit grower: "For his contribution to the success of co-operative marketing and to the development of the fruit growing industry of Door County."

Mrs. Emilie Louise Roloff, Madison:

"In inspiring others with an enduring love of plants and birds, and for her sympathetic understanding of God's great out-of-doors."

1937

Delbert E. Bingham, Sturgeon Bay, fruit grower:

"In the development of the cherry and apple growing industries of Door County, and as a leader in the advancement of fruit growing in general."

James G. Moore, Madison, horticulturist:

"In the advancement of Wisconsin orcharding and gardening, as a teacher and counselor of the student and horticulturist."



Mrs. E. L. Roloff, Madison, gardener.

1938

Nicholas A. Rasmussen, Oshkosh, nurseryman: "In the advancement of fruit and vegetable growing, and in the promotion of organized horticulture."

1939

Walter J. Kohler, Kohler:

"For his achievement in building a garden city, and his inspiring leadership in developing a more beautiful state and nation."



Walter J. Kohler.

1940

William G. McKay, Madison, nurseryman:

"For his achievement in developing Wisconsin's largest nursery; for his leadership in advancing the nursery industry; and his untiring efforts in promoting better horticultural plants."

Peter C. Swartz, Waukesha, fruit grower:

"In the promotion of fruit growing in Wisconsin; in the furtherance of approved horticultural practices; and in his great helpfulness to his fellow fruit growers."

1941

Arthur K. Bassett, Baraboo, fruit grower:

"In the development of a successful orchard; in promoting interest in fruits through exhibiting and in better varieties through fruit testing."

William A. Toole, Baraboo, nurseryman:

"In his devotion to the culture of plants and flowers; for ever giving freely of his services and knowledge and inspiring in others an enduring love of plants."

1942

Ray H. Roberts, horticulturist, Madison:

"In advancing the science of fruit growing through research and as a counselor of students and orchardists."

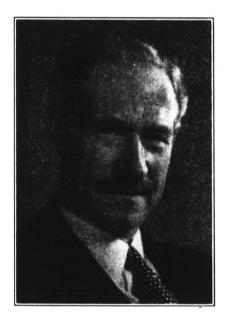
Arthur J. Schultz, Ripon, beekeeper:

"For his achievement in developing one of Wisconsin's most successful apiaries and for his leadership in advancing the beekeeping industry." "As one of Wisconsin's outstanding strawberry growers, in advancing the culture of small fruits and promoting co-operative marketing."

1943

Mrs. Chester Thomas, Milwaukee, gardener:

"In advancing garden club work, increasing interest in ornamental gardening, and successfully promoting flower shows."



James Livingstone, Milwaukee, nurseryman



W. A. Toole (Left) and A. K. Bassett.



Peter C. Swartz, Waukesha, fruit grower.

Now--Bean Ruggedness Means Everything . .

Your job is to produce the MOST and the BEST you can. Our job is to keep your BEAN rolling at top efficiency. A BEAN Sprayer needs very little repair attention. But when it does, you'll find Authorized BEAN Service and Parts in every growing area.

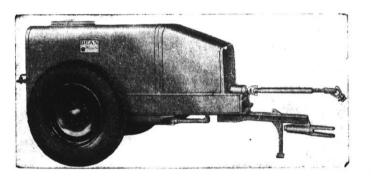
We're allowed to supply new outfits, too, where they are vitally needed. While we're busy at top production of war equipment for Uncle Sam, we're continuing to build some sprayers where they do not interfere with war work. And we're building them with all the ruggedness and dependability that have kept the BEAN in front through the years . . . including the matchless All-Enclosed BEAN Royal Pump.

So . . . keep your BEAN rolling if you're already an owner. Get a new one if you must have new, larger, or more equipment for full Victory Production. Call on us or any of our dealers anywhere for service and help. And remember, a BEAN is a sound investment, not just for the emergency, but for years to come.

Food Machinery Corporation

John Bean Mfg. Co., Division

LANSING, MICHIGAN



Pruning Tools-

COPPER SOAP RODENT REPELLENT

1 qt........95c ------ 1 gallon.......\$3.00 1 qt. enough for 50 trees.

I qt. enough for 50 trees.

F. R. GIFFORD COMPANY

"FRUIT GROWERS and GARDENERS SUPPLIES"

2201 University Ave.

Madison 5, Wis.

History of the Wisconsin State Beekeepers Association

THE Wisconsin State Beekeepers Association was first organized in 1885. However, the Northeast Wisconsin Beekeepers Association was organized at Appleton, on April 11, 1878, and a brief account of its proceedings is of interest. The first officers were :

President, A. H. Hart, Appleton Vice-President, R. Bishop, Sherwood Secretary, Mrs. Frances Dunham, DePere Treasurer, J. L. Kittell, Menasha

We are indebted to Mrs. Frances Dunham and the American Bee Journal for well written, detailed accounts of those early meetings. The journal was established in 1861 by Samuel Wagner, and in 1878 it was published in Chicago. The editor was Thomas Newman.

Good Honey Crops

The following reports were given at the first meeting:

"Mr. Bishop produced from 58 colonies, in the spring, 9,000 lbs. of honey; 4,300 box, 3,000 extracted. Wintered in house.

"Mr. Potter, of Calumet Co., obtained 350 lbs. from one hive; 260 lbs. comb, 90 lbs. extracted. Bees not allowed to swarm. He wintered in house, with wire-cloth over the entrance. Counted 30 dead bees, in the spring, from 1 hive.

"It was the general opinion that many bees were lost when carrying the dead ones out. Comb foundation was used with the greatest success by many; but it was absolutely necessary to have the wax pure.

"It was universally acknowledged that the price of honey must be low, in order to compete with preserved fruits and syrups, and that then there was an almost unlimited market at home, which was the proper and most profitable place to sell.

"Mr. Hart stated that bees, this season, commenced bringing in pollen the 30th of March."

The Second Annual Convention

The second meeting of the Association was held May 27-28, 1879, in Philip Laun's house, Hartford, Wisconsin. Officers elected that year were: President, H. P. Sayles, Hartford; Vice-President, George Grimm, Jefferson; Judge Grote, Mauston; and A. A. Porter, Eureka.

At this meeting it was suggested changing the Northeastern Association to the Wisconsin State Beekeepers Association, but no action was taken on the question.

Wintering Problems Discussed

One of the principal topics' at the early conventions was on the question of how and where to winter bees. In 1879 a Mr. Guenther reported he wintered 600 colonies and lost 8. In 1880 he wintered 700 and lost 11. He used wool and cotton quilts over the frames. However, in his talk on the question he said that the most important thing was *strict attention to fall management*. If the bees were not raising brood in September, he fed them 9 lbs. of honey, and thereby produced three frames of brood. Spring dwindling was due to poor fall management. He used a one *inch auger hole* above the entrance so that the bees could get air even if the lower entrance became clogged. He averaged from 220 to 250 pounds of extracted honey per colony.

There was much discussion on cellar versus outdoor wintering. Chaff hives on summer stands were favored by some, while many others favored cellar wintering. Upward ventilation for the hives was also discussed.

Heavy Winter Losses; History Repeats Itself

On May 4th, 1880, the convention was held at Waupun, and A. A. Winslow, New Holstein, was elected president.

At the convention in 1881, held October 11, at Pewaukee, the principal topic of discussion was, "What Caused the Great Loss Last Winter?" Those reporting stated that starvation was the principal cause, many adding that this was strange because they had fed them as well as usual in fall. It is interesting to note that exactly the same topic was discussed, and the same conditions prevailed during the past year, 1942-43.

Large Crops Produced

Some of the reports of 65 years ago showed that large crops were obtained by beekeepers. This is interesting because the honey extractor had only been invented about 12 years before and movable frame hives had not been known for very many years longer. At the Pewaukee convention S. E. Gernon reported that 30 colonies and 6 nuclei produced 3,400 combs of honey, 800 pounds of extracted honey, and an increase was made to 68 colonies.

In 1879 a Mr. Hodgson reported that he had built a bee house with wall 18 inches thick, filled with shavings. He considered the house a failure because he lost 25 out of 100 colonies. *Poor fall preparation* of the colonies was given as the cause, however, which is much the same as is being said today.

Presidents Wisconsin Beekeepers Association

1885-94. C. A. Hatch, Richland Center and Ithaca
1894-1900. F. Wilcox, Mauston
1900-08. N. E. France, Platteville
1908-13. Jacob Huffman, Monroe
1914-18. N. E. France, Platteville
1918-21. Gus Dittmer, Augusta
1921-22. L. C. Jorgensen, Green Bay
1922-23. S. F. Stelling, Reedsville
1923-28. James Gwin, Gotham
1928-29. L. G. Bishop, Sheboygan
1929-34. A. H. Seefeldt, Kewaskum
1934-36. A. E. Wolkow, Hartford
1936-39. A. J. Schultz, Ripon
1939-44. Walter Diehnelt, Menomonee Falls

Secretaries Wisconsin Beekeepers Association

1885-86. Dr. J. W. Vance, Madison
1886-89. F. Wilcox, Mauston
1889-93. Dr. J. W. Vance, Madison
1893- H. Lathrop, Browntown; Rec. Sec.; Dr. J. W. Vance, Madison, Cor. Sec.

- 1895-97. N. E. France, Platteville, Cor. Sec.-Treas.
- 1897-1900. N. E. France, Platteville
- 1900-02. Miss Ada Pickard, Richland Center
- 1903-18. Gus Dittmer, Augusta
- 1918-19. Edw. Hassinger, Jr., Hortonville
- 1919-22. H. F. Wilson, Madison
- 1922-26. Malitta Fischer, Madison
- 1926-28. Arlene Weidenkopf, Madison
- 1928-34. H. F. Wilson, Madison
- 1934-35. Arlene Weidenkopf, Madison
- 1934- . H. J. Rahmlow, Madison, Cor. Sec.

Recording Secretary-Treasurer

1935-37. Mrs. Millie Francis, West Allis 1937-39. Mrs. E. Voigt, Menomonee Falls 1939-44. Mrs. Louise Brueggeman, Menomonee Falls

HONEY CONTAINERS

Wisconsin Beekeepers Association

Order Through Your State Association where all profits go to further the work of the industry.

> Modernistic Glass 60 lb. cans

New Association Labels

For complete price list write

HONEY ACRES Menomonee Falls, Wisconsin



A. J. Schultz, Ripon, President, 1936-39.

HONEY WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company, Oconomowoc, Wisconsin.

THE LOTZ SECTION PRICES ON REQUEST

Now is the Time

to

Anticipate Your Bee Supply Needs For 1944

AUGUST LOTZ COMPANY

Manufacturers of Bee Supplies

BOYD, WISCONSIN

First Meeting Wisconsin State Beekeepers Association—1885

The Wisconsin State Beekeepers Association was organized in the State Capitol, Madison, February 6, 1885. The first officers were:

President, C. A. Hatch, Richland Center

First Vice-President, George Grimm, Jefferson

Secretary, Dr. J. W. Vance, Madison

For many years to come the organization was to meet the first week in February in the State Capitol, Madison. There was often a very good attendance. In 1890, for example, we find that 100 were present, and speakers included such prominent men as A. I. Root of Medina, Ohio, and Dr. C. C. Miller of Marengo, Illinois.

At the 1886 convention the number of colonies reported by the census for Wisconsin was 51,917, and the honey crop was set at 1,432,700 pounds. However, the president stated that this was not a complete record. The same holds true today.

Association Cannot Control Prices

In 1887 the opinion of the convention was that a producers' association for controlling, fixing or regulating prices cannot be made practical.

At the 1893 convention the subject of foulbrood was first mentioned. There were no laws at that time, and the convention felt that something must be done soon. It was not, however, until 1897 when Mr. N. E. France of Platteville became prominent in beekeeping history, that anything was accomplished. Mr. France was at that time secretary of the Association, and it was reported that he spent a great amount of time looking after the interests of the foulbrood bill before the legislature that year.

In 1897 also, sweet clover had been classified as a noxious weed by the Wisconsin legislature. The State Association became active in getting this law repealed.

Other Early Wisconsin Beekeepers Associations

One might almost say there have always been beekeepers. Beekeeping follows very closely the development of other kinds of farming. As soon as there are a number of beekeepers in a community, they begin to hold meetings to discuss their mutual problems. No other agricultural organizations have more interesting programs or better attendance, in proportion to the total number concerned, than beekeeping. There were small beekeepers organizations such as county associations meeting in Wisconsin before and after the Civil War. However, we have records only of the organization of larger groups

--In 1876 the Southwestern Wisconsin and Northwestern Illinois Association was organized. This association met regularly in northern Illinois, usually the city of Freeport.

The Northwestern Wisconsin Association was organized in the early 1880's. In 1882 the president was Emanuel Markle; vice-presidents, J. Pelty, and William Lossing; secretary, J. B. Pammel; treasurer. John Salzer.

The Madison Beekeepers Association met in 1882. and Prof. R. B. Anderson, Madison, presided.

The Southwestern Wisconsin Beekeepers Association was organized in 1886. The first report published was of a meeting in Boscobel when Mr. N. E. France of Platteville was president and A. A Arms, secretary.

The Southern Wisconsin Beekeepers Association was organized in 1884. Officers were President C. O. Shannon and Secretary J. T. Pomeroy, Edgerton

Value of Bees for Pollination Discussed More Than Fifty Years Ago

At the annual meeting of the Wisconsin Horticultural Society February 2-6, 1891, the beekeepers of Wisconsin joined with the Horticultural Society and listened to an address by the editor of the American Bee Journal, Mr. Thomas E. Newman.

Mr. Newman spoke on the value of bees in pollination, and his remarks are of especial interest now that the subject has come up so prominently to help in the production of seeds as a war measure. Today our government is recognizing the value of bees as never before.

Beekeepers Sued for Damages

The following are some of the remarks made by Editor Thomas Newman:

"Here in Richland county, a few years ago, a farmer conceived the idea that the bees damaged the clover, and sued his beekeeping neighbor for damages, because he imagined that his sheep did not prosper an account of the presence of bees in his pasture.

"This ignorance was a God-send to apiculture. It brought out such an array of testimony as to the great advantage that bees were to the clover fields, that now it is difficult to find many so ignorant as to claim that bees are anything but a blessing to fields and flowers—to plants, trees and bushes. They make it possible to produce large crops of clover seed, and fill the land with richest fruit. Many fruit-growers now even keep bees, not for the production of honey or wax, but for the especial purpose of fertilizing the early blossoms, thereby increasing the fruit crop.

"Darwin mentions the following experiment: Twenty heads of white clover, visited by bees, produced 2,990 seeds; while twenty heads so protected that bees could not visit them, produced not one seed.

"The horticulturist may dig graft and bud, but what will the returns be without the labors of the bee? The Creator has provided no other means for the fertilization of flowers but the visits of insects, and there are no other insects at that time of the year to flit from flower to flower. The body of the honey-bee is wisely adapted to this purpose, being covered with fine hairs, invisible to the naked-eye, which brush off and carry the fertilizing powder to the germ that requires it. The fruit sets better even when the tree has perfect flowers, containing both pistils and stamens, if pollen from another flower, or better still, from another tree, is brushed upon its germs. Who has not observed that a long continued rainstorm, occurring during fruit bloom, and preventing these little messengers from their rounds, is followed by a failure of fruit?

"The beekeepers and horticulturists should,

therefore, always be fast friends—their interests are linked together in a way which should make them 'brothers, all!' The prosperity of the one aids in the advancement of the other!"

Italian Queens Imported in Early Days

In the June, 1868, issue of the American Bee Journal, we find a full page advertisement by Adam Grimm of Jefferson, Wis., containing the following statements:

"Due to great losses, will sell only after June 1, 1868, 10 Imported queens at \$30.00 each." He offered Italian queens of his own raising at \$12.00 each after June 20, 1868. He stated there were no other bees within 3 miles of his yard and so assumed they must be pure. We know today that drones travel much farther than that.

Mr. Grimm also offered queens imported "from Prof. Manos' Apiary" at \$10.00, in July.

Mr. Grimm is reported to have had more than 1,000 colonies in those early days.

First Affiliation With Horticultural Society in 1919

In March, 1919, the Wisconsin Beekeepers Association affiliated with the Wisconsin Horticultural Society. At that time Prof. H. F. Wilson, secretary of the State Beekeepers Association, began a department entitled "Among Wisconsin Beekeepers" in Wisconsin Horticulture. The Association had 300 members, and in President Gus Dittmer's annual message he stated that \$1,500 annually was appropriated by the state for the control of foulbrood.

Good Honey Prices

In the October, 1920, issue we find that honey was selling at very high prices. The wholesale price of 60 lb. cans was 25 cents per pound. To retail stores 10 lb. pails brought \$3.00, and 5 lb. pails \$1.60. To the consumer, 10 lb. pails, \$3.50, 5 lb. pails, \$1.80. This price may not have prevailed in all sections of the state.

Issue Supplement to Wisconsin Horticulture

In February, 1922, the State Beekeepers Association began issuing a supplement to Wisconsin Horticulture called "Wisconsin Beekeeping." This was continued until December, 1923. It was interesting to note that in September, 1919, Mr. H. L. McMurray was engaged as the first extension specialist in beekeeping for Wisconsin.

Wisconsin Beekeeping Published Separately

In January, 1924, the Association decided to publish Wisconsin Beekeeping as a separate magazine. This was continued until December, 1933.

Beekeepers Again Affiliate With Wisconsin Horticultural Society in 1933

At the annual convention of the Wisconsin Beekeepers Association in 1933 it was decided to again affiliate with the Wisconsin State Horticultural Society and have the Society publish Wisconsin Beekeeping as a part of Wisconsin Horticulture. The first issue of Wisconsin Beekeeping in this form was in the January, 1934, issue of Wisconsin Horticulture, and it has been so continued until this time.

Activities of the Wisconsin Beekeepers Association

The Wisconsin Beekeepers Association was instrumental in having laws passed by the Wisconsin Legislature to control and eradicate bee diseases and for grading honey. It has always been active in promoting the best interests of the honey producer. It contributed largely to the success of the Miller Memorial Library.

Its principal and most valuable contribution has been its educational program by holding state and regional conventions throughout the state, and by publishing a beekeepers' magazine. It has given much valuable information to the beekeepers which has led to increased production of honey and beeswax, and to the prosperity of the state as a whole.

The Miller Memorial Bee Library

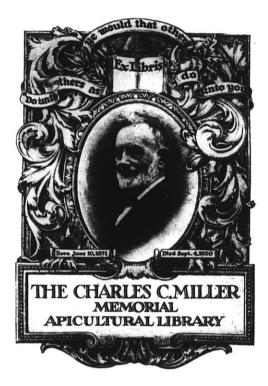
In 1921 a national movement began to establish a beekeeping library to the memory of Dr. C. C. Miller of Marengo, Illinois, one of the outstanding figures in beekeeping of his time. He was especially noted for his contributions to national bee magazines, for his lectures at conventions, and for several books on beekeeping. Also for his kindly personality.

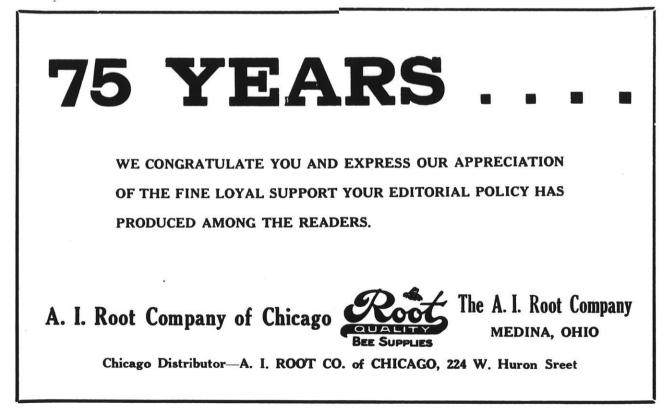
Contributions came from beekeepers all over the United States.

The library was established in the Agricultural Library, of the Wisconsin College of Agriculture, Madison, with Prof. H. F. Wilson, then secretary of the Wisconsin Beekeepers Association, as director. Prof. Wilson still holds that position. He deserves much credit for the success of the undertaking.

The library contains 3,500 volumes of bee journals, more than 3,000 books and pamphlets on beekeeping, and is worth from \$15,000 to \$20,000. It contains the Walker collection of books on beekeeping purchased in England. These fine books have the finest of binding, many being bound in fine leather. They are used by classes in journalism at the college for illustrating fine old bindings.

The Miller Memorial Library is today the largest beekeeping library in the world. It is maintained in a separate room in connection with the Agricultural Library.





History of the Wisconsin Cranberry Growers' Association

FOR a number of years the Wisconsin Cranberry Growers' Association has been affiliated with the Wisconsin Horticultural Society. We are indebted to Mr. Guy Nash of Wisconsin Rapids for the early history of the Association, which was published in the Wisconsin Rapids Daily Tribune in 1936, and sent to the Society by the sales manager of the Cranberry Exchange, Mr. Vernon Goldsworthy of Wisconsin Rapids.

First Organization of Wisconsin Cranberry Growers' Association

-By Guy Nash, Wisconsin Rapids

Nearly fifty years ago there was held a meeting called for the purpose of organizing a cranberry growers' association. The first line of the old record book reads "New Lisbon, Wis., 1887" but another hand has pencilled "Jan'y. 4th" in the blank space.

The objects to be attained were "briefly stated" by J. S. Stickney of Wauwatosa, George A. Marvin of Mather and Hon. W. H. H. Cash. R. C. Treat of Meadow Valley was elected president and C. E. Warriner secretary. Annual dues were fixed at 50 cents.

Name Executive Committee

"The following gentlemen paying said amount became members: F. E. Hurd, J. S. Stickney, Peter Lasarge, George A. Marvin, Ira Young, C. E. Warriner, J. A. Wildner. * * * The following gentlemen were appointed as an executive committee for the ensuing year: A. C. Brooks, Norway Ridge; George A. Marvin, Mather; A. P. Wilson, Necedah." * *

A month later, on February 8, 1887, a special meeting was held at Tomah, with morning, afternoon and evening sessions. "The following gentlemen upon payment of the usual fee became members of the association: Russel Case, D. Braddock, A. C. Brooks, A. Evans, H. Somers, Wesley Prothero, W. D. Reynolds, R. C. Treat, J. H. Treat, C. R. Treat." And at the afternoon session the names of C. J. Krueger, F. J. Hoffman and W. H. Bowden were added.

Corresponding secretaries were appointed for various districts: Norway Ridge, H. Somers; Mather, A. D. Janes; Meadow Valley, J. H. Treat; New Lisbon, F. E. Hurd; Duester, James Bassett; Daly, K. K. Kline; Remington, A. D. Scribner; Remington, J. T. Bearss; Dexterville, Charles J. Krueger.

Adopt Constitution

Constitution and by-laws were adopted and William S. Megow was elected vice-president. "The convention proceeded to the discussion of the various methods of cultivations and flowage. The discussion was entered into with a vim and brought out many useful methods, etc." A resolution was offered that "we each strive for the model one acre of cranberries" and a "new pattern for cranberry rakes was presented and exhibited by C. J. Krueger."

The following August the first of 49 summer conventions was held, but the records do not show where. "On account of so many forest and railroad fires the attendance was very light. A motion prevailed adopting the scale of prices for rakers at \$1.00 per day."

So far as information at hand goes, Clark Treat is the only man whose name appears on the minutes of the meetings of the year 1887 who is still active in growing cranberries, and even some of the towns. such as Meadow Valley, are now ghost towns.

In 1888 the winter meeting was held at Mather. Among the corresponding secretaries a p p e a r the names of Henry Sampson, Daly; J. A. Gaynor, Grand Rapids; L. M. Nash, Centralia, and Andrew Searls, Elm Lake. "Motion made and carried to pay past and present secretaries a salary of \$10.00 each whenever there are funds on hand unexpended to that amount." The August convention was to be held in Duester (wherever that might be) and the annual meeting for 1889 in Grand Rapids.

1888 Crop Large

At the Duester meeting corresponding secretaries turned in estimates for the 1888 crop showing a total of 55,400 barrels, which is practically that in sight for Wisconsin for this year, 1936. A second column in the minute book shows actual shipments of 48,390 barrels with blanks for two points which had been estimated together at 1,700 barrels, so that it is fair to presume shipments in 1888 were very close to 50,000 barrels.

Berlin and Mather were tied at 8,000 barrels each; Duester, Oak Island and Necedah were lumped together with 5,450; Daly and Bearss Marsh (now Cranmoor) were also tied with 5,000 each; Meadow Valley shipped 4,480 and Remington (now Babcock) 4,000; Elm Lake showed 3,370 and Norway Ridge 2,560, and no other shipping point has as much as a thousand barrels. Grand Rapids was credited with 750.

Offers Marketing Plan

At the Grand Rapids meeting in January, 1889, Mr. Bennett presented a paper on how they raise cranberries on Cape Cod. (This was A. C. Bennett, father of A. E. Bennett.) At this meeting T. E. Nash was elected president and offered "a plan of marketing given at length in printed report." This plan of marketing as embodied in the printed proceedings involved cooperative selling and embodied many of the vital features later adopted by the Wisconsin Cranberry Sales Company, 16 years later. Nothing came of it at the time.

At the summer meeting at Mr. Bennett's marsh the statistician estimated the Wisconsin crop at 20,775 barrels with a half crop in sight for Cape Cod and New Jersey. It was voted that no grower should offer a good berry at less than \$8.00 per barrel.

The winter meeting of 1891 reported 74,407 barrels shipped the preceding fall. In the following season shipments dropped to 13,535. In 1892 there were 19,064 barrels "making a shortage of the August estimate of nearly 37 per cent easily traceable to the frost of September 1."

Hold Summer Picnics

The summer meeting of 1893 was held at the Bennett & Son's marsh at Cranmoor. "There being 69 to feed, the tables were spread in one of the dining halls belonging to the marsh, and the call for dinner made." This is the first reference in the minutes to the cranberry picnics at the summer conventions. These meetings were held at one or another of the marshes, and through a long term of years gained a great reputation for the bountiful supplies of food provided by the wives of the growers, and for the good company, as well as for the interest in the meetings with technical papers, growers' discussions and inspection of bogs.

Drought, Fires Take Toll

The summer estimate for the crop of 1893 was 5,600 barrels. Here the toll taken from the cranberry growers by the droughts and the accompanying fires of the early '90's shows. The crop of 1896 was reported as follows at the 1897 winter meeting:

Berlin & Vicinity

(Fox River Valley)9	,000 bbls.
Wood County	500 bbls.
Valley Junction	700 bbls.
Cranberry Center	150 bbls.
Wild Marshes in northern Wis	800 bbls.
Tomah	200 bbls.
Mather, less than	300 bbls.

The association was not so grave and reverent but what items of strictly human interest appear in the minutes. Thus: "A fire alarm took the members out of the hall. And after their return the balance of the session was devoted to discussing the Trade Co."

And so through the years from 1887 to 1907 the old, pasteboard-bound record book with its mottled paper exterior, records the changing fortunes and changing personnel of the "cranberry game."

Many changes have come to pass. The original experiment station and Malde have passed out of the picture. False blossom has stolen the spotlight from the ravages of the fire worm. Remington changed to Babcock, Bearss Marsh to Cranmoor, Meadow Valley and Daly have become only names. With changes in water table and with drainage, the center of gravity of the cranberry industry has shifted from Berlin to Mather, from Mather to Cranmoor. New and modern high producing bogs in the north and elsewhere in the state are shifting it again.

Time Marches On

New varieties of berries are being substituted for the original natives. Old names cease to appear in the reports and new ones appear; but fortunately many other names from the early minutes are still appearing in the present day reports.

In essence the activities of the Wisconsin State Cranberry Growers' Association are today much what they were 50 years ago, as must be the case with an association dealing with anything so fundamental as an agriculture. Cranberry growers are still "striving for the model one acre of cranberries." New patterns of rakes and other cultural tools are offered for inspection at each meeting. Crop statistics and market prospects are debated. And of every meeting it may be said as the secretary reported of that first meeting: "The discussion was entered into with a vim and brought out many useful methods, etc."

Present officers of the Wisconsin State Cranberry Growers' Association are Wm. F. Huffman, Wisconsin Rapids, President; Vernon Goldsworthy, Wisconsin Rapids, Secretary-Treasurer.

History of Cranberries

By Vernon Goldsworthy, Wisconsin Rapids

CRANBERRIES are typically an American fruit and are found on no other continent other than North America. The American cranberry grows wild in a limited area throughout Canada, and the United States as far north as Alaska, but most abundantly in Nova Scotia where a few are cultivated.

However, the bulk of cranberries comes from cultivated marshes in only three states of the United States: Wisconsin, Massachusetts, and New Jersey.

Legends tell us that cranberries were first discovered by the Pilgrims, growing wild on Cape Cod. Indians used them as poultices and health cures. The early Pilgrims gathered them and cooked them and served them with their wild turkeys and other game.

Early Berries Wild

During the early years of the cranberry industry in Wisconsin, up to 1900, most of the cranberries were taken from wild marshes. There was little or no intensive cultivation carried out.

However, around 1890 there were a large number of fires which destroyed many of the wild marshes and it was necessary for Wisconsin, if it were going to hold its place in cranberry production, to go into cranberry growing commercially. As the state did so, crops naturally increased. As the crop increased and competition became keener there was a fight among the growers for various markets, with results the berries brought very little money.

History of the American Cranberry Exchange

In the fall of 1905, A. U. Chaney, now president and general manager of the American Cranberry Exchange, made his usual trip to Wisconsin to buy cranberries. In Wisconsin, and near Wisconsin Rapids, was an outstanding leader, Judge Gaynor, and by him most of the growers were guided in making their sales.

Cooperate On Sale

He was not only a cranberry grower, but a lawyer as well. Mr. Chaney called on Judge Gaynor, telling him that he was willing to pay \$6 a barrel for his berries and all similar berries in Wisconsin. Judge Gaynor then asked how much Mr. Chaney would pay if he could be furnished with the whole crop in Wisconsin which at that time amounted to 100 cars.

Mr. Chaney offered Judge Gaynor \$6.75 a barrel if the whole crop could be purchased, and to make a long story short, Judge Gaynor called his grower friends together and the deal was arranged which ended very satisfactorily for all the Wisconsin growers.

After the season ended, Judge Gaynor had Mr. Chaney give them a plan which involved establishing grades, labels, pooling, and various other factors. The plan was accepted by most of the growers and thus the Wisconsin Cranberry Sales Company was formed for marketing the berries in 1906. E. P. Arpin was elected president of the new company and headed it for a number of years.

Word of Success Spreads

The year 1906 was again a successful year for Wisconsin growers. Word of the two-season success spread to the East and Judge Gaynor, himself, was so interested that he took a trip to Massachusetts and New Jersey with the result that each of these two states formed a separate state organization, similar to the Wisconsin company and finally the three states were set up under one general head known as the National Fruit Exchange and later changed to the American Cranberry Exchange with Mr. Chaney and C. M. Chaney at its head.

When the Wisconsin Cranberry Sales Company was first organized, it was purely a marketing organization and it served in this capacity for a number of years. During the last three or four years, however, it not only acted as a sales organization for the berries, but also became a wholesale purchaser for various growers' commodities.

Frequently 40 to 50 cars of box shooks are purchased in a year and carlot shipments of fertilizer, cranberry mills, iron sulphate, lime, cement, lumber and similar items are ordered at a very substantial saving to the members. Several thousands of dollars are saved annually by members of the company.

Successful From Start

The company is without question the leading farm cooperative in Wisconsin, having been very successful since its initiation 30 years ago. The reason it has grown prosperous, while many other farm cooperatives have fallen by the wayside, is because of the fine manner of cooperative spirit and feeling of its members.

Advice to Cooperatives

At the annual convention of the Society in February, 1908, Mr. A. C. Bennett of "Grand Rapids" (now Wisconsin Rapids) gave an interesting report on the Cranberry Growers' Association with this pertinent advice in regard to the success of any cooperative sales association. The remarks are so frank that we publish them here for the benefit of those who are interested in the cooperative movement.

"Our general manager and salesman, and bookkeeper-in fact, the whole selling force-are men of long years of experience in their particular lines and not one of them are growers. They were selected for their ability and experience after much investigation, regardless of price; the best is the cheapest in the end. They make for us the money wherewith we pay them. Some foolish growers in Wisconsin had previously started a sales company composed entirely of growers, even to the lawyer who drew up their organization papers. They selected one of their member growers as salesman. They sold about \$8,000 worth of berries on which they lost about \$4,000, then they went to law to see how the loss should be divided. The suit was carried to the supreme court, after five or six years' litigation, while our salesman sold several hundred thousand dollars' worth without a loss of a single dollar of poor accounts, or a single law suit."



PEONIES_

International reputation. Our peony roots correctly planted and cared for will outlive the owner.

TYPEWRITERS

All makes including portables rented. Largest rental service in the state. We teach "Touch Typewriting" through booklet in your home.

ORGANS-

Peonies inspire music so we added a line of portable organs in all sizes for sale or rent.

Write



ROSENDALE, WIS.

Hi-ways 23-26 intersection



Harvesting cranberries with a cranberry harvest rake. Wisconsin berries are usually raked on water with a slightly different type of rake.

> The Dionne QUINS use our Estey organs exclusively



SMALL SIZE ORGAN for homes, schools, hospitals, etc.

We have a two manual organ with chimes on exhibition.

64

We have advertised in Wisconsin Horticulture since 1928

History of The Wisconsin Gladiolus Society

Organized in 1930

THE Wisconsin Gladiolus Society was organized by a small group of gladiolus fans in the city of Madison in 1930. The first officers of the Society were Robert C. Leitsch, Columbus, President; W. A. Sisson, Rosendale, Vice-President; Geo. C. Morris of Madison, Secretary; Walter F. Miller, Sun Prairie, Treasurer.

The first annual Wisconsin Gladiolus Show staged by the Wisconsin Gladiolus Society was held in the Loraine Hotel, Madison, August 15-17, 1930. The entire ballroom of the Loraine Hotel was filled with beautiful gladiolus, according to a report of the show in the September, 1930, issue of Wisconsin Horticulture.

The Society has held a successful gladiolus show every year since that time. Membership in the Society has been very good. During several years the Society had the largest membership of any state in the United States.

From its beginning the Society affiliated with the American Gladiolus Society until that organization passed out of existence. Later it became affiliated with the New England Gladiolus Society, and most of the members belong to that organization at this time.

Educational Meetings Held

In addition to staging an annual gladiolus show, the Society has each year held educational meetings and programs. These have usually been in the late fall and early spring at which time such problems as new and improved varieties, disease and insect control, soil and cultural problems, and matters pertaining to the annual show were ably discussed by members.

In the early days members of the Society exhibited their flowers in order to create interest in gladiolus among show visitors, and to sell bulbs. In late years a number of members have become prominent breeders of new varieties. Dr. Geo. H. Scheer of Sheboygan, and Mr. Walter C. Krueger of Oconomowoc being listed as among the most prominent in the country during the past few years. Interest in new varieties and seedlings has been very keen, and the improvement in quality and beauty of the flowers has been going on steadily.

Gladiolus Thrips Create Problem

In the early 1930's there were practically no insects which seriously troubled the gladiolus, but about the middle of that period gladiolus thrips made their appearance and for a while it was feared that they would ruin the industry. However, scientists as well as growers got busy and developed remedies and the insect is well under control today.

Gladiolus Most Popular Flower

In 1934 there were more shows featuring gladiolus than any other one flower in the United States. Many states have gladiolus societies and hold one or more gladiolus shows.

Gladiolus have become a very important cut flower for florist use and are available throughout most of the months of the year, being shipped into Wisconsin from Florida during the winter, and from other st tes during many other months of the year. Wisconsin growers find cut flowers a very profitable source of income, and the growing of bulbs also has attracted many growers.

In 1943 there were about 150 members in the Wisconsin Gladiolus Society. Most of these grow gladiolus in considerable quantity both as a hobby and profession.

The annual shows held by the Society not only interest the public in gladiolus, but serve as conventions for members of the Society. New varieties and seedlings are exhibited, and members gather around to discuss their merits and to talk about cultural problems.

Affiliated With Wisconsin Horticultural Society

In 1931 the Wisconsin Gladiolus Society affiliated with the Wisconsin Horticultural Society and changed their constitution so that the secretary of the Wisconsin Horticultural Society be the corresponding secretary of the Gladiolus Society. Wisconsin Horticulture was adopted as the official magazine of the Society, and two pages are devoted each month to the growing of gladiolus and the functions of the organization.

Membership fees in the Wisconsin Gladiolus Society are \$1.00 per year, which includes membership in the Wisconsin Horticultural Society and the magazine Wisconsin Horticulture. Affiliation with the New England Gladiolus Society, which includes their annual year book and supplement is an additional \$1.15.

How the Wisconsin Horticultural Society Helps the Gladiolus Society

The assistance of the office of the Wisconsin Horticultural Society is available in helping with the educational program of the Wisconsin Gladiolus Society, as it is to all affiliated organizations. The Society provided in its constitution that its corresponding secretary be the secretary of the Wisconsin Horticultural Society. In this way the secretary can act in an advisory capacity to the Board, help in the arrangement of programs at all meetings, send out notices to members and officers about meetings and shows, mimeograph its show premium list, and in other ways help in the educational work.

The secretary has acted as manager of the State Gladiolus Show for all but two shows. He has made colored lantern slides of new and improved varieties of gladiolus, and also seedlings, which are available free of charge to members. Two pages of material on gladiolus are published each month in Wisconsin Horticulture.

Gladiolus Shows Held by the Wisconsin Gladiolus Society

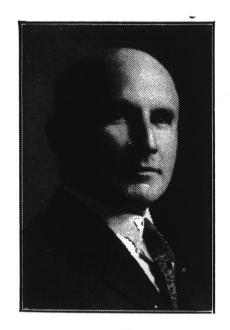
August 15-17, 1930. Loraine Hotel, Madison
August 21-23, 1931. Hotel Retlaw, Fond du Lac
August 19-21, 1932. Kohler
August 12-13, 1933. Fort Atkinson
August 18-19, 1934. Municipal Bldg., Hartford
August 17-18, 1935. Field House, Madison
August 15-16, 1936. YMCA, Kenosha
August 14-15, 1937. Eagles' Club, Oshkosh
August 19-21, 1938. Eagles' Auditorium, Sheboy-
gan
August 12-13, 1939. Ripon College Gymnasium,
Ripon
August 10-11, 1940. High School Gymnasium,
Columbus
August 30-31, 1941. Armory, Manitowoc
August 8 -9, 1942. Horticultural Hall, Lake
Geneva
August 21-22, 1943. Municipal Auditorium, She-
boygan

Presidents Wisconsin Gladiolus Society

- 1930-31. Robt. Leitsch, Columbus 1931-32. W. A. Sisson, Rosendale
- 1932-34 Edwin H. Ristow, Oshkosh
- 1952-54 Edwin II. Ristow, Oshkosh
- 1934-36. W. E. Menge, Fond du Lac
- 1936-37. Walter C. Krueger, Oconomowoc
- 1937-38. B. A. Robinson, Kenosha
- 1938-39. Karl Timm, Markesan
- 1939-41. Chester Harrison, Waldo
- 1941-42. A. S. Haugen, Stoughton
- 1942-43. Harold Janes, Whitewater

Secretaries Wisconsin Gladiolus Society

1930-31. Geo. Morris, Madison
1931-32. R. A. Sutherland, Fond du Lac
1932-33. Mrs. Helen Ebert Groskopf, Rosendale
1933-43. Otto A. Kapschitzke, Sr., Sheboygan
1931- H. J. Rahmlow, Madison, Cor. Sec.



W. A. Sisson, Rosendale, First President Wisconsin Gladiolus Society.



Recent Gladiolus Varieties of Wisconsin Origin —Introductions by Krueger

Mr. Walter Krueger of Oconomowoc lists the following originations:

Bonny Jeanne '44. Color: Bluish white with a pink glow in the center of the floret, and a rose spear on a creamy yellow ground.

Exemplar '44. A beautiful ruffled medium sized decorative salmon-pink.

Badger Beauty '41. A beautiful lavender, with a creamy white throat.

Criterion '42. Beautiful warm light pink tones. Diane '39. Salmon-orange.

King Bee '41. Flaming salmon-scarlet, flaked darker.

Llona '43. A creamy white of commercial promise. Miss Wisconsin '43. A large flowered cerise rose of great beauty.

Show Queen '43. A giant salmon for the show exhibitor.

Variation '42. Pure light pink.

-Introductions by Scheer

In his 1943 catalog, Dr. Geo. H. Scheer, Sheboygan, lists the following introductions:

White Gold '41. Cream glad, blending into a light gold throat.

Eglantine '43. Warm pink, or salmon pink.

Genghis Khan '43. Light, medium, warm pink, with lighter throat.

Marseillaise '43. Glowing, rich crimson-scarlet. Phoebe '43. Tall medium pink.

Shooting Star '43. Rich cream self, with inconspicuous faint lavender feather deep in throat.

Burgundy '43. Rich, glowing, velvety deep crimson, with fine cream line on throat petals.

Gardenia '43. Light cream or milk white.

Introductions by Edwin H. Ristow, Oshkosh Heritage; Parnassus.

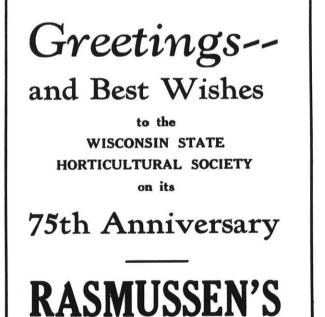
Introductions by Frank Thomas, Kenosha Sue Ellen.

Introduction by Mrs. William Lumsden, Menomonie

La Ventia.



White Gold introduced by Dr. G. H. Scheer in 1941.



Fruit Farm and Nurseries Oshkosh, Wisconsin

History of The Wisconsin Garden Club Federation

THE Wisconsin Garden Club Federation has become one of the strongest and most influential Federations in the United States. In 1943 the Federation has a membership of 86 clubs, and even in this war year four new clubs have joined the Federation.

The Wisconsin Horticultural Society is the parent and organizer of the Wisconsin Garden Club Federation, and consequently takes pride in its accomplishments. A short history of the Federation will therefore be of interest.

Presidents of the Wisconsin Garden Club Federation

- 1928-30 Mrs. R. H. Malisch, Hales Corners
- 1930-32 Mrs. Wm. Bowers, Milwaukee
- 1932-34 Mrs. James Livingstone, Milwaukee
- 1934-35 Mrs. Chas. Jahr, Elkhorn
- 1935-36 Mrs. E. R. Durgin, Racine
- 1936-37 Mrs. Chester Thomas, Milwaukee
- 1937-38 Mrs. J. Martin Johnson, Ripon
- 1938-39 Mrs. E. A. St. Clair, Wauwatosa
- 1939-40 Mrs. Charles H. Schuele, Oconomowoc
- 1940-41 Mrs. Frank Quimby, Racine
- 1941-42 Mrs. Chas. Braman, Waupaca
- 1942-43 Mrs. H. S. Bostock, Madison
- 1943 Mrs. R. H. Sewell, Wauwatosa (Elected October, 1943)

Recording Secretaries of the Wisconsin Garden Club Federation

- 1928-30 Mrs. A. W. Sperber, Hales Corners
- 1930-31 Mrs. James Johnson, Wauwatosa
- 1931-32 Mrs. W. A. Peirce, Racine
- 1932-35 Mrs. R. R. Hibbard, Wauwatosa
- 1935-37 Mrs. E. A. St. Clair, Wauwatosa
- 1937-38 Mrs. Sam Post, Madison
- 1938-39 Mrs. R. E. Kartack, Baraboo
- 1939-41 Mrs. E. L. White, Fort Atkinson
- 1941-42 Mrs. F. C. Marquardt, Hales Corners
- 1942-43 Mrs. Floyd Ballard, Madison
- 1943-44 Mrs. H. W. Schaefer, Kenosha
- 1928- H. J. Rahmlow, Madison, Cor. Sec.

Affiliation of Garden Clubs With the Wisconsin Horticultural Society Prior to Organization of the Federation

In the annual report of the Wisconsin Horticultural Society for 1928 we find that in April of that year the following garden clubs and horticultural societies were affiliated with the Society:

Belles Cooley Horticultural Society Brown Valley Horticultural Society Dunn County Horticultural Society Eau Claire Garden Club German Settlement Club Kenosha Horticultural Society Madison Garden Club Manitowoc County Horticultural Society Milwaukee County Horticultural Society Mindoro Horticultural Society Nashotah Garden Club Oshkosh Horticultural Society Racine Garden Club Waukesha Garden Club West Allis Garden Club

The First Convention of Wisconsin Garden Clubs

The first convention ever held by Wisconsin garden clubs was a meeting at Lake Geneva under the auspices of the Wisconsin Horticultural Society and the Lake Geneva Horticulturual Society on July 19-20, 1928. Previous to that time the Horticultural Society had held summer conventions for all members with a mixed program covering all branches of horticulture. In the June issue of *Wisconsin Horticulture* for 1928, the editor makes this statement:

"Another summer meeting has been arranged. This one will be for garden club members and will be held at Lake Geneva in July.

"We have a large number of garden clubs affiliated with the Society. The members are intensely interested in gardens, flowers, and landscaping. and Lake Geneva offers an unusual opportunity for their study."

The program consisted of talks on gardening and one by Mrs. Frederick Fisher, Lake Bluff, Illinois. then president of the Illinois Federation of Garden Clubs, on the organization of a Federation.

In the August issue, 1928, we find this statement in comments on the program at the Lake Geneva meeting:

"Mrs. Frederick Fisher urged the Wisconsin

garden clubs to federate and to do things in an organized way. As a result of her suggestion, a special meeting of a representative of each of the garden clubs present was called for the following morning at which plans for an organization were discussed. This committee decided that because of the service which the State Horticultural Society can render such clubs, it would be desirable to organize in such a way as to affiliate with the state organization."

The First Organization Meeting

In the October, 1928, issue of *Wisconsin Horticulture*, is given this account of the first organization meeting:

"On October 3rd representatives of ten garden clubs met in the Milwaukee Public Museum to discuss the organization of a State Federation.

"The following clubs were represented: Beloit, Delavan Lake, Elkhorn, Hales Corners, Kenosha, Madison, Milwaukee, Sum-Mer-Del, Waukesha, and West Allis.

"Mr. Huron Smith of Milwaukee was chosen chairman, and Mr. H. J. Rahmlow, Madison, secretary of the meeting.

"A motion was passed that steps be taken to organize a Federation, and the chairman appointed Constitution and Nominating committees to report at the afternoon session."

At that time a constitution was approved, subject to the approval of local clubs, to be presented for adoption at the convention of the Wisconsin Horticultural Society in Milwaukee on December 5-7, 1928.

Temporary officers were elected until the next meeting as follows: President, Miss Helen Moore, Sum-Mer-Del Club; Vice-President, Mrs. R. H. Sage, Delavan; Recording Secretary-Treasurer, Mrs. Arthur Sperber, Hales Corners; Corresponding Secretary, H. J. Rahmlow, Madison; Executive Committee, Huron Smith, Milwaukee.

The Organization Meeting

In the January, 1929, issue of *Wisconsin Horti*culture, there is the following report of the meeting of the Wisconsin Garden Club Federation:

In the absence of the temporary president and vice-president, the meeting was called to order by Mr. Huron Smith, in the Milwaukee Public Museum, December 6, 1928, at 9 a. m.

The first motion to defer the organization of a Federation for one year was lost.

A motion was then made that a permanent Federation of Garden Clubs be organized and that the Federation be affiliated with the Wisconsin State Horticultural Society. The motion was carried.

The following permanent officers were elected at the afternoon session: President, Mrs. R. H. Malisch, Hales Corners; Vice-President, Mrs. C. W. Vaughn, Madison; Recording Secretary-Treasurer, Mrs. Arthur Sperber, Hales Corners; Corresponding Secretary, H. J. Rahmlow, Madison.

The First Executive Committee Meeting

The first meeting of the Executive Committee was held in the home of the president, Mrs. R. H. Malisch, Hales Corners, on January 24, 1929. All officers were present, together with Mrs. C. E. Strong, member of the Board.

In spite of the small size of the Federation, the officers decided on an ambitious program. The first decision made was that a state flower show should be held in the month of June of 1929, and that a state meeting of the Federation be held later in the summer or early fall.

It was decided to hold an annual convention in connection with that of the State Horticultural Society and attempt to put on an interesing program for garden club members. A special department for garden clubs in *Wisconsin Horticulture* was voted, and that magazine was designated as the official organ of the Federation.

CHRISTMAS WREATHS — EVERGREEN SPRAYS

Christmas Wreaths of fragrant balsam, the evergreen with the delightful and lasting fragrance, trimmed with cones and bright berries: 12 inch wreath, \$1.25; 15 inch, \$1.75; 20 inch, \$2.25.

Assorted evergreen sprays with a variety of cones: Boxes of 50, 12-18 inch sprays, \$2.50; boxes of 100, 12-18 inch sprays, \$4.00.

Boutonnieres or favors can also be used as decorations in wrapping gift packages, 25c each, 5 for \$1.00, postage prepaid.

Mrs. Nels Nelson, Hayward, Wisconsin, Route 1.



State Flower Shows

The First State Flower Show Madison, June 7-9, 1929

In the May, 1929, issue of *Wisconsin Horticulture*, we find a description of the first State Garden and Flower Show held in the Loraine Hotel, Madison, June 7-9. An admission charge of 25c was made. It was an ambitious project and the premium list was patterned after the Chicago Flower Show which had become so successful. The premium schedule called for gardens by nurserymen and garden clubs, shadow boxes, luncheon tables, window boxes, miniature models, and little gardens. There were also classes for amateurs for iris, peonies, roses, perennials, and artistic arrangements. There was a long list of committees. H. J. Rahmlow, Madison, was named as general manager of the show, with the officers of the Federation as members of the Executive Committee.

The First Show a Decided Success

A description of the first flower show in the July, 1929, issue of *Wisconsin Horticulture* states that the show was a decided success, with an excellent attendance and many beautiful exhibits. Nurserymen cooperated wholeheartedly in staging elaborate gardens.

These garden clubs exhibited gardens: Milwaukee Horticultural Society exhibited a rock garden; the Madison Garden Club built a miniature park; the Hillcrest Garden Club and West Allis set up a little garden entitled "Bird Retreat"; "Over the Garden Wall" was presented by the Madison Garden Club, ladies' committee, and the men's committee of the club built a Garden Path.

In addition to purchasing much material such as 20 shadow boxes, the show left a small profit in the treasury of the Garden Club Federation.

Flower Show Helps to Promote Garden Club Organization

The publicity received in connection with staging the State Flower Show stimulated the organization of more garden clubs throughout the state and induced them to join the Wisconsin Garden Club Federation. Progress was rapid during the following year.

Stimulated by their success, the officers of the Federation decided to hold the second annual Wisconsin Garden and Flower Show on June 19-22, in the Milwaukee Auditorium, Milwaukee. This show proved to be a decided success artistically, but disastrous financially. The Auditorium rental was high; the weather turned very hot; and the show being held on a Saturday and Sunday, very few people ventured into the heart of the city over the weekend. As a result, the show suffered a loss of about \$450, which was paid by the Wisconsin Horticultural Society.

The following year, 1931, the Executive Committee decided to hold the State Flower Show in the Horticultural Building at the State Fair Park on June 5-7. The large Horticultural Building at the Park was filled to capacity with beautiful gardens and exhibits. This show and the one held in the same building in 1932 were both financially successful and left in the treasury of the Wisconsin Garden Club Federation, a substantial balance which was placed in the permanent fund.

State Flower Show Hit By Depression

The State Flower Show held in the Horticultural Building at the State Fair Park in 1932 was the last large show ever held in that building by the Federation. By this time the depression had hit the nursery business so that the nurserymen who had so generously contributed to the success of previous shows were unable to continue.

Last Show at Kohler

The Federation therefore decided to hold a show in the Municipal Building in Kohler on June 16-18, 1933. This show featured table decorations, shadow boxes or living flower pictures, a plant curiosity shop, flower arrangement tables, artistic arrangements, and a peony show. There were also classes for junior garden club exhibits.

Wisconsin Horticulture for July-August, 1933. makes this statement about the exhibit:

"This year new ideas in flower arrangement were featured at the State Garden and Flower Show. To those who love flowers and like to see them well arranged, and who like to study new ideas in arrangement, the show appealed greatly.

"Only two gardens were exhibited this year. The Kohler Garden Club built a large garden, and the West Allis Garden Club exhibited a garden featured with an evergreen background.

"The tables of eight flower arrangements were the most attractive feature of the show and the classes in which there were the most entries."

While the show was artistic and there were a large number of exhibits, nevertheless the attendance was small. This led to the decision by the Board of Directors of the Federation to discontinue the State Flower Show for the duration of the depression.

State Flower Shows Resumed in May, 1940

On May 17-19, 1940, the Wisconsin Garden Club Federation resumed holding State Flower Shows when a large show was held at the Wauwatosa Recretional Building, with Dr. Carl Schwendener, Milwaukee, as general chairman. Under his leadership and with the cooperation of the Wauwatosa Park Board, the show was made an outstanding success, both financially and educationally. Garden clubs responded well and many educational exhibits were presented.

The second show was held in the same building on May 23-25, 1941, with increased success. At the close of the 1941 show, Dr. Carl Schwendener resigned as manager because of lack of time. He had put the show well on its feet.

Mrs. Chester Thomas was then elected general chairman, and a very beautiful and successful show was staged on May 22-24, 1942. This was again the last large show to be held for some time, because war-time conditions have made it impossible to continue, due to limitations on travel, and the pressure of many other lines of activity.

However, Mrs. Chester Thomas managed two successful Victory Harvest Shows in September, 1942, and in August, 1943.



Mrs. Chester Thomas, Milwaukee, received honorary recognition by the Wisconsin Horticultural Society in 1943

We would like to give credit to the many members of committees who participated in making the shows successful; but due to lack of space, we must refer anyone interested to issues of *Wisconsin Horticulture* for those years.

WISCONSIN'S GREATEST NURSERY

Here is a field of Pyramidal Arbor-Vitae, typical of our more than 400 acres of hardy fruit trees, s m all fruits, evergreens, shade trees, shrubs, roses, etc. the largest assortment of first class stock in the Northwest.



MCKAY NURSERY COMPANY Madison, Visit Our Nurseries at Waterloo, Wisconsin

FLOWER ARRANGEMENT SCHOOLS BE-COME IMPORTANT PROJECT OF FEDERATION

ONE has only to look through issues of *Wiscon*sin Horticulture for the years 1928 and through the early 1930's to realize the tremendous increase in activity of garden clubs due to the organization of the Wisconsin Garden Club Federation. While previous to its organization there had been no meetings of any kind, now we find summer meetings, winter conventions, and flower arrangement schools for all the garden clubs in the state. They were well attended and interest was keen. The success of the flower shows created an interest in flower arrangement. Flower arrangement schools had not been held previous to this time. In fact, very little instruction in flower arrangement had been given before the organization of the Federation.

Premium schedules at flower shows had been very similar to those at county fairs, with little consideration for arrangement. Consequently not very many good arrangements were exhibited excepting those made by florists.

Realizing the need and the demand for flower arrangement schools, the Federation adopted as one of its leading projects education in flower arrangement.

The First Flower Arrangement School Milwaukee, Feb. 19, 1931

The first flower arrangement school was held in the Milwaukee Art Institute, Milwaukee, on February 19, 1931. On the program we find Miss Ann Koerner of the Watts Company; Archie McDonald of Gimbel's; Prof. J. G. Moore, Madison; H. J. Rahmlow, Madison; James Livingstone, Brown Deer; and Mrs. Wm. Bowers, Milwaukee, President of the Federation.

Wisconsin Horticulture for March, 1931, states in regard to this school: "There was such a keen interest in flower judging at the Federation meeting February 19, that a judging contest and meeting was suggested during tulip time."

District Flower Shows and Judging Schools Held

The second flower judging and arrangement school was held in the Hotel Plankinton, Milwaukee, on May 14th, 1931. The plan of this school was as follows: During the forenoon visitors judged four classes, each of four arrangements, which had been prepared previously by a special committee.

The judging papers for each visitor were then graded and winners announced. Following this the official judges told how they had placed the arrangements officially, and discussed principles of flower arrangement. This was followed by talks by three speakers on flower shows and judging.

Second Annual Flower Judging School

The second annual flower judging school was held at the Plankinton Hotel, Milwaukee, on April 28th, 1932. The program was quite similar to that of the first school, and official judges and speakers were Prof. J. G. Moore, Madison; Mr. Chas. Hudson, Jr., of Garfield Park Conservatory.

Another flower arrangement and judging school was held in the Milwaukee Public Library, April 27, 1933.

District Flower Shows and Judging

In 1933, the Federation decided to hold District Flower Shows and Judging Schools, so in 1934 the following were held:

May 22, Milwaukee District at the Milwaukee Gas and Light Building.

May 23, Southern District Show at Elkhorn.

May 24, Fox River Valley District Show at Oshkosh.

June 9-10, Central District Show, Wisconsin Rapids.

An educational program on arrangement was held in connection with each show, which resulted in greatly increased interest in flower shows and flower arrangement. These schools took the place of the state flower arrangement schools.

Outstanding Accomplishments and Activities by the Wisconsin Garden Club Federation

A great many projects have been carried on by the Wisconsin Garden Club Federation and its various committees. Among the outstanding accomplishments we list the following:

(1) Increasing the number of garden clubs and interest in gardening by means of the projects and activities of the Federation.

(2) Conducting flower shows and flower judging and arrangement schools, thereby greatly increasing interest and knowledge in the art of flower arrangement and in growing flowers.

(3) Increasing the knowledge of gardening, landscaping, and other branches of horticulture through programs at annual conventions, summer meetings, district meetings, and helping garden clubs with their own local programs.

(4) Developing important projects for the state and local communities through committees. Included in these are: highway beautification; conservation and reforestation; interest in controlling billboards; knowledge of birds and their habits; plant testing; development of garden centers; war service in various ways, especially by landscaping and planting at army camps, such as Truax Field in Madison.

Annual Conventions

Annual Conventions Held With the Wisconsin State Horticultural Society

The organization meeting of the Wisconsin Garden Club Federation held in conjunction with the annual convention of the Wisconsin Horticultural Society has already been described. It was held in Milwaukee on December 5-7, 1928. For a number of years thereafter the Federation held its conventions in conjunction with the Society, but with a separate program. These meetings were held as follows:

November 13-15, 1929, Raulf Hotel, Oshkosh November 19-21, 1930, Loraine Hotel, Madison November 3-4, 1931, Avalon Hotel, Waukesha November 9-10, 1932, Schroeder Hotel, Milwaukee November 9-10, 1933, State Capitol, Madison November 8-9, 1934, Hotel Racine, Racine November 14-15, 1935, Schroeder Hotel, Milwaukee.

Separate Conventions Voted

Garden club members felt that the November dates were rather late and preferred to meet in October and to hold separate conventions. Accordingly, the following conventions were held, with the cooperation and assistance of the Horticultural Society: October 13-14, 1936, Loraine Hotel, Madison October 14-15, 1937, Athearn Hotel, Oshkosh September 30-October 1, 1938, Foeste Hotel, Sheboygan

October 11-13, 1939, Pfister Hotel, Milwaukee October 1-2, 1940, Hotel Loraine, Madison October 2-3, 1941, Retlaw Hotel, Fond du Lac October 1-2, 1942, Pfister Hotel, Milwaukee October 20, 1943, Plankinton Hotel, Milwaukee



Hardy Perennials .

NORTHERN FIELD GROWN PLANTS

— 200 Varieties — 15 Acres —

We specialize in Lupine, Canterbury Bells, Chrysanthemums, Delphinium, Hollyhock, Shasta Daisy, Viola, Rock Garden Plants and Herbs.

SUPERIOR VIEW FARM

BAYFIELD, WIS.

John F. Hauser

Dawson Hauser

THE WISCONSIN SCHOOL CHILDREN'S FOREST

TN 1936 the Wisconsin Garden Club Federation promoted the Wisconsin School Children's Forest project. It was conceived by Mrs. Frank Quimby of Racine, then Junior Chairman for the Federation, and later Federation President, at a time when teachers were urgently in need of conservation teaching help.

Twelve hundred acres were set aside in the Nicolet National Forest. For each penny contributed by the school children, four pine seedlings were planted in the area. The project was continued for five years, with Mrs. Quimby acting as chairman. A total of 79,022 pennies were contributed, and 316,088 trees were planted in the forest. The area was then left in the care of the United States Forest Service, with the knowledge that through their method of sustained yield harvest, this area will be allowed to perpetuate itself and will always remain a forest.

The forest was dedicated at a special program sponsored by the Federation on July 27, 1940.

How the Wisconsin Horticultural Society Aids the Garden Clubs

All garden clubs affiliated with the Wisconsin Garden Club Federation automatically join the Wisconsin Horticultural Society as well. This is provided for in the constitution of the Federation, and dues of 50 cents for membership in both organizations are collected at one time.

Since the function of the Wisconsin Horticultural Society is purely educational, the service given garden club members is along that line. The secretary of the Horticultural Society is the corresponding secretary of the Garden Club Federation, and thereby a member of its Board of Directors as provided in the Federation constitution. In this way the secretary can act in an advisory capacity to the Board, and much of the educational work of the Federation can be carried on in the Society's office.

Aid to Garden Clubs as Listed in 1942

A report of the service given by the Wisconsin Horticultural Society to the Wisconsin garden clubs was presented at the annual convention of the Federation at its convention in October, 1942. The following are some of the items listed:

(1) The secretary prepared moving picture films and slides on garden subjects, and with these presented lectures to 71 garden clubs. No fees were charged, the Society paying the traveling expenses.

(2) The secretary of the Society gave 12 radio talks on garden topics over State Station WHA.

(3) The Society paid \$25.00 for premiums at the Federation's convention flower show; \$25.00 for a speaker at the summer meeting; paid \$51 as part-payment of plants for trial gardens.

(4) Prepared ten sets of lantern slides on gardening, with a total of 600 slides for free use by any affiliated garden club, the club to pay only the return postage. Each set is accompanied with a lecture.

(5) A total of 5,013 copies of mimeographed material was prepared by the Society for garden club work. This included letters for committee chairmen, and other officers, premium schedules for the State Flower Show, various blanks such as membership, etc., and convention programs.

Comparison of Magazines

At the request of the Federation president, the State Horticultural Society secretary prepared a comparison of the garden material in magazines put out by other State Garden Club Federations with the material in *Wisconsin Horticulture*. A detailed analysis indicated that *Wisconsin Horticulture* contained the largest amount of garden material of any magazine in the nation published by a Federation or Horticultural Society. For the preceding year, *Wisconsin Horticulture* contained a total of 3,092 column inches on gardening, while its nearest competitor had 2,520, and the third, 1,775 column inches.

Only nine State Garden Club Federations were able to continue sending material either in magazine or mimeographed form to their members.

The Wisconsin Horticultural Society in no way exerts any control over the business or other policies of the Federation.



W. G. McKay, Madison, nurseryman, honored by Wisconsin Horticultural Society in 1940.

The Wisconsin Nurserymen's Association

By Thomas S. Pinney, Secretary

THE Wisconsin Nurserymen's Association was organized in Watertown, Wisconsin, on December 27, 1917. It was on that date that nine nurserymen of the state met and organized, electing Mr. T. J. Ferguson of the Hawk's Nursery, Wauwatosa, as president, and Mr. L. J. Tucker of the McKay Nursery, Madison, as secretary-treasurer. Also, at that meeting Mr. F. C. Edwards, Mr. A. W. Brown, and Mr. W. G. McKay were appointed as a committee to draft By-Laws for the organization. Mr. L. J. Tucker remained secretary-treasurer of the organization until his death in 1924.

On March 11, 1926, Mr. W. G. McKay of the McKay Nursery Company, Madison, Wisconsin, was elected secretary-treasurer and held this position until 1929. Mr. McKay has been one of the most active men in the entire organization and is still a leading figure in it. He has unselfishly given considerable time and effort to further the interests of the organization and the industry as a whole. In 1928 Mr. F. C. Edwards of the Coe, Converse & Edwards Co., Fort Atkinson, was elected president, who because of his health, refused to accept the position for more than one year. By this time the organization had grown to a membership of 25.

On March 5, 1929, Mr. Charles Hawks, Jr., of the Hawk's Nursery, Wauwatosa, was elected president, and Mr. M. C. Hepler of the North Star Nursery, Pardeeville, was elected secretary-treasurer. Mr. Hepler remained secretary-treasurer until 1938.

In 1930, Mr. E. H. Niles of the White Elm Nursery, Hartland, Wisconsin, was elected president. Mr. Niles served as president of the Association for two years and in 1932 Mr. L. J. Baker of the Baker Seed and Nursery Co., Fond du Lac, was elected president who also served in that capacity for two years.

In 1934 Mr. Thomas S. Pinney of the Evergreen Nursery, Sturgeon Bay, was elected president, and likewise served in that capacity for the following two years. In 1936 Mr. Karl Junginger of the McKay Nursery Co., Madison, was elected president. In 1938 Mr. A. T. Singer of Singer Bros., Inc., Milwaukee, was elected president and also the same year Mr. M. C. Hepler, who had been secretarytreasurer ever since 1929, withdrew from office and Mr. H. W. Riggert of the Coe, Converse & Edwards Co., Fort Atkinson, was elected secretary-treasurer. Mr. Riggert deserves a lot of praise for his work as he remained their secretary-treasurer until 1942 at which time Mr. Thomas S. Pinney of Sturgeon Bay was elected. Mr. Riggert gave his undivided attention to the affairs of the organization and not only built up the finances to a very healthy condition, but conscientiously kept the membership informed of matters of interest and of importance to them.

In 1940 Mr. James Livingstone of the Holton & Hunkel Co. was elected president, who served for two years. In 1942, Mr. Walter Remond of the Carl Gerlach Co., Milwaukee, was elected president and again reelected in 1943.

Activities

While the Wisconsin Nurserymen's Association is not a large group as far as numerical strength is concerned, it does represent an excellent cross-section of the nurserymen of the state of Wisconsin. The Wisconsin Nurserymen's Association has also affiliated itself with the American Association of Nurserymen for a number of years as well as the Wisconsin State Horticultural Society. Every year it holds an annual convention usually the fore-part of February and for the past number of years it has been held in Milwaukee. Up until this summer a midsummer meeting was usually scheduled, but due to transportation difficulties was eliminated this year for the duration.

Ever since the organization of the Wisconsin Nurserymen's Association in 1917, the cooperation and good feeling between it and the various state departments concerning themselves about the nursery business has always been outstanding. Particular reference is made to the splendid cooperation given each other by the Association and the State Entomology Department which for a number of years has been in charge of Mr. E. L. Chambers. Mr. Chambers does everything in his power to keep the nurserymen informed as to the regulatory measures in regard to shipping nursery stock and also control measures relative to the many diseases we have today. He appreciates the nurserymen's problems, and they in turn do all they can to cooperate with him and make his work as agreeable and effective as possible.

A Short History of Wisconsin Spray Rings, County Fruit Growers' Associations, Southeastern Fruit Growers' Cooperative

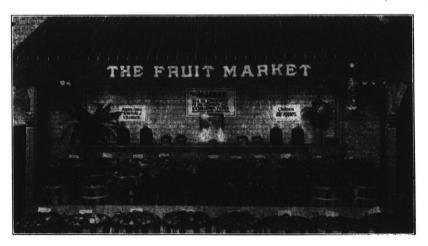
By Conrad L. Kuehner

W ISCONSIN Spray Rings were first organized about twenty-five to thirty years ago when F. R. Gifford joined the staff of the Department of Horticulture, University of Wisconsin, as Extension Fruit Specialist (May, 1920, to June, 1923). Grant, Crawford, La Crosse, Dodge, Jefferson, and Iowa Counties were among the pioneer counties in the state to organize spray rings. Soon thereafter, when the experiences of these first rings became known to other counties, additional ones came into action in quite a few counties. County Agents saw the value of the organization and did much hard but fine work

in getting community groups of ten to twelve farm orchardists organized into spray rings. Originally the spray ring was distinctly devoted to the job of providing the family's fruit needs. This ambition, however, was enlarged upon as soon as spray rings were organized in city market areas where the surplus fruit produced by them soon gained popularity with the city folks. The great improvement of highways and the immense increase in auto ownership and travel in the last twenty years gave much momentum to the project so that at the present time there are a total of 215 rings operating in 33 counties, with prospects of many more rings as soon as spray machines become more readily available again.

County Fruit Growers' Associations

The first County Fruit Growers' Association was organized in Jefferson County when J. M. Coyner was County Agent of this county. It was organized



A roadside stand conducted by Spray Rings.



Five counties put up this fine exhibit at a "Food Show."

to help give direction to fruit improvement work in the county; to facilitate the purchase of fruit growers' supplies, and to aid in more satisfactory sale of surplus fruit from spray ring orchards. Several years' experience showed that other counties with spray rings might also benefit as Jefferson County had benefited. Within the following ten years, Milwaukee, Waukesha, Ozaukee, Washington, Racine, Sheboygan, Manitowoc, Winnebago, Dodge, and Marinette Counties all organized Associations and have since been very active in furthering fruit improvement work in their respective counties.

Southeastern Fruit Growers' Cooperative

The Southeastern Fruit Growers' Cooperative may be considered as all-over service or purchasing organization for county fruit growers' associations. The charter members of this cooperative were Milwaukee, Ozaukee, Washington, Waukesha, and Ra-

cine Counties. These five counties were primarily responsible for the fine steady growth of the cooperative and its services to fruit growers and spray rings in general. While the Co-op. was started in a small way, within a few counties, it has steadily increased its membership, its services, and its volume of business so that today it serves growers and growers' organizations in all parts of the state. This cooperative had been a definite help in the past twelve years to popularize sound farm orchard fruit growing practices.

SPRAYERS — DUSTERS PRUNING TOOLS GARDEN TOOLS BERRY BOXES BASKETS

HARVESTING SUPPLIES GARDEN SEEDS INSECTICIDES FERTILIZER TRELLISES

F. R. GIFFORD COMPANY

IN CORPORATED

ORCHARD AND GARDEN SUPPLIES

2201 UNIVERSITY AVENUE

MADISON, WISCONSIN

November, 1943

A message to all the readers of this magazine:

The F. R. Gifford Company wishes to extend a hearty thanks to the many friends for their continued patronage and consideration shown us in the past. We would also like to take this opportunity to tell you a little about ourselves since our start back in 1923 by Mr. Frank R. Gifford.

While working with Orchardists and Gardeners as Extension Horticulturist for the University of Wisconsin, Mr. Gifford came to realize the difficulty growers were experiencing in obtaining supplies. When Mr. Gifford's health no longer warranted his continuing with the University, he organized the F. R. Gifford Company at 2201 University Avenue, Madison, with the aim of serving the Fruit Growers and Gardeners of the state.

The Company had little trouble coming to the front as a principal source of supplies for the Orchardist and Gardener. Mr. Gifford had many friends in the state whom he served diligently till his death in 1926. There was no one left to carry on the already thriving business except his wife, Mrs. Edith Gifford.

Mrs. Gifford was a very kind and understanding woman who had to learn all about the Orchard and Garden in order to continue her husband's business. With four different partners, all at different times, Mrs. Gifford served the public, although not always the way she would like to have done.

The present manager had considered going into the business as a partner with Mrs. Gifford in the spring of 1942, but because of her sudden death on the first day of November, 1941, had to give up those plans.

The Company was left to Miss Frances Post, sister of Mrs. Gifford. At first Miss Post wanted to sell the business, but no buyer could be found. Today the Company is owned by Miss Post and managed by Mr. Glenn A. Dunn.

Mr. Dunn (he prefers to be called Glenn) is a graduate of the Wisconsin College of Agriculture. He lived on a farm in Adams county till the wind blew the farm away, and his family moved to Waukesha. He would rather be out calling on the growers than tending store, but finds it hard to get the necessary gas with which to travel.

At times during the past year we have found it impossible to take care of all your requirements, due to conditions arising out of the ever increasing demands by our armed forces. However, we hope that you will contine to be considerate and think of us for your supplies.

Sincerely yours,

F. R. GIFFORD COMPANY

Glenn A. Dunn, Mgr.

The Wisconsin Horticultural Society in 1943

WAR-TIME conditions have made many changes, but the work of the Wisconsin Horticultural Society has been continued as in the past, because horticulturists are still interested in obtaining information to help them with their problems. Governmental regulations may come and go; interest in them may be paramount for a time, but the grower's chief concern is and always will be how to solve his immediate problems; how to control those insect and disease pests which ruin his crops; improved varieties; results of the work of our experiment stations in horticulture; how to increase production and lower costs; how to make life happier by gardening and landscaping. These and many other subjects are discussed in Wisconsin Horticulture each month, as well as at meetings both of the various state organizations and of local organizations.

Membership

The Wisconsin Horticultural Society is composed of three types of membership: (1) Life members. Anyone may become a life member on application and payment of the fee of \$10. (2) Annual members. Anyone may become a member of the Wisconsin Horticultural Society for the fee of \$1.00 per year, or \$1.50 for two years. (3) Members affiliated through local organizations. The largest group of members are those affiliated with the Wisconsin Horticultural Society through local fruit growers' associations, garden clubs, beekeepers' associations, and others.

The fee for these members has been set as follows: 200 or more members in one organization, 35c; from 10 to 199 members, 40c per member. All such memberships must be sent to the Society by the local secretary, and are usually part of the local dues.

All members receive Wisconsin Horticulture each month.

The membership of the Society has steadily increased since its very beginning. The largest increase, due to a great extent to the organization in Wisconsin of many local fruit growers' associations, garden clubs and beekeepers' associations, has been during the years 1930 to 1940 when the membership increased to approximately 4,900.

Organizations Affiliated With the Wisconsin Horticultural Society—1943

State Organizations:

Wisconsin Garden Club Federation Wisconsin Beekeepers Association Wisconsin Nurserymen's Association Wisconsin Cranberry Growers Association Wisconsin Gladiolus Society Local Fruit Growers Associations:

Alma Center Fruit Growers Association **Bayfield Fruit Growers Association Dodge County Fruit Growers Association** Fruit Growers Co-op, Door County Jefferson County Fruit Growers Association Manitowoc County Fruit Growers Association Marinette County Fruit Growers Association Milwaukee County Fruit Growers Association **Ozaukee County Fruit Growers Association Racine County Fruit Growers Association Reynolds Company Fruit Growers, Door County** Shawano County Fruit Growers Association Sheboygan County Fruit Growers Association Southeastern Fruit Growers Association Walworth County Fruit Growers Association Warrens Fruit Growers Association Washington County Fruit Growers Association Waukesha County Fruit Growers Association Winnebago County Fruit Growers Association

Garden Clubs

Antigo; Art Institute; Baraboo; Bay View Horticultural Society, Milwaukee; Berlin; Blue Beech, Milwaukee; Blue Mound, Milwaukee County; Brandon Community; Brookdale; Burlington.

Cambridge and Lake Ripley; Cedarburg; Ceresco, Ripon; Darlington; Dousman.

Edgerton; Elkhorn; Elm Grove; Fond du Lac Community; Fort Atkinson; Gale Crest, Milwaukee County; Green Bay; Greendale, Milwaukee County; Green Tree, Milwaukee County.

Hales Corners; Hawthorne, Milwaukee County; Hillcrest, Milwaukee County; Home G. C., Ripon; Home Gardeners, West Allis; Horicon.

Iola; Jefferson; Kaukauna; Kenosha County; Kohler; La Belle, Oconomowoc; La Crosse; Lake Geneva Town and Country; Lake Wazeecha, Wisconsin Rapids; Ledgeview, Fond du Lac; Little, Madison; Lodi.

Madison; Manitowoc; Marinette; Menasha; Menomonee Falls; Milwaukee County Horticultural Society; Namekagon, Hayward; Neenah; Oakfield; Omro; Oshkosh Horticultural Society.

Park Ridge, Stevens Point; Pewaukee; Plymouth; Portage Community; Port Washington.

Racine; Ravenswood, Wauwatosa; Ripon, Rosholt; Scandinavia; Sheboygan; Shorewood Hills, Madison; Shorewood, Milwaukee County; Spring City, Waukesha; Sturgeon Bay; Sum-Mer-Del, Waukesha County; Sunset Village, Madison; Superior. Tess Corners, Hales Corners; Two Mile, Wisconsin Rapids; Victory, West Allis; Washington Island; Wayside, Milwaukee County; Waukesha Town; Waupaca; Wausau; Wauwatosa; West Allis; West Bend; West Side, Madison; Whitewater; Whitnall Park, Milwaukee County; Winneconne; Wisconsin Rapids; Yard and Garden, Ripon.

Wisconsin Beekeepers Association

District Associations: Southeastern District; Northwestern District; Fox River Valley District; Southern District: Southwestern District.

Affiliated with the Wisconsin Beekeepers Association are also 27 county associations.

Other Local Associations

Woman's Auxiliary, Wisconsin Horticultural Society; Lake Geneva Gardeners and Foremen's Association.

WHAT THE SOCIETY IS DOING

IN 1942 the secretary of the Wisconsin Horticultural Society stated in his annual report that the following work had been done by the Society and the secretary during the past year.

The secretary spoke at these meetings: 18 apple and strawberry growers meetings 46 garden club meetings, with 78 clubs taking part 9 beekeepers meetings or schools conducted 7 Gladiolus Society meetings

2 Nurserymen's meetings

Arranged three state 2 day conventions (Horticultural Society, Garden Club Federation, and Beekeepers Association)

Established 9 trial gardens for ornamentals

Sent out the following plants in the fruit testing project: 300 strawberry plants each of 4 varieties from Canada; 700 raspberry plants; 50 Milton raspberry plants; 19 apricot trees; 132 Sungold peach trees; 25 Polly peach trees; 68 Prunus tomentosa shrubs.

The Society has prepared 10 sets of lantern slides of 600 slides for free distribution to affiliated organizations.

Edited Wisconsin Horticulture, 11 issues.

Sent out 90 bags of poisoned oats bait and 227 tubes zinc phosphide to fruit growers for mouse control.

The office sent out during the year, 3,821 letters. and 2,463 postcards. Considerable mimeographing was done for affiliated groups.



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Looking Forward TO NEXT SEASON Here Are a Few Tips You Might Appreciate:

In planning your spraying program you will want to use sprays which effectively control worms and scab and the many other diseases which attack fruit. You will find these materials in the Dow line of sprays.

Your first spray, of course, is the dormant to control aphis, scale, bud moth, pear psylla. Either DN Dry Mix or Dowspray Dormant will do the job for you.

For scab and other fungus troubles we offer you "Mike" Sulfur, Dry Lime Sulphur or

Lime Sulphur Solution. Use the one best suited to your particular conditions.

For leaf spot and shot hole fungus on cherries, consider Bordow, our copper fungicide and, of course, Dow Lead Arsenate for worm control.

Consult your dealer about these and the other Dow products which have served fruit growers so well for more than 30 years. A spraying chart will be sent you upon request.



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No. 4

SUCCESS

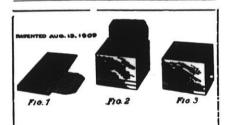
- Success is built upon the dreams we have.
- With courage and the will to see them through;
- Though obstacles may dim your cherished hope
- The way be rough and helping hands be few.
- But keep your dreams unto your troubled heart,
- And cast them not in idleness awav:
- For no great man has reached the golden stair-
- Without some doubt and showers of dismay

In Wildfire

-Marion F. Haugseth

When a British sailor at the Hollywood Canteen complained about a sore throat, a solicitous hostess asked, "Have you tried gargling with salt water?"

Sailor: "Have I? We were torpedoed three times!"



Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Fold-ing Berry Boxes of wood veneer that give satisfaction. Berry box and crate materials in the K. D. in carload lots our specialty. We constantly carry in stock 15-quart crates all made up ready for use, either for strawberries or blue-berries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

CUMBERLAND FRUIT PACKAGE COMPANY

Dept. D. Cumberland, Wis.

HORTICULTURE WISCONSIN

The Official Organ of the Wisconsin State Horticultural Society

ESTABLISHED 1910

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Subscription to Wisconsin Horticulture is obtained by membership in the Wisconsin State Horticultural Society for which the annual dues are \$1 per year or \$1.50 for two years. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Fifty cents of the annual dues paid by each member is for a year's subscription to Wisconsin Horticulture.

58

The Convention Program

Speakers Discuss Important Topics With Fruit Growers

The Apple Maggot

DR. C. L. Fluke, Madison, and Dr. A. C. Hodson of Minnesota gave very interesting discussions on their experience with apple maggot during the past season. and some new discoveries on its control. The fact that apple maggot can be controlled by spraying was illustrated by Dr. Hodson when he gave an observation in two orchards in Minnesota, A neglected orchard had a 60% infestation of apple maggot. In an adjoining orchard, with only a fence between, even the first row had only 6% injury from the maggot. This orchard had been properly sprayed and the drops had been picked up the year before.

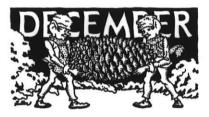
Apple maggot flies will move perhaps one-quarter mile, but tend to stay fairly close to the place where they are hatched out.

Bait Traps

The continued use of bait traps was highly recommended by both speakers. The easiest way of making a bait trap, according to Dr. Hodson, is to use common household ammonia at the rate of 1 teaspoonful per quart of water. The use of soap is quite important because the flies tend to skip off of the water if soap is not used. Dreft is best for hard water, but any granulated soap may be used in soft water. If household ammonia is used, it should be dumped and refilled at the end of each week.

There was some discussion as to the best type of pail to use. Dr. Hodson stated that the larger the pail opening, the greater the catch of flies. A pail of the dish pan type, with a wide mouth, is best. The water level should be kept to within one inch of the top of the pail.

It was emphasized that it is important not to use more than one teaspoon of ammonia per quart of water because if the odor is too



strong the flies are repelled. If the odor is just right, the flies are at-tracted.

Best Height For Traps

Questions were asked as to the best height for hanging the pails. Dr. Hodson stated that in studies on this question traps hung at a height of three feet caught 18 flies, at nine feet, 76 flies, and at 12 to 13 feet, 77 flies. He therefore recommended the pails be hung at eye level, or a little above.

It is also important not to hang the traps near the trunk, but on the outside of the tree where it is sunny.

Traps alone did not give practical commercial control even if hung in every tree in the orchard. The traps, therefore, are mainly used to determine the proper time for spraying.

The drought may reduce the infestation. It was pointed out that during the drought years of the middle 1930's, the apple maggot practically disappeared in some sections.

Spray Trees Not Fruiting

Apple maggot flies feed on the leaves of the trees without fruit, as well as those having fruit. They also feed on the leaves of the brush and trees on the edge of forests adjoining orchards. It is therefore recommended that all trees be sprayed regardless of whether or not they have fruit, and also the trees on the edge of woodlots in order to get rid of all the flies.

Early, soft varieties of apples should be picked up within three or four days after they drop. Otherwise the maggots will work their way into the soil and there will no longer be any use picking them up. The later and hard varieties of apples may be picked up from one to ten weeks after they drop.

Flies seem to concentrate on the varieties they like best such as Tolman Sweet, and may move to unpicked trees after some kinds are picked; they are especially bad on early apples.

For cleaning up an orchard badly infested, Dr. Hodson recommended three pounds of arsenate of lead per 100 gallons of water, but for maintaining control, two pounds per 100 gallons is enough.

Dr. Fluke urged that growers continue using bait traps and keeping records for at least two or three more years in order that information may be obtained as to when the flies appear in various sections of the state in an average year.

Who is to Blame for the Bruises?

Mr. Minard Farley, Jr., of Lansing, Michigan, representing the Michigan Apple Commission, gave an interesting talk on "Who is to blame for bruises?" giving the results of work carried on in Michigan. The study showed that everyone who handles apples is somewhat to blame.

Using the Jonathan variety of apple, the study showed the following number of *bruises per 100* apples.

On the tree, 10 bruises; in the picking bag, 65 bruises; in the field crate, 85; delivered to the exchange, 170; dumped on the conveyor, 230; through the washer, 268; over the grader, 351. He emphasized that more care must be used all along the line to avoid bruising.

Get Rid of Rabbits and Mice

Mr. G. C. Oderkirk of Purdue, again emphasized the necessity of getting rid of rabbits and mice in (Turn page) the orchard. Mr. Oderkirk has written some very good articles which have appeared in this magazine and has covered this subject well. Poison bait for mice and trapping or hunting the rabbits are the most practical methods for eliminating these pests in the orchard, as well as in the garden.

Orchard Observations By Dr. R. H. Roberts

Dr. R. H. Roberts made some very valuable suggestions to fruit growers based on orchard observations and research.

He said that from pollination studies made this year it seems certain that none of Wisconsin's commercial varieties of apples are selffruitful. Varieties on which studies were made include Wealthy, Duchess, McIntosh, Delicious, N. W. Greening, Jonathan, Dudley and Snow. These varieties, therefore, should be planted so that crosspollination is possible.

Dr. Roberts exhibited a specimen of Starking which he said was the finest he had ever seen. The trees had been sprayed nine times with lime sulphur at a pressure of 600 pounds. He concluded, therefore, that lime sulphur used correctly, does not always injure the foliage. His opinion was that summer injury may be caused by lead arsenate in the spray. At any rate, most of the foliage injury that he has observed occurred during the calyx, or the 10-day spray and not later.

Blossom Bud Formation

Dr. Roberts stated that studies made at Madison by Dr. B. Esther Struckmeyer have shown that apple bud formation is induced three to four weeks after blossoming. Blossom bud initiation can be stopped by removing a portion of one or two of the tip leaves next to the bud. Therefore, spray injury to these leaves can greatly affect blossom bud formation.

On the subject of fertilizing apple trees, he said that the practice of giving nitrogen fertilizer to biennial bearing trees in the spring of the heavy blossoming year, causes too heavy sets and consequent poor foliage and poor finish to the fruit. The fertilizer should be applied in the spring of the off-years to such varieties as Wealthy. Dr. Roberts would apply all nitrogen fertilizers in the orchard in the spring of the year.

On the subject of pruning he emphasized that it is poor practice to follow a style or system of pruning. The system which makes a good Wealthy tree will wreck the fruiting habit of a McIntosh tree.

In his opinion the reasons for highly colored fruit this year was due to the cool nights in late August and September.

He does not believe that the size of the apple depends entirely upon the number of seeds in the apple or that poor fertilization caused apples to be small this year.

McIntosh, he said, had made a very good stock on which to topwork Starking, at Gays Mills, as indicated by grafts which had been set for four years.

WINNERS AT THE CONVEN-TION FRUIT SHOW

The fruit show at the convention this year was smaller than usual. but nevertheless served its purpose. It brought out exhibits of the new varieties on trial in Wisconsin so that those in attendance might see and examine these specimens to determine whether or not they would like to grow them. This is always valuable because many growers in Wisconsin have not had a chance to see some of the new kinds. Discussion around the exhibit tables between the growers of the new kinds and those interested in growing them determines what course will be followed.

An exhibit of some of the most popular standard varieties is valuable because it brings out the finest quality and shows what growers in Wisconsin can do.

THE WINNERS

New Varieties

Milton: 1st, W. E. Aeppler. Oconomowoc.

Macoun: 1st, A. K. Bassett, Baraboo; 2nd, Arno Meyer, Waldo; 3rd, W. E. Aeppler.

Cortland: 1st, W. E. Aeppler; 2nd, Arno Meyer; 3rd, A. K. Bassett; entries of merit, W. H. Steele, Pewaukee; Emil Beyer, Malone.

Secor: 2nd, W. H. Steele; 3rd, Arno Meyer.

Kendall: 1st, W. E. Aeppler; 2nd, Arno Meyer; 3rd, Wm. R. Leonard, Fort Atkinson.

Perkins: 1st, L. H. Stringer, Milton; 3rd, Meyer Orchards, Hales Corners.

Any other new variety: 1st, W. E. Aeppler; 2nd, W. E. Aeppler; 3rd, Gygax Bros., Waukesha; entries of merit, W. E. Aeppler; W. H. Steele; Ralph Irwin, Lancaster.

Standard Varieties

The special cash premiums offered by the Niagara Sprayer and Chemical Company on McIntosh and Delicious were won as follows:

McIntosh: 1st, A. K. Bassett, Baraboo; 2nd, Wm. Connell, Menomonie; 3rd, W. E. Aeppler; 4th, Emil Beyer, Malone; 6th, John Guth, Bancroft.

Delicious: 1st, Emil Beyer; 2nd, A. K. Bassett; 3rd, John Kopp, West Bend; 4th, Gygax Bros.; 5th, L. H. Stringer, Milton; 6th, S. F. Herdrich, Adell.

Golden Delicious: 1st, A. K. Bassett; 2nd, Emil Beyer; 3rd, S. F. Herdrich.

Snow: 1st, A. K. Bassett; 2nd, Wm. R. Leonard; 3rd, Leonard Bros., Fort Atkinson; 4th, Gygax Bros.

N. W. Greening: 1st, Wm. Connell; 2nd, A. K. Bassett; 3rd, John Guth; 4th, Gygax Bros.

Any other standard variety: 1st, 2nd, and 3rd, A. K. Bassett, Baraboo; 4th, John Guth, Bancroft

Orchard Cover Crops as Soil Conservers

EARLY June seeding of an an-nual cover crop in New York orchards is advocated as being far superior to late summer or fall seedings when measured in terms of nitrogen and organic matter conservation and in the reduction of soil and water losses. This and other recommendations on orchard soil management with respect to cover crops and mulches are set forth in a bulletin published by the New York state experiment station, at Geneva, on seven years' investigations by R. C. Collison and E. A. Carleton. A copy of the bulletin may be obtained upon request to the station

Clean Cultivation Ruins Soil

In the station experiments, clean cultivation depleted both soil nitrogen and organic matter, while soil and water losses were heavy. Even allowing weeds to grow had a marked effect on nitrogen and organic matter accumulation in the soil. The seeding of cover crops in June proved the most effective procedure, especially where the cover was allowed to stand over winter and was plowed under in the spring. In fact, any method of soil management which reduced the time during which the soil was not occupied by a crop reduced losses of soil nitrogen and organic matter as well as erosion losses.

Legumes Good

Legumes used as *annual cover* crops in the orchard proved especially effective. These included soybeans and sweet clover and combinations of rye and vetch and oats and sweet clover, all of which can be seeded early and allowed to stand over winter.

Permanent grass sod proved to .be almost a perfect cover to control erosion losses, but under some conditions it gave rather large water losses. It conserved soil nitrogen and organic matter, the latter more than the former. Continuous alfalfa conserved and accumulated both nitrogen and organic matter.

Retain Snow

Snow retention proved an important factor in preventing water losses in orchards, and cover crops which tended to retain snow by their upstanding habit of growth were superior to other covers which did not hold the snow so effectively. The effect of mulches on the conservation of soil nitrogen, organic matter, water and soil is also considered in the bulletin.

From November 1, 1943 Americon Nurseryman.

Question on recent examination paper: "If the President of the United States died, who would get the job?"

Little Joe's answer: "A Democratic undertaker."



One Lot of Ripe Apples May Ripen Another in Storage

A^N article by R. M. Smock in "Farm Research" of the Geneva (N.Y.) Station says one lot of apples can affect another lot in the same storage chamber, whether it is home, common, or cold storage. Scientists at Cornell University tried to find out why, how, and how much.

Recently an English scientist discovered that rapidly ripening apples gave off small quantities of ethylene gas. It has been known for a long time that ethylene gas causes immature fruits to ripen at an increased rate and it has been used commercially to ripen oranges and bananas. So the Cornell scientists set out to discover if ripe apples could evolve enough gas to cause less mature apples to ripen.

They found, for example, that if a small lot of ripe, early apples was in the storage room when a lot of a later variety in prime condition for storage (not fully ripe) was brought in, the late apples would not keep as well as if stored by themselves. They found that if as little as 1 per cent of the apples in the room were ripe, it would affect the storage life of the prime apples significantly. In seven experiments at cold storage temperatures, the small lot of ripe apples reduced the storage life of the prime apples an average of 25 per cent. In some cases, with certain varieties, it may run to 50 per cent. Lots of different varieties, but of equal maturity, whether green, ripe, or prime for storage, had no effect on each other.

Another example of this ripening influence, and one most likely to occur, is where a grower gets his storage pretty well filled with apples in prime condition early in the season, but later, the fruit ripens on the tree faster than it can be packed, so the last apples to go in are ripe, and these speed up ripening of the prime fruit.

In small-scale experiments, it was found that filtering the air through charcoal to which a small quantity of bromine has been added, would clear the storage atmosphere of ethylene, and it is planned to test the feasibility of this process on a commercial scale. Results of the study so far completed will be published as Cornell Bul. 799.

This gives the "why" to a statement made recently in "Horticulture" (Mass.) that a few ripe apples or pears put into a tightly closed container with partly ripe tomatoes, picked to escape frost, would make them ripen up well at room temperatures.

A.N.P.—From Tennessee Horticulture, November 15, 1943.

HOW TO KEEP RABBITS AND MICE AWAY FROM YOUNG FRUIT TREES

WRAP the trunks of your young fruit trees in several layers of common newspaper. Paper will protect them from rabbits as well as any other material you can use. If the snow is deep during the winter, the rabbits will girdle the bark of the branches in the tops of the trees, and it is very difficult to wrap these. Consequently the best way to protect our fruit trees is to get rid of the rabbits and in our cities we should organize to do that, using live rabbit traps.

The mouse problem is somewhat different. There is nothing we can wrap around the trees that will protect them from the mice, excepting to use wire screen around the trunks, and it may be difficult to get the screen. If possible, all trees should be protected, however, with screen, which should be shoved into the ground about one inch and be large enough to avoid girdling the tree in a short time.

In addition, if you have many fruit trees, it will pay to use poisoned bait, especially if the trees are in sod. If not in sod, but in cultivated ground, there is very little danger from mice and the snow can be tramped around the trunks as soon as it comes, which will practically eliminate all danger. All mouse baiting should be done before snow comes, the bait being placed in the mouse runways on the morning of a bright, clear day so the mice will get it at once.

EXPERIMENT WITH SQUASH

A SQUASH storage experiment has been going on for a year.

Here are some of the things learned last year. First, the common practice of piling squash in the field, and allowing them to cure a couple of weeks beneath the vines before storing, is bad. It increases the amount of disease and materially shortens the storage period. Dryness is more important in the storage itself than any other one single thing.

Squash can be kept in a room at ordinary house temperature if it is kept dry. It will keep better, however, if it is kept cooler, in dry air, and the quality is better. Keeping the air dry, which is the first essential, is more difficult at lower temperatures. Over-ripe squash do not keep quite as well as those just well matured. On the other hand, while green squashes may keep fairly well they have poor quality. Medium or small squash if well matured store better than the large ones.

As for varieties, Butternut, a comparatively new variety, keeps pretty well up until about Christmas time. Buttercup or Hubbard will keep later.

By Dr. A. F. Yeager, in North and South Dakota Horticulture, October, 1943.

We Agree

The juke box in the Oasis bar on upper Broadway in New York City contains one item billed: "Five minutes of silence for a nickel." The item does a land-office business.—Geo. Jean Nathan in Cosmopolitan.

Wisconsin Apple Institute Organized

Officers Elected and Program Planned

THE Wisconsin Apple Institute was launched on its way following a discussion at the annual convention of the Wisconsin Horticultural Society, led by Mr. Minard Farley, Jr., of the Michigan Apple Commission. Fruit growers at the second day's session voted to adopt the report of a special committee appointed to consider the organization. The following is the report of the committee:

(1) The committee considers it advisable that an organization be set up in Wisconsin for the purpose of helping fruit growers and suggests the name Wisconsin Apple Institute.

(2) It is recommended that membership dues of the organization be \$5.00 per membership, plus 50 cents per acre as a voluntary contribution.

(3) The committee recommends the following growers to act as an organization committee for the coming year, with power to elect temporary officers, and otherwise organize in whatever way they deem best for the industry:

Committee Members

S. S. Telfer, Ellison Bay

Don Reynolds, Sturgeon Bay

C. J. Telfer, Green Bay

Arno Meyer, Waldo

Wm. Connell, Menomonie

Dawson Hauser, Bayfield

Arnold Nieman, Cedarburg

Arthur Bassett, Jr., Baraboo

J. C. Schubert, Gays Mills

Anton Dvorak, Casco

Member at large, Dr. R. H. Roberts, Madison

H. J. Rahmlow, Madison, to act as corresponding secretary, exofficio.

COMMITTEE ORGANIZES AT GREEN BAY

THE committee met at Green Bay on November 30 to organize and make plans for the work of the Institute. The following officers were elected: President, C. J. Telfer, Green Bay; Vice-President, Wm. F. Connell, Menomonie; Recording Secretary-Treasurer, Arnold F. Nieman, Cedarburg, R. 2; Corresponding Secretary, H. J. Rahmlow, Madison.

The following program of work was planned by the committee:

Program

(1) That we support the work of the National Apple Institute in every way possible.

(2) That we promote the welfare of Wisconsin apple growers.

(3) Distribute all literature from the National Apple Institute to each of our members.

(4) Promote more widespread use of Wisconsin apples.

(5) Receive money from Wisconsin apple growers to be used for all above purposes.

It was voted that all names of members and the amount of their contribution be published in Wisconsin Horticulture. The first contribution came from Mr. J. C. Schubert of Gays Mills, who was unable to be at the meeting, but wrote that he hoped that the work would be successful and enclosed his check for dues amounting to \$55.

The following are the members whose dues have been received up to the time we go to press: Kickapoo Orchard Co., J. C.

Schubert, Gays Mills ____\$55.00 Wisconsin Orchards, Inc.,

R. H. Roberts, Gays Mills 47.50 Wm. F. Connell, Menomonie 50.00 Waldo Orchards, Arno Mey-

er, Waldo _____ 15.00 Nieman Bros. Orchards, Ar-

nold F. Nieman, Cedar-

burg _____ 25.00 Virgil Fieldhouse, Dodgeville 6.00 Haas Bros., South Milwau-

kee _____ 10.00 Gays Mills Fruit Farm. Inc..

James P. Kegel, Pres.,

Gays Mills _____ 35.00

We invite all Wisconsin apple growers to send their dues of \$5.00 per membership, and 50 cents per acre, bearing orchard, voluntary contribution to Mr. Arnold F. Nieman, Cedarburg, R. 2, as soon as possible.

FRUIT GROWERS WHO WOULD BE SUCCESSFUL

Must:

1. Be horticulturally well-informed

2. Choose a frost-free location

3. Choose a good orchard soil

4. Fit the crop to the soil

5. Manage the soil carefully

6. Have bearing orchards of desirable age

7. Obtain abundant yields

8. Grow standard commercial varieties

9. Produce high-grade fruit

10. Recognize and meet changing conditions

Should:

1. "Grow up" in the business

2. Live on their farms

3. Devote the major part

4. Grow a diversity of fruit crops

5. Operate relatively large, bearing orchards

6. Be adequately equipped

7. Have access to adequate and conveniently located storage facilities

8. Keep books

By H. P. Gaston, in Circular Bulletin 181 entitled "Factors Which Make For Success in Orcharding" by Michigan State College.

If you don't keep a diary, how are you going to tell what you were worried about this time last year?

INCREASING STRAWBERRY YIELD AND SIZE

USE of a narrow row, such as 10 inches, rather than the wider row of 30 to 40 inches, definitely increased yield per acre of Blakemore strawberries, when a season does not favor early plant development and good fall development of runner plants in the thinned row system. In a very favorable season for runner plant development, such yield increases may be small, or none at all. Hence the narrow width of row acts as insurance a gainst unfavorable weather conditions.

The Second Year Bed

In the renewal of strawberry beds for second-year fruiting, the grower usually suffers a decrease in yield of 50 per cent or more, compared with the first season of fruiting of Blakemore. A new system of renewal is possible with thinned row system of culture, which will give yields in the second season nearly equal to the yield of the first season. This method requires only the removal of all runners during the season following the first year of fruiting, so that the thinned plants of the first season are held over for a second year of fruiting. The cost of runner removal is probably not more than the cost of barring off and cultivating the rows as practiced under the usual method of renewal. Another method of renewing thinned rows is to allow the thinned bed to fill in with runner plants after the first fruiting, so that a matted row results, which will yield equal to the usual method of renewal. With both of these newer methods of renewal of thinned rows, the narrow row has an advantage in yield over wider rows.

From October, November, 1943 The Maryland Fruit Grower.

Court Clerk: "Sorry, Madam, but a license will be issued only when your form is filled out properly."

Bride-to-Be: "Sir! I like your nerve. We can get married no matter what I look like."

COMMENTS ON RASPBERRY VARIETIES

PROF. J. D. Winter of the Minnesota Horticulture Department, makes the following comment on red raspberry varieties which are on trial in Minnesota.

The Sunrise variety proved to be a heavy producer of early berries, beating King by a day or two. This variety shows great freedom from anthracnose and other cane diseases, and it should be worthy of more extensive trial.

The Rideau from Ottawa, is doing well at Morden, Manitoba. We have had it two years now and like its looks so far.

LOW BUSH BLUEBERRY BEING DEVELOPED

HAVE just been visiting an important blueberry section in the mountains of New Hampshire, and saw there the development of a modern industry, from a sideline crop. These berries are of the lowbush species and must not be confused with highbush which are sometimes cultivated. When one sees \$300 worth of blueberries per acre being harvested in half a day, from land which a few years ago was poor grade cow pasture, one cannot help but be impressed by the possibilities, especially when the cost of such a change is almost nothing.

One of our projects is a study of the possibility of maintaining present blueberry pastures and reestablishing blueberries on abandoned cultivated fields. We are working on methods of planting, the rate of spread from such plants once they are established, the control of insects and diseases and the possible use of fertilizers or chemical agents in the rejuvenation or re-establishment process. Berries from selected plants are being tested in the chemical laboratory for vitamins, so that is case propagation proves practical some of those selections which are high in food value may be chosen.

By Dr. A. F. Yeager, in North and South Dakota Horticulture, October, 1943.

SCIENCE IS CHANGING PLANTS

SCIENCE seems to be doing some startling things to Mother Nature. We are told that hardwoods may be treated with a chemical, then heated and bent like taffy, so that in the future lumber may be handled like plastic. Then a man named Fritz von Behr, at the University of Maine, is dyeing trees while they are still growing, thus turning beech to rosewood, yellow birch to mahogany, or making one tree into several colors, like marble.

Redwood bark fiber mixed with wool is being used for warm, colorfast, shrinkproof fabrics. Colchicine experiments already have brought forth super - duper soybeans and cotton bolls. Botanists list more than fifty common weeds which contain rubber, the richest of which is Ambrosia trifida, the great American ragweed. The man who finds the way to get rubber from the ragweed can get himself elected president by the hay-fever vote!

From September 15 American Nurseryman.

Get extra savings on

Sheboygan



working Neva - Clog stapler. Get everything you need for fruit or truck shipments at Sheboygan—as leading growers have for 63 years.

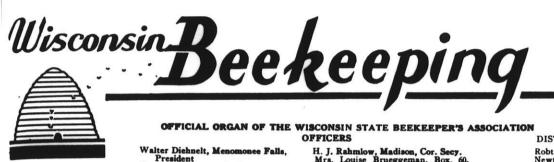
Write, now, for low prices and free facts on new shipping regulations.

Sheboygan Fruit Box Co.

5113

64

Sheboygan, Wisconsin



President Corneluis Meyer, Appleton, Vice-president

H. J. Rahmlow, Madison, Cor. Secy. Mrs. Louise Brueggeman, Box. 60, Menomonee Falls, Recording Secretary-Treasurer

DISTRICT CHAIRMEN Robt. Knutson, Ladysmith Newton Boggs, Viroqua C. C. Meyer, Appleton Ivan Whiting, Rockford

Beekeepers Hold Successful Convention

HE 65th annual convention of the Wisconsin Beekeepers Association will go down in history as one of the most interesting held in years. It was interesting because so many problems of value to the producer came up and were thoroughly discussed so that the beekeepers felt they had received a great deal of help from their attendance at the meeting.

The talks by Mr .James Gwin and Mr. John F. Long of Madison on plans for disease control and observations on beekeeping were most interesting.

Mrs. Harriett Grace of the American Honey Institute gave valuable information about post-war plans for the industry.

Dr. C. L. Farrar gave valuable information which will be discussed later.

Several inspectors were called upon by the president, Mr. Walter Diehnelt, and gave their experiences of the summer.

Everyone appreciated the banquet program arranged by the local committee, of which Mr. Louis Stauss was chairman. The Kraft Choral Society of 30 voices gave an excellent program.

Mr. George Briggs of the Agronomy Department, College of Agriculture, gave a very interesting talk on the various clovers which produce honey, and their culture, including the new Ladino clover.

The colored movie on queen rearing in Georgia was especially good.

There was much enthusiasm about the information please hour. The questions asked were well answered

by the producers selected, and every beekeeper was on the edge of his chair to hear the discussion and many questions were asked. This hour was conducted by H. J. Rahmlow, Madison, who also discussed the movie on queen rearing.

Officers for 1944

All officers of the Wisconsin Beekeepers Association were reelected. They are: Walter Diehnelt, Menomonee Falls, president; Cornelius Meyer, Appleton, vice - president; Mrs. Louise Brueggeman, Menomonee Falls, recording secretarytreasurer. The corresponding secretary is the secretary of the Wisconsin Horticultural Society. 25 provided in the constitution.

Officers of the Woman's Auxiliary

Officers of the Woman's Auxiliary are Mrs. Wm. Michaelson, Arkansaw, president; Mrs. Cornelius Meyer, Appleton, vice-presi dent; and Mrs. Henry Piechowski, Redgranite, secretary-treasurer.

Business Transactions

At the meeting of the Board of Managers a number of good recommendations were made which were all passed by the convention. They include the following:

It was voted to continue registration fees of 25 cents per person, the money thus collected to be placed in the advertising fund, to advertise honey when the need arises. The fund now contains over \$100 collected in this way.

It was voted to send \$25 to the American Honey Institute. Members were instructed that only if they send their dues to the American Honey Institute, Madison, can their names be included in the annual directory.

It was voted to send the president of the Association to the National convention of beekeepers in Chicago on January 11-13 to represent the Wisconsin Association.

A resolution was passed asking the delegates to request the National Federation of State Beekeepers to have 60 pound tin cans standardized as to the size of opening and the thread of the cap instead of having so many different sizes as is now the case.

Nosema Discussed

A resolution which was passed by the Southeastern District of the State Beekeepers Association at their meeting in Menomonie in July was read. It asks that the U.S. Department of Agriculture, through its Bureau of Entomology, conduct more research on Nosema because Nosema is one of the most serious diseases of the adult bee with which the beekeepers must now contend. Copies of the resolution have been sent to all Wisconsin congressmen. One congressman had written Mr. Nathan Paddock, Bruce, secretary of the Northern District, enclosing a copy of a letter received from the Under Secretary of Agriculture at Washington, which stated in part as follows:

"The Bureau of Entomology and Plant Quarantine has been carrying on investigations of important bee diseases for a number of years, and has given some consideration to the Nosema disease. During the (Turn page)

SIOUX HONEY ASSOCIATION SUPPORTS INSTITUTE

THE Sioux Honey Association, composed of 200 Midwest honey producers, has voted that their entire advertising appropriation be given to the American Honey Institute. The amount of \$10,000 will go far to relieve the Institute from problems due to lack of funds.

The big job before the Institute now is to work out ways and means for keeping up the demand for honey after the present emergency is over. We must convince the public that honey as a food has special merit, that there is something in honey that is of value to the consumer such as vitamins and other factors for health. Then the public will buy honey, whether or not the price is higher than sugar.

It has been most interesting to note this year that persons whose salaries are not a cent higher than they were two, three or four years ago, and whose income is really reduced on account of higher income taxes and increased cost of living, are today buying honey in 60 pound cans at 15 cents per pound, and making no complaint. The demand for such 60 pound cans has been three or four times as great as it was a few years ago. Shortage of sugar isn't the entire reason either because many families say today that their sugar ration cards provide ample sugar for their needs.

Changing Voice:—Jack—"Hello, is that you, Jake? It don't sound like your voice."

Voice-"Sure-it's me."

Jack—"Say, could you let me have ten bucks over the week-end?"

Voice—"Okey—I'll ask him when he comes in."

Supreme Joy—Interviewer—"You have risen to such a height, you really have everything to make you happy, have you not?"

Great Actor—"Just one thing is lacking—I can never sit in the audience and see myself act."

THE INFORMATION HOUR

Answers to Beekeeping Questions

Question: What can we do with a weak colony having a good queen?

Answer: A weak colony with a good queen can be wintered by placing it in one hive body containing plenty of stores on top of a tight screen over a strong colony, and giving it an auger hole entrance in front. Bees from the strong colony below will drift into the weak upper colony, and both should come through well.

Question: What should be done with a colony containing very small bees?

The opinion was that such a colony should be disposed of with cyanide gas.

Question: What should we do with a weak colony having a poor queen?

Answer: The poor queen of such a colony should be killed and the colony united with a better colony. In the fall of the year, especially during cold weather, it is not necessary to use newspapers. The colonies can simply be placed together without any trouble. In fact, Dr. Farrar was of the opinion that the newspaper method of uniting often causes supersedure of queens and he does not recommend it. Instead, he recommends, during warm weather, spraying both colonies with sugar syrup and uniting them directly. In a good honey flow they can be united without the syrup.

Question: Should we provide colonies with dark comb for the winter cluster?

Answer: Yes. Dark combs are much preferred by the bees and they often will not cluster on white combs of honey. Some winter loss may be due to this cause. Dark combs should always be provided for the winter cluster.

plant pollination, as is pointed out in the resolution submitted." The letter encloses with the statement that the Department of Agriculture does not now have sufficient funds to carry on any new investigation along this line, suggesting that more funds must be provided. That will be the object of the Na-

past year a limited survey has been carried out in cooperation with

package bee shippers, which indi-

cates that more than half of the

package bees shipped from two im-

portant producing districts are in-

fected with this disease. There is

reason to believe that these districts

are typical of the package-bee ship-

ping areas of the entire South. It

has been determined that the mal-

adv causes early supersedure of

queens among package bees, and

apparently a considerable mortality

of the bees in infected hives re-

sults which in turn adversely af-

fects honey and wax production and

tional Federation.

Financial Report Very Good

The report of the treasurer, Mrs. Chester Brueggeman, showed that 424 members paid dues in 1943. Commission on glass and pails sold by Honey Acres paid to the State Beekeepers Association amounted to \$87.70. The Association had a balance of \$398.32 in its general fund in October of this year.

The balance in the label fund is \$293.49, making a total balance of \$691.81.

The Association also has a label inventory of \$189.23, and an office inventory of \$44.74, or a total net worth of \$925.78.

Label Account

Sale of labels amounted to \$114.15. New label stock was printed to the amount of \$182.39. New labels sold this year and going into the label account, was \$58.77. The organization has no liabilities.

My nephew Ed says he will not convert from oil to coal, and he won't convert from coal to oil. He will go right on using corn cobs and chunks. Question: In cellar wintering, when should the bees be taken out of the cellar?

Answer: They should by all means be taken out before the *first pollen* comes in from any source, as pollen is very important for the early spring colony. It was thought best to take them out on a cold day so they cannot fly immediately.

Question: What is the cause of honey having light body, or being thin, even when a neighboring beekeeper has honey of a heavier body?

Answer: There are several causes for thin honey. They were enumerated as follows: (1) having too small entrances for the colonies so they cannot ventilate the hive well: (2) a weak colony or one which has swarmed after the honey flow may not have enough bees to ripen the honey well; (3) honey will absorb moisture from the air if left uncovered by bees. In cold, damp weather the bees may cluster, leaving honey uncovered which will absorb moisture during a rainy or damp period. Honey stacked in a basement or other damp place and allowed to remain there for some time before extracting will absorb moisture, as it will if left in an open tank. Thin honey should always be heated, bottled and sealed while hot to prevent fermentation. If the beekeeper is careful, there should be no thin honey.

Question: What is the most common way of spreading foulbrood?

Answer: A number of ways were given, but the most common fault was carelessness on the part of the beekeeper, and trying to save his equipment when it is diseased.

Question: What is the best way of feeding bees in the spring of the year?

Answer: A quick way is to sprinkle warm, heavy sugar syrup directly into combs and giving each colo-

ny what it needs, for best results.

Question: Who will make the most money—the man with several thousand colonies run for mass production, with little care for individual colonies, or the man having 500 colonies and caring for each one to get maximum production?

Answer: The man with the 500 colonies would have more money in the bank at the end of ten years, other things being equal, than the one who pays little attention to his colonies, was the opinion.

Question: How many colonies do you think is enough for an average location?

Answer: The majority of beekeepers seem to prefer from 50 to 60 colonies in a yard.

Question: What is your experience in getting a tax refund on sugar?

Answer: Small beekeepers had no success, and became discouraged and did not continue trying to obtain it. A large beekeeper, purchasing much sugar reported that he was successful in getting the tax refunded, but it requires a great deal of work. The tax amounts to about one-half cent per pound.

BACTERIA CONTROLLED BY HONEY

H. Dold, at the Third International Microbiological C on g r e s s (New York, 1939), reported the discovery of substances, present in various animal and vegetable secretions, which control attacks by bacteria. There are two classes of such substances: *inhibins*, which hinder bacterial multiplication, and *mutins*, which change bacterial characters. Both these classes are present in honey; further details are not yet available (Schw. Bzlg., December, 1942).

Uncle Sam's new debt limit will be \$200,000,000,000, which is bigger than my limit by eleven ciphers and three dollars.

HONEY WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company, Oconomowoc, Wisconsin.

HONEY CANS

We can give you immediate delivery on 60[#] cans.

Order your glass supply for the new crop now, as it takes from 3 to 6 months to receive same from the factory. We now have a good supply of 5#, 2½#, 1# and ½# on hand, and can make immediate shipment.

To insure prompt service, order your Association labels now for your new crop of honey.

Write for Complete Price List.

Order Through Your State Beekeepers Association

HONEY ACRES Menomonee Falls, Wis.

We wish to express our thanks and appreciation to all our customers and all others who have helped make 1943 a successful year.

May we continue serving you through a bright and prosperous

NEW YEAR

AUGUST LOTZ COMPANY BOYD, WISCONSIN



OUR 75TH ANNUAL CONVENTION

Good Attendance and Interesting Program at Waukesha Meeting

THE 75th convention of the Wisconsin Horticultural Society at the Avalon Hotel, Waukesha, on November 16-17, was most successful.

The first day's attendance at the fruit growers' session was about 125, with about 60 at the Auxiliary meeting. There were 123 present at the banquet. The total attendance, therefore, was good and indicates that growers are anxious to learn how to solve their problems. The program was designed to help the fruit growers and the wives of the fruit growers in attendance, for which the Auxiliary meeting was arranged. It should be remembered that the Auxiliary meeting was planned to help those who grow small fruits, vegetables and flowers on the farm, rather than for garden club members in the city. That this is an age of specialization is more and more evident. A garden club member remarked that there wasn't so very much of interest to her on the program, indicating that she had different problems from those of the farm gardener. Therefore, she would receive more value from a meeting of garden club members with a program designed to fill that need.

There were 63 fruit growers in attendance on the last afternoon, and they stayed until the final adjournment. This indicated the keen interest in the discussion of technical problems of fruit growing, as so many stayed to hear Dr. R. H. Roberts discuss orchard observations.

The conclusion we are forced to draw from these experiences is

that we must have an apple growers' program for apple growers, small fruit program for small fruit growers, and topics on growing ornamentals for those interested in that field. People are so busy these days that they do not care to sit through a program that is not designed for their needs. Therefore meetings must be specialized.

New Board Members Elected

At the annual election of officers, Mr. Arno Meyer was reelected president, and Mr. Don Reynolds reelected vice-president.

Members of the Board of Directors elected were Mr. E. L. White, Fort Atkinson, to succeed Mr. Theo. Ward; Mr. Leland Brown of Sturgeon Bay to succeed Mr. D. E. Binghum; and Mr. R. G. Dawson, Franksville, to succeed Mr. Charles Patterson, Franksville.

Board of Directors Meeting

The Board of Directors of the Society held two meetings during the convention. Some of the matters of business transacted were as follows:

It was voted to allow members to give as Christmas presents to friends or relatives, membership in the Wisconsin Horticultural Society and the magazine, for the price of 50 cents per year. This is for Christmas presents only, and expires January 1st.

It was voted that extra copies of the 75-year history of the Society, November issue, be sold in any quantity to members at 10 cents each.

Applications for life membership were approved. New life members are: Wm. F. Connell, Menomonie; Mrs. Peter Lewis Swartz, Waukesha; Peter Lewis Swartz, Waukesha; Mrs. R. L. Marken, Kenosha; Jos. L. Morawetz, West Bend; Murray Bingham, Sturgeon Bay; and S. S. Telfer, Ellison Bay.

The Board voted to allow Mr. H. J. Rahmlow, secretary, to attend the National meeting of State Beekeepers Associations to organize a National Federation, he having been appointed chairman of the organization committee.

The Board reelected H- J. Rahmlow, Madison, as secretary for the coming year, and E. L. Chambers, Madison, as treasurer.

The office of the Wisconsin Horticultural Society was authorized by the Board to assist in the organization of a Wisconsin Apple Institute, and that such work as was necessary be carried on in the office.

ARTHUR J. EDWARDS

All horticulturists will be saddened to hear of the death of Arthur J. Edwards, pioneer nurseryman of Fort Atkinson, on September 29th.

Mr. Edwards had followed the nursery business for 57 years. He has been a vice-president of the Wisconsin Nurserymen's Association, and was president of the Coe, Converse and Edwards Nursery Company.

L. G. KELLOGG

Mr. L. G. Kellogg of Ripon, pioneer horticulturist, passed away in Ripon in May, 1943.

Mr. Kellogg was the oldest living president of the Wisconsin Horticultural Society at the time of his death. He took a very active part in the affairs of the Society in the early years, and was a leader in his field. During the past years he has not been active in horticulture, but always retained his interest in that subject.

Two Horticulturists Honored by Society

THE Wisconsin State Horticultural Society recognized the eminent services of two prominent Wisconsin horticulturists at the annual banquet of the Society at the Avalon Hotel, Waukesha, November 16.

Mrs. Chester Thomas

The certificate was presented to Mrs. Chester Thomas, Milwaukee, by Mrs. R. H. Malisch, Hales Corners, the first president of the Wisconsin Garden Club Federation.

In making the presentation, Mrs. Malisch made these statements:

The Wisconsin Horticultural Society is recognizing this evening the services of a woman who richly deserves such honor. No woman has worked more faithfully or more diligently in the interests of gardening than has Mrs. Chester Thomas.

In 1925 Mrs. Thomas with the aid of her husband, developed at Fox Point, a suburb of Milwaukee, a beautiful garden and lawn by converting low marsh lands into a $2\frac{1}{2}$ acre beauty spot. She raised her own seedlings, constantly experimenting with new varieties of annuals, perennials, shr u b s and bulbs. In that spring she set out over 3,000 annuals. It was considered at that time one of the most beautiful and attractive places in the Milwaukee area, and was admired by many visitors.

Mrs. Thomas was a charter member of the Art Institute Garden Club organized in 1927. She held office in the organization and served on its Board of Directors.

She was chairman of flower shows for six years and staged each year, two annual flower shows in the Art Institute Building.

As a member of the flower show committee of the Wisconsin Garden Club Federation, she took an active part in planning and staging annual shows at the State Fair, State Flower Show at Kohler, and the National Show in 1937 in the



Mrs. Chester Thomas, Milwaukee



J. Earl Leverich, Sparta

Milwaukee Auditorium.

She was chairman of the State Flower Show in the State Fair Horticulture Building in 1939. She was superintendent of the annual flower show of the Wisconsin Garden Club Federation, Wauwatosa, est living president of the Society in 1942, and of the Victory Harvest Show in Milwaukee this year. Also of the Harvest Show held in the Milwaukee Auditorium this year. In fact, she has taken active part in every State Flower Show staged by the Federation with the exception of the first one held in Madison since the Federation was organized. In addition, she has been an exhibitor who has won prizes on many arrangements, shadow boxes, tables and small gardens.

Mrs. Thomas organized the Fox Point and Countryside Garden Clubs. She has been president of the Garden Study Club of Milwaukee and the Blue Beech Garden Club.

She rendered most valuable services to the Wisconsin Garden Club Federation as a member of its Board of Directors and as 1st vicepresident in 1936, and as president in 1937, and honorary president in 1938.

She is a master accredited judge, and as such has judged many flower shows both local, district, and state. She has been chairman of the following state committees: publicity, visiting gardens, judging schools, garden centers, flower shows and war service.

As president of the Wisconsin Garden Club Federation she was a member of the Board of Directors of the Wisconsin Horticultural Society in 1937.

The certificate stated that it was presented to Mrs. Thomas for her services "in advancing garden club work, increasing interest in ornamental gardening, and successfully promoting flower shows."

Certificate Presented to J. Earl Leverich of Sparta

Mr. J. Earl Leverich of Sparta, State Senator from his district, was given the certificate by Mr. D. E. Bingham, Sturgeon Bay, the earliat this time. In making the presentation, Mr. Bingham stated as follows:

The Wisconsin Horticultural Society is honoring this evening a man who was practically raised in a strawberry patch. Earl Leverich was born in the town of Angelo, near Sparta, in 1891, on the farm he still operates.

In a talk he gave before the Society in 1920 entitled "How to grow strawberries every year," he made these remarks: "I might say with much truth that I have partially at least grown up in the strawberry field. I cannot remember when we have not had at least 5 acres each year, and for the coming season we have about 15 acres. We are farmer-strawberry growers. We plan to make a success of the berries, both strawberries and bush fuits just the same as we do the other farm crops."

Mr. Leverich has not been an "inner and outer" in the strawberry game. He has grown strawberries every year, never missed once, and has grown as many as 20 acres.

In a talk given in 1920 he said he had broken many old rules about strawberry growing, but that his aim is to grow them for profit, cutting down overhead and expenses as much as passible. As a tonic for distressed nerves, he invited his listeners to come to the Leverich fruit farm during the strawberry picking season and eat of the fruit. This and the sight of 100 pickers, picking the luscious king of all berries, would surely restore their nerves to normal condition. The Leverich fruit farm in many years produced almost 20 per cent of all the berries grown in the Sparta district, and in 1920 they grew over 3,500 crates from 9 acres. A few years later they produced over 6,000 cases from 9 acres.

Mr. Leverich was active in promoting the welfare of the old Sparta Fruit Growers Association, and later the Sparta Produce Exchange, of which he is a director at the present time.

He has been president, vicepresident, and a member of the Executive Committee of the Wisconsin State Horticultural Society, and an active leader in the affairs of the Society at all times.

He has been most active in promoting cooperative agricultural organizations, and has been president of the Sparta Cooperative Creamery and the Western Wisconsin Creamery Association. He was chairman of the anti-Oleomargarine committee, is a member of the State Senate, from his district; has been a member of the Monroe County Board for many years, and a member of the Monroe County Council of Defense.

Mr. Leverich has given a number of talks on the subject of small fruit culture. His paper before the Society in 1920 was published in bulletin form, and made available to all strawberry growers in the state. In 1936 he read a paper on "How much does a strawberry cost?" before the annual convention at Green Bay.

His addresses while president of the Society were outstanding.

The certificate stated that it was presented for Mr. Leverich's eminent services "as one of Wisconsin's outstanding strawberry growers, in advancing the culture of small fruits and promoting cooperative marketing."

It Was Christmas, 1942 . . .

From New Guinea an Ohio private wrote his wife: "It will be a different Christmas this year. The altar will be a fallen tree in the jungle. All around there will be the stink of sweat, of unwashed clothes and of death. But as I kneel to pray I know you will be alongside me praying too, and that will make it a happy Christmas, darling."— George Johnston in TIME.

WINNERS IN THE AUXILIARY CANNED GOODS AND AR-RANGEMENT EXHIBIT

MEMBERS of the Woman's Auxiliary of the Wisconsin Horticultural Society exhibited some, very nice canned goods and arrangements at the convention at Waukesha. Here, as at the fruit show, the value of the exhibit is in the discussion and interest created among those who see the exhibit.

Our plan was somewhat different this year in that it called for a complete display of a variety of canned vegetables and fruits by one exhibitor.

The arrangements helped decorate the convention room and gave an atmosphere of horticulture to the hotel.

The Winners

12 jars canned vegetables, fruits, jams, or jellies, Wisconsin grown.

1st, Bessie M. Pease, Oshkosh; 2nd, Mrs. Milo Hansen, Madison; 3rd, Mrs. L. N. Meyer, Hales Corners; 4th, Mrs. Oscar Conrad, West Allis; entries of merit, Mrs. A. J. Meyer, Hales Corners; Mrs. Arno Meyer, Waldo.

Centerpiece for dinner table, composed of fruits, vegetables, gourds, etc.

1st, Wrs. Walter Diehnelt, Menomonee Falls; 2nd, Mrs. Arno Meyer, Waldo; 3rd, Mrs. A. K. Bassett, Baraboo; 4th, B. M. Pease, Oshkosh; entry of merit, Mrs. Oscar Conrad, West Allis.

Arrangement for living room or dining room in vase or bowl of dried materials.

1st, Mrs. Walter Diehnelt, Menomonee Falls; 2nd, Mrs. Arno Meyer, Waldo; 3rd, Mrs. H. Gritt, Plymouth; 4th, Mrs. Oscar Conrad, West Allis.

Potato Pancakes (Serves 4-6)

12	raw potatoes	2 tablespoons milk
	(large)	2 eggs beaten
3	teaspoons salt	1/2 cup flour

Mix the above ingredients, beat thoroughly and cook on hot greased griddle.

Roving With Roses

IN the State Test Garden at Como Park the one variety that stands out above all others is Pink Princess, Brownell's great everblooming subzero hybrid tea which seems to be so resistant to blackspot that even in a situation like that at Como this year, it still blooms and blooms, with large individual roses in big clusters. With its hardiness and its attractive color and form, this rose has demonstrated again that it is entitled to first place in Minnesota. It certainly has vigor, vim and vitality. Even without special food it is still a champion.

The season at Como even got Crimson Glory down. With me, however, despite the rather bad weather conducive to blackspot, it has not suffered from it and has done very well, I think, though, I dusted more this summer than in any other year. But over at Como. Crimson Glory lost most of its leaves and the quality of the fall bloom has been very poor. The new dark red from the California Armstrongs, which I referred to last month, has proved to be much more resistant to blackspot than Glory, but I still don't want to say that it is a better rose. If it winters satisfactorily, it is certain, however, to be a good one for use. Another new Armstrong rose, a big but not very double bloom of salmon and pink suffusion, also resisted blackspot to a considerable degree. This is all encouraging. It does indicate that blackspot can be bred out; if not entirely, at least enough to make it easy to protect from it.

Ann Vanderbilt, Red Robin, King Boreas, V for Victory, Break o' Day and even Lily Pons, the most susceptible of subzeros to blackspot have all done fairly well but not as well as Pink Princess.

Two shrub roses which have resisted the blackspot and have little damage are Mabelle Stearns, vigorous double salmon pink of Horvath's and Nearly Wild, Brownell's single free - blooming floribunda. The latter has again this year had the most persistent bloom of any rose in the garden. It is certainly one of Mr. Brownell's best creations and fills an important place heretofore empty in a small freeflowering shrub ideal for foundation planting. Both these roses are among the hardiest, although they do better with a little hilling during the winter.

By Richard S. Wilcox, in October, 1943 Minnesota Horticulturist.

CHRISTMAS WREATHS— EVERGREEN SPRAYS

Christmas Wreaths of fragrant balsam, the evergreen with the delightful and lasting fragrance, trimmed with cones and bright berries: 12 inch wreath, \$1.25; 15 inch, \$1.75; 20 inch, \$2.25.

Assorted evergreen sprays with a variety of cones: Boxes of 50, 12-18 inch sprays, \$2.50; boxes of 100, 12-18 inch sprays, \$4.00.

Boutonnieres or favors can also be used as decorations in wrapping gift packages, 25c each, 5 for \$1.00, postage prepaid.

Mrs. Nels Nelson, Hayward, Wisconsin, Route 1.

DRINK BRAZIL MATTE TEA

The new-life tea grown in Brazil. Not a medicine, but a daily meal - time beverage. Restores lost energy quickly. Keep you fit at 25 or 75 and up. Enjoy life. 1 lb. 75c; 2 lbs. \$1.40; postpaid. Special price on 50 or 100 lbs. Kettler Nursery, Platteville, Wis.

Excuse, Please

A private, somewhat shaggy, failed to pass inspection. "There was no one to cut my hair," he explained. He's the company barber.

BAD NEWS for BARK-GNAWING RABBITS

Now you can protect your young fruit trees against winter damage from rabbits and rodents simply by applying . . .

NO-NAW TREE PAINT

This scientifically compounded preparation is diluted with water and applied to trunk of tree with a paint brush . . . coating the trunk from its base to about 2 ft. above the average snow-line.

NO-NAW repels rabbits. They don't like the **taste** or **smell** of NO-NAW (although practically odorless to humans), and won't touch the bark that is covered with it.

One pint of NO-NAW should treat from 25 to 50 young fruit trees or ornamental trees, depending upon size. Absolutely harmless to trees. Supplied in these sizes:

1 Pint, \$1.00; 1 Quart, \$1.75; 1 Gal., \$6.00

SEND US THE NAME OF YOUR FAVORITE DEALEK, together with order and remittance for whatever quantity of NO-NAW you want. Use this convenient coupon:

WISCONSIN PHARMACAL CO. 217 No. Water Street MILWAUKEE 2, WIS.

- - - - - - -

Please ship at once, by parcel post, the following: PINT SIZE NO-NAW @ \$1.00

 QUART	SIZE	NO-NAW	@	1.75
 GALLON	SIZE	NO-NAW	@	6.00

Dealer's Name & Address.....

Your	Name
Addre	



OFFICERS Harold Janes, Whitewater, President David Puerner, Milwaukee, Vice-President H. J. Rahmlow, Madison. Cor. Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Illinois Ave., Sheboygan

By the WISCONSIN GLADIOLUS SOCIETY

DIRECTORS Frank Blood, Stevens Point Dr. F. Graff, Freeport, Ill. Fred Hagedorn, Sheboygan J. R. Hopkins, Deerfield, Ill. Walter C. Krueger, Oconomowoc E. A. Lins, Spring Green Walter F. Miller, Sun Prairie Dr. Geo. Scheer, Sheboygan Leland Shaw, Milton Noel Thompson, Madison

Gladiolus Society Holds Annual Meeting Most Interesting Program Held

THE Wisconsin Gladiolus Society held its annual meeting and election of officers on November 21st.

The Board of Directors met at 10 a. m. and voted to send a delegate to a national meeting on classification and premium schedules in order that premium schedules all over the nation might be similar so as to make it easier for exhibitors to show in different states.

Mr. Walter Krueger of Oconomowoc was chosen to represent Wisconsin, with Mr. E. A. Lins of Spring Green as alternate. They were instructed to make all decisions for Wisconsin, and try to bring about the kind of premium list desired. The sum of \$10 was voted to pay the cost of the compiler of gladiolus classification, in case the same is possible.

1944 Show Discussed

There was some discussion on holding next year's gladiolus show, but the final decision was left for the meeting to be held next spring. Suggestions were made to hold the state show at the State Fair, and also to ask the Sheboygan Chapter for an invitation to hold the show in connection with their Chapter show, the same as this year. There were good arguments for both plans. Many felt, however, that it would be possible to hold both shows next year since the Mid-West will probably not hold a show.

Election of Officers

The following officers were elected: President, Harold Janes, Whitewater; Vice-President, David Puerner, Milwaukee; Rec. Secretary-Treasurer, O. A. Kapschitzke, Sr., Sheboygan; Corresponding Secretary, H. J. Rahmlow, Madison.

Directors: Frank Blood, Stevens Point; Dr. F. Graff, Freeport; Fred Hagedorn, Sheboygan; J. R. Hopkins, Deerfield, Ill.; Walter C. Krueger, Oconomowoc; E. A. Lins, Spring Green; Walter F. Miller, Sun Prairie; Dr. Geo. Scheer, Sheboygan; Leland Shaw, Milton; Noel Thompson, Madison.

J. R. Hopkins Talks on Best White Gladiolus

Mr. J. R. Hopkins of Deerfield, Illinois, is always welcome at Wisconsin meetings. He spoke on the best white gladiolus. He mentioned the following varieties as the best, with a rating at 84 for Margaret Beaton; 82 for Nana; 82 for Myrna; 81 for Snow Princess; 81 for Lilla; 80 for the following: Edelweis, Materhorn, September White, Vredenberg. Mammoth White, White Chieftain, Caribou, North Pole, Krytberg, Schoonard, Star of Bethlehem, and Mary Kathleen.

Mr. Hopkins stated that he had discarded the following varieties: Crystal, Mrs. Burtner, Silentium, Snow White, Heiligtum, 1942, Lord Selkirk, Maid of Orleans, Mount Shasta, and Ariosa.

Information Hour Very Interesting

An interesting feature of the program was the Information Hour, with the following growers as "experts" answering the questions: Walter F. Miller, Sun Prairie; Roger B. Russell, Madison; E. A. Lins, Spring Green; Archie Spatz, Wausau; Leland Shaw, Milton. The hour was conducted by H. J. Rahmlow, Madison.

Questions and Answers

Question: Will bulblets from old bulbs germinate as well as bulblets from young stock?

Answer: There was a difference of opinion here. The majority, however, believed that bulblets from old bulbs would not germinate quite as well as those of young bulbs. and that old bulbs would not produce as many bulblets. Bulblets should be allowed to mature well and there is a varietal difference.

Question: Is it worth while to start bulblets of new varieties in the house to transplant later in order to get increase quicker?

Answer: For the commercial grower it was not thought worth while. Mr. Walter Miller stated that he starts bulblets in the greenhouse and produces good sized bulbs by fall, and for those who can do so it would be worth while for new varieties.

Question: Can you grow salable cut flowers from bulbs four or five years old? How old should a bulb December, 1943

be to still produce salable flowers?

Answer: Most bulbs over four or five years should be discarded. In some instances may be kept longer, but are not the best producers.

Question: Have you tried Salbach's method of letting flowers wilt after cutting and before taking them to the show?

Answer: The majority were in favor of the Salbach method and stated it was better to let them wilt, or not put them in water if they had to be shipped dry. If they are put in water immediately, they should be kept in water all the way to the show. It was brought out that warm water is better for flowers than iced water, as warm water goes up the stems better.

Question: Should the tops of gladiolus be burned or plowed under? Is there danger of the tops carrying over thrips?

Answer: Practically all growers got rid of their tops in some way either by burning or hauling them away. No one plowed under the tops. On showing of hands from the entire group, almost all believe that thrips are carried over winter in compost heaps or heaps of tops not destroyed. Mr. Noel Thompson gave the opinion that on scattered tops the thrips would not survive, but they might possibly survive in piles of tops though there was no evidence to prove it.

Question: Were thrips as numerous in your section this year as in previous years?

Answer: A majority felt that the thrips have been noticeably less in numbers in their section. In several sections there were plenty of thrips.

Question: Have you used soy beans as green manure, and with what results?

Answer: Only a few had experience with soy beans, but could give no definite results. Mr. Rahmlow pointed out an experience in plowing under soy beans late in the fall when the stems are already woody, and followed next spring by early planting of strawberries. He stated that the strawberries were noticeably yellow during the next spring, indicating that the woody stems were decaying in the soil and that the bacteria were robbing the soil of nitrogen which affected the strawberry plants. This might also occur in the case of gladiolus. He stated that the soy beans should be plowed under early while still green, so as to decompose quickly and avoid nitrogen deficiency. Plowing under rye was mentioned as a good practice.

Question: Do you think that manure or commercial fertilizer is best for gladiolus, and how do you apply it?

Answer: They seemed to favor the use of commercial fertilizer, but also preferred well aged and rotted cow or sheep manure, or some other type of humus. All agreed on the need of humus in the soil. Peat moss is being used. Several pointed out that when only commercial fertilizer is used, the soil gradually becomes very hard-

Question: Do you think light or heavy soil is the better for gladiolus growing? That is, if you had your choice, which would you choose?

Answer: For ease of cultivation, planting and digging, light soil is preferable. For depth of color in bloom and good substance, heavy soil was considered better. Sandy soil is good if there is sufficient water. The need for water or irrigation was emphasized a number of times by growers.

Question: How deep do you think gladiolus bulbs should be planted?

Answer: One or two growers stated they were planting deeper than recommended, on e grower mentioning a total depth of eight inches on light soil, six or seven inches on heavy soil. Others stated three or four inches, and then hilling up the soil over the rows. For small bulbs some planted as shallow as two inches. The average depth was from three to six inches.

Question: In planting gladiolus, how far apart should the rows be, and how far apart should the bulbs be planted in the rows for both exhibition and commercial flowers?

Answer: Distance between rows varied considerably, depending upon the type of instruments used. It was emphasized, however, that for exhibition flowers the plants must have plenty of room. A good distance for exhibition flowers was considered two feet between rows, and eight inches between bulbs. Where irrigation was available and plenty of plant food, commercial stock was planted quite close together, usually in double rows.

Question: How do you irrigate your gladiolus patch?

Answer: The answer was to begin irrigating after the plants are 12 to 15 inches high, and continuing throughout the season. A good soaking is better than sprinkling.

(To be continued)

SHEBOYGAN GARDEN CLUB H E L P S DECORATE F O R STATE GLADIOLUS SHOW

W^E omitted mention in our report of the State Gladiolus Show at Sheboygan, August 21-22, that the Sheboygan Garden Club cooperated very effectively.

The garden club carried out its part in decorating the lobby and created a very beautiful picture in ' the entrance to the show. Several artistic arrangements of vegetables, especially one in a little garden wheelbarrow, were placed before a background of long needle pine. Branches of pines were placed between the trees, making a beautiful background for both the vegetable and gladiolus arrangements in the lobby. Mr. Gordon Z. Rayner, Park Superintendent, was instrumental in obtaining the background material and in helping to place it in the lobby. The garden club members made corsages which were sold on the floor during both days of the show. The proceeds were added to the fund turned over to the Citizens' War Fund.

Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

Mrs. R. H. Sewell, President 957 No. 70th St., Wauwatosa 13

Mrs. F. E. Willard, 1st Vice-President Oakfield

Mrs. Walter Dakin, 2nd Vice-President 4110 Mandan Crescent, Madison 5

REPORT FROM OUR PAST PRESIDENT

Dear Garden Club Members: "FRIENDSHIP"

- "I've a garden where the flowers never fade,
- And each year the blossoms brighter grow:
- Each flower is some friend that I have made:
- The best are where the everlasting grow."

-Selected Pearls of Wisdom.

I believe that the most difficult task assigned to me this year, is this, my last letter to you as President. The various activities undertaken by our State Federation have already been covered in a most excellent way by our very capable Officers, District Presidents and State Chairmen. Many of you heard these reports at our final meeting in October, and the rest may read them in the magazine.

It was with a great deal of apprehension last October, that I accepted the responsibility of being your Leader. Although many handicaps presented themselves, I believe we hurdled most of them without too much difficulty, and that our year has shown definite progress. Our work has broadened because of the war and much valuable service has been rendered by our members.

War Service

Upon returning from our Convention last October, 1942, we were plunged into definite war service. We furnished flowers for the USO

OFFICERS

Mrs. H. W. Schaefer, Recording Secretary-Treasurer 4416 Taft Road, Kenosha

H. J. Rahmlow, Corresponding Secretary 424 University Farm PL, Madison 6

pitals and once helped to decorate and the Service Clubs, for hosthe Governor's mansion for a tea in honor of Army and Navy men's wives

I accepted the Chairmanship of the Flower Arrangement Committee of the USO, putting in over 250 hours and receiving a pin in recognition of this work. One person from each Madison club served on the Committee with me, and we averaged two and three days a week at the Club, making our flower decorations as interesting to the men in service as possible. We trimmed Christmas trees and made wreaths and sprays galore.

I served several days with Mrs. Dakin's Committee on the planting project at Truax Field. I put in some time at the newly organized Garden Center in Madison, and I finished one Scrap book for the War Service Committee.

As your President, I served on the Board of Directors of the Wisconsin Roadside Development Council, attending meetings Dec. 10, 1942, and Mar. 8, 1943. I attended conferences with the Wisconsin Highway Commission in company with Mrs. Chas. Dean.

Meetings Attended

It was a pleasure to represent you at the Farm Labor Conference at the University of Wisconsin, a report of that meeting being printed in our magazine.

I attended the Board of Director's meeting of the Wisconsin Hor-

DISTRICT PRESIDENTS

DISTRICT PRESIDENTS Mrs. F. J. Fitzgerald, 649 Broad St., Menasha; Fox River Valley District Mrs. H. R. English, 1722 Chadbourne Ave., Madison 5, Madison District Mrs. O. H. Burgemeister, 2127 S. 87th St., West Allis 14, Milwaukee District Mrs. John West, R. 2, Manitwoo, Sheboygan District Mrs. Norma Robinson, Lake Geneva, South Central District

November, 1942, and again August 17th of this year. I was present at their Convention last November.

I presided at our own Board meeting held October 2 and November 30, 1942, and January 5 and September 14, 1943.

I was present at the Milwaukee and Madison Regional meetings held in February, 1943.

I accompanied Mmes. Sewell, Willard and Fitzgerald and Mr. Sonn on a Judging School tour held in the Fox River Valley District, namely, Green Bay, Wausau. and Stevens Point, June 21, 22, and 23.

A number of talks and demonstrations on flower arrangements were given to garden clubs, Gladiolus Society and Dahlia Society. Numerous invitations from Church groups, Leagues and Women's Club organizations were received. but time schedules prevented my accepting. I felt too, that my first obligation was to the garden clubs.

I served in the capacity of Judge at a number of flower shows, taking with me members who were interested in obtaining Assistant Judges' Certificates. I served as a Judge at the Victory Harvest Festival held in Milwaukee, and judged a Junior Flower Show conducted by the 4th, 5th and 6th graders of Marquette School in Madison on September 20th. I encouraged this group in their work, and awarded the ribbons to the winners.

I attended the 5th Annual Judgticultural Society in August anding School of the Garden Club of

WISCONSIN HORTICULTURE

December, 1943

Illinois in Chicago last year, and received my Certificate. I attended their 6th Annual Judging School this year. I exhibited at only one show this year, the Madison Gladiolus Show. I entered 4 exhibits, won 4 blue ribbons, which merited the sweepstakes prize.

I attended the Madison District meeting September 10th; the Sheboygan District meeting September 23rd; and the Milwaukee District meeting October 4th. These meetings together with the Fox River Valley Judging School, and judging the Fort Atkinson show, provided an opportunity for my presence in all 5 Districts in Wisconsin.

I wrote a 500 word newspaper article for the Milwaukee Journal and Sentinel at their request; gave a number of radio talks over WHA, Madison; and gave the final broadcast over WTMJ August 28th closing the garden club series for our year.

With the exception of two months, I have been in Milwaukee 1, 2 or 3 days per month, to confer with Chairmen and Officers or attend meetings. Have had much correspondence with Regional and National Council Chairmen and Officers and have tried to keep in close touch with our own State Officers and Chairmen.

In company with 10 other delegates, I attended the 14th Annual Session of the National Council of State Garden Clubs in Chicago at the Sherman Hotel May 4-6. I considered it an honor to give Wisconsin's report at that meeting, and you will find it printed in full in a recent issue of the National Council's Bulletin I attended the National Council Board of Directors' meeting and also attended and participated in the Board of Directors' meeting of Central Region. You have read about these meetings in your magazine.

October 20th, we held our own annual business meeting in Milwaukee.

On November 5th and 6th, together with Mmes. Sewell, Lowry and Willard, we were happy to take part in a program presented by the Oakfield Garden Club, Oakfield, Wisconsin.

November 17th and 18th, I attended the Central Regional meeting at Ames, Iowa, and the Iowa Horticultural Society. I was happy to report on Wisconsin's activities at the Central Regional meeting. Mmes. Sewell, Willard, Dean, Dakin and Kieckhefer also attended.

Our State Federation has worked in cooperation with other State organizations, whose purposes and aims were closely allied with our own. Our leaders lent able assistance to the Office of Civilian Defense, working on Victory Garden Committees throughout Wisconsin.

Although we had no State programs this year, which would supplement our income derived from membership dues, we have budgeted our operating expenses in such a manner as to have a substantial balance in our General Fund.

Our year has passed swiftly and much has been accomplished. There is still a great deal of work our Federation will be called upon to do in the next few years. You alone know best what your club can do to serve. Plan your work with faith, courage, vision and determination to do your part this coming year.

I am humbly grateful for the pleasure of serving you, and for the many friendships that have been made. I want to pay tribute to past State Officers and Chairmen—they are the ones who have helped build the leaders we are so proud of today. Without them we would not have the strong organization we have today. I express my sincere appreciation to the members of the Board for their able assistance. I am indeed grateful to all club members and chairmen for their whole-hearted support and tolerance, and for their many accomplishments. To my own Madison District, for their unswerving loyalty, unquestionable faith, and willingness to serve, I wish to express my appreciation. Mr. H. J. Rahmlow and Mrs. Art. Steinmetz, his Secretary, have given unstintingly of their time and interest.

If we have learned any lesson at all this past year, it is that of the value of working together. Singly and individually we can have but little influence on the course of the world, but when the vast numbers of garden club members unite their efforts into concerted action, their influence is well nigh irresistible.

If in the capacity of President I too have strengthened your organization, it has been with your help. We make no predictions for the future, nor recommendations. Each administration must work out its own problems and do its own planning. The members of this Federation have chosen their new leaders wisely, so we have only one request to make-let us all be tolerant in our dealing with one another. Let us all join hands and bend every effort in serving our State and Nation, as only garden club people can serve. May God grant us success in our work.

My very best wishes to each and every one of you for a happy holiday season.

-Elsie M. Bostock.

Get This

My lady, be wary of Cupid And list to the lines of this verse;

To let a fool kiss you is stupid,

To let a kiss fool you is worse.

	—SAVE TRE	
Cavity Treatment	General Landscaping	Large Tree Moving
F	We are insured	Removal
Fertilizing	Lakeside 2907	Removal
Pruning	Wisconsin Tree Se	ervice Spraying
	2335 N. Murray Ave.	Milwaukee

Truax Planting Project Report

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REPORT OF THE STATE JUDGING SCHOOL CHAIRMAN

THE National situation curtailed our activities this year. All District Presidents were contacted and the majority were not in favor of holding local judging schools. However, the Fox River Valley held 3 very successful judging schools on June 21st, 22nd, and 23rd at Green Bay, Wausau, and Stevens Point total attendance 105.

Accredited judges were asked to notify the State Judging School Chairman of flower shows to be judged by them during the year, so that new judging students could obtain experience by serving with them. About 10 judges cooperated. The following people have fulfilled their qualifications for Assistant Accredited Judges and received their cards recently. Mrs. G. Alan Kriz, Mrs. Carl Namur, Mrs. H. W. Schaefer, and Vicky Lee Hirsh.

The aim of this chairman is to raise the standards of judging and assist and encourage the judges of tomorrow. Present qualifications for judges do not seem to give us future judges to appear before a board of 3, elected at large by the garden clubs for an oral and written examination. Judges should be required to attend one refresher course every five years for renewal of certificates.

All judges have been contacted in regard to filing their credentials for permanent record with the State Federation of Garden Clubs, and in regard to the possibility of holding a judging school in 1944. I would like to suggest that we offer such a course, meeting the requirements of the National Council, because we have received so many favorable replies to this proposal.

Our flower shows are as good as our judges. We set higher standards for our flower shows, why not for those who judge them?

> By Vicky Lee Hirsh State Judging School Chairman.

WINTER weather is exerting its influence in calling a halt to planting activities at Truax Field.

The largest project for the fall was the landscaping of the grounds of the Radio School building. Mr. George Simmons drew the plans which were executed under the supervision of Lieutenant John Roos. More than 350 trees and 2500 shrubs were dug, transplanted and planted by soldiers in just ten days.

Approximately 300 more shrubs were added to the Hospital planting bringing a total set out there to nearly 1500. A group of pines and large ash trees was set out in the Hospital area near Gate 2. Two groups of Douglas firs add winter color in front of the Administration building.

Headquarters building and the adjacent parking areas came in for foundation planting, hedges, and a row of trees.

Groups of pine, 36 in all, with shrubs and tall trees were used at Gate 1. At the Flag Pole area, too, evergreens were introduced. Tall spruces and arbor vitae at focal points give distinction. Low junipers mark the end of the borders flanking the walk. Two concrete benches, one at each end of the cross walk at the pole, complete the architect's plan. Tulips, red Darwins, fill the four beds at the pole's base.

Spring will see us back at the Post checking winter loss, overhauling borders, sowing seeds and setting out flats of annuals. We have already been asked to develop some areas in the spring.

At this time may we say "thank you" to all of you who have cooperated so splendidly in putting this project across. Every gift of talent, time, money, and material has been deeply appreciated. To our landscape architects we are especially indebted. They have been unfailing in their active participation in the work whenever they were needed.

> Genevieve C. Dakin, War Service Chairman Madison District.

The Federation Business Meeting

Two important resolutions adopted at the business meeting in Milwaukee, Oct. 20, 1943, were:

1. "Voting for State officers of the State Federation of Garden Clubs may be by mail when any regular accredited Garden Club finds it impossible to send a delegate in person. The club sending its vote by mail shall have voted at a regular meeting on the candidate it wishes elected and the vote by mail shall be indorsed by the President and Secretary of such club. This amendment is to be in force for the duration of the war."

2. "To hold Regional meetings in each District this next year."

Officers Elected

The election resulted as follows: President, Mrs. R. H. Sewell, 957 N. 70th Street, Wauwatosa.

First Vice-President, Mrs. Frank E. Willard, Oakfield.

Second Vice-President, Mrs. Walter Dakin, 4110 Mandan Crescent, Madison.

Secretary-Treasurer, Mrs. H. W. Schaefer, 4416 Taft Rd., Kenosha.

New District Presidents are: Fox River Valley, Mrs. F. J.

Fitzgerald, 649 Broad St., Menasha. Madison, Mrs. H. R. English,

1722 Chadbourne Ave., Madison. Milwaukee, Mrs. O. H. Burgemeister, 2127 S. 87th St., West

Allis. Sheboygan, Mrs. J. D. West,

Manitowoc.

South Central, Mrs. Norma Robinson, Normandie Farms, Lake Geneva

By Mrs. F. E. Ballard.

Highlights of Central Regional Meeting, Council

THE Central Regional meeting of the National Council of State Garden Clubs, Inc., was held in Ames, Iowa, November 17, 1943. Mrs. Warren D. Shoemaker, Woodstock, Ill., Regional Vice-President, presided. The meeting was most inspirational as well as educational.

Mrs. E. Wesley Frost, President of the National Council, gave an address, "Garden Clubs of Today and Tomorrow." She stressed the importance of horticulture and good programs. All programs must be interesting, definite and educational enough to inspire action. Two slogans for garden clubs were suggested. The first was the reply given by the shipbuilder, Mr. Kaiser, when asked how he obtained success. (1) "Determine your needs"; (2) "Organize to meet these needs"; and "Then do it." Mrs. Frost then admonished individual members to bear in mind that "No fitter person could be found than I, to do the task today."

The Council Bluff Schools sponsored a Junior group of 2,100 children and a harvest of 11,500 bushels of vegetables.

County Judge Roe submitted an interesting tabulation of court cases before and after their Junior project was instituted:

	1941		
Court Cases	225	boys - 35	girls
Investigations :	1,339	boys - 372	girls
Court Cases:	88	boys - 14	girls
Investigations :	628	boys - 184	girls

Victory Gardens proved successful in decreasing the number of junior cases.

Mrs. W. B. Mills, National Junior Chairman, offered helpful outlines for Junior programs.

Mrs. A. C. Grant, Indianola, Ia., reported on garden centers. A Moline, Ill., center holds meetings in a house in the city park. The center contains rooms for assemblies, a kitchenette and a flower arrangeBy Mrs. R. H. Sewell



ment room. Lectures were given every Wednesday with "Timely Tips" for gardening. Flower arrangements were made by the residents of the community. Paid teachers had charge of the arrangement classes and ribbons were given for awards. Other centers were held in seed stores, a lighthouse and cabins. Garden clubs were urged to educate the public to attend, rather than the members. The Moline Center has been duplicated in England. France and Puerto Rico.

Mrs. O. W. Dynes, Past President of National Council, related an interesting history of the National Council in a talk entitled "What Has Come Before." As Regional Judging School Accrediting Chairman she discussed the requirements of a successful flower show and "The Art of Judging."

Mrs. Alfred Kieckhefer, Milwaukee, Regional Associate Conservation Chairman, urged the clubs to emphasize "Soil Conservation," and responding to an unanimous request, gave her receipt for a "Compost Pile."

Mrs. C. L. Dean, National Roadside Chairman, impressed the clubs "lt's eith with "Today is the time to begin in too far."

proceedings for landscaping the roadsides." Mrs. Dean described the Wisconsin Memorial Highway and told how the Roadside Development Program will aid post-war plans.

Dr. L. C. Grove, Regional Horticulture Associate Chairman, gave all talks on Horticulture. His subjects were "Iowa Gardening in 1943," with kodachrome slides, "The Fact Finding Program," and "Horticulture." "The Fact Finding Program" will be explained at the Regional meetings by Mrs. R. R. Hibbard, Horticulture Chairman for Wisconsin.

George Burkhardt, Mineola, N. Y., outlined the 4 H's of Victory Gardening:

1.Head—Gardening gives the opportunity to think and plan and reason.

. 2. Heart—Provides beauty and gladness in your heart, watching things grow.

3. Hands—Reap joy in the feel of the earth.

4. Health—Mental and physical rehabilitation found in Victory Gardening.

To Miss Ada Swalwell, President of I owa Federation of Garden Clubs, Mrs. Warren Shoemaker, Regional Vice-President, Mrs. E. Wesley Frost, President of the National Council, Inc., and to Prof. B. S. Pickett, Dr. L. C. Grove, E. C. Volz of the Iowa State University faculty, the Wisconsin delegation wishes to express their appreciation for the hospitality and courtesy shown and for the intellectual value derived from the Central Regional meeting held in Ames, Iowa.

Which?

"Is my dress too short?"

"lt's either too short or you're too far."

Message From The Conservation Chairman

THE article on Compost Piles that I had in a late issue of Horticulture has brought forth some very interesting letters. All Garden Club members seem to be alive to the need of building up their garden soil and even if these methods differ a bit, the results are about the same.

But I still maintain that my way of making a compost pile gets the quickest results and with so few of the unpleasant conditions like attracting flies and domestic animals.

How to Make a Compost Pile

I made one compost pile the latter part of April. We are using it now on our vegetable garden and asparagus bed. Last week we did another one. It is an adaptation of the Bio-Dynamic method which Mrs. George Miller spoke about in our last Bulletin of the National Council of State Garden Clubs.

A Community Effort

The first condition is that you obtain several helpers. You simply cannot do it alone. In the East, a group gets together and moves from place to place making them, a sort of community effort. Some weeks ahead I engaged the same men who had helped me in the spring. But what a difference in their attitude! Then they had been most skeptical -tongue in cheek and so on. This time after they had inspected the pile they had made in the spring and had felt that rich, loamy soil, they were most respectful and the work went swiftly. We did make a few changes. Dug our trench 15 inches deep, about 7 feet wide and 14 feet long, and piled the earth up neatly on each side for future use. Then we lined the trench with corn stalks, a layer of garbage with a thin dusting of lime and leaves. After that earth, then manure, then hay or grass cuttings and you keep on the same schedule. I appreciated more than ever what it meant to have our piles and bins of hay, manure, grass cuttings and all so conveniently arranged near our working place, out of the way and close together. The main trick of this is, every layer is made as thin as possible and watered down by a hose with a fine nozzle on it and then trodden down by some worker with rubber boots. Our first pile had 42 layers. This last one I rather lost count on as I helped walk it down but I am sure it was over fifty. The more layers you make, the more firmly they are forced down with the proper amount of moisture, the more rapidly decomposition sets in and the sooner Nature is able to give you super results.

Then the earth you had first excavated and piled to one side is plastered all over the compost pile, rather like an Indian mound. This seals the heap, keeping the moisture in. As a final touch make a hollow in the top of your mound to catch the rain and snow.

When the men and myself had completed our work, the head man, with a twinkle in his eye, said, "There is gold in that thar hill, Mrs. Kieckhefer," and I am sure of it.

> Mrs. Alfred Kieckhefer, Conservation Chairman.

TO A LOST FRIEND

When friendship's ring is broken, And faith in pieces lie Scattered on the hearth of memory; I hold within my mind One lovely token— The comradeship we knew, "When you told me And I told you."

—Marion F. Haugseth In American Poetry

GARDEN SLIDES PROVIDE INTERESTING MEETING

OLORED lantern slides of Sheboygan gardens proved to be an interesting feature of the annual meeting of the Sheboygan District in October. Mrs. Gilbert E. Snell writes: "We showed colored slides which had been taken throughout the season in our own gardens. Our club had purchased a projector and we had an official photographer. This was so well received that I would recommend it to other clubs, even if the officers have to take the pictures themselves when the gardens are at their best."

The Sheboygan District reported an attendance of 56 at their District meeting in October, with five out of the six clubs in the district represented. One end of the meeting hall was used for displays of fruits, vegetables and artistic arrangements of flowers. Reports indicated that much has been accomplished this year by the club.

SOLDIER DOESN'T LIKE **DEHYDRATED VEGETABLES** UCH has been said and writ-M ten about dehydrating vegetables recently. We can be sure of one thing—if the product doesn't taste good, it will not be eaten readily. If there are better methods of preserving vegetables than by dehydration, we should know about them, and if the consumer doesn't like them dehydrated, it is a mistake to put them up that way. In this connection we were interested in reading a statement by a soldier in Alaska, published in a Madison newspaper recently.

Dehydrated Potatoes Taste Like Glue

Said the soldier: "Our food has been very good, especially when we are off the canned and dehydrated diet. One thing that I cannot go for are dehydrated potatoes. No matter how the cooks disguise them, they still taste like a poor grade of glue. Whoever figured that deal doesn't have to eat the stuff."

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WHAT KIND OF PROGRAMS DO GARDEN CLUB MEM-BERS WANT?

EARLY in October we sent a questionnaire to the president of each garden club in Wisconsin asking them to report on the kind of programs and gardening topics in which the members are most interested, both for reading in Wisconsin Horticulture, and as discussion at garden club meetings.

A total of 52 clubs reported. The attendance was 976 at the meetings.

The following are the results of the voting up to November 24th:

Number desiring articles on

flower arrangement _____ 471 We were rather surprised to see

the overwhelming vote in favor of the topic disease and insect control. This topic received over 100 votes more than the second place topic, *flower and ornamental growing*. The latter topic led the interest in *vegetable growing* by a small margin.

The other topics all received a substantial number of votes, and the difference is not very great. The difference here was more between the clubs than it was between individuals. That is, certain clubs gave their entire vote to flower arrangement and landscaping, while others did not vote at all for these topics. Twelve clubs cast no votes at all for *flower arrangement*, while 14 clubs reported all members present voting for this topic.

Neither can one draw any definite conclusion as to whether or not members in small communities

FINANCIAL REPORT WISCONSIN GARDEN CLUB FEDERATION November 10, 1943

Flower Show Fund 53	8.69 1.47		
	5.05 0.96		
	0.50		
Total \$1,19	6.17		
GENERAL FUND			
Balance Oct. 20, 1942	\$	221.56	
Transfer from 1942 Flow Show Fund		75.00	
Total—1942	-		\$ 296.56
Receipts:			
Federation dues, 2222 members\$ 25 Horticultural Society dues 74 National Council dues 10 Stationery sold Judges' books sold Total Receipts past fiscal year	9.75 7.50		
Total Receipts past fiscal year			\$1,118.70
Total			\$1,415.26
Disbursements:			
Horticultural Society dues	\$	749.75	
National Council dues		107.50	
Roadside Council dues		10.00	
4 Executive Board meetings		60.24	
President's expenses President's and 1st Vice-Pres. registrations		40.00	
President's and 1st Vice-Pres. registrations	s to	22.00	
National Council meeting		$22.00 \\ 14.00$	
President's expense at Nat'l Council meeting		10.96	
1st Vice-Pres. expense at Nat'l Council meetin Secretary-Treasurer's salary		15.00	
Extra clerical help		10.00	
Treasurer's bond		5.00	
1942 Bank charge		1.11	
Federation stationery and supplies		24.80	
Postage and supplies for SecyTreas.		22.69	
Committee expenses :		68.12	
General Chairman\$	\$7.02		
1st Vice-President	10.00		
Membership			
Judging school	4.01		
Radio	2.32		
Junior Gardens	1.83		
Constitution	1.18		
Conservation			
Garden Centers	.45		
Horticulture	.40		
Memorial Highways Publicity			
Program	15.50		
1943 War Service	12.45		
Miscellaneous items 1943 business meeting,			
telephone, mimeographing, etc		13.13	
	-		AL 151 00
Total Disbursements past fiscal year Balance in General Fund			\$1,174.30
Balance in General Fund			-φ 240.90

preferred one subject over another. Some clubs in large cities voted unanimously for *flower arrangement*, while a few clubs in these places gave that topic no vote at all, and the same was true in the smaller communities.

Four clubs gave no votes for the first place topic, *insect and disease control*, while most other clubs gave this topic the largest number of votes.

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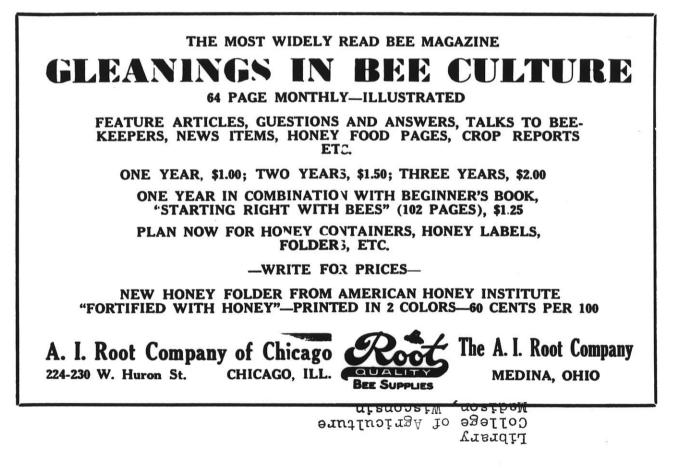
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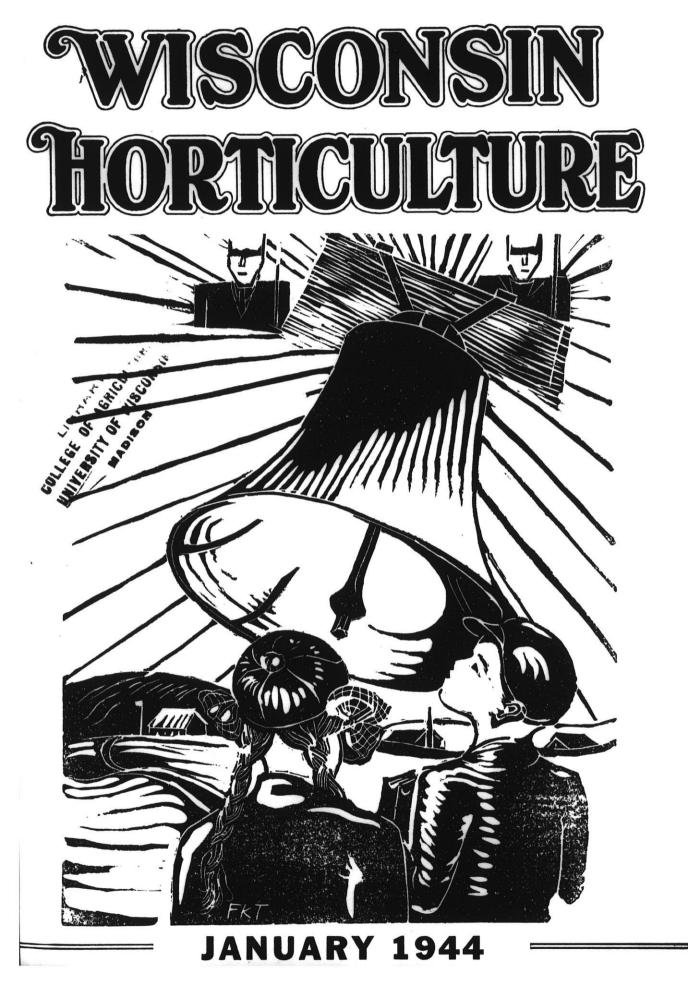


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THE outlook for a sufficient supply of insecticides and fungicides for the control of insects and diseases in the garden, both flowers and vegetables, is very promising.

We hear now that there will be no restrictions on rotenone in 5 lb. packages. The average back yard gardener can do a lot with a 5 lb. package of sulphur-rotenone combination, and in fact, our observation is that when a dust of this material is applied at the correct times, and a thorough job is done, there is not much else to worry about.

Nicotine will be plentiful this year, and a new material, Cryolite, is also available. This material is effective for the control of flea beetles, striped cucumber beetles, cabbage worms, and a number of other insects. Natural deposits of Cryolite are found in Greenland.



CUMBERLAND FRUIT PACKAGE COMPANY

Dept. D, Cumberland, Wis.

WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Horticultural Society

ESTABLISHED 1910

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No. 5

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Subscription to Wisconsin Horticulture is obtained by membership in the Wisconsin State Horticultural Society for which the annual dues are \$1 per year or \$1.50 for two years. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Fifty cents of the annual dues paid by each member is for a year's subscription to Wisconsin Horticulture.

An Outstanding Cranberry

FIFTY YEARS OF THE SEARLES VARIETY

Neil E. Stevens — Cranberry Specialist

RANBERRIES are native to the United States and grew extensively in the marshes of Wisconsin. The early white settlers simply harvested the wild berries as the Indians had been doing for many years. As the industry developed, however, growers recognized differences in the productivity of different plants and also in the quality of the fruit. Selections were made and propagated vegetatively so now we have many named varieties, most of them from Massachusetts and New Jersey, but a few from Wisconsin.

The Searles may well be the youngest of the important commercial varieties of cranberries. Apparently 1943 is the semi-centennial of its discovery. Andrew Searles reported in 1928 to the Wisconsin Cranberry Growers Association that "The experiment which has given me the most satisfaction is the cultivation of a variety of cranberry I found growing wild in our swamp about 1893. This variety, known as Searles Jumbo, has been marketed for nearly twenty years."

Found at Walker

Well might he take solid "satisfaction" in this "experiment." For already in 1928 the worth of the variety was recognized and it was being planted in increasing acreage. At that time the variety was known as the Searles Jumbo. But the American Pomological Society, which attempts to standardize the names of fruit varieties, favors a single word. Popular usage tends to follow the same trend, so SEARLES is coming into general use. Naturally enough the first plantings of this new discovery were on Andrew Searles' own marsh at Walker, near Wisconsin Rapids, and the first two sections wholly planted to the new variety are still in bearing in 1943. The first planting away from this



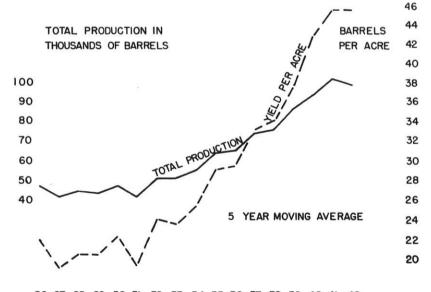
immediate vicinity was made in 1908 or 1909 on the property of the Lewis Cranberry Company near Minong. Since then the increase in acreage planted to Searles has been impressive.

At the time of Bain's Survey in 1929 (Cranberry Industry in Wisconsin) there were in Wisconsin 371 acres of Searles of which 183 were young vines. This was out of a total acreage of 2,120 acres. Ten years later a careful survey was made by Vernon Goldsworthy. This shows that the total acreage in cranberries had increased by only about 200 acres while the acreage of Searles had risen to 784.

A Quality Berry

In two respects the Searles variety may have been favored by fortune in that it was not discovered and widely planted at an earlier date. It is distinctly a quality berry unsuited to rough treatment and has shown little resistance to false blossom. If the Searles had been marketed at the time when cranberries were poured out of a second story window to clean them from chaff it might well have been discarded as too tender. If it had been widely planted in the Mather area when false blossom was a major problem and no control was known, it might be following the Palmeter and Metallic Bell into oblivion.

Actually, however, the comparative isolation of many of the earlier plantings on the widely separated northern marshes protected



26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 The Searles Has Had Its Part in the Increase in Yield Per Acre. them from the false blossom disease for many years. By the time infection became widely scattered on large acreages the carrier of the disease had been discovered and control measures were being actively pressed.

Good Producer

The Searles has made its way on its ability to produce crops. Attention to the unusual productivity of the variety was first called in a large way in 1923. That year the Cranberry Lake Marsh produced 11.097 barrels on a little less than 83 acres of vines. The marsh was then planted wholly to Searles. Cranberry Lake still produces big crops, but the productivity of the Searles variety is best shown by the simple statement that on the average about half the Wisconsin cranberries now sold are of this variety. These are produced on less than one-third of the acreage.

In view of what has been said, it will be obvious that the Searles played its part in the increased production of cranberries in Wisconsin during the last decade. This, together with the increase in yield per acre, is shown in the accompanying graphs. The figures represent a five-year moving average. That is, the figures actually recorded for each year represent an average of that year's crop and the four preceding ones. Naturally the increased planting of Searles has been only one factor in this increase.

Some Joke

Jess Feliz, 70, is still chuckling over the joke he played on some holdup artists. In a bar, he boasted of the fact that he was carrying on his person a \$1,000 payroll for a nearby ranch. The holdup men took him outside, beat him up and robbed him. "But the joke is still on the thieves," he declared. "They only got \$5 which was all I had on me."

Wisconsin Apple Institute Membership Is Growing

THE organization committee of the Wisconsin Apple Institute has been very much pleased at the response from growers for membership.

The following had paid their dues by the last of December: F. E. Allegar, Rio _____\$10.00 Arthur Brunn, Hales Corners 5.00 Wm. F. Connell, Menomonie 50.00 The Dvorak Orchard-H. A. Dvorak, Casco _____ 21.00 Virgil Fieldhouse, Dodgeville 6.00 Frenz Orchards-Mrs. Pauline Frenz, Cedarburg ____ 10.00 Fromm Orchards, Cedarburg 20.00 Fruit & Honey Farm--Charles Patterson, Franksville _____ 6.50 Gays Mills Fruit Farm, Inc., -James P. Kegel, Gays Mills _____ 35.00 Haas Orchard-Haas Bros., South Milwaukee _____ 10.00 Hickory Valley Orchard -Jos. L. Morawetz, West Bend _____ 5.00 Hillside Orchard-John Guth & Sons, Bancroft _____ 9.50 Hipke Orchards - A. T. Hipke & Sons, Inc., New Holstein _____ 15.00 Horse Shoe Bay Farms, Egg Harbor, Door County ____ 30.00 L. B. Irish Orchards-L. B. Irish, Baraboo _____ 5.00 Kickapoo Orchard Co.-J. C. Schubert, Gays Mills ____ 55.00 Meyer Orchards-Alfred J. Meyer & Sons, Hales Corners _____ 15.00 O. G. Mills, Bayfield _____ 7.00 Nieman Bros. Orchards-Arnold F. Nieman, Cedarburg _____ 25.00 B. J. Otting, Cedarburg --- 7.00 Sunrise Orchard-Dr. S. R. Boyce, Gays Mills _____ 40.00 Superior View Farm-Dawson Hauser, Bayfield ____ 27.50 Waldo Orchards - Arno

Meyer, Waldo _____ 15.00

Wisconsin Orchards, Inc .--

R. H. Roberts, Gays Mills 47.50 Wonderland Orchard — Sam

Goldman, Sturgeon Bay__ 65.00 Ozaukee Orchard Co., G. S.

Hales, Port Washington_ _15.00 R e y n o l d s Bros., Sturgeon

Bay _____ 27.00

Kickapoo Development Co.,

Gays Mills _____255.00

W. C. Powers, Windsweeps

Orchards, Ellison Bay ___ 10.00

ON CONSERVING OUR ASSETS

Bulletin No. 133 From the National Apple Institute

A^T the risk of being called visionary, your Secretary wishes to make a suggestion which he believes will prove practical in the long run.

The combination of a very short apple crop, a greatly accelerated demand, and the preclusion by the apple price ceilings of realizing higher prices for fine packs is tending to discourage careful grading and packing. At the same time, the definite and substantial periodic mark-ups in the ceiling regulations are tempting growers to withhold their apples until the last possible moment. Unfortunately both of these practices are working against the years of work which all of us have put into building a greater demand for apples. If there are periods during which the housewife cannot buy apples at all, and if. when she can get them, they are not of the quality, size or condition she wants, her thoughts will turn to other foods and we will have crossed a good customer from our list. By the same token, the store manager, the distributor, and all those who depend on regular supplies of apples will lose their interest in our product in some degree.

Would it not be better if we all undertake to supply our usual trade anuary, 1944

with a normal supply of properly packed apples? This will mean some financial sacrifice. Yes. But let us remember that we are experiencing an extraordinary year, in which most of us can earn a fair profit, even if we pack and sell in the normal way, and particularly let us remember that other years are coming, years of large yields when, regardless of ceilings and mark-ups, none but the best will command the maximum price and when we will be obliged to sell when the market can absorb our apples regardless of mark-ups. Then we will need our outlets, our customers and their good will. What was that parable about the goose that lai dthe golden egg?

> John Chandler, Executive Secretary.

At It Again—Sales Manager— "You mean to say the Minneapolis Board of Education wouldn't even see you?"

Bible Salesman—"No—they got word somehow that the New Testament was full of St. Paul and never mentioned their town at all."

Requirments for Success In Fruit Growing

A FRUIT grower should live on his own farm, is a conclusion reached by Prof. H. P. Gaston, Michigan State College, from a study of a number of orchards. In a bulletin entitled "Factors Which Make For Success in Orcharding" Prof. Gaston makes this statement:

"All of the orchards in the Successful group were managed and directed by resident owners who were in almost constant attendance throughout the year. The owner of Orchard No. 33 moved from the farm to a nearby city soon after the study was begun. Although he visited the orchard at frequent intervals and directed operations, this formerly profitable orchard became much less profitable and the owner was eventually classified as Unsuccessful. Fruit growing is a complex enterprise in which important decisions must be made at frequent intervals. One of the factors essential to success in such a venture is wise and constant supervision. The results of the study here reported led to the conclusion that the resident owner makes the best manager and his personal direction is essential to satisfactory profit."

Prof. Gaston concludes from the studies made that fruit growing is a business that cannot be learned quickly. That a beginner, no matter how old he is, would probably do well to work for a successful grower to acquire experience before making an effort to establish himself. He makes this suggestion because professional and buiness men 50 or more vears old frequently try to become fruit growers and adds this statement: "Such nen think that because they have ben successful in some other line of work they will do just as well a orchard managers. This supposition is not true and often leads to impoverishment and hardship."

ORCHARD SUPPLIES

PURCHASE YOUR REQUIREMENTS FROM THIS COOPERATIVE AND SAVE DOL-LARS, BY PARTICIPATING IN THE EARNINGS. PATRONS' REFUND TO ALL CUS-TOMERS AT THE END OF THE SEASON.

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Picking Bags Nitrate Fertilizer Spray Materials Rodent Repellent (For Rabbits and Mice) Tree Seal (grafting wax)

Nitrate Fertilizer for the Coming Season Will Be Ammonia Nitrate, a 34% Product Instead of Sulphate of Ammonia, a 21% Product.

PRICE WILL BE SLIGHTLY HIGHER.

PLACE YOUR ORDERS EARLY.

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About Those Rabbits

G. C. Oderkirk

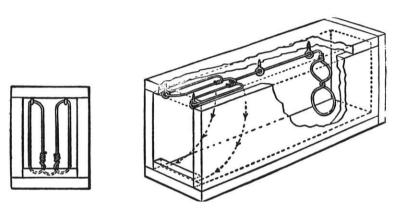
HOW to prevent injury by rab-bits to snall plants, shrubs or trees, is a problem confronting many people in towns and cities as well as rital areas. In the country, shooting is about the best way to remove rabbits. It is a different matter, however, in or at the edge of towns and cities. There it is usually unlawful, and rightfully so, to use guns, and it is quite hazardous to expose poisoned baits. Thus, the choice of methods of rabbit control narrovs down, in most cases, to the ise of traps, frightening device, and in some instances, the appication of repellent substances.

How to Use Traps

Trapping is slow and it is diffiult if not impossible to tell exactly now traps should be used to get the best results. If a person has had no experience in trapping. about the best advice would be to study the animal, learn his ways, and try to lure him to a trap. Baits are usually less effective in inducing a rabbit to enter a trap than to take advantage of a rabbit's natural desire to go into an opening for protection from weather or enemies. Thus, the kind or type of trap is less important than the manner in which the trap is used. Some people have been very wrathy about our trapping recommendations, but we have learned from questioning some of these folks that little or no thought had been given to the task of setting and tending their traps. For example, in some cases traps were set in the open lawn with the expectation that they would catch the rabbits merely because they had been constructed for that purpose and, therefore, should possess some attraction to the animals.

Make Traps Attractive

It is necessary to place a trap in a location where rabbits will likely



A RABBIT TRAP

travel, and then give the trap the appearance of a good place for a rabbit to shelter. Prunings from trees, hay, straw, or old lumber can be piled over and about the trap to make it attractive to the rabbit. This is particularly effective on well-kept grounds usually barren of the kind of cover desired by rabbits. Place the opening of the trap to the east, or away from the direction of prevailing winds. Try to out-guess the rabbit in every way.

Among rabbit trappers there are some who say a trap should be baited and others who say it is not necessary. However, baiting a trap with apple, alfalfa leaves, or a cob of corn seems to help entice the rabbit who hesitates at the opening, not knowing whether he should enter the trap or not.

Start in January

Probably the most important point to bring out in this discussion of rabbit control is the suggestion that rabbits should be removed before they have the chance to cause damage. If it's a matter of protecting gardens, a person should start in January to trap and remove rabbits. When the gardening season begins a person is too busy to tend the traps and, furthermore, it is much more difficult to take the animals when vegetative cover and food are readily available.

If you use box traps, use at least two. However, you may have need for a half-dozen or more, depending upon the area that you want to protect. Most people underestimate their trap needs, so if you want to get rabbits quickly, the more traps the better.

Repellents

As for the use of repellents, none that have been developed to date are sure protection. It takes a lot of time and trouble to get the repellent substance and apply it, and when the winter is over the chances are that a few bunnies were ornery enough to eat and relish the repelent you applied, so why not trap the rabbits, eat them, and save meat points? Incidentally, use gloves. preferably rubber gloves if you can get them, in handling rabbits from the time you skin them until they're in the pot on the stove. After they are cooked well there's no danger of contracting tularemia. There is, however, little danger from January to March.

Here are the materials and details for constructing a good box trap. Remember, when using it, if

(Continued on page 88)

lanuary, 1944

1944 PRICE LIST EFFECTIVE Be Wise--Order Early!

ARSENATE OF LEAD- 4 lb. bag\$ 48 lb. case (3, 4 or 6 lb.)\$.75 7.20
ARSENATE OF CALCIUM— 4 lb. bag	
BORDEAUX MIXTURE— 1 lb, bag 4 lb, bag 48 lb. case (4 lb. bags)	.30 .65 6.95
CYANOGAS— 4 oz. ant kill ½ lb. can dust 1 lb. can dust 5 lb. can dust 5 lb. can G-Fumigant	.30 .45 .75 3.00 3.00
COPPER-A-COMPOUND 6 lb. bag 36 lb. case (6-6 lb. bags)	1.65 9.20
COPPER SULPHATE—Powdered 400 lb. barrelper lb 100 lb. bagper lb	.06½ .07½
DRY LIME SULPHUR— 12¾ lb. bag 100 lb. drum 200 lb. drum	11.00
DU PONT SPREADER STICKER— 1 gal. bottle 1 pint bottle	4.50 .75
DUSTING SULPHUR— 2 lb. canister Case of 12—2 lb. cans	.30 3.20
ELGETOL	2.15
FLOTATION SULPHUR PASTE— Large drum (450 lbs.)per CWT Small drum (275 lbs.)per CWT	3.00 3.25
TREE WOUND PAINT-	60

ROTENONE DUST—	
1 lb\$.40
5 lbs	1.00
PARMONE—	
4 oz. bottle	1.30
12-4 oz. bottleseach	1.20
(4 oz. per 100 gals. water)	
NICOTINE SULPHATE-40%	
5 gal, tin	47.00
1 gal. tin	11.65
5 lb. can	6.90
2 lb. can	3.70
1 lb. bottle	2.35
MIKE SULPHUR-	
10 lb. bag	1.00
6-10 lb. bags	5.50
managerse.	<u>^</u>
LIQUID LIME SULPHUR-	
1 gal	.40
5 gals	1.50
20 gals	4.40
50 gals	8.50

GARDEN DUSTERS- Each\$.65
HAND SPRAYERS-	
Quart size	.50

	\$.20
		.30
	each	.55
5-1 lb		.55

Atkins (T. R. Roberts)	Course of the Cale of the Cale
No. 0	2.50
No. 6	2.50
Diston-16 in	2.35
Blades 14 & 16 in	.30
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The Strawberry Situation W. H. Alderman, Minnesota

'ET us look over the strawberry L and raspberry situations in this state. Strawberry production reached a peak in the United States about 1930 and then rapidly declined. The census for 1940 showed a loss in acreage of 28 per cent during the previous 10-year period. Reports from the West Coast and other strawberry producing centers indicate that this national decline is still continuing. There is a definite shift, however, in the producing areas. Minnesota, Wisconsin, Michigan, and Ohio showed definite increases during this same period. In Minnesota, the increase in acreage was 71.6 per cent. One of the reasons why Minnesota is increasing its strawberry industry is found in the fact that not only is its production per acre higher than the average for the country as a whole, but the value of the fruit per quart is the highest of any of the major strawberry producing centers.

Red Raspberry Production

The red raspberry industry throughout the nation has increased slightly during the past 10 years, and the increase in Minnesota has about kept pace with that in the nation. The six major producing states are: Michigan, New York, Minnesota, Washington, Oregon, and Wisconsin. From the standpoint of selling price per quart, New York, Wisconsin, and Minnesota occupy the most favorable position. Michigan, with the greatest acreage, has the lowest gross income per acre. Washington and Oregon produce a heavy tonnage per acre, but the value of the fruit per quart is so low that it probably places them in the position of obtaining the smallest net'income per acre of any of the states. Minnesota and Wisconsin have the best strategic location for raspberry production because their crop comes on the market when there is relatively little competition, and because northern grown berries have

developed a reputation for very high quality.

Condensed from The Minnesota Horticulturist, November, 1943.

ABOUT THOSE RABBITS

(Continued from page 86)

your results are not up to expectations, don't cuss the trap-try to improve your method of using it!

The box of the Wellhouse trap is 21 inches long, about 6 inches high, and 4 inches wide (inside measurements). Old one by six-inch boards should be used rather than new lumber, if obtainable. The box is closed in the rear and has a wire door in front which swings inward from the top, a cleat at the bottom preventing its opening outward. The trap is set and the wire door kept open by a wire trigger rod held in place by two staples in the top of the box. The trigger rod is bent downward in a loop or figure 8 near the rear of the trap. As the rabbit enters and goes into the back part, it presses against the loop and moves the trigger rod backward, thus becoming imprisoned as the wire door releases and falls. The materials needed to make a Wellhouse trap are: Four boards 1 by 6, 21 inches long, for the top, bottom, and sides; a piece 1 by 6, 8 inches long, for the back; a small cleat for the door stop; a 281/2inch length of fairly stiff wire for the door; 22 inches of wire for the trigger; 4 small staples for hanging the door and trigger; and nails.

Eighteen cases of dogs eating their own license tags have been reported by New Yorkers. Dog tags used to be made of hard rubber, but now they are made of soy beans. The dogs have just got on to it.—The New Yorker.

MARSH SOIL MUST BE "JUST RIGHT" FOR ONIONS

ON a peat soil, onions did very poorly in the neighborhood of a drainage ditch, although they thrived on the rest of the field. Investigation revealed that the marl-bearing clay subsoil thrown up by the ditch-digging operation had been leveled off for a distance of about 5 rods from the ditch, and that it was in this soil the onions were "sick."

Soil analyses proved the marlbearing soil was on the alkaline side, and low in both potassium and boron. Fertilization trials showed the onions responded markedly to borax, manganese sulphate, zinc sulphate, and to an application of complete fertilizer plus copper sulphate.

This result bears out previous findings that where peat or muck soils are alkaline, they are quite apt to be deficient in such trace elements as boron, copper, manganese and zinc. These deficiencies are more likely to show up on vegetables than on most farm crops.

From Bulletin 460, "What's New in Farm Science?" by University of Wisconsin.



ship locally in old style boxes, you can be safe and save money too, by assembling either type box with the fastworking Neva - Clog

working Neva - Clog stapler. Get everything you need for fruit or truck shipments at Sheboygan—as leading growers have for 63 years.

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Sheboygan Fruit Box Co.

5113

January, 1944

Sheboygan, Wisconsin



How Bees May Smother In Winter

A COLONY of bees may be completely covered with snow for a number of weeks and still come out in excellent condition. Many beekeepers have had this experience. What happens is that the heat from the colony soon melts the snow around the entrance, and the colony being in the dark and cool, will maintain a normal cluster.

Danger of smothering comes when the snow melts so that the cover or upper part of the hive is exposed to the sun and the entrance is clogged with dead bees, ice or snow. The sun may warm up the hive, if covered with black paper or even if lightly packed, to the point where the bees become active. Then finding the entrance closed, they may create so much heat and activity as to be smothered.

We must therefore watch our colonies and shovel the snow away from the entrance as soon as the upper part of the hive is exposed to the sun. If the colonies are completely covered or it is very cold, there is no cause for worry.

Value of Top Entrance

The auger hole beneath the handhole of the upper brood chamber is especially valuable to eliminate danger of smothering under the above conditions, and many beekeepers are now using it. This entrance being close to the brood nest will be open as soon as the snow starts to melt, and give a means of flight when the weather is at all favorable. Dr. C. L. Farrar has stated that it may help to keep down the amount of Nosema in the colony.

There are often short periods of warm weather during the winter months of which the beekeeper may not be aware. The sick bees will fly out and not return. This keeps down the amount of infection.

Excessive Moisture in Over-Wintering Hives

A great deal has been said about excessive moisture in the hives. What we do not know, however, is whether colonies suffer or die from excessive moisture or from some other cause—which also causes the moisture.

Since so many normal colonies i.e. colonies with large populations and plenty of stores, winter well without any special arrangements for the elimination of moisture, we are inclined to believe excessive moisture is abnormal. What the cause is, we do not know.

Dr. Farrar does not claim that the auger hole entrance in the top hive body will eliminate moisture. Good colonies, wintered side by side, some with the upper entrance and some without, all come through the winter well without any noticeable difference in moisture.

All of this goes to show we do not know very much about the subject. We do feel though that recommendations for elaborate methods of eliminating hive moisture are not based upon facts.

We also think there are still plenty of problems left for our scientists to solve.

A SEVERE WINTERING TEST

IN THE September issue of Gleanings in Bee Culture, Dr. C. L. Farrar describes the severe wintering exposure test he carried on during the winter of 1941-42 at Madison in which he cut the side walls out of two hives and substituted screen wire, or in other words, exposing two colonies to the wind and cold to see what would happen.

A picture of one of the hives is shown on this page. Of course Dr. Farrar emphasizes that this was simply a test and is not recommended to beekeepers. He describes it as follows:

"On November 13 two normal colonies were transferred to skeleton hive equipment having screened sides and ends except for the front of the upper hive body. Since the bees were accustomed to an upper auger-hole entrance, the front section, which had been cut out, was reinserted.

"One of the two colonies wintered in the screened hives suffered severely from dysentery early in February, as evidenced by badly spotted combs. A small sample of bees taken late in December showed Nosema infection. Subsequent examinations showed this colony to be 100 per cent infected by the time all the bees had died late in February.

Pollen Fed

"The second colony showed no Nosema in any of the small samples examined at frequent intervals during the winter months. At no time was there evidence of dysentery within this hive, although the snow was heavily spotted after flight periods. Because this colony had only small, scattered areas of pollen, cakes of soybean flour supplemented with 25 per cent of pollen were fed beginning February 26. On March 5 and 12 there was brood of all stages in three frames, but it was of poor quality.

The colony that survived lost 64.5 pounds in weight between December 4 and June 8. Daily gains from June 8 to September 27 totaled 140 pounds, and losses during the same period amounted to 31.5 pounds. The winter loss added to the summer loss subtracted from the total gain leaves a surplus of 44 pounds produced in a poor season when the average yield for the State (Wisconsin) was only 40 pounds. No special care was given the colony during the summer except to limit the-queen to the two ventilated brood chambers with an excluder and to provide two supers of drawn comb. Package colonies. by way of contrast, averaged 73 pounds above 60 pounds required for winter and showed a range in net surplus from minus 65 to plus 165 pounds. In other words, this experimental colony stored 109 pounds more honey than the poorest package colony and 121 pounds less than the best.

"The test clearly demonstrates that the normal winter cluster can protect itself to a remarkable degree against severe climate conditions. If Nosema disease had not been discovered in the colony that died out, or if both colonies had been infected, we might have concluded that death was due to the severe exposure."

"Why ain't you in uniform?" demanded a truculent young dame of a deferred gent the other day.

"Why ain't you?" he rejoined tartly.

Can We Improve Our Honey Plants?

THE subject of improving our honey plants is receiving con honey plants is receiving considerable attention today. Mr. Frank Pellett of Atlantic, Iowa, has been experimenting for some years on the value of various plants and recently found that Anise-Hyssop is a very heavy nectar producer. He states in the American Bee Journal: "This plant (Anise-Hyssop) Agastache Anethiodora appears to be the best bee plant among the hundreds tried in our test gardens." The plot swarms with bees from early morning until late at night, and it blooms from early June until late in September.

Now if we could grow a large acreage of this plant we would have a beekeepers paradise. But as is the case with many good ideas, the obstacles, while they seem simple, are often insurmountable. The fact that this plant was once native to Iowa, but that Mr. Pellett had to go to Canada to find seeds now, indicates that it did not survive the competition of other plants. There may be plenty of waste places in the West where it can be grown in the wilds, but in Wisconsin we have a different problem. Our waste places are filled with highly competitive plants, among them quack grass, June grass, and sweet clover. Since the plant at present has no agricultural value, it is very doubtful that it can ever be grown on valuable farm land.

However, all this does not mean that we should not try it in waste places to see what it will do.

Improve Our Clovers

It would seem that a greater opportunity for improving honey plants lies in the direction of improving the nectar yielding quality of our farm crops such as the clovers and alfalfa. There is evidence that some strains of alfalfa produce much more nectar than others. If we cooperate with the Agronomy Departments in making selections and improving these strains, it would benefit not only the beekeeper, but the farmer as well, because the farmer would produce more seed if the bees visited the alfalfa. The same applies to red clover. We believe the time will come when strains of red clover will be produced on which honey bees can work freely. Since bumble bees are decreasing in numbers, such strains will be more profitable for seed growing in the future.

Another improvement lies in the direction of more and better sweet clover. At present this plant seems to be at the bottom of the growing cycle. Causes may be the sweet clover weevil, as well as winter conditions unfavorable for the germination of seed. Farmers seem to discontinue growing it in pastures after a series of wet seasons. Since it blooms when our colonies are at their peak strength, it is still one of our best honey plants.

DISTRICT BEEKEEPERS' MEETING, JANESVILLE, FEBRUARY 10, Y.M.C.A.

A MEETING of the Southern District of the Wisconsin Beekeepers Association has been called by Pres. Ivan Whiting. It will be held in the Janesville Y.M.C.A. on Thursday, February 10, beginning at 10 a. m.

The program will be devoted to discussion of practical beekeeping problems. Results of the national conference at Chicago will be announced. Governmental regulations will be discussed. Labor short-cuts and how to care for our bees during the coming season will be the principle topic of the meeting. Speakers will include State President Walter Diehnelt, Ivan Whiting, James Gwin, John Long, and H. J. Rahmlow.

All beekeepers are invited to attend and join the Association.

National Beekeepers Conference Planned Morrison Hotel, Chicago January 11-12-13

A NATIONAL conference of the beekeeping industry, including all its branches, will be held in the Morrison Hotel, Chicago, on January 11-13.

It will be the first meeting of delegates from the various states to organize the National Federation of State Beekeepers Associations. A majority of states in the nation will send delegates to this meeting. The Federation will unite thousands of beekeepers, through their State Associations, into a national organization so that the producer may be adequately represented on all matters of importance to him.

Bee supply manufacturers, honev packers, and bee inspectors will hold sessions in conjunction with the meeting. The American Honey Institute will hold a meeting of its Board of Directors. A War-Time Beekeeping Council will plan to perfect the organization of all branches of the industry, and if possible, raise enough money to employ a permanent Executive Secretary with a permanent office. Such an office is badly needed. We need someone to devote his entire time to the industry on a nationwide basis. Often too little is accomplished by voluntary help when it comes to important matters.

The meeting was called by Mr. James Gwin, President of the American Honey Producers League who set the ball rolling for these organizations last January when a similar meeting was held in the Morrison Hotel, Chicago. H. J. Rahmlow, Madison, is chairman of the organization committee and is also program chairman.

The first day's session will be devoted entirely to talks by specialists. On the program are: Mr. Harold Clay, Washington, on Government Orders Concerning Beekeepers. Mr. J. B. Hutson, Associate Director War Food Administration, on Government Viewpoint on Placing a Floor Under Honey Prices.

Dr. Jas. I. Hambleton, Washington, on Beekeeping Research— Recent Accomplishments and Future Needs.

Mr. Walter F. Straub, Washington, in charge of Food Rationing, OPA, will talk on the work of his department.

Mr. Lewis White, beekeeper of Portland, Oregon, on The Work of the Honey Industry Advisory Committee, Accomplishments and Duties.

Mr. Allan Root, Medina, Ohio, on How the Beekeeper Supplies Industry Committee Will Help Our Program.

There will be considerable discussion on floor prices for honey from the producers' viewpoint.

On the second day there will be separate sessions for all branches of the industry, and on the third day they will again get together and formulate a united policy.

BEES WILL NOT FREEZE TO DEATH

beekeeper from Edmonton, Al-A berta, reports in Gleanings in Bee Culture for November, that he tried to freeze a colony to death, but failed. He writes: "The queen was destroyed in August in order that there be no brood at the time of killing the bees in the fall. The beekeeper thought he would freeze them to death by removing the entrance block and placing the hive cover cornerwise on the top. They did not freeze, though it was a colony of average strength only, and the temperature for one threeweek period never rose above 40 degrees below zero, and went as low as 62 degrees below zero."

HONE? WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company. Donomowoc, Wisconsin.

HONEY CANS

We can give you immediate delivery on 60[#] cans.

Order your glass supply for the new crop now, as it takes from 3 to 6 months to receive same from the factory. We now have a good supply of 5#, 2½, 1# and ½# on hand, and can make immediate shipment.

To insure prompt service, order your Association labels now for your new crop of honey.

Write for Complete Price List.

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HONEY ACRES Menomonee Falls, Wis.

BUY LOTZ SECTIONS

You will get the finest sections that can be made. Prices may rise as lumber, labor, and manufacturing costs have all advanced. Protect your 1944 honey crop by buying your supplies before the honey flow begins, so that you will have all the equipment you will need.

> AUGUST LOTZ COMPANY BOYD, WISCONSIN



NEW LIFE MEMBERS OF THE HORTICULTURAL SOCIETY

A PPLICATIONS for life membership in the Wisconsin Horticultural Society which were unanimously approved by the Board of Directors at their meeting held during the annual convention, were as follows:

Joseph L. Morawetz, West Bend Peter Lewis Swartz, Waukesha Mrs. Peter Lewis Swartz, Waukesha

Mrs. R. L. Marken, Kenosha Murray Bingham, Sturgeon Bay Wm. F. Connell, Menomonie S. S. Telfer, Ellison Bay

Life membership dues are \$10 and entitle a member to membership in the Wisconsin Horticultural Society during his lifetime, which includes Wisconsin Horticulture and all other publications whenever issued. The fees are placed in the permanent fund of the Society. This fund now contains more than \$1,400, and the income from this fund will be used at such time as it is ample for specific projects as decided by the organization.

WRAP BEES IN HONEY

MOST of us are wrapping our bees in honey this year rather than tar paper and believe it should be much more to their liking. Last year a good many of them wrapped their bees in tar paper without the honey and they didn't seem to come through the winter in very good shape.

From letter from Chas. Reese, State Apiarist, Columbus, Ohio.

A weary wartime commuter wired his boss: "Will not be at office today. Am not home yesterday yet." —Reader's Digest.



WRAP YOUR APPLE TREES WITH NEWSPAPER

RABBITS were such a menace to fruit trees in city gardens last winter that many members are discouraged and feel, as Mrs. F. J. Peterson of Waupaca stated, "Apple trees are just rabbit food in the back yard as soon as the snow gets high. One of our trees was protected with three feet of screen wire, but snow drifted over this and the rabbits took every branch so only a whip was left. This, however, grew well this past summer."

Rabbits are most troublesome when food is scarce as the result of long periods of snow covering. During such periods we should use rabbit traps in addition to protecting the trees. Remember, however, that rabbits may not go into a trap if there is other food available and they are not especially hungry. However, then they won't bother the trees either. Do not use black paper such as tar paper for covering trees. There is evidence that the sun may warm the bark of the trunk through the black paper which may result in winter injury. Common white newspaper is the best.

Read the article in this issue by Mr. G. C. Oderkirk on how to make a rabbit trap and how to use it.

HALES CORNERS GIRL WINS NATIONAL VEGETABLE GROWING AWARD

A N attractive seventeen-year-old Hales Corners farm girl, who helps her father by driving the tractor and taking green produce to market, brought new honors to Wisconsin by winning a major award in the National Junior Vegetable Growers' Association production and marketing contest.

She is Delores Giese, of Hales Corners. She received a sectional award of \$100 from a \$6,000 scholarship fund provided for the contest by the Great Atlantic and Pacific Tea Company. The awards were announced at the annual convention of the association in Chicago Dec. 11.

Miss Giese, a senior in high school, has been president of her 4-H Club for three years and is a Milwaukee County junior leader. She reported a \$160 profit on the 9,800 square feet of garden that she used as her contest project. Another Wisconsin winner was Raymond Walters, 18, of R. F. D. 2, Marinette, who received a \$25 war bond.

Boys and girls of 33 states, ranging from youths living in cities to one girl who lives on a 1,100-acre ranch in Montana, completed successful vegetable projects and reported required studies of production and marketing methods which show why efficient marketing is vital to farm prosperity. Winner of the national award of \$500 was Wayne R. Ennen, 19, R. F. D. 3, Terre Haute, Ind., while Charles L. Hahn, 18, R. F. D. 2, Huron, Ohio, won the Central regional prize of \$200.

BREVITY — A FORGOTTEN VIRTUE We Note:

THE story of the creation of the world is told in Genesis in four hundred words. The world's greatest moral code—The Ten Commandments—contains only 297 words. Lincoln's immortal Gettysburg address was but 266 words. The Declaration of Independence required only 1,321 words to set up a new conception of freedom.

The Office of Price Administration is credited with using 2,500 words to announce a reduction in the price of cabbage seed.

When I called this to the attention of one of our members, he said, "Yes, but remember there were no lawyers when the world was created."

They recently had 1,821, mostly young "should be in the service," legal lights in the OPA, according to reliable information. Any Government agency that becomes so enmeshed in legal "tanglefoot" has long since passed its usefulness to a people and should be abolished or be radically changed.

From Oct., 1943 Virginia Fruit.

HOW DO WE GET A BETTER WORLD?

EVERYONE is talking and planning for the better world to come after the war. We can be sure of one thing, however. Unless we work for it, it will not be forthcoming for us. We believe that the editor of the Hopkins, Minnesota Review expressed it very well when he said :

"A better world can't be just planned. It will have to be earned. And those who earn it will have to decide, (1) how much a better world is worth, (2) how badly they want it, and (3) how much they are willing to pay for it."

In a Nutshell

Johnnie—"Dad, tell me what it's like in a night club?"

Dad—"Well, a night club is where they take the rest out of restaurant and put the din in dinner."

WHO WAS THE FIRST TO SELL APPLES AT A ROADSIDE STAND?

A LETTER from Mr. L. B. Irish, Baraboo, comments favorably on the publication of our 75-year history. In addition, Mr. Irish makes these statements:

"Ever since I took up the business of fruit growing about 40 years ago, I have been especially interested in the marketing of fruit direct to the consumer.

"In 1915 I started selling apples by the roadside in front of our yard on what is now Highway 12. In 1916 I hauled apples to the suburbs of Madison and sold them from a tent put up in the Albright yard about one-fourth mile west of the F. R. Gifford store. I advertised in the Madison paper the days I would be there with fresh fruit. The venture proved quite successful.

"Since that time we have sold fruit at our orchard roadside stand. In the spring of 1942 we put up a larger building farther back from the highway providing more parking space. We were fortunate in doing so as it would have been impossible to handle the sales the past two years with the former set-up.

"I would be interested to know if the roadside selling venture in 1915 was the first of its kind in this part of the state."

We will be glad to hear from others as to their success in roadside selling and who had the first roadside stand in Wisconsin.

PICTURE IN HISTORY IS NOT LIKENESS OF A. L. HATCH

A letter from Mr. M. H. Bingham of Sturgeon Bay states that the picture on page 12 of the 75year history of the Wisconsin Horticultural Society is not of A. L. Hatch, but of C. G. Patten.

We regret the error. We found the cut in our files, and on the back of it was marked "A. L. Hatch" so it was assumed that this was correct.

Trite Observation

An old gentleman made this observation in a local grocery the other day: "I used to come in here bringing my money in my pocketbook and carrying my groceries away in a basket.

"Now," he continued, "the process is reversed; I bring my money in a basket and carry my groceries in my pocketbook."





OFFICERS Harold Janes, Whitewater, President David Puerner, Milwaukee, Vice-President H. J. Rahmlow, Madison, Cor. Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Illinois Ave., Sheboygan

By the WISCONSIN GLADIOLUS SOCIETY DIRECTORS Frank Blood, Stevens Point Dr. F. Graff, Freeport, Ill. Fred Hagedorn, Sheboygan J. R. Hopkins, Deerfield, Ill. Walter C. Krueger, Oconomowoc

E. A. Lins, Spring Green Walter F. Miller, Sun Prairie Dr. Geo. Scheer, Sheboygan Leland Shaw, Milton Noel Thompson, Madison

Rambling Through The Glad Patch

CTYLES in flowers change from **D** time to time the same as in other lines. This is true of gladiolus also. In the twenty odd years I have been growing glads I have seen many changes in varieties. Some of the older varieties popular in those days, and really good too, are today out of style. Some of those varieties which I grew were Mrs. Frances King, America, Halley, and Mrs. Frank Pendleton. (I still think this variety is the best blotched variety introduced.) Another good blotched variety was Mrs. John R. Walsh.

Two popular varieties which I was never able to tell apart were Mrs. Leon Douglas (still being listed) and Mrs. John S. Wood. A scarlet which I liked was Charlemagne.

At the time Mother Machree was listed in Dr. Stephen's catalog at \$100 per bulb, I received his list and ordered Little John, a real nice pink. Mrs. Austin originated a number of fine varieties, one of which was Evelyn Kirtland, a very beautiful Pin Point pure pink. This variety should have been continued as it was very beautiful.

The varieties listed in the following classifications are my own preferences. Perhaps many growers will not agree with me.

Maid of Orleans is one of the best white varieties on the market. It is inexpensive and is good. Snow Princess is also a good commercial. However, to get more style in white

George C. Morris, Madison

gladiolus one should have the following in their collections: Surfside, Matterhorn, Margaret Beaton, Van White, and Silentium. Myrna, when well grown can be very fine. I have never had a good spike of this variety, but I shall keep on trying.

Creams

In creams we have Leading Lady, very excellent, and White Gold, also very fine. The variety which took my eye the past season in this color class was Wanda. This is a real glad. I had the finest spikes of Shirley Temple the past season that has been my pleasure to grow, and I have made the remark that if the frost had not killed the plants I would have had blooms until Christmas. Ivory Keys was very good in my garden the past season.

In yellows I do not have a real good variety except Sir Galahad and Van Gold. Both are very fine.

Helen of Troy is really fine and is the best buff I have.

I have several nice orange varieties. The variety which performed best the past season was Lantana, a new variety. Bobby Dazzler was fine also with Diane coming in as a must have. I do not have Padre, but saw it at the Midwest Show and liked it very much. It is on my list for next season.

This article started out to be a review of the varieties in my garden, but there are varieties seen at the shows which should be mentioned. One of these is Glamis, I saw some nice spikes of King of Hearts but have not been able to obtain a good spike. It is grand when well grown.

My choice of scarlets might not be the choice of others. Southern Drama to my mind is the grandest scarlet on the market. It is tall, refined and has many florets open. Algonquin is one of the best. While Dr. F. E. Bennett still wins at shows I have discarded it. Red Spire by Hatch is a very good scarlet.

There are many fine varieties in the light pink class. Candy Heart is excellent, and Camellia very good. Probably the finest varieties in this section are Corona and Grand Opera. The latter is extra good for large arrangements.

I seem to prefer the deeper shades of reds and the purples. Marjorie by Hatch is very good. I liked it very much the first year I grew it. King Click is very fine also. The red with the largest floret in my garden the past season was Mammoth Ohio, the lower floret being 8 inches. The red varieties which I saw at shows that were very fine were American Commander, Red Charm, and Spitfire.

Purples

Purples have a great attraction to me and I get all the varieties I can afford. Lexington is a giant purple that has considerable refinement. It is very beautiful and makes good increase. Parnassus is January, 1944

also a very excellent deep purple, one of the finest. Purple Classic is excellent when well grown.

In blues we have Blue Beauty, Blue Admiral, Blue Wonder, and Winall. All of these are good commercial varieties and also winners at the shows. The blue variety I liked best was Harold Logan, a rather light blue and very refined.

The lavender class can stand more good exhibition varieties. Badger Beauty is a fine commercial.

Elizabeth the Queen is very good. Minuet still wins at the shows and is hard to beat, although it is quite a few years old.

I might say that the best lavender in my garden last fall was a seedling of my own. Paul Hoppe said it was the best lavender he had seen. Of course another growing season may change the story.

At one time I was partial to smoky varieties and still grow some. Perhaps the most spectacular smoky I have seen is Hoppe's Alla, a large, stately spike with large florets and quite a few open. Stanley will replace Mother Machree. It is really a beauty and well worth growing. Another variety I have been growing for three years is Mary Spellman which is not listed in any catalog yet.

One of the best varieties I grew last fall was Wilson's Show Boat. I have not mentioned thrips and their control, but an acquaintance had quite a few bulbs and the previous season had serious thrips damage. One day she was doing her washing and decided to see what effect strong soapy water would have on thrips.

The past season without any further treatment she had very fine spikes. It may be worth trying some time.

The simple life is great stuff provided you lead it by choice and not by necessity.

Hopeless Contest—Fatty—"Hey Skinny, what's the idea of making faces at the bulldog?"

Skinny — "I dunno—he started it."

QUESTIONS ABOUT GLADIOLUS ANSWERED

(Continued from Dec. issue) *Question*: How deep should the gladiolus patch be cultivated, and also how late in the season?

Answer: Gladiolus should be cultivated shallow—just enough to kill the weeds, was the general opinion. Cultivation should not be continued late in the season, but irrigation or water was important.

Question: What colors of gladiolus does the florist trade like best? What colors do they refuse to buy?

Answer: White, lavender, light pink and yellows are preferred by florists. The color should be pure. They do not like blotched colors. Smokies are the least desired. Some reds, whites and blues wanted for certain occasions. One grower had a demand for all of his stock. Another grower pointed out that a florist who had an expert on arrangement would buy smokies, and other dark colors, and it was remarkable what this person could do with such varieties in making beautiful bouquets, and other types of arrangements.

Walter Krueger Talks on Shows

Mr. Walter Krueger of Oconomowoc gave an interesting talk on visits to other State Gladiolus Shows, especially the one in Iowa. There were quite a number of outside exhibitors present at the Iowa show. He visited growers and told how several large growers harvested their crop with machinery.

Noel Thompson Talks on Diseases and Insects

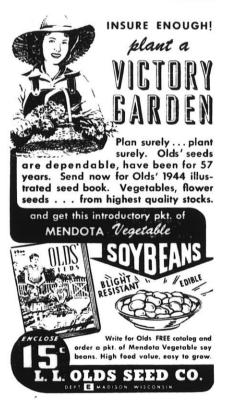
Mr. Noel Thompson, Madison, who is our expert on disease and insect control of gladiolus, is always welcomed by the growers. He gave results of new experiments on thrips control and discussed other troubles. We will not report his talk in detail because Mr. Thompson will write articles from time to time on these subjects for this page.

New experiments on the use of nicotine as a substitute for tartar emetic were most interesting. When

molasses was used as a sweetener with nicotine, there was a strong odor of nicotine immediately after the mixture was prepared. Such a mixture was not effective for thrips control. However, when a light cane syrup was used there was no strong odor of the nicotine and the control was good. The best formula was 1 ounce of nicotine sulphate, 3 ounces light colored syrup, and 3 gallons of water.

When Paris green was used in a formula of 1/5 ounce of Paris green, 3 ounces of syrup, and 3 gallons of water, the results were good with 3 ounces of molasses as a sweetener, but not good when 3 ounces of a light syrup were used. However, when 12 ounces of the light syrup were used, good results were obtained. When 12 ounces of molasses were used, burning resulted, which was not the case when only 3 ounces were used.

Mr. Thompson emphasized that a diseased old bulb is hopeless and should be discarded.



GARDEN GLEANINGS

The Compost Pit

Be sure to read Mrs. Alfred Kieckhefer's article in this issue on how she makes a compost pile. It is a very important project and much valuable humus can be obtained if the pile is made correctly. In sections where the water for watering the garden is hard, or high in lime, lime should not be added. In Madison, for example, many garden soils are already too high in lime and gardeners are beginning to use sulphur to create acidity. Our garden soils should always be tested before adding lime.

Very important to a compost pile consisting of cellulose material such as leaves, is to add a fertilizer high in nitrogen. Any complete commercial fertilizer will do as long as the nitrogen content is high. Plant food thus added will make the compost richer and the nitrogen is invaluable for feeding the bacteria that decompose the compost. The nitrogen is later given back to the soil as plant food.

Soil Testing

"Removing Some of the Bunk From Soil Analysis" is the title of an article in the November issue of the Missouri Botanical Gardens Bulletin. The writer, a member of the staff of the Gardens, concludes: "Buy the very finest testing kit you can and devote a great lot of time to soil sampling. Much information can be gained from this procedure but it is a mistake to place any value on a very simple test taken by some one who has not worked in the locality before or by some one who doesn't standardize each movement and gesture."

In other words, it is not well to rely upon simple tests. No doubt the simplest way for the back yard gardener to get results is to: (1) provide plenty of humus; (2) use a small amount of complete commercial fertilizer if it is not practical to have the soil tested; and (3) do not add any lime to city



gardens where hard water is used for watering when growing vegetables or flowers.

Hormones

Here is a new way to retard the dropping of leaves of holly branches. The Ohio Experiment Station reports that dipping holly branches in a solution of growth promoting hormones will do the job. No doubt we will find other uses for these substances which so strongly affect plant cells.

Mice

We are sorry that we cannot recommend any material yet devised for protecting plants against injury by mice. Field mice are gross feeders as illustrated by the fact that they will eat oats covered with strychnine which is very bitter. Rats will not eat the poisoned grain for that reason and so tasteless poisons must be used for them. The only way we have of protecting plants from injury by mice is to destroy the mice, or wrapping the trunks of young apple trees with wire screen.

For getting rid of mice in the home, traps are preferred.

Peonies Best

No ornamental flower can compare for permanence and general garden satisfaction. This is the conclusion reached by a small group of Wisconsin plant growers recently. The peony will outlast the gardener, one of the men stated, and it is no doubt true if the plants are well cared for. It has but few insect and disease troubles, is perfectly hardy, and if grown in a sunny place in good soil, will give magnificent bloom year aftetr year.

House Plants

One of the most puzzling questions is why some folks can grow house plants well, while others have little success. Referring to Saint Paulias or African Violets, Victor Ries stated recently in the Country Gentleman that in his opinion they should be kept a little on the dry side. However, in the October issue of The Flower Grower, a lady writes that she has had wonderful luck with them and keeps them in a north window in about one-half inch of water in the jardiniere. She says, "I think the trouble is not giving the plants enough moisture.

I have been able to grow plants in the office window with more success than with the same kinds in the home. Cooking gas is used in both buildings and we are at a loss to explain the difference in results

Prune Shrubs

Do your shrubs need pruning? Winter is an excellent time to study the shrubs to determine whether they need pruning, and how to prune them. After all, the fundamental principle underlying the subject of how to prune is that the plants should look well after pruning. It is much like having one's hair cut. A man can look decidedly shaggy if badly in need of a hair cut, and so does a shrub in need of pruning. True, if a shrub is not correctly pruned, as for example if it is just beheaded, it will look as badly as will a man with a chopped-off hair cut.

Perhaps the best way to learn to prune shrubs properly is for garden clubs to arrange for demonstrations by someone who knows how.

Shudders

H. A. Graves, horticulturist at Fargo, writing in the North and South Dakota Horticulture, comments on the serial "Bugles in the Afternoon," published in the Saturday Evening Post this fall. He says that thorough readers would no doubt shudder at some of the tall historical and botanical inaccuracies found scattered throughout the story. For example, the hero hauls a barrel of apples from Fargo to Bismarck in the dead of winter with two mules and a cutter. The story implies that the apples were not frozen on arrival at Bismarck.

Thorough readers find plenty to shudder over in much reading matter these days.

Early Sweet Corn

Will sweet corn mature earlier if started in the greenhouse? J. Horace McFarland writing in Horticulture (Mass.) tells of a gardener who tried it out last spring. He sowed seed in pots very early, aiming to get sweet corn for the table by July 4. He also planted outdoors and was surprised to find that the potted plants did not produce any earlier than those grown in the regular way.

Kale

Did you try Kale this summer? How did you like it? Mr. McFarland tells in the same issue of Horticulture of a gardener who grew beautiful Kale, but found no one willing to eat it. He did have real pleasure, however, with several crops of Kohlrabi which seemed to hit the spot.

RECOMMENDATIONS OF THE NATIONAL VICTORY GAR-DEN CONFERENCE November 16-17, 1943 Hotel Blackstone, Chicago

THE objectives of the National Victory Garden Institute were endorsed and strengthened. These call for 22,000,000 Victory Gardens and 26,000,000 home preserves in 1944. This means a vegetable garden and a fruit garden, where practicable, for every family that has suitable soil and a sunny site.

It was resolved that every effort be made to secure adequate equipment and supplies for Victory Gardeners. Especial e m p h a s i s was placed on the following:

An increased number of hand garden tools and wheel hoes. No wheel hoes are now being manufactured for Victory Gardeners.

An adequate amount of rotenone insecticides. It was specifically recommended that the amount allocated to Victory Gardeners be increased from 20 per cent to at least 30 per cent.

An increased number of dusters and sprayers was requested so as to provide for the effective and economical use of these vital materials.

Sufficient quantities of canning equipment must be made available. It was urged that *at least* 600,000 pressure canners be manufactured instead of the 400,000 now requested by the Department of Agriculture. Also mentioned were additional quantities of jar closures, tin cans, non-pressure canners, tin can sealers and such minor equipment as jar racks and jar lifters.

It was urged that additional gasoline again be made available to Victory Gardeners for necessary travel to and from their garden plots.

Children's gardens for both food and education were endorsed and it was recommended that they be carried on through the existing school organizations wherever possible.

POOR ROSE VARIETIES Omit These From Your Order List

THE list of popular rose varieties is a long one. The American Rose Society in its bulletin, The American Rose Magazine, publishes a long list of favorites, but also a short list of varieties which have 75 per cent unfavorable criticism.

Some of the faults found with these varieties are: not desirable, not interesting, a dud, not worth while, has many faults, etc. Of course, difference in climatic contitions may be the reason for some of these unfavorable reports. However, with so many good varieties available, it will be valuable to have a list of poor varieties so that they may be omitted from our purchase order in the future.

Unpopular Varieties

Alice Harding Allen's Fragrant Pillar Dorothy McGredy Golden State Jean Cote Lilette Mallerin McGredy's Orange Mrs. J. D.Eisele Nigrette Patrick Anderson Poulsen's Pink Reveille Riviera S & M. Perrier Shenandoah Souvenir Spun Gold Sunmist Thomas A. Edison

The variety Blaze, advertised so highly a few years ago as an everblooming climber, was also on this list. The complaint was that it is not remontant as advertised, but otherwise a brilliant June performer.

- You've oft proven that in this war-
- But have you gone up against ladies
- For the very last steak in the store?

Yes, soldiers, we grant you have courage,

Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

Mrs. R. H. Sewell, President 957 No. 70th St., Wauwatosa 13

Mrs. F. E. Willard, 1st Vice-President Oakfield

Mrs. Walter Dakin, 2nd Vice-President 4110 Mandan Crescent, Madison 5

THE PRESIDENT'S MESSAGE

To the Members of the Wisconsin Garden Club Federation:

You have all received a copy of "The History of Seventy-five Years Actice Service, Wisconsin State Horticultural Society." In your behalf, I wish to thank the author. Mr. H. J. Rahmlow, for the fine Christmas gift.

During the past year, you have shown your strength, courage and united efforts, not only through the gospel of Victory Gardening, to supply sustenance at home and abroad but for cooperation wherever your services have been requested. You have given inspiration and been a positive uplift to those in need of comfort and cheer through your bonds of fellowship.

In 1944, we are urged to double food production to lower youth delinquency by sponsoring Junior Garden Clubs; aid communities searching for knowledge by establishing Garden Centers and bear in mind our loyalty to those in the Service by our support of the Memorial Highway project and the War Service program.

An able staff of Chairmen are eager to give their "best" to make every Federation activity a success. Pledge them your support and keep the Federation growing by organizing many interested groups, who are just waiting for your leadership and invitation.

With best wishes for the New Year.

Edna M. Sewell.

OFFICERS

Mrs. H. W. Schaefer, Recording Secretary-4416 Taft Road, Kenosha

H. J. Rahmlow, Corresponding Secretary 424 University Farm Pl., Madison 6

DISTRICT PRESIDENTS

DISTRICT PRESIDENTS Mrs. F. J. Fitzgerald, 649 Broad St., Menasha. Fox River Valley District Mrs. H. R. English, 1722 Chadbourne Ave.. Madison 5, Madison District Mrs. O. H. Burgemeister, 2127 S. 87th St.. West Allis 14, Milwaukee District Mrs. John West, R. 2, Manitowoc Sheboygan District Mrs. Norma Robinson, Lake Geneva, South Central District



THE BOARD OF DIRECTORS, WISCONSIN GARDEN CLUB FEDERATION, 1944.

Seated, left to right: Mrs. H. W. Schaefer; Mrs. F. E. Willard; Mrs. R. H. Sewell; Mrs. Walter Dakin. Standing: Mrs. H. R. English; Mrs. John D. West; H. J. Kahmlow; Mrs. F. J. Fitzgerald: Mrs. O. H. Burgemeister. Absent, Mrs. Norma Robinson, Lake Geneva.

NOTICE! SEND IN NAMES OF GARDEN CLUB OFFICERS NOW

THE Directory of the officers of Wisconsin garden slubs will be Wisconsin garden clubs will be published in the March issue of Wisconsin Horticulture as has been customary in past years.

In order to have the names appear in the March issue, the officers for 1944 should reach the office of the Wisconsin Horticultural Society not later than February 12th.

When New York's meat supply was at its lowest, an apartment housewife managed to find a roast of beef for Sunday dinner. As it cooked, its delicious and compelling odor drifted up the apartment cliffs and brought a man to his window across the courtyard. He sniffed hungrily for a minute and then velped in agony, "Whoever's cooking roast beef, for God's sake shut your window !" - M. Blakeslee in Reader's Digest.

State Committee Chairmen For 1944

STATE COMMITTEE CHAIR-MEN FOR 1944

MRS. R. H. Sewell, president of the Wisconsin Garden Club Federation, appointed the following state committee chairmen and the appointments were approved by the Board of Directors at their meeting held December 14th.

Bird: Mrs. R. A. Walker, 2222 Chamberlain Ave., Madison 5

Conservation: Mrs. Alfred Kieckhefer, Sta. F, R. D., Box 206, Milwaukee 9

Constitution and By-Laws: Mrs. Martha Lowry, 204 Kensington Dr., Madison 4

Courtesy: Mrs. Irving C. Miller, 6831 Cedar St., Wauwatosa 13

Garden Centers: Mrs. Carl Namur, 4611—5th Ave., Kenosha

Historian: Mrs. A. L. Noerenberg, R. 9, River Road, Milwaukee 9

Horticulture : Mrs. R. R. Hibbard, 7034 Aetna Ct., Wauwatosa 13

Judging Schools: Mrs. S. J. Hirsch, 604 N. 119th St., Wauwatosa 13

Junior Garden Clubs: Mrs. Leland Dietsch, Fairview Drive, Plymouth

Membership: Mrs. Charles Barthels, 119 Eau Claire St., Wausau

Nominating: To be announced

Parliamentarian: Mrs. Martha Lowry, Madison

Program: Mrs. H. J. Anderson, 317 West Blvd., Racine

Publicity: Mrs. Robert Wendt, 819 N. 112th St., Wauwatosa 13

Rural Clubs: Rev. Alfred H. Otto, 210 Seventh Ave., West Bend

Special Projects

State Flower Show: Mrs. Chester Thomas, 2579 No. Downer Ave., Milwaukee 11 Planting Testing and Trial Gardens: Mr. E. L. White, Box 334, Fort Atkinson

Roadside and Memorial Highways: Mrs. C. L. Dean, 102 Grand Ave., Madison; Mrs. R. H. Malisch, Hales Corners

War Service: Mrs. Chester Thomas, Milwaukee.

REPORT OF WAR SERVICE PROJECT

THE year 1944 is upon us and with it has come new and greater opportunities for the Wisconsin Garden Club Federation.

In looking forward to the tasks ahead let us give thought to the accomplishment of the year just passed.

In every way, under conditions never before experienced, Federation activities have functioned successfully and progressively.

The Federation's War Service program has had the finest kind of cooperation and wholehearted support of the member clubs. Every one of the many projects undertaken was highly successful.

Your war service chairman's annual report very clearly proved this, but with the greatest of joy it is my privilege at this time to report that the very recent Christmas program, whereby the Garden Clubs furnished jellies and jams to the several State Camp Hospitals went far beyond the plans and expectations.

More Than 5,000 Glasses of Jelly Sent

To have asked the club for 3,500 glasses of jelly with Christmas wrappings was an immense order and then to receive returns from sixty of the clubs reporting a total of nearly 5,500 glasses — well words cannot express the gratitude due all those dear garden club members for such a splendid contribution to the Federation's War Service Christmas project.

In addition to the glasses of jellies and jams so beautifully and cleverly tied and wrapped, the records show over 200 evergreen wreaths furnished by the member clubs for use at the camp hospitals.

For the year's loyal support and assistance which made possible the Federation's War Service work, and for the highly enthusiastic response to our Christmas project, your chairman, on behalf of the Executive Board of the Federation, expresses sincere thanks and heartfelt appreciation.

> Mrs. Chester Thomas, War Service Chairman.

They Separated

A hillbilly, seeing a motorcycle rider going along the road below the house (and never having seen an automobile or motorcycle before), grabbed his rifle and took a shot at it.

His wife called out: "Did you git the varmint, Zeke?"

"No," he said, "I didn't kill it. I can still hear it growling, but I sure made it turn that man loose."

American ends in "I CAN."

	-SAVE TREES	S	
Cavity Treatment	General Landscaping	Large Tree Movin	
Fertilizing	We are insured Lakeside 2907	Removal	
Pruning	Wisconsin Tree Servic 2335 N. Murray Ave. Milw		

Report of Plant Testing Committee for 1943

THERE were eight Garden Clubs which had the Trial Gardens in 1942 and 1943. The locations of these gardens were spread over quite a territory in our state, thus giving a chance to try out the plants in various soil and climatic conditions. In some places, the plants were all planted in one garden and in others, the plants were divided among different Garden Club members. There is quite a pleasure in trying out these different plants and when one proves to be valuable for beauty, either for landscape purposes or as a cut flower, there is reason for rejoicing.

Besides your Chairman's garden, the cities where tests were made and the local chairmen who supervised the planting or distribution are:

Elkhorn-Mrs. Harry F. Howe Menomonee Falls-Mrs. Arthur Triller

Hayward-Mrs. Nels Nelson

Racine-Mrs. E. C. Pfeifer

Waupaca-Mrs. Theodore J. Peterson

Wausau-Mrs. C. H. Brimmer

West Bend-Mrs. Jos. L. Morawitz.

The thanks of the State Federation of Garden Clubs are due these workers.

The Wisconsin Horticultural Society has promoted this plant testing.

Summary of Reports on Plants Tested in 1943

Vinca Minor — *Bowes strain.* Did not bloom in most cases and evidently the plants received were not the Bowes strain. Mrs. Peterson reports there is an excellent growth of this variety at the Post Office in Waupaca.

Campanula Carpatica — White. Reports on this are mixed, but the average report is "fair." Did not bloom as freely and is not as showy as the blue form. Good for rock gardens.

Spirca Hexapettala and Phlox

By E. L. White, Chairman

Subulata Atropurpurca did not bloom enough for a clear-cut decision. Three gardeners liked the bloom they got on the Spirea.

Verbena Bonariensis was received by only one gardener, who reported poor results this year.

The bloom of *Tigridia* was praised by the six reporting on this bulb. It blooms early in the morning and lasts only part of the day, but it is a very striking and exotic looking flower, causing many favorable comments from visitors.

Fairy Lily bulbs. These lilies are small, good for rock gardens and edgings, or small groups in front of taller growing flowers. Ofttimes, when planted, the blooms appear before the leaves; hence the name "Surprise Lilies" sometimes given them.

Both of the bulbs are tender and have to be handled much as gladiolus bulbs are handled. Tigridia bulbs are relished by mice, so they must be protected against those pests during the winter.

In addition to the above-mentioned plants, Mr. John Hauser, of Bayfield, sent chrysanthemums. All received a very favorable report. The new Red Cushion mum was much praisesd; the only objection mentioned was fading in the sun. Then there were No. 57 and No. 81 on the bronze order, and one yellow and one white one reported on. If these winter well, perhaps in another season we can check on the names and numbers.

Report on 1942 Plantings

The trial plants planted in spring of 1942 have now gone through one winter and we can judge about hardiness.

Four roses were planted, namely McGredy's Sunset, Salmon and Hector Deane, also Brownell's Lily Pons. The bushes received were not in the best condition which may account for the poor results in some cases. Wausau reported all four died and there was a scattering loss among the others. Two gardeners did not report on these roses. Reports were favorable on the roses that lived, but they did not do as well as the Florabunda roses planted in 1941.

Violas — Lavender and White Gem. Reports on lavender are quite enthusiastic—hardy, good for rock gardens, edgings and cut flowers. Bloomed all summer and fall, even after frost came. One gardener reports the white as being good.

Campanula rotundifolia olympica reports range from poor to good. Is hardy, good for rock gardens. Not as free blooming as the blue Carpatica.

Incarvillea delavayi (Hardy Gloxinia). Reports are not favorable. Too much trouble to take care of for winter. Not showy in garden and poor for cut flowers.

Thermopsis caroliniana. Very hardy. Flowers are good for cutting and plant makes a striking display in garden. Some think it coarse and weedy looking; others are very favorable.

Chrysanthemums

Chrysanthemums should have a special chapter written about them. The writer, for several years, has been trying to find early blooming hardy chrysanthemums and so far has not been successful. The only fool proof hardy mums seem to be the old-fashioned variety that bloom real late, after freezing weather. To be sure of bloom, one has to pot them and bring inside the house. Now to get back to the chrysanthemums we have had on trial, which were planted in 1941 and 1942. Of the seven varieties on trial the yellow mum Algonquin came through the best. It was the most hardy, is a very free bloomer and has long stems. Good for bouquets and garden effects. Lavender Lady is too late blooming for Wisconsin.

The five Chicago University mums with the above two suffered severely last winter, along with all the other kinds grown in our gardens. This was not the fault of the varieties selected, but was due to our fall and winter weather. The sharp and sudden freeze in September, with unknown conditions during the winter, was fatal to most mums even when heavily mulched.

Good Drainage Needed

One fact about mums, that gardeners should know, is to have perfect surface drainage. Water or ice around the plants during the winter is fatal. Plant on beds raised above your garden level. This winter, the writer has planted one plant of each variety in a cold frame to make more sure of having live plants in the spring.

So, to those who reported a total loss or almost a total loss of their mums, and said their climate is too cold for them, we say: "It is not too cold for mums if protected by heavy mulching, properly drained, and if we do not get a sharp, sudden freeze like September, 1942. Chrysanthemums are grown successfully along Lake Superior, but they have several feet of snow to act as mulching. With this covering of snow, there is no frost in the ground and mums come through with flying colors.

Plantings in 1941

Let us take a swift look at the test plants set out in 1941. Of these the Florabunda roses have been most popular. Comparatively free from pests, they are showy, full of bloom in June with much bloom until after frost, are fair for bouquets and by mounding in fall with earth are hardy.

Aquilegia—Crimson Star is attractive but requires care to make live more than one year.

Pyrethrum—James Kelway is a bright red and quite showy—is hardy.

Phlox—Miss Kenosha is good. Heliopsis—Summer Gold is good as a landscape plant in background. Blooms a long time.

Shasta Daisies-Snow Banks and

Nobilis are both good in garden and as cut flowers, hardy, large flowers, and bloom at different times.

Hardy Aster—Beechwood Challenger blooms in late fall and is a mass of color when in bloom. Is hardy but some years is afflicted with a rust.

Heuchua—Queen of Hearts is a bright red but does not bloom as freely as the pink coral bells.

SHEBOYGAN DISTRICT REPORT

THE newly elected district officers and presidents of the affiliated clubs of the Sheboygan District of the Wisconsin Garden Club Federation met at the home of Mrs. Fred Wilkerson, Sheboygan, on November 19 to plan for the coming year.

The following committee chairmen were appointed by the Board:

Membership: Mrs. Harvey Vollendorf, 715 No. 6th, Manitowoc

Radio: Mrs. Newton Jones, Manitowoc

Bird: Mrs. Leland Dietsch, R. 1, Plymouth

Victory Gardens: Mrs. Ida Wiebe, 324 N. 8th Ave., West Bend

Roadside Development: Mrs. Gilbert Snell, 414 Erie Ave., Sheboygan

Junior Garden Clubs: Mrs. Harvey Winsauer, Kohler

War Service: Mrs. Walter Dunwiddie, Port Washington

Garden Centers: Miss Anna Ubbink, Port Washington

Conservation: J. F. Garner, 419 Church St., Kohler

Publicity: Mrs. William Curtiss, R. 1, Plymouth

The Sheboygan District officers are: President, Mrs. John West, R. 2, Manitowoc; Vice-President, Mrs. Fred Wilkerson, 724 National Ave., Sheboygan; Secretarv-Treasurer, Rev. A. H. Otto, 210 S. 7th St., West Bend.

We are looking forward to a successful and interesting year under the leadership of our president. Mrs. John West, who is an enthusiastic gardener and most capable garden club worker.

Mrs. William Curtiss, District Publicity Chairman.

ANTIGO GARDEN CLUB HAS INTERESTING PROGRAM

THE Antigo Garden Club has an unusually interesting and attractive Year Book. The cover is most attractive, with a hand painted illustration of a flower picture done in white ink on a dark background.

The program topics are very timely, and are given by the members themselves. Here is an example: in February the program was on vegetable gardening. The topics were, "Preparing the Vegetable Garden," "Preparing the Soil," and "Starting Seeds Indoors" by three members.

For April the topics were: "Flower Gardens in Wartime," "New Flowers for 1943," "Growing of Gourds," and "Dwarf Fruit Trees" by four members.

The September program was given over to the vegetable harvest with topics on Harvesting Vegetables. Storing Vegetables, and Canning, Freezing, Drying.

In June there was a flower show, in September a dahlia show, and in December a Christmas party.

Overtime for Bossie

On going into the cowshed, the farmer was surprised to find his new hand, a town girl, giving one of the cows a drink from her milking pail.

"What are ye doin' that for?" he demanded.

"Well," explained the girl, "the milk seemed pretty thin to me so l thought I'd better put it through the process again."

A young lady was accosted at the corner of Park Avenue and Forty-eighth Street in Manhattan by a postman, fully uniformed and carrying a bag of mail, "Can you tell me where the post office is?" he asked. Manpower shorter than ever, it seems.—The New Yorker.

Madison District Report

A report of the work of the Madison District during the past year must be written for the most part in terms of its war service.

Each Club in the area reports that it has been busier than ever before, carrying in addition to its quota of meetings and civic beautification projects, a liberal load of extra war work. The monthly meetings were reported well attended and interest ran high. The emphasis being definitely on the practical phases of food production, preservation, soil conservation, and related topics. In all cases the clubs went all-out for Victory Gardens. the Sunset Village Club taking entire charge of the movement for its community.

The Baraboo Club enlisted the aid of other civic groups in purchasing and starting a Town Forest project, comprising a forty acre tract of land one mile north of the city on highway 12. Over seven thousand trees have already been planted and plans are under way to plant more progressively. The actual planting was made a gala occasion, with refreshments and a suitable ceremony as a dedication.

The District was also very well represented on the radio. Of the 49 garden and nature talks given over station WHA Homemakers' Hour each Tuesday morning, 38 were given by Madison District Garden Club members, 18 different persons speaking.

On December 11, a District Board meeting was held in Madison, at which policies were discussed, plans made and chairmen chosen.

Our Regional meeting was held on February 26 at the University Club in Madison, with South Central District as guest-partners. This was the only joint Regional held, but the idea proved to be a great success.

On St. Patrick's Day, all the Madison Clubs united in starting off the Truax Field planting project with a large card party in the Woman's Building. The income of \$256.00 was nearly all net.

A very successful open District meeting devoted to a study of vegetable and fruit production was held in the YWCA in Madison in April. At the morning session Prof. C. L. Kuehner spoke on the use of small fruits on the home lot. The afternoon program featured Prof. J. G. Moore on practical vegetable growing, besides bird slides shown by the State Conservation Commission and reports of the District business.

Garden Center

The very popular project, the Madison Garden Center, was started in May and continued for eight weeks in an accessible uptown location. Mrs. Bert Wells and Mrs. H. R. English were its guiding spirits. Four of the Madison Clubs participated in the work, the various members taking turns acting as hostesses and advisers on different days. New exhibits and publicity were released each week and free bulletins were available at all times. Notwithstanding the fact that Madison held a city Gardening School during the same time, which was widely publicized, the Garden Center was well patronized and greatly appreciated by amateur gardeners seeking advice.

On August 29, as soon as the annual beds at Truax Field had reached their full glory, the District held a tour of the Field to review the results of the work done. Two hundred members attended and expressed delight at the effect accomplished thus far.

On September 10, the final annual business meeting was held.

The newly elected officers are Mrs. H. R. English, President; Mrs. Joseph Wirka, Vice-President; and Mrs. Roy Colbert. Secretary-Treasurer, a very splendid corps of workers.

Our war service, if done full jus-

tice, would make more than a fiveminute report by itself. This is being reported by Mrs. Dakin.

Numerous other phases of war service work which we have done deserve mention. Furniture, potted plants, flowers and Christmas decorations were given to the day rooms at Truax Field. At Christmas time, over 1,000 small evergreen wreaths were made for the Truax Hospital breakfast trays; the recreational center was appropriately decorated, as were the Officers' Club, Cafeteria, and library; service room and Guest House.

Beginning in May and continuing through September, flowers were sent to Truax Hospital each Friday, the five clubs in Madison taking turns.

Also under Mrs. Bostock's direction the USO has been continuously supplied with plants and flower arrangements throughout the year. The artistry of these arrangements has won the admiration of all who have seen them, making worth while the many hours spent in creating them.

Vases, bird houses and feeders. scrap books and entertainment envelopes were supplied to Truax Hospital until the supply exceeded the demand, whereupon the remainder was sent to the Wisconsin General Hospital.

The Baraboo Service Club and USO were also furnished flowers by the Baraboo Club, which. besides, found time to give regular instruction in flower arrangement to the service men's wives at the Service Club.

Money was donated for USO meals, cookies were baked for the USO and Madison Masonic Service Center. Furniture was given with which to furnish day rooms at Truax Field.

Condensed from the report of Martha E. Lowry, Madison District President.

Art Principles in Flower Arrangement

T WAS a real treat to have had the opportunity of attending the Judging School in Chicago on Oct. 26 and 27, given under the auspices of The Garden Club of Illinois, Inc.

This meeting was highlighted by the introduction of such well known garden club personalities as Mrs. E. Wesley Frost, president of the National Council of State Garden Clubs and Mrs. Jerome W. Coombs, chairman of Judging School Accrediting, who was called upon to tell us something about the requirements of credits necessary for obtaining a National Judging Certificate. "Read Pages 7 to 11 and 85 to 87 in the HANDBOOK OF FLOWER SHOW JUDGING," she repeated several times during her closing remarks.

Art Principles

It was the second lecturer of the day, Dr. Dudley Crafts Watson, Extension Lecturer of the Art Institute of Chicago, in whom the Milwaukee flower arrangement addicts who attended this session had an especial interest. Dr. Watson was formerly director of the Milwaukee Art Institute and founder or instigator of the Art Institute Garden Club. His talk on "Judging Artistic Classes in Flower Shows," included the application of fundamental art principles by use of charts.

The Charts

Charts No. 1 and No. 2, sketched here, are attempted copies of the ones drawn by Dr. Watson, with the exception of the center line which was added to better elucidate the two kinds of balance interpreted in them. No. 1 is symmetrical, showing a regular arrangement of lines and forms on either side of the center line, which is known as the axis. "Bi-symmetry," Dr. Watson said, "has no place in flower arrangement. It is a mechanical kind of thing, monotEmma C. Schipper

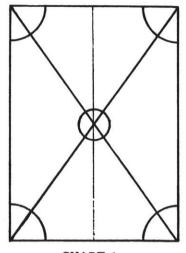


CHART 1

onous and uninteresting Bi-symmetry is utterly necessary in a military program. It is the power of military force. It does not belong to the fine arts."

Chart No. 2 is an asymmetrical arrangement of lines and forms arranged in such a way as to give infinite variety, and at the same time creates *balance*, *rhythm* and *unity*. "Forms should be echoed," said Dr. Watson referring to the chart, which means, in other words, there should be *rcpetition*. Note the *gradation* in size of the forms, the main movement upward and outward, giving a sense of growth, and also the lines at the top and bottom which are in *contrast*.

Importance of Correct Scale

Dr. Watson greatly stressed the importance of keeping flower arrangements in *scale* or in *proportion* to their backgrounds. "Sparse line arrangements," he said, "no matter how beautiful, are utterly lost in a very large room or hall. Arrangements to be placed against a wall should have an interesting silhouette, and the spacing should not be symmetrical. Background spaces or voids are just as important as the flowers themselves. Too often the beauty of stems is lost by too much massing of flowers at the base of

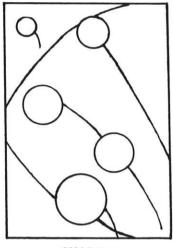


CHART 2

an arrangement. Let there be holes in your arrangement." Spaces, voids or holes Dr. Watson compared to the rests or pauses in music.

Regarding the judging of flower shows Dr. Watson believes that a judge should tell the one who fails why. "Never in the world give a prize to an entry which is not immediately beautiful, creative, original and charming."

As a way toward deliberately creating fun and humor for a table decoration we were told to go surrealistic, or as far as we liked in making a perfectly ridiculous or "nutsy" arrangement. "Use the toaster in the middle of your centerpiece or stick utensils into the arrangement. Utterly irrelevant things are tolerated in a surrealistic arrangement. The surrealist's theory is that logic always leads to depressions and world wars, 'Let's have none of that,' they say."

"Color" was the last subject to be discussed by Dr. Watson and this concluded the program, after which we all assembled around the punch bowl for a little chat and refreshment. Everyone seemed agreed and satisfied that the lectures were both educational and inspirational.

HAPPY NEW YEAR SISSON'S

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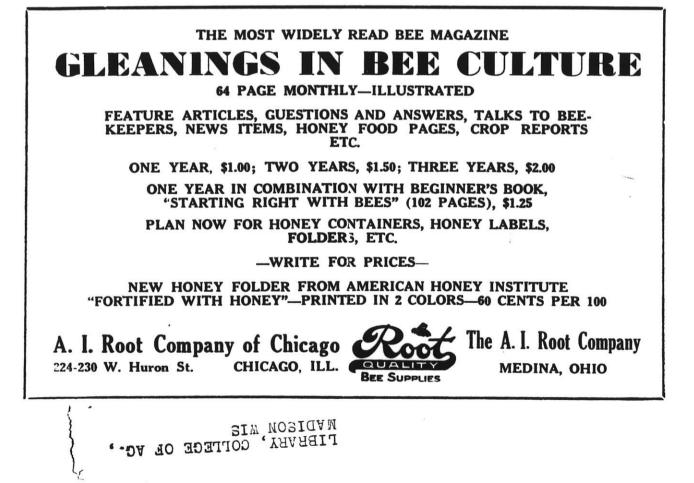
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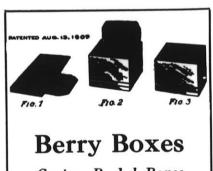


FEBRUARY 1944

White Man Much Crazy

Two pictures, one showing a dilapidated house, the other a field badly washed out, were printed in the Oklahoma Farmer - Stockman, which offered prizes for the best essays suggested by the pictures. First prize went to a Cherokee Indian who wrote: Both pictures show white man crazy. Make big tepee. Plow hill. Water wash. Wind blow soil, grass all gone. Squaw gone, papoose too. No chuckaway. No pig, no corn, no hay, no cow, no pony. Indian no plow land. Keep grass. Buffalo Eat. Indian eat buffalo. Hide make tepee, moccasins, too. Indian no make terrace. No build dam. No give a damn. All time eat. No hunt job No hitch-hike. No ask relief. Great Spirit make grass. Indian no waste anything. White man much crazy. - Reader's Digest.

The up-to-date people have started collecting old buttons. One of them works in the laundry that does my shirts.



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WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Horticultural So

ESTABLISHED 1010

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			ussenOs	

Term Ending December, 1945

Virgil	Fi	eldhouse	Dodgevi	lle
N. C.	Ja	cobs	Sturgeon B	ay
Peter	L.	Swartz,	JrWaukes	ha

Prof. J. G. Moore, Chairman Dept. Hor-

Term Ending December, 1946

- R. W. Riggert, Pres. Wis. Nurserymen's
- Walter Diehnelt, Pres. Wis. Beekeepers'
- Mrs. R. H. Sewell, Wauwatosa, Pres. Wis. Garden Club Federation

Subscription to Wisconsin Horticulture is obtained by membership in the Wisconsin State Horticultural Society for which the annual dues are \$1 per year or \$1.50 for two years. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Fifty cents of the annual dues paid by each member is for a year's subscription to Wisconsin Horticulture.

Cultivation-Covercrop vs Sod-Mulch Culture

The First Twenty Years' Results in a Michigan Apple Orchard

By Walter Toenjes, Michigan

OMMERCIAL apple growers, almost exclusively, follow the practice of maintaining their newly set orchards under the cultivationcovercrop system of soil management, until such time that it appears the trees are sufficiently well established to withstand the competitive influence of a grass sod. Opinions of these growers, however, differ as to when this period has been reached. Some hesitate to change over to the sod-mulch system before the trees reach the age of 20 to 25 years, while others seed their orchard to grass at an earlier age. In view of the data presented on the growth and yield of the trees in this experiment, it appears entirely feasible that the sod can be established at a much earlier stage than was formerly thought advisable, without appreciably changing the rate of tree growth and fruit production.

Loss By Erosion

It is believed that the value of the somewhat greater growth and yields obtained in the young orchard under the clean culture system, by delaying the change-over to the sod-mulch system, will not equal the value of the additional soil and fertility lost during the same period by erosion, particularly on erosive soils and steep slopes. Tree growth can be increased, in a large measure, by applications of the necessary fertilizer elements, but the cost of replacing the lost soil with its humus and fertility in the orchard, will much exceed the value of any extra fruit produced. The more erosive the soil type and the steeper the slope, the earlier is the date at which the cultivated orchard should be seeded down to grass.

Several disadvantages are also associated with the use of mulches in the sod orchard. The presence of



a mulch under the trees provides attractive winter quarters for mice from surrounding areas, frequently resulting in heavy mouse concentrations with the constant danger of subsequent girdling of unprotected tree trunks. Protective devices must be maintained around the trunks and an intensive poisoning program followed during the late fall and winter months to keep rodents under control. Possibly owing to the comparative absence of protective material during the winter in the cultivated plots, mouse injury to the trees has been less severe. Further, the danger of fire damage to the trees is increased in the sodmulch area during dry periods. However, the probability of serious losses from this source can be reduced by the maintenance of cultivated strips or fire lines running through the orchard at frequent intervals. These fire lines should be made to cross the slopes following the contour of the land, otherwise they may lead to serious gully formation owing to their bare and unprotected surface.

Materials For Mulch

Materials most frequently used in Michigan for mulching apple trees a r e straw, alfalfa, sudan grass, corn stalks and peat. These materials, with the exception of alfalfa, have a rather high-carbon and a low-nitrogen content, and consequently decomposition takes place at a slower rate in the absence of an additional nitrogen supply. On the contrary, alfalfa decomposes very rapidly because it is higher in nitrogen and lower in carbon and quickly releases most of the nitrogen and other plant nutrients stored within its structure. Apple growers who have been applying green or partially dry alfalfa direct from the field as an orchard mulch, during late June or early July, frequently complain of the poor color of their fruit in the fall. The additional nitrogen made available to the trees from the decomposition of the alfalfa mulch, acts as an additional application of a nitrogen fertilizer during the summer season, a practice which is not generally accepted or recommended as a desirable procedure by Michigan apple growers.

Mulch Reduces Bruises

At harvest time the soft spongy condition of the mulch acts as a cushion for the fruit that drops from the trees, thus greatly reducing bruising, and thereby permitting the salvaging and sale of additional apples after the harvesting operations are completed. This is particularly true of McIntosh and other varieties which tend to drop rather severely during hot or windy periods.

Where to Use Mulch

From the foregoing discussion and data it should not be inferred that the sod-mulch system of soil management can be employed indiscriminately in all Michigan apple orchards with any assurance of greatly increased yields and profits. The type, fertility, and depth of soil, also the slope of the land, will individually or collectively, determine whether this method of handling the orchard soil may be used to advantage in any given apple orchard. Orchards planted on the lighter types of sandy soils lacking in water-holding capacity, no doubt may suffer severely during dry seasons from moisture deficiency aggravated by the demands of the grass growth for moisture. In contrast, soils of medium to heavy loam types, underlain by a waterretaining sub-soil of good depth, are capable of supporting grass growth without materially affecting satisfactory tree performance. Where such soils are found, the data presented proved the sodmulch system to be an economical and profitable method of management.

Summary

As observed under the conditions of this experiment both systems of soil management have their merits and faults. The cultivation-covercrop method consistently favored the loss of a large part of the water resulting from rapidly melting snow and dashing rains by surface runoff, while the very effective soil cover in the sod-mulch plots virtually prevented all such water loss. permitting the water to penetrate and be stored in the soil. Soil moisture determinations made to a depth of 5 feet, from August 2 to October 18 in 1937, showed that the soil in the sod-mulch plots contained an average total of 47 per cent more moisture during this period than the soil in the cultivationcovercrop plots. Erosion of the soil is likewise becoming serious in the latter plots as evidenced by the exposure of many tree roots, and the lighter color of the surface soil. No erosion can be detected in the sodmulch plots.

In the Young Orchard

The cultivation-covercrop method can be expected to grow larger and more vigorous apple trees during the early life of the orchard. During the first 10-year period the trees under clean culture had the larger trunk circumferences and produced more fruit per acre, but at the end of the 20-year period the trees in the sod-mulch plots showed the larger tree measurements and produced the greater total acre yield. The fruit from the latter plots had slightly more color of a brighter shade, and graded out approximately 79 per cent more A grade size than did the fruit from the cultivated plots.

Costs Compared

The annual acre maintenance costs for the two systems of soil management, as used in this experiment, were only slightly less for the sod-mulch plots. However, any increase in the cost, or the amount of mulch material applied per acre over that here discussed would equal or exceed the acre maintenance cost of the cultivation-covercrop system of soil management. The advantages of the cultivation-covercrop system are not of sufficient magnitude to warrant its further use after the apple trees become well-established in those orchards having conditions which compare favorably with those prevalent in this experiment. The better tree performance in the sod-muleiplots indicate that this method et soil management should also provthe more profitable in many other similar Michigan orchards now being grown under the clean cultural system.

Condensed from Special Bulletin 313, Michigan Experiment Station.

FRUIT GROWERS MEETINGS County Associations Will Hold Annual Meetings and Interesting Program

Eight county fruit grower associations will meet the first two weeks in March as follows:

Tuesday, February 29. Racine County Fruit Growers Association, Agricultural School at Rochester. Luncheon served by the Home Economics Department.

Wednesday, March 1. Waukesha County Fruit Growers Association.

Thursday, March 2. Milwaukee County Fruit Growers Association, Greenfield Town Hall. Plate luncheon will be served.

Friday, March 3. Jefferson County Fruit Growers Association. Municipal Building, Fort Atkinson. Noon luncheon served by ladies group.

Tuesday, March 7. Washington County meeting. Jackson Town Hall. Luncheon served by woman's group.

Wednesday, March 8. Manitowoc County meeting. Assembly Room, Court House.

Thursday, March 9. Sheboygan County meeting, Plymouth City Hall. Luncheon will be served.

Friday, March 10. Ozaukee County meeting. Grafton High School gymnasium. Noon luncheon will be served.

THE PROGRAM

10:00 a. m. Meeting called to order by President.

Local announcements.

Control of Apple Maggot and Other Problems. C. L. Kuehner.

Business meeting.

The Wisconsin Apple Institute — How It May Help the Apple Growers. H. J. Rahmlow.

12:00 m. Luncheon.

Apple Variety Exhibit and Discussion During Luncheon. C. L. Kuehner.

Colored movie (sound) "Guardians of Plenty,"

or

Movie "Handling, Marketing, and Distribution of Fruit in England." The County Fruit Growing Situation. County Agent.

S. E. Wisconsin Fruit Growers' Co-op Report. Lester F. Tans.

Practical questions and answers on fruit growing problems. H. J. Rahmlow.

Orchard Supplies . . .

Purchase your requirements from this Co-operative and save DOLLARS by participating in the earnings. Patrons Refunds to all customers at the end of the season. Our prices are conservative because we do not strive for large profits. This Co-operative was formed for the sole purpose of serving the fruit growers of this state at reasonable prices. Your continued patronage will make a larger and better organization.

SPRAY MATERIALS

Arsenate of Lead Calcium Arsenate Bordeaux C.O.C.S. Spray Dry Lime Sulphur Liquid Lime Sulphur Flotation Sulphur Mike Sulphur Kolo-Spray Kolo Fog Copper Sulphate Black Leaf 155 Cucurbit Dust Paris Green Casein Spreader Du Pont Spreader Sticker Nicotine Sulphate Spray Oils Elgetol

PRUNING EQUIPMENT

Pruning Saws Pruning Snips-9" Point Cut Pruners

GRAFTING EQUIPMENT Grafting Knives Budding Knives Tree Sea.' (Grafting Compound)

NURSERY STOCK Catalog and Price List on Request. All Orders Must Be In Prior to March 1st.

SPRAYER SUPPLIES

Spray Guns Friend Pecan Bean 780 Bean Fog Guns Bean Spray Nozzles

Spray Hose 600# Pressure 800# Pressure Hose Swivels Hose Coupling & Clamp Suction Hose

NITRATE FERTILIZER

Ammonia Nitrate—34% Place Your Order Today to Insure Delivery.

OUR 1944 GENERAL CATALOG AND PRICE LIST WILL BE AVAILABLE FEBRUARY 15.

Complete Line of Repair Parts for Bean Orchard Sprayers.

WRITE FOR PRICES

ALL INQUIRIES PROMPTLY ANSWERED

SOUTHEASTERN WISCONSIN FRUIT GROWERS CO-OPERATIVE, INC.

WAUKESHA, WISCONSIN

Lester F. Tans, Secy.-Treas.

Telephone Big Bend 2821. R. 2

Marketing McIntosh Apples

A NEW bulletin published by the Agricultural Experiment Station, University of New Hampshire, by L. A. Dougherty and A. F. Yeager is entitled, Marketing New Hampshire McIntosh Apples.

The summary of the studies made are very interesting and will be of value to Wisconsin apple growers.

Varieties

McIntosh apples were handled by over 86 per cent of the stores selling apples before January 1 and by 77 per cent in February.

Sources

Of stores contacted in the 1940-41 season, 40 per cent of the chains and 78 per cent of the independent groceries and markets obtained apples from within New Hampshire. Early in the season chains bought 60 per cent and independent groceries and markets bought 82 per cent of their McIntosh from within the state. Late in the season chains bought 19 per cent and independent groceries and markets 78 per cent of their McIntosh apples in the state.

Condition of McIntosh

Producers vary considerably in their ability to place good-quality McIntosh apples in city markets. The bruised surfaces on McIntosh apples bought in eight cities ranged from an average of 6.3 per cent to 13.3 per cent of the total surface area. The average waste varied from 4.3 per cent to 17.2 per cent in different cities. Those hauled to stores over short distances were in no better condition on the average than those hauled over longer distances, presumably because the poorer apples were delivered into near-by markets.

McIntosh delivered from cold storages showed 22 per cent less waste on the average than those delivered from common storages. McIntosh from growers' storages showed 33 per cent as much waste,

27 per cent as many large bruises, and 39 per cent as much bruised surface as did the same growers' apples bought from retail stores.

The method of handling has far more to do with the condition of McIntosh than the length of time they are held in the store. Apples sold from the original box were in much better condition than those sold from the counter. They had 42 per cent less waste and 50 per cent fewer large bruises. Samples purchased from fruit stores had the most waste (10.9 per cent), and those from independent groceries and markets, the least (7.4 per cent). Those from chain stores showed the largest number of bruises (averaging 176 per 100 fruits), and those from independent groceries and markets, the fewest (averaging 118 per 100 fruits).

Sales

Weekly sales of McIntosh apples in different types of stores in December 1940, ranged from an average of 2.1 boxes in small grocery stores to 21.2 boxes per week in self-service chain stores. Over half the weekly sales of McIntosh by super-markets were made on Friday and Saturday, according to test sales. The rate of sale for McIntosh in retail test sales was over twice as great in the afternoon as in the morning.

Large size (3 inch) Fancy McIntosh sold best in test sales in chain markets and returned the highest profits. Faced McIntosh (red side out) sold over three times faster at retail, and for more money, than unfaced ones of the same grade in an adjoining display. Gross profits on faced apples were about four times as great. Appearances certainly do count in customer appeal and in profits from sales.

Bruises

Bruising reacts on sales. Unbruised apples in test sales sold over three times as fast and were far more profitable than conspicuously bruised ones of the same grade. In about half the stores in which inquiries were made, McIntosh apples were sold from the original box. These were in better condition than those which had been rehandled.

Prices

Small price increases did not reduce sales in s e v e r a l test sales where apples were the very best and prices did not exceed 8 cents a pound. Quality a n d condition were more important factors than price in the sale of the best grades of apples.

Margins

Average gross retail profits observed in seven cities varied from 32 to 43 per cent. Average gross profits in 207 stores varied from about 37 per cent in chain and independent stores to 47 per cent in fruit stores.

Displays

Of 211 stores contacted, 47 per cent had apples on display in front windows, and 29 per cent had Mc-Intosh apples.

Packages

Retail packages for apples have not been very successful to date because of cost or because they have not properly displayed the fruit. But some new developments look promising for use in the sale of high grade fruit. A tray or display package to be set in place in stores by the grower or packer could answer the bruising problem at least partially.

Handling

Dropping a box of apples greatly increases the number of large bruises. Hauling apples on the back of a lightly loaded truck causes greater increase in bruises than does hauling in a loaded truck or on the front part of the vehicle. February, 1944

1944 PRICE LIST EFFECTIVE Be Wise--Order Early!

ARSENATE OF LEAD- 4 lb. bag\$ 48 lb. case (3, 4 or 6 lb.)	.75 7.20
ARSENATE OF CALCIUM- 4 lb. bag 48 lb. case (4 lb. bags)	.50 4.95
BORDEAUX MIXTURE— 1 lb. bag 4 lb. bag 48 lb. case (4 lb. bags)	.30 .65 6.95
CYANOGAS— 4 oz. ant kill ½ lb. can dust 1 lb. can dust 5 lb. can dust 5 lb. can G-Fumigant	.30 .45 .75 3.00 3.00
COPPER-A-COMPOUND 6 lb, bag 36 lb, case (6-6 lb, bags)	1.65 9.20
COPPER SULPHATE—Powdered 400 lb. barrelper lb 100 lb. bagper lb	
DRY LIME SULPHUR— 12½ lb. bag 100 lb. drum 200 lb. drum	11.00
DU PONT SPREADER STICKER— 1 gal. bottle 1 pint bottle	
DUSTING SULPHUR— 2 lb. canister Case of 12—2 lb. cans	.30 3.20
ELGETOL	2.15
FLOTATION SULPHUR PASTE- Large drum (450 lbs.)per CWT	2 00
Small drum (275 lbs.)per CWT	3.00

ROTENONE DUST— 1 lb\$ 5 lbs PARMONE— 4 oz. bottle 12—4 oz. bottleseach_	1.00
(4 oz. per 100 gals. water) NICOTINE SULPHATE—40% 5 gal. tin 5 lb. can 2 lb. can 1 lb. bottle	47.00 11.65 6.90 3.70
MIKE SULPHUR— 10 lb. bag 6—10 lb. bags LIQUID LIME SULPHUR— 1 gal	
GARDEN DUSTERS— Each\$ HAND SPRAYERS— Quart size	.65 .50

GRAFTING WAX—	
1/4 lb\$.20
1/4 lb	.30
1 lb.	.60
5—1 lbeach	.55

PRUNING SAWS— Atkins (T. R. Roberts) No. 0 _____

No. 6	2.50
Diston-16 in	2.35
Blades 14 & 16 in	.30
Calif. Style Curved Blade	1.65

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: Poisonous materials cannot be mailed.

TERMS: Cash with order, or merchandise will be sent C.O.D.

__ALL PRICES ARE F.O.B. MADISON, WISCONSIN,__

Write us if there is something you want and it is not listed.

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2201 University Ave.

Madison 5, Wisconsin

2.50

National Apple Institute Plans Help For the Growers

OHN Chandler, Secretary of the National Apple Institute, told members at the Central States Horticultural Conference last month that the aims of the Institute were the same as they always have been since its organization five years ago -to increase the demand for apples and to provide for better marketing of them, and to encourage research in the field of by-products. That is the primary program, but the present demand places emphasis on our war program, particularly price ceilings and cooperation with the war agencies. He cautioned that we must look beyond the present emergency.

Competition

He expressed the conviction that we face competition with a flood of fresh fruit and vegetables from South and Central America as soon as war needs release the necessary shipping space. The kind of competition this will be is indicated by the fact that the present cost of producing apples in Argentina is 40 cents a box This means keen competition, and apples are only one of a wide range of fruits with which we must compete. Promoting apples against this ever-widening field is going to be a tough job. It will take our best efforts in organizations to fairly and fully represent the industry.

Chandler suggests t h a t appleproducing states set up State Apple Institutes to support and work with the National. This would give more individual growers a chance to get back of the promotion work. The National Apple Institute needs both funds and grower support to command recognition before the War Boards today.

Price Ceilings

There was a fairly wide difference in the price ceilings suggested by producers in the various regional organizations at their sectional meetings, and the National Apple Planning Committee of the National Apple Institute was able to keep OPA officials from playing one section against another, to force down the price ceiling. The Planning Committee adopted a policy of working with the War agencies, rather than fighting them. They asked for and got a single price for apples over the Nation, in fact, OPA finally recognized the Planning Committee's recommendations practically intact.

The Planning Committee met again in August, when it became known definitely that the crop was very short. They asked for a $12\frac{1}{2}$ cents a pound ceiling. OPA had a much lower figure in mind-close to 7 cents. When they apparently couldn't be budged over $8\frac{1}{2}$ cents a pound, the Committee appealed to Judge Vinson, presenting growers' cost-of-production figures, and he ordered the figure raised a cent a pound all along the line. (Ed.: Although they failed to get this price set high enough to let it function as a true ceiling, with room for the various grades to operate below it, we figure that the 11/2cents-a-pound raise, over a 90,000,-000-bushel crop, returned to our growers \$45,000,000. This should give some idea of the value to our industry of such representation.)

The Institute is working now to have cost - of - production surveys, conducted under the direction of State Colleges of Agriculture, to form a basis for price ceiling regulations for 1944. The present program is complicated and not understandable. It looks now as if the price ceiling structure will be simplified, and, one of the most important things we can do this winter is work on these surveys to get a fair basis for our arguments. Mr. Chandler said that the Committee had gotten the very best deal it could. Then he reminded growers

that in 1942 they had been very glad to have the Government come in and buy their apples at \$1.25 a bushel.

From January 15 Tennessee Horticulture.

WISCONSIN APPLE INSTI-TUTE GOES OVER THE TOP New Members Join During Past Month

THE Wisconsin Apple Institute has met with the approval of apple growers beyond expectations of its officers. There is now a total of 47 members.

The following members joined during the past month, up to January 27th, according to Mr. Arnold F. Nieman, Secretary-treasurer of the Institute:

New Members

The Larsen Company,
Green Bay\$50.00
Oriole Springs Orchards, A.
C. Ellsworth, Richmond,
Illinois 20.00
Pine Bluff Fruit Farm, A.
M. Ten Eyck, Brodhead 10.00
Olaf Selfors, Bayfield 12.50
Rasmussen's Fruit Farm and
Nurseries, Oshkosh Wis 15.00
M. A. Ward, Durand 10.00
V. R. Connel, Chippewa Falls 10.00
Geo. A. Gannon, Chippewa
Falls 10.00
Falls 10.00 John D. McIlquham, Chip-
pewa Falls 15.00
Geo. E. Wolfe, Chippewa
Falls 5.00
Ski-Hi Fruit Farm, A. K.
Bassett, Baraboo\$33.00
Eames Orchards, Spencer
Eames, Egg Harbor 25.00
Swartz Orchards, Waukesha 30.00
Driftwood Farms, S. S. Tel-
fer, Ellison Bay 5.00
Ed. Betzold, Bayfield 5.00
Brown Bros. Orchard, L. P.
Brown Sturgeon Bay 10.00
Grand View Orchard, James
Cherf, Antigo 10.00
(Continued on next page)

February, 1944

(Continued from page 112) **Production Cost Survey**

The Institute is at present engaged in finding the cost of production for apples in Wisconsin for the National Apple Institute. This is urgently needed because we must present cost records to the OPA in order that the ceiling price of apples will not be set below the cost of production. A total of 100 growers has been asked to send in cost records in this state.

FIVE MILLION BUSHELS FOR APPLE JUICE

A FTER the war, four million to five million bushels of the nation's apple crop will be processed into apple juice, in the opinion of Dr. Roy E. Marshall, of the Michigan State College Agricultural Experiment Station. One million bushels of Michigan apples are expected to be utilized in this manner.

Reporting at the recent meeting of the International Apple Association on the development of the industry in Michigan, Dr. Marshall estimated that 80,000 bushels of apples from that state were made into juice in 1937. The quantity processed into juice in Michigan increased rapidly until 1941, when 500,000 bushels were utilized. War restrictions reduced the utilization in 1942 to 350,000 bushels, the juice from which was all processed in glass. As soon as tin is available, the metal containers will replace the glass, in the opinion of Dr. Marshall.

With one or two exceptions, all of the winter apples were found to be satisfactory for juice, but the juice from four to six varieties should be blended. Duchess (Oldenburg), one of the leading summer varieties in that state, was unsatisfactory as a juice variety. Even when the percentage of Duchess juice in the product was reduced to 15 per cent, this variety imparted an undesirable flavor to the product. Sediment, which is not an important factor when tin containers can be used, does affect the appearance of the juice when packed in glass. Dr. Marshall reports, however, that the use of a minute quantity of pectin prevented the formation of an undesirable sediment. As little as five thousandths per cent of 140 grade pectin was sufficient to prevent sedimentation. This small quantity is the equivalent of one ounce in 150 gallons of juice.

An increase of ten cents per hundred pounds of apples results in an estimated one and one-quarter cents per gallon increase in the cost of the apple juice.

From September, 1943 Hoosier Horticulture.

I see where a football team from the state prison beat one from the army training camp. Guess the pen is still mightier than the sword.— Uncle Levi Zink.



Orchardists' Jobs Between Now and Apple Spraying Time

C. L. Kuehner

1. Pruning

Prune out unproductive, weaklygrowing branches. Avoid cutting large branches. Open dense tree tops—do it moderately. Lower tops of high trees—do it gradually inside 2 to 3 years. Cut away dead and diseased limbs and old pruning stubs. Cut own worthless varieties and crippled broken-down old trees. Clean the orchard of all prunings. Fire does the job. Make pruning cuts close. Paint large wounds, 2 inches or larger, with asphaltum paint, Tree Seal, or shellac. They are good wound paints.

2. Repair Your Spray Outfit If You Have One

Parts are available. Remember it is costly to repair the machine at spraying time. You may have to get along with your old sprayer until after the war. Pump: Check the valves-make replacements of valve balls or valve seats as needed. Inspect plunger packing and cylinder walls-replace if necessary. Make sure that gears are tight and in alignment. The suction hose may need a new strainer screen. Will the old diaphragm rubber serve another season? Are all parts of the pressure regulator in good working condition? Does the pump need cleaning and oiling? Check the spray gun or nozzles and hose. Timely repair or replacement will save valuable time during the spraying season. Engine: Check its performance and condition. Put it in efficient working order. Note: A check list for complete overhauling of a power sprayer will be mailed upon request.

3. Spray Materials

Anticipate your needs and order early. The important orchard spray materials will again be liquid lime sulphur and lead arsenate.

4. Fertilizer

Estimate the nitrogen require-

ments of your orchard and order at once. Ammonium nitrate is available now. It contains about 1/3 more nitrogen than sulphate of ammonia, so that the application per tree should be reduced by 1/3. Apply it early in April.

5. Nursery Stock

Nursery stock is scarce this year, some varieties are not available, and prices are considerably higher than last year. Order your stock early. Strong, 4 to 5 ft. high, one-yearold trees of $\frac{1}{2}$ inch diameter; or two-year-old trees, 4 to 6 ft. high and $\frac{3}{4}$ inch diameter are best. Mark your order "No substitutions permitted." Only adapted varieties are worth planting.

6. Get Your Containers for the 1944 Crop Now

Order n e w containers early. Make arrangements now for used containers by getting fruit stores, restaurants, hotels, county and state institutions, and grocery stores to save them for you.

7. Picking Ladders

Build your own during the winter months. Some high school farm shops may be in a position to build them for you. Note: Plans for two types of picking ladders and a rabbit trap may be obtained from the Department of Horticulture, University of Wisconsin, Madison, (1) Ladder on wheels; and (2) Stepladder on three legs.

From Wisconsin Orchard Letter, No. 1, 1944.

COST OF PRODUCING APPLES INCREASES

T cost thirty cents per bushel more to grow apples in 1942 than in previous years. This is the information published recently by Appalachain Apple Service from actual records from an orchard producing 180,000 bushels.

BITTER PIT CONTROL

STUDIES by Britton, Fisher, and Palmer on bitter pit of apples in the Okanagan Valley of British Columbia have led to the following conclusions: (1) Fruit from trees carrying less than a third of a full crop is much more susceptible to bitter pit than fruit from trees carrying more than a third of a full load. (2) Harvesting at desirable maturity reduced bitter pit but did not entirely prevent it. (3) Prompt storage at 32 degrees F. delays and reduces development somewhat. (4) After storage at 32 degrees F. for two months, most of the affected specimens can be readily discerned from the exterior of the fruit.

It is strongly recommended that fruit from light-crop trees (less than 30 per cent of normal) be segregated at harvest, since such fruit is most likely to develop bitter pit. Further, it is also susceptible to breakdown, brown core, and scald. If this fruit is mixed with the entire crop from the orchard, the trouble is likely to be scattered throughout the crop. The best practice, it is said, is to keep the lightcrop fruit separate and to dispose of it directly to processing plants.

By H. B. Tukey, from The Rural New-Yorker.

LIKES SEBAGO POTATO

MR. Virgil Fieldhouse, Dodgeville, is very enthusiastic over the Sebago late potato. He writes that he finds no hollow potatoes. has a large yield, there is no second growth, and very little scab. Folks in his neighborhood are buying even the smaller ones for seed.

TAXES

The Ways and Means Committee exploded a lot of hokum about light taxes in this country, declaring that Americans "bear the heaviest tax load of any country in the world." Per capita tax payments in 1943-44 are: United States, \$357; United Kingdom, \$291; and Canada, \$261.

From the Farm Journal.

February, 1944

NITROGEN FERTILIZERS **INCREASE YIELD OF** RASPBERRIES

APPLICATIONS of nitrogen-carrying fertilizers at the rate of either 300 pounds of nitrate of soda, 240 pounds of sulphate of ammonia or 115 pounds of Uramon per acre, resulted in increasing the vield of Cumberland black raspberries by over 1,500 quarts, acording to experiments of Collison and Slate conducted on a highly iertile Ontario loam soil in the Bristol area of Western New York. The highest yield represented an acre production of about 4,700 quarts. The size of the berries was also improved.

By H. B. Tukey, from The Rural New Yorker.

GRAPES CAN BE GROWN IN A COLD CLIMATE

DR. W. R. Leslie writes in his weekly news let Morden Manitoba Experiment Station that at Morden it is necessary to cover all dessert grapes with eight to twelve inches of dry soil in order to winter them. This is done after pruning in mid-October. "The covering is eased by elimination of pruning beforehand."

Here in Wisconsin it would be possible to grow the better varieties of dessert grapes if they were covered in this way with dry soil in the fall. Without pruning them, it would be difficult to cover the canes.

Ordinarily, we do not prune grapes until spring in order to see which canes have survived, and which have not.

BUY POTATOES BY THE BAG THE Wisconsin Department of Agriculture suggests that it would help relieve the commercial storage situation of potatoes if consumers would purchase Wisconsin potatoes by the bag instead of in small lots. It would assure the family a good supply of exceptionally fine quality potatoes. Wisconsin harvested one of its largest and best potato crops this year.

WHEN TO APPLY NITROGEN

When a biennial bearing apple tree such as Wealthy needs some nitrogen fertilizer, is it best to apply this in the off-year or in the onyear?

There are at least three good reasons why the application of nitrogen should be made in the early spring (or previous fall) of the off-year. First, the tree will have more leaves during the offyear, and this will tend to build up an excess of carbohydrates, which can be offset by making the heaviest nitrogen application at that time. You will notice that the foliage is normally less green during the off-year than in the on-year. Second, the off-year is a better time to raise the nitrogen level because the resulting loss of fruit color would be of less concern with a small crop than with a large one. Third, heavy application in the spring of the on-year to a tree in a good state of vigor would tend to set more fruit, a condition which is not desirable at that time.

I. D. Winter in The Minnesota Horticulturist.



523

Whether you need a box approved for interstate shipment by the Federal Food and Drug Administrat i o n, or whether you plan to ship locally in old style boxes, you can be safe and save money too, by assembling either type with the fast-

working Neva - Clog stapler. Get everything you need for fruit or truck shipments at Sheboygan-as leading growers have for 63 years.

Write, now, for low prices and free facts on new shipping regulations.

Sheboygan Fruit Box Co.

Sheboygan, Wisconsin

Mr.-"Sure I put the cat outdon't I always?"

Mrs.—"I don't believe it."

Mr.-"Well, if you don't believe me, get up and put her out yourself.'



"Of most importance from the stand-"Of most importance from the stand-point of the practical grower perhaps, are the hardiness and resistance to dis-ease of the plants, the earliness and larger size of berry as compared with Ranere, and the better texture and quality as compared to Latham.

NEW - HARDY MINNESOTA GRAPES Delicious - Full Size - Hardy

Just introduced by University of Min-nesota. Hardy, full sized, require no winter cover. Excellent quality—easy to grow. Moon beam (Minn. #66) a "white" grape; Red Amber (Minn. #45) a red grape, and "Blue Jay" (Minn. #69) a blue grape.

OUTSTANDING NEW APPLES Prairie Spy - Victory - Fireside Minjon - Beacon - Minn. #638 Haralson

These 7 new apples are the result of years of tireless effort on the part of the Minnesota Fruit Breeding Farm. Excellent quality, heavy croppers, each is Tops in its season. Send for Free descriptive catalog.

NEW NANKING CHERRY

Hardy - Ornamental - Delicious At last a true cherry for the North. Absolutely hardy under very severe con-ditions. Decorative enough for the landscape, productive enough for the fand-scape, productive enough for the orchard or garden. The equal of early Richmond for pies—but tree is a little smaller making it suitable for lawn planting. Our stock includes Minnesota and Mor-den, Manitoba, Canada varieties.

Andrews Better Raspberry Plants

Your best assurance of clean, dis-ease-free successful fruiting fields.

FREE CATALOG on Request



Potato Varietes For Wisconsin

G. H. Rieman

Wisconsin Experiment Station

MANY new potato varieties have been developed during the past ten years. They have been extensively tested by the Wisconsin Agricultural Experiment Station over a period of five years in nine widely separated counties. The results from these trials are summarized so that the grower may compare his old favorite variety with the best of the newer varieties.

At the present time the two new varieties, Sebago and Red Warba are of unusual interest. The late Sebago variety is highly resistant to late blight tuber-rot disease which has become very serious in Wisconsin. The early Red Warba variety is not resistant to this serious diease, but it matures so early that it usually escapes the late blight tuber-rot. So far as the home gardener is concerned, these two new varieties make a fine combination for early new potatoes, when they are really good, and storage potatoes for winter use. Seed of these new varieties can be obtained from Wisconsin seed houses and from certified potato seed growers.

Editor's Note: G. H. Kieman is Professor of Genetics, Horticulture and Plant Pathology. He has been active in Potato Variety Improvement.

COMPARISON OF POTATO VARIETIES IN WISCONSIN

VARIETY (maturity)	BLACKENING AFTER COOKING	HOLLOW- HEART	TUBER SHAPE	TUBER SKIN	HOPPER- BURN	SCAB	AVERAGE ¹ YIELD (9 counties)
COBBLER (early)	AVERAGE	AVERAGE	DEEP EYES	WHITE	MOD. SUSCEP- TIBLE	SUSCEP- TIBLE	189 bu.
CHIPPEWA (mid-season)	COOKS WHITE	SELDOM OCCURS	VERY SMOOTH	VERY WHITE TENDER	MOD. SUSCEP- TIBLE	SUSCEP- TIBLE	205 bu.
RUSSET RURAL (late)	Frequently COO KS DARK	SOME- TIMES SEVERE	SMOOTH	RUSSET TOUGH	RESISTANT	MOD. RESISTANT	193 bu.
KATAHDIN (late)	AVERAGE	SOME- TIMES SEVERE	VERY SMOOTH	VERY WHITE TENDER	RESISTANT	SUSCEP- TIBLE	189 bu.
SEBAGO (late)	COOKS WHITE	AVERAGE	VERY SMOOTH	VERY WHITE TENDER	RESISTANT	MOD. SUSCEP- TIBLE	HIGH
RURAL NEW YORKER (late)	Frequently COOKS DARK	SOME- TIMES SEVERE	SMOOTH	WHITE	RESISTANT	MOD. KESISTANT	179 bu.
GREEN MOUNTAIN (late)	AVERAGE	AVERAGE	Frequently POOR SHAPE	WHITE	MOD. SUSCEP- TIBLE	SUSCEP- TIBLE	205 bu.
TKIUMPH (early)	COOKS WHITE	SELDOM OCCURS	DEEP EYES	RED TENDER	HIGHLY SUSCEP- TIBLE	SUSCEP- TIBLE	162 bu.
RED WARBA (first early)	AVERAGE	SELDOM OCCURS	VERY DEEP EYES	BRIGHT RED	SUSCEP- TIBLE	SUSCEP- TIBLE	170 bu.
PONTIAC (late)	AVERAGE	SELDOM OCCURS	SMOOTH	DULL RED	SUSCEP- TIBLE	SUSCEP- TIBLE	HIGH
SEQUOIA very) late)	AVERAGE	SOME- TIMES SEVERE	SMOOTH	WHITE	RESISTANT	SUSCEP- TIBLE	HIGH

¹ Bu. per acre, U.S. No. 1 size—5 year average 1937-41. Sebago and Pontiac tested for 3 years produced uniformly high yields. Sequoia tested for 1 year produced exceptionally high yields.



OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPER'S ASSOCIATION OFFICERS

Walter Diehnelt, Menomonee Falls. President Corneluis Meyer, Appleton, Vice-president H. J. Rahmlow, Madison, Cor. Secy. Mrs. Louise Brueggeman, Box. 60, Menomonee Falls, Recording Secretary-Treasurer DISTRICT CHAIRMEN Robt. Knutson, Ladysmith Newton Boggs, Viroqua C. C. Meyer, Appleton Ivan Whiting, Rockford

National Federation of State Beekeepers Associations Organized

THE National Federation of State Beckeepers Associations completed its organization at the National Beckeepers' Conference at the Morrison Hotel, Chicago, January 11-13.

Present were delegates from 18 states. They included Iowa, Nebraska, Idaho, Minnesota, South Dakota, Georgia, Montana, Pennsylvania, Illineis, Michigan, Kansas, Oregon, Indiana, Virginia, Ohio, California, New York, and our own delegate, Mr. Walter Diehnelt, from Wisconsin.

Officers elected were: Mr. Oscar Schnidt, Bay City, Michigan, president; Mr. D. P. Stahlman, Buhl, Idaho, vice-president. The position of secretary-treasurer has not been illed. H. J. Rahmlow of Madison was nominated, but stated that it was impossible for him to carry on the work. The office was then offered to Dr. V. G. Milum of Illinois who has not yet definitely accepted.

Honey Rationing Condemned

The most important single resolution adopted by the Federation delegates concerned the question of honey rationing and limiting the size of containers in which honey may be sold. The conference was informed that there was probability that honey would be rationed. Some preferred to limit the size in which honey might be sold to a one pound far rather than rationing. This was discussed in some detail. At the session of the delegates this resolution was adopted: "that the producers as represented by the Board of Directors of the National Federation of State Beekeepers Associations are opposed to the rationing of honey, or the restriction in any way of standard sizes of containers in which honey may be sold." This was carried unanimously.

Joint Sessions of Allied Industries

A number of joint sessions of all allied industries were held at which Mr. James Gwin, president of the American Honey Producers League presided. These sessions were valuable because while it appeared that there was a wide difference of opinion, nevertheless, after much debate and after many facts had been presented not before available to all, opinions changed and there was unanimous action taken on many important questions.

Recommend Standard Openings For 60 Pound Cans

An important action taken concerned the opening of 60 pound cans. A resolution was passed endorsing the $2\frac{1}{2}$ inch opening, calling upon all manufacturers and buyers of 60 pound cans to use only this one size for honey.

Raise in Price Ceiling Requested

A resolution was passed asking the OPA to raise the producer's price ceiling of honey to conform with increased costs and the increase in the parity price of honey.

The Wisconsin State Beekeepers Association has already voted to affiliate with the National Federation.

V. G. Milum Elected Secretary

Late in January a letter from

Prof. V. G. Milum, Department of Entomology, University of Illinois, stated that he had accepted the secretaryship of the National Federation of Beckeepers Associations, with the consent of his Department.

Prof. Milum will send to all delegates and state secretaries a complete report of the important resolutions adopted and the proceedings. Further resolutions will be published as received.

Prof. Milum is well known to Wisconsin beckeepers and we wish him success in this important undertaking.

Wisconsin Representatives at Conference

The following beekeepers from Wisconsin attended the conference in addition to President Walter Diehnelt, and Secretary H. J. Rahmlow: Mrs. Walter Diehnelt, Menomonee Falls; Mrs. H. J. Rahmlow, Madison; Mrs. Harriett Grace, Madison; James Gwin, Madison; C. W. Aeppler, Oconomowoc; Lewis Parks, Watertown; Adolph R. Moesch, Bonduel; Charles J. Zellner, Green Bay; George Lotz, Boyd; Edwin J. Mintzlaff, Pewaukee; Dr. C. L. Farrar, Madison.

OPINION ON FLOOR PRICES FOR HONEY

M^{ANY} honey producers feel that to make the future secure, some arrangement should be made to prevent the price of honey from dropping too low after the war as was the case some years ago. They have therefore suggested a floor price program to prevent this.

A letter from Mr. J. B. Hutson of the Commodity Credit Corporation, Washington, states the opinion of that department as follows:

"We can appreciate the desire of beekeepers for a price support program. As honey prices are at the ceiling and are likely to continue favorable for a considerable time. it does not appear advisable to undertake at this time to develop a program which may be needed at some future date. So far as practicable, we try to limit our support price program to commodities which currently require support. I want to assure, you, however, that if the beekeeping industry should be confronted with marketing difficulties, we shall undertake to give them the same consideration as is given to other branches of American agriculture."

NO BENEFIT PAYMENT FOR **BEES TO POLLENIZE CLOVERS**

WOULD benefit payments to farmers bring in bees to pollenize clover grown for seed, help the seed production of the nation? This question has been asked in various parts of the country. The suggestion has been made to the U. S. Department of Agriculture that such payments be made.

A letter from the Agricultural Adjustment Agency, Washington, states as follows:

"There will be no practice payment under the 1944 program. The question was discussed at some length during the formulation of the program, and it was determined that sufficient incentive for the use of bees as pollinating agents was given by a favorable price of hay and grass seeds and the farm program payment of \$3.50 per acre of hay or grass seeds harvested. The administrative difficulties involved were also of such proportions as to exclude the incorporation of this practice into the program."

Plan Now For Sugar Tax Refund

If you use much sugar in feeding your bees, it will pay to plan now for a tax refund for any you buy this coming season. When you buy your sugar, you will need to get important papers signed at the time you purchase it.

The "American Bee Journal" suggests the following procedure. Since the tax refund amounts to about 53 cents on every 100 pound bag of sugar you buy, it will pay to plan ahead.

The Procedure

"The procedure is to file an affidavit with your nearest Internal Revenue Collector, proceeding as follows:

1. Secure Form No. 843 from your nearest Internal Revenue Collector. Fill same in and certify to it before a notary public.

2. Make no claims for sugar purchased over a year previous to date of vour claim.

3. Have your grocer, wholesale grocer, or whoever you purchased the sugar from, give you a certified copy of his invoice on which is stated, the name and address of the manufacturer, the date the sugar was manufactured. the polariscopic test thereof, and the amount of tax paid. We suggest using the form below for him:

Form For Grocer

Place _____

Date _____ We certify that the above sugar was manufactured by_____ of_____, and that it was manufactured, Date _____. The polariscopic test of this sugar is -----per cent, and a tax of_____ per pound was paid by us when the sugar was purchased by us, and by ----- (beekeeper), when purchased from us by them. Signed _____

(Notarial Seal)

4. You must make out and have certified to, statement giving all the information of (3) above, also amounts and dates of sugar purchased, that the sugar was used in feeding bees, and the dates used together with the amounts. We suggest form as follows:

I certify that I have purchased and used sugar as follows:

Dates purchased _____

Amount in pounds _____ that this sugar was manufactured, by_____ of_____; that this sugar was manufactured, Date____; that I have paid a tax of _____ cents per pound on this sugar, and that the polariscopic test on said sugar is ____ per cent. I further certify that all

the above sugar was used as live. stock (bee) feed, and for no other purpose and that it was fed in the amounts and on the dates as follows: -----(date) -----(date) Signed _____

(Beekeeper's Name Signed) Notarial Signature and Seal

5. Attach together properly signed and certified, Form 843 as in (1) and form as shown in (3), and form as shown in (4), and mail to your nearest Internal Revenue Collector under first class postage.

6. Be sure to keep copies of all invoices, claims, forms, etc., for reference

A Short Cut

We have received affidavits ourselves through our sugar wholesaler made out by the sugar company from whom the wholesaler obtains his supplies giving the invoice date and number, amount of sugar in the sale, the amount of sugar which you bought from that sale, polarization, rate of tax and date of tax payment, signed by an official of the sugar company and subscribed before a notary. This sort of an affidavit is just as satisfactory as the use of the forms printed here, and since it is apparently now common procedure between the sugar corporation and the wholesale dealers, it may only be necessary for your sugar supplier to furnish the correct evidence for the Collector of Internal Revenue in any way that is common in his procedure."

A group of women shipyard workers laid down their tools in Vancouver, B. C., to protest dismissal of a fellow worker who wore "tight" clothes. In a manifesto to their employers, they declared:

"We cannot let an act like this go unchallenged, no matter what the circumstances. Woman must retain above all things her pre-eminent right to snare her man." The management, somewhat abashed. reinstated the girl.—Up.

An Inscription on the Tombstone of an Army Mule Named Maggie

"In memory of Maggie, who in her life kicked 1 General, 4 Colonels, 2 Majors, 10 Captains, 24 Lieutenants, 42 Sergeants, 454 Privates, and one bomb."

February, 1944

PLAN NOW FOR REQUEENING

WITH queens selling for \$1.25 each, there will be little wholesale requeening done this year, nor is it advisable. Dr. C. L. Farrar has advised requeening only when a queen shows signs of failing. Dr. C. C. Miller advocated the same thing many years ago. He said that by wholesale requeening we were in danger of removing our most valuable stock.

Nuclei in Each Yard

The risk of introducing a highpriced queen directly from the mailing cage into the colony is too great. Sometimes the plan works, but far too often it does not.

The safest way is to introduce the queen to from one to two pounds of young bees in a small hive or a standard hive prepared for the purpose. We should have one such nucleus for every ten colonies in the yard. Now is the time to prepare the hive. A standard hive can be made over to hold three such nuclei, each division or section to have three frames and an auger hole entrance, one inch in diameter. Canvas strips nailed over the frame will separate the bees so that they will not unite over the top of the frame. Thin boards will separate one section from the other.

By shaking a number of frames of bees from strong colonies into the prepared hives, the old bees will fly home, and the young bees remain. These are then sprayed with warm sugar syrup. The queen is also sprayed with syrup, and introduced directly among the bees; the same as in introducing a package.

After a queen starts to lay eggs and raise brood in the nucleus, she can quite safely be introduced into a strong colony by the sugar syrup method. Simply remove the queen to be replaced, spray the old colony, spray the young queen and place her among the bees in her new home. The frame on which she has been working may be sprayed and introduced also, but it is not essential.

The fact is that a laying queen can be much more safely introduced than one which has just come through the mail.

THAT SMOKER FUEL PROBLEM

HAT is the best material to use as smoker fuel? That question has been discussed many times. We have tried about everything that has been suggested. However, when one has a large number of colonies, and must use considerable fuel, then the problem of preparing or obtaining the material is an important one. It takes a great deal of time to cut up burlap and roll it into bundles for fuel. Right now too, burlap is scarce. After everything is said and done, we have settled on planer shavings as the cheapest, the most easily obtainable, and requiring the least amount of work. A bale of shavings such as are used for bedding, may be purchased at most feed stores. A bale will last a long time. and the price has been quite low. Right now shavings are scarce, and it would be well to put in an order early for use next spring. There are two kinds of planer shavingsfrom hard wood and from soft wood. Either can be used, but the soft wood shavings burn the most rapidly.

To overcome the blowing of soot or fine shavings into the hive, we place a small piece (about $2'' \ge 2''$) of screen wire into the cover of the smoker. That assures a clean smoke, and eliminates sparks.



HONEY WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company, Oconomowoc, Wisconsin.

HONEY CANS

We can give you immediate delivery on 60[#] cans.

Order your glass supply for the new crop now, as it takes from 3 to 6 months to receive same from the factory. We now have a good supply of 5#, 2½#, 1# and ½# on hand, and can make immediate shipment.

To insure prompt service, erder your Association labels now for your new crop of honey.

Write for Complete Price List.

Order Through Your State Beekeepers Association

HONEY ACRES Menomonee Falls, Wis.

BUY LOTZ SECTIONS

You will get the finest sections that can be made. Prices may rise as lumber, labor, and manufacturing costs have all advanced. Protect your 1944 honey crop by buying your supplies before the honey flow begins, so that you will have all the equipment you will need.

> AUGUST LOTZ COMPANY BOYD, WISCONSIN



IS THE McINTOSH BEING OVERPLANTED?

A T THE annual conference of the members of the New York Fruit Testing Association, there was considerable discussion on new varieties. Some very significant statements were made. It was said that too much emphasis has been placed on the McIntosh variety not that the McIntosh is not a good apple. It has been responsible for much of the revival of the apple industry in the Northeast. However, it was argued that a sound apple industry cannot stand indefinitely on a single variety.

In Wisconsin, the McIntosh has been popular for some years, and rightly so. Growers have devoted up to fifty per cent of their orchard acreage to this one variety. Two things are bound to happen. First, as more and more McIntosh trees come into bearing, this variety will be available to Wisconsin consumers. If the supply of McIntosh is large, then what will happen to varieties of poorer quality? Obviously, they will go begging, or have to sell at low prices. Moral: do not plant varieties of poor quality.

What, then, should we plant in setting out a new orchard, or to increase our acreage, where we already have plenty of McIntosh? That is a question of considerable importance. Our opinion is that growers should select and examine the qualities of the following varieties more closely: *Cortland*, *Macoun*, and *Sccor*. These three varieties do show promise in Wisconsin. There are others that should be tested further, but we are not yet ready to recommend them for extensive planting.

Northern Wisconsin should test some of the new varieties from Minnesota. They are especially adapted for that part of the state.



WFA WARNS AGAIN ON CONTAINER SHORTAGE

THE War Food Administration has repeated its warning to growers and shippers of fruits and vegetables that new wooden containers would be scarce in 1944. Growers and handlers of these commodities were asked to make the greatest possible use of used containers of all types—including wood crates and boxes, and open-mesh bags.

The outlook is dark, also, for egg crates of all kinds, meat packing boxes and similar containers.

Retailers and the buying public have been inclined to discriminate against used containers, but the War Food Administration now asks them to accept produce on its merits, irrespective of whether it is delivered in new or secondh and packaging materials. Used containers, WFA officials explain, should be regarded as necessary "wartime packages," comparable with a recapped rubber tire. The shortage of new containers is such that many fruits, vegetables and other food items in 1944 will either be delivered in used containers or not at all.

Officials of the War Food Administration and the War Production Board say that if yields are normal, wooden container materials will be short of the demand by 10 to 20 per cent. They point out that similar shortages did not develop as expected in 1943 because spring freezes drastically reduced the eastern fruit and early vegetable crops, and summer drought caused heavy reductions in vegetable yields in parts of the East.

To illustrate the situation, WFA container authorities said that if the 1944 tree fruit crop is equal to the 1942 crop, 16 million more bushel baskets will be needed than actually were used in 1943. New fruit baskets will not be available to that extent in 1944.

COPIES OF 75-YEAR HISTORY OF SOCIETY STILL AVAILABLE

An ample supply of the 75-year History of the Wisconsin Horticultural Society, with a brief history of affiliated organizations is still available. The price is 10 cents per copy.

Members might wish to have these sent to relatives and friends, to country schools and teachers, and to descendants of those mentioned in the history who helped build up horticulture in Wisconsin.

WISCONSIN STATE FAIR DATES ARE ANNOUNCED

DATES of the 1944 Wisconsin state fair will be Aug. 19-27. according to an announcement by William T. Marriott, state fair manager. Again this year a program of close cooperation with various state and war agencies will feature the exposition.

The theme of the 1944 state fair, Marriott said, will again be "Aiding a State and Nation at War," with exhibits, premium lists, and every facility of this great agricultural exposition given over to this purpose.

New Raspberry Will Be Tested

New Sunrise Red Raspberry Shows Promise

THE new red raspberry, Sunrise, is a cross between Ranere and Latham, and originated by the U. S. Dept. of Agriculture.

Dr. George M. Darrow and Prof. Harold Clark describe the new Sunrise raspberry in the Dept. Circular No. 397 as follows:

"The Sunrise has shown resistance to low temperature in midwinter, having come through the winter of 1933-34 at News Brunswick, New Jersey, with practically no injury, whereas L at h a m and some other varieties were severely injured.

"In the winter of 1938-39 in southern New Jersey, the Sunrise was injured less than either Latham or Ranere by a sudden drop in temperature after a very late growing season. The resistance of Sunrise to leaf curl and cane diseases is probably an important factor in its ability to withstand low temperatures. It has been more resistant than Latham to anthracnose, leaf spot, and spur blight.

"The color is bright red, but turns dark red on ripening. The berries pick easily, are firm, fine-textured, juicy, non-crumbly, mild sub-acid in flavor. They are better in quality than Latham."

Sunrise is ten to sixteen days earlier than Latham, which may be an advantage in many cases.

The Sunrise has not been tested in Wisconsin. We do not claim that it will do as well here as in New Jersey. Only by testing a variety can we determine its value for our conditions. We do not recommend large planting of this variety now.

Grow Twenty-Five Plants

The Horticultural Society will pay one-half the cost of twenty-five plants to any one member who wishes to test this variety.

This method has given us much valuable information because our members are located in so many different parts of the state.

Prices

On the above basis of the Society paying one-half the cost, the price to any member of the Society for 25 plants will be \$1.65 postpaid.

ANOTHER IMPOSSIBLE CROSS

PROF. Harry Graves of Fargo, writing in North and South Dakota Horticulture, has this to say about an article by a columnist in the Minneapolis Tribune.

"You may be interested in a new vegetable for 1944. It's a combination called the cu-cum-squa and is a cross between a cucumber and a squash. It'll take stewing, frying, boiling, even pickling. The catch: Each seed costs \$5.00.' I can't rerist the temptation to stick a pin into this balloon. I am sure I am correct when I say that a cross between a true cuke and a true squash is impossible. Celtuce was hailed by many the last couple of years as a cross between celery and lettuce. Actually, it is a kind of lettuce."

PINE NEEDLES CONTAIN VITAMIN C

A^N interesting account of the vitamin C contained in evergreen tree needles occurs in "Science," offered by Maurice Donnelly of Riverside, California. The Soviet botanist B. Shishkin has reported that needles of ordinary pine trees contain large quantities of vitamin C and that biochemists in Moscow and Leningrad have organized mass production of vitamin C concentrate from pine needles. Mr. Donnelly then refers to Parkman's classic work "Pioneers of France in the New World," in which is told of a malignant scurvy which broke out among Cartier's troops. It seems that Cartier observed that an Indian who had been long prostrate like many of his fellows, appeared in high health and spirits from drinking a decoction of evergreen leaves. Accordingly, Cartier had his men drink a brew made from the leaves of what is supposed to have been a spruce tree. A tree the size of a large oak was thus consumed and "the distemper relaxed its hold, and health and hope began to revisit the hapless company."

By H. B. Tukey, from The Rural New-Yorker.

ENGLISH WALNUT TREE GROWS WELL AT MUKWONAGO

A letter from Dr. J. C. Harland of Mukwonago encloses pictures of an English walnut tree grafted onto native black walnut stock in the spring of 1940. Dr. Harland says that the tree has made a very rapid growth and is now about 12 feet high, 8 feet of which is above the graft. The graft is about four feet above the ground.

We consider this very interesting because many growers have found it very difficult to graft the English walnut onto the black walnut.

NEW EVERBEARING STRAWBERRIES

MINNESOTA growers report a promising new everbearing strawberry, the Gemzata. Growers stated that the berries do not scald in the sun, and that it may be an all-around good variety. If plants are available, it might be well for Wisconsin growers to try it on a small scale.

OUR COVER PICTURE

Our cover picture this month shows a beautiful evergreen in front of the home of Mr. and Mrs. Wm. F. Connell, Sunridge Orchards, Menomonie.

Mr. Connell is vice-president of the Wisconsin Apple Institute. The picture was taken following an unusual snow storm on September 26th, 1942.



OFFICERS Harold Janes, Whitewater, President David Puerner, Milwaukee, Vice-President H. J. Rahmlow, Madison, Cor. Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Illinois Ave., Sheboygan

By the WISCONSIN GLADIOLUS SOCIETY

DIRECTORS Frank Blood, Stevens Point Dr. F. Graff, Freeport, Ill. Fred Hagedorn, Sheboygan J. R. Hopkins, Deerfield, Ill. Walter C. Krueger, Oconomowoc

E. A. Lins, Spring Green Walter F. Miller, Sun Prairie Dr. Geo. Scheer, Sheboygan Leland Shaw, Milton Noel Thompson, Madison

Favorite Varieties of Gladiolus

WE decided this year to confine the voting on lavoiite varieties of gladiolus to the Board of Directors of the Wisconsin Gladiolus Society because it involved much less work and postage. We wondered if this plan would reduce the number of varieties receiving votes since the members of the Board are all good growers, know their gladiolus varieties, and therefore might have a more unanimous opinion about certain varieties.

On the contrary, we found that almost as many varieties received votes as was the case when we asked all members to vote. This is well illustrated by the vote on Best Variety, any color.

Best Variety, Any Color

Marion Pearl received two votes. The following each received one vote : Hinemoa, Nana, Picardy, King William, Leading Lady, Eglantine.

The Best White

Board members were not at all positive in many cases as to which variety was best in any of the color classes, and so we have a number of cases in which two varieties were mentioned in one class, which accounts for the large number of votes some classes received.

In the case of the whites, Leading Lady was first with three votes: Snow Princess received two votes, and the following received one vote: Myrna, P-39, Nana, Maid of Orleans, Vreedenburg, and Margaret Burton.

A FRIEND'S ADVICE

A fren' of mine wot's got a fren' Who heard sumbody say, "Dis guy's got sum dandy bulbs; You better write today.'

So Tom he write dis feller An' he get de bulbs O.K. An' when we plant he laff at me An' dis is wot he say:

"I bet you. Joe, I'm grow de bes' Of Glads you never see: I got more bulbs, for less dan you. Why ain't you wise, lak me?"

But I'm jes' laff and tell him wait, We'll see who gets de prizers, For my Glads come from old standby's De Gladbook advertisers.

Well, Tom he got sum pretty Glads They're ol', ol', fren's you see, An' Tom he's pretty tickled Tell he cum my Glads to sec.

I didn't haff to rub it in; My Glads were there to sec, An' Tom he looks in wunder An' he seys "Jus' dumb, dat's me."

An' now he's got my Yearbook An' he'll order from de adds Of ol' standby advertisers. Who are experts on de Glads.

-JOE PIERRE GLAD

Greeting card from J. H. Odell, N. E. G. S. "Joe" received national circulation when the Plain Dirt Gardener quoted several verses in his February, 1943, diary in "Better Homes and Gardens." Again we thank Mr. Edgar Lindsley, Waterville, Maine.

Cream-Buff

Leading Lady is popular with many members because it also received votes in the cream class. However, White Gold led the field with five votes. Leading Lady received four, Lady Jane two, Corona two, and Helen of Troy one.

Salmon-Pink

Margaret Fulton received two votes, and the following one vote each: Eglantine, Sharon, Cooney Lass, Glamis, Marguerite, Marion Pearl, and Picardy.

Pinks

Criterion received three votes. while Marion Pearl and Rosa von Lima received two each, with one vote for the following: Eglantine. Ethel Cave Cole, Greta Garbo, Pink Radiance, and Variation.

Yellows

Golden State led this class with a total of four votes. Crinkle Cream was next with two votes, and the following received one vote each: Sir Galahad, Miss Bloomington. Goldstaub, Vangold, and Golden Galleon.

Lavender

Badger Beauty received 6 votes. Elizabeth the Queen three votes. and Minuet two votes.

Red

Intruder, Algonquin, and Marseillaise received two votes each. while the following received one each: Hindenburg's Memory, Red Charm (Butt), King Bee, Rocket. King Click.

Purple

King Lear led with seven votes. while Vulcan received three, and Parnassus one.

Violets

Blue Admiral received two votes, and the following one each: Joseph Hayden, Bluet, Blue Beauty, Violet Beauty, Pelegrina, and Oberbayern.

Smoky

High Finance and Vagabond Prince received two each, and the following one each: Laddie, Misty Dawn, Mother Machree, Sahara, Tunia's Mahomet, and Zuni.

Any Other Color

The fact that there are so many popular varieties will make it necessary in another year to list all the colors given in the premium list in order that members have an opportunity of expressing their preference. Since we listed only the most important colors this year, we put in the heading "Any other color," and the following varieties received votes: Vagabond Prince two, and Bagdad, Capeheart, Scarlet Rose-Red, The Owl, Diane, and Zacatex one each.

Seedlings

In the seedling class *Ritsema*, 1944 Introduction (P-39), received the highest number of votes. *Krue*ger's Pink, 447-11, was second, and the following were mentioned: Hagedorn's 437, W. C. Krueger, and Miller's Lavender and yellow.

Favorite Varieties of Leland C. Shaw, Milton

Best, Any Color, Nana; White, Nana; Cream-Buff, Helen of Troy and Leading Lady; Salmon Pink, Glamis; Pinks, Greta Garbo; Yellows, Golden State; Lavender. Elizabeth the Queen; Red, Hindenburg's Memory or Algonquin; Purple, King Lear; Violets, Bluet; Smoky, Misty Dawn; Any Other Color, Vagabond Prince; Scedling, #447-11 (Krueger's pink).

Nicholas Murray Butler: "If a man's curve of efficiency is ascending at 45, and keeps on ascending just after that period, it may well move upward for his whole life; but if there is a turn downward at 45, he will never recover."

COMMENTS ON VARIETIES Leland C. Shaw, Milton

WORD or so of explanation A of my enclosed ballot on "Favorite Varieties" may not be out of order. To begin with, "best" is a very tricky word, and I have applied it, in my choices, in several different ways, which may, or may not, be evidence of my unreliability as a judge. I ruled out, for example, all varieties which I have not grown for at least two years and which have not done well for me. Then I promptly made two exceptions: (1) Golden State, as best vellow, because as I saw it in the shows last summer it seemed incomparably better than any others I have seen or raised, including Van Gold, which is excellent; and (2) Krueger's seedling which I have had no time or chance to raise but which I have been watching for some time.

Nana is my choice not only as best white, but as best of any variety even though it will never become a good commercial, unless it reforms its habit of being a discouragingly slow propagator, and even though, to the best of my knowledge, it has never won a blue ribbon in a major show. I have raised it for four years and have never had a poor spike. Every floret is well faced and firmly attached. All spikes have been straight and tall. Invariably the color has been clear-and I happen to like whites that are clear. Some day, with luck, I'll hit a show date with an average spike of Nana, and then----!

Helen of Troy gave me by all odds the finest single spike I have ever raised or seen—and I had it frozen (by accident) in a cooler, attempting to hold it for the Midwest show. But I have raised the variety only two seasons, and not all spikes have shown good facing.

Bluet wins for me over Blue Beauty on several counts. I prefer its color; it makes sturdier growth (for me); it makes more bulblets and they germinate easily.

MISTAKES IN PEST CONTROL

THERE seem to be many mistaken ideas about pest control and Victor H. Ries of Ohio has brought this out well in a bulletin by the Ohio College of Agriculture. He gives the following as some of the common mistakes made by gardeners.

"Spraying Black Leaf 40 on roses for the control of black spot and mildew. It is useless for this purpose.

"Applying arsenate of lead for plant lice. It won't bother them in the least.

"Using dusting sulfur for caterpillars. It won't bother them at all.

"Putting lime in the ground for the control of insects on plants. It is useless for this.

"Dousing plants with dishwater or soapsuds. The grease in the water will probably do the plants more harm than the insects.

Putting tobacco stems in the ground for the control of insects and diseases; they have about the same value as cornstalks.

"Each dust or spray material is good for certain things only. No one material is good for everything. although many of them may be combined for dual-purpose sprays or dusts.

"Nicotine in the form of Black Leaf 40 is good only for the control of plant lice (aphis) and other sucking insects. It must hit each and every insect in order to be effective. It also has some value in the control of leaf miners.

"Arsenate of lead is effective only for those insects that eat it when they eat the foliage, stems or flowers. It will not bother sucking insects such as plant lice.

"Sulfur, whether used as dusting sulfur or sprayed as wettable sulfur, is valuable only in the control of certain diseases such as black spot of roses and mildew on any plant. It is also used in the control of red spider mite on phlox, evergreens, and other plants. Do not use it on vegetables; it may cause burning."

February, 1944

Garden Failures of 1943 Season

A Round Table Report, Horticultural Society of New York

By Patrick J. McKenna

A NALYZING the failures of the 1943 Victory Garden proved to be a timely topic, and, judging from the spirited discussion and the numerous questions, a very pertinent one.

Out of the questions discussed and the experiences that were related, there came this valuable contribution, that the results could be used as a basis for a future educational program which, directed at the weak spots of 1943, would go far to achieving greater success in 1944.

Lack of Plans

One of the omissions that led to a number of mistakes was the lack of a plan. Many gardeners after studying the catalogs and ordering all they could with no idea how the various items would fit in, betook themselves to the garden and with a trowel, a line, and a collection of seeds, attempted on the spot to plan a garden. The arrangement of crops as to height and length of season was not well adjusted, and the result was a very crowded effect. With no plan, there was, of course, no provision for intercropping, succession cropping or most of all, for late crops.

Seed Sowing

Attempts at seed sowing accounted for many more mistakes. Sowing depths ranged from the seeds being so shallow that they were washed up by the first rain to making a drill six inches deep, putting in a layer of fertilizer, sowing the seed, and then burying it. When the seedlings failed to appear, a complaint was usually registered with the seedsman. There was a lack of appreciation of the supreme necessity of creating conditions favorable to seed germination, among which are making the soil as fine as possible several inches deep, seeing that enough moisture is present, sowing at one-quarter to one-

half inch depth, and covering with fine soil. Little seeds, when buried a couple of inches in a sticky soil that has been tamped firm, are encased as in a bed of concrete when the soil dries out.

Little discrimination, too, was shown as to sowing dates for various crops, and in numerous instances, all kinds, both cool and warm weather vegetables, were sown at the same time.

Thinning Neglected

Thinning is another operation that was little understood, and, by some people, completely neglected. Indeed, more than one person considered it a waste to remove any seedlings. Many of the complaints that nothing but tops could be had on beets, carrots, turnips, and radishes might well be traced to neglect of thinning out the plants to provide adequate space for development. Even where thinning was attempted, results were out of proportion to the importance of the operation, and this for a number of reasons - the plants were allowed to become too large for thinning to be of any benefit, or the job was done hurriedly and in one operation, with considerable disturbance to the plants remaining.

Thinning is a very important phase of vegetable culture. To be effective, however, its practice is governed by certain rather welldefined conditions. The first thinning is given when the seedlings have made their first true leaves, spacing about one to two inches apart. The second is given ten days later, and the thinnings from beets, turnips, lettuce, and some others, can be used for food. The third, and, if necessary, other thinnings, are concerned with providing the proper spacing to enable the particular crop to attain its maximum development. All these later thinnings have food value. Handled thus, there is not only no waste; there is a maximum production of food.

Transplanting

The same lack of perspective that characterized thinning marked the setting out of plants. It looked like a waste of space to set small cabbage plants two feet apart, broccoli in rows 30 inches wide, and tomato plants in three-foot rows. In a good soil these crops demand this spacing. The actual transplanting of plants brought its own troubles. There was the ever-present tendency to set plants too deeply, and to firm the soil around the neck of the plants rather than around the roots. Tomatoes suffered little, but cabbage was injured, and, to a greater degree, lettuce, which rotted at ground level. There were also attempts to transplant carrot and beet seedlings with variable and, mostly, no results.

Hilling

One of the interesting and unlooked for trends was the extension of the practice of mounding or hilling to include nearly everything in the garden. Although valuable when used against corn stalks to give better anchorage in storms, around potato plants to provide enough depth to cover the developing tubers, around the stems of string beans when six to eight inches high to prevent them from sprawling. and as a means of blanching leeks and celery, its use when transferred to hilling beets, carrots and turnips is of doubtful value. Many gardeners seemed determined to keep these crops and their tops under the soil. The crowns from which the tops spring were kept covered and their development hindered. Mounding tomato plants with soil induced stem roots which dried out when the high mound became dry, as was observed by one member.

Fertilizers

There was evidence aplenty that one of the least understood of garden practices was the use of fertilizer. There were complaints that directions for its use were not uniform, that the advice about quantities to use was conflicting, and that a lot of fertilizer was used without much result. These criticisms are not serious when one considers the almost infinite variety of needs that plants and soils demand. in the light of which it is not possible to give uniform advice. Those who handled the educational side of fertilizers did so very capably, and made an honest effort to find a basis for sound advice.

It is not the amount of fertilizer applied, but rather the amount which the plants can use, which will determine the crop. The use of fertilizer is governed by various factors, the chief one being moisture. Only when sufficient moisture is present can it be used. Fertilizer is also influenced by the kind of soil, whether sand, clay or loam; by the physical conditions, that is, whether the soil is fine and friable. or whether it is full of hard clods. All things considered, a soil with a good humus content, and well supplied with moisture, will use fertilizer more efficiently than one which is hard and dry.

Condensed from The Monthly Bulletin, Horticultural Society of New York.

HYBRID LILIES

THE Regal lily, *Lilium regale*, is well-known to gardeners and nurserymen as one of the handsomest and most satisfactory of all garden lilies. Less well-known, but equally beautiful, is *L. Sargentiac*, which flowers later than *L. regale*. Still later and even more magnificent than the preceding species is *L. sulphureum*, a native of Burma, and generally considered to be lacking in hardiness in the eastern United States. In the writer's garden, plants have endured several winters without injury.

These three species have been hybridized by lily breeders in Can-

ada, the United States and Europe. The product of the cross between Lilium Sargentiac and L. regale is known as L. Princeps. L. sulphureum and L. regale, when hybridized produced L. sulphurgale. The first to combine the three species was the late J. W. Crow of Simcoe, Ontario, and the strain of lilies which resulted is known as Crow's hybrids. The plants grow to five or six feet or more in height, bloom later than L. regale, and are fully hardy in the northern states and adjoining Canada. The flowers are similar to those of L. regale, but larger, and vary considerably in the amount of yellow in the throat and external coloring of the trumpet.

Another very fine strain which includes the blood of *Lilium centifolium* is known as Green Mountain hybrids. Seedlings of *L. Princeps* are also in the trade.

Since these lilies are raised from seeds, they should be referred to as strains, although there are individuals in every batch of seedlings well worthy of vegetative propagation.

G. L. Slate, Geneva, New York. In New York Nursery Notes.

CARE OF THAT AZALEA PLANT

HERE are some suggestions for the care of Azalea plants, which make such popular gifts: (1) Azaleas are broad leaved evergreens and require plenty of moisture. Never let them become dry, especially during the blooming period.

(2) Water with rain water or melted snow. City water is usually alkaline and Azaleas like acidity. Light sprinklings of alum worked into the soil will help keep the soil acid.

(3) The average home has an atmosphere too dry for Azaleas. Keep the air moist and spray the leaves of the plants daily.

(4) Best temperatures are below 70 degrees F.

(5) In the spring plunge the pot into the garden on the shady side of the house. Keep well watered and bring in before frost in the fall.

FAVORS DEEP BULB PLANTING

D^{EEP} planting of tulips as advocated by Harry Nelis of Holland, Michigan, is not a new idea even in America. I advised such planting 15 or more years ago for gardening purposes, both for tulips and hyacinths. I practiced such planting long years before in England, where because a grower friend had recommended it as a means of preventing too rapid splitting up and as a preventative against fire disease, which often is due to injury to the foliage by spring frosts.

In my garden there is a clump of tulips, the old cottage variety T. gesneriana spathulata which was planted 23 years ago and which two or three years later, through raising the level of a bank, was covered with another 12 inches of soil. The bulbs are at least 18 inches deep and have never been touched, yet each year they bloom bravely.

T. A. Weston, Hillsdale, N. J., in December 1, 1943 Horticulture (Mass.).



Vegetable Varieties For The Home Garden

Home gardeners are expected to produce even more vegetables this year than in 1943. Seed supplies are now more plentiful than a year ago, but shortages are apparent in certain important varieties. Because of labor shortages and unprecedented demands for seed, increasing delays in filling orders can be expected from all seedsmen as the spring rush season arrives. It is important, therefore, that home gardeners plan orders early.

As a seed conservation measure home gardeners should arrange to secure plants from local plant growers rather than buy seeds and attempt to grow plants themselves. It is especially important that none of the limited supply of **cabbage** and **tomato** seeds be wasted.

VARIETIES FOR WISCONSIN

One of the first requirements of successful home vegetable production is the **careful choice of varieties**. Those mentioned here are confined to those known to be adapted to Wisconsin growing conditions.

Asparagus: Mary Washington is the standard variety. Paradise is a new, rapidly-developing type worthy of trial for new beds.

Beans: Stringless Green Pod is suggested as a standard bush green pod. Giant Stringless Green Pod is a little larger and often slightly more productive. Tendergreen is of superior quality, but less productive in Wisconsin. If a flat-podded green bush bean is preferred, Bountiful or the newer Plentiful should be used. Butter Wax, also listed as Round Podded Kidney Wax, is a favorite round-podded wax. Pencil Pod Black Wax is of superior quality, but is usually less productive and a few days later. For all-around usefulness, Kentucky Wonder is unsurpassed as a green podded pole bean for home gardens. If a pole, wax bean is desired, grow Kentucky Wonder Wax or the flat-podded Golden Cluster Wax. Only the small seeded limas consistently produce well in Wisconsin-Henderson Bush and Baby Potato. If dry beans are to be grown, either White Navy or Great Northern should be used. Great Northern is slightly earlier and is considered of superior quality for baking.

Beets: Early Wonder is now the standard early beet and is equally useful for greens and small beets. Grow **Detroit Dark Red** or the improved type, **Perfected Detroit**, for late beets. O. B. Combs



Grow Broccoli

Broccoli should be more commonly grown in home gardens; its food value is excellent and practically everyone enjoys its delicate flavor. **Green Sprouting**, sometimes listed as Calabrese, is the standard variety.

Cabbage: Golden Acre is the standard, round-head early cabbage. Those who are willing to sacrifice production for quality may prefer Jersey Wakefield which has pointed heads. Resistant Detroit and Jersey Queen are the yellows-resistant counterparts of these two varieties. All Seasons is suggested as a late cabbage for kraut or storage; Wisconsin All Seasons is the yellow-resistant form of this variety. Those who enjoy red cabbage, should grow some Monmouth Rock Red, or if yellows is suspected, use Red Hollander.

Carrots: Red Cored Chantenay is generally preferred as an all-around carrot for home gardens. **Nantes** is slightly earlier and considered by some to be of superior quality. The long bunching type carrots like **Imperator** should be grown only in deep, loose soils. **Imperator** grows more slowly and is therefore somewhat later than Red Cored Chantenay.

Cauliflower: Either **Early Snowball** or **Super Snowball** will give good results with good weather and properly grown plants.

Celery: Golden Plume and **Golden Self-Blanching** are both suitable. If a late, green type celery is desired, **Giant Pascal** or preferably the earlier, higher quality, **Utah Pascal** is suggested.

Chard: Lucullus is the most common chard available, but the **Large White-Ribbed** type with smooth, darker green leaves is rising in popularity.

Chinese Cabbage: Chihili for general use. Don't sow Chinese cabbage before June 20. Neither **Pe-tsai** nor **Wong** Bok have consistently given satisfaction in Wisconsin.

Cucumbers: Straight Eight is the allpurpose cucumber. Varieties like Chicago Pickling are excellent for small pickles, but not suited where both slicers and dills, as well as small sweets, are wanted.

Eggplant: Black Beauty is the choice. New Hampshire Hybrid is earlier but the smaller, rounder, duller colored fruits are less desirable.

Kale: Dwarf Green Scotch is standard. Kale is not overly popular, but its food value is excellent. Cool weather and light frosts improve its flavor.

Kohl-rabi: White Vienna is most commonly listed by seedsmen, but Purple Vienna is of higher quality.

Lettuce

Lettuce: Grand Rapids is the choice leaf lettuce for quality, but Black Seeded Simpson is hardier and more productive. For head lettuce grow butter-head varieties as White Boston, May King, or Crisp As Ice. Crisp head varieties are not very dependable in Wisconsin.

Muskmelon: Delicious for earliness combined with larger size, and good quality. Milwaukee Market and Pride of Wisconsin for second-early and late.

Onions: Yellow sets are most common, but either red, white or yellow may be used for green onions. For mature onions grow Early Yellow Globe, Southport Yellow, Red or White Globe and Yellow Globe Damsen. For a larger, milder onion, grow Sweet Spanish, although it is a little too late for production from seed sown in the garden.

Parsley: Moss Curled is the standard variety and only a few plants or a few feet of row are needed by the average home gardener.

Parsnip: Guernsey, also listed as **Hollow Crown** and **Ideal**, is most commonly grown.

Peppers: Generally speaking, earliness cannot be had without sacrificing thickness of flesh. **Harris' Early Giant** is an excellent early variety, but is not to be compared with California Wonder in thickness of flesh. **Regular California Wonder** is later than might be desired for Wisconsin. Earlier strains of this excellent variety are listed by seedsmen as **Cal-Wonder, Harris' Won-** der, Fordhook and Oakview Wonder. Grow Red Chili if a hot pepper is desired. Early Pimento is an excellent pimento pepper.

Potatoes

Potatoes: Red Warba and Irish Cobbler for early potatoes. Chippewa as a medium late and Katahdin and Russet Rural for regular lates.

Pumpkins: Early Prolific Straightneck is suggested if a summer "squash" is desired. Green or Golden Table Queen are favorite fall "squashes." Small Sugar and Winter Luxury are excellent for pie.

Radish: Early Scarlet Globe is the standard early red radish. White Icicle, late.

Rutabagas: American Purple Top is standard for home gardens.

Salsify: Sandwich Island is the only variety commonly listed by seedsmen.

Spinach: Good varieties of true spinach include Long Standing Bloomsdale, King of Denmark and Giant Nobel. New Zealand, although not a true spinach, is well suited to our conditions, highly productive and a satisfactory substitute for true spinach, especially during the long hot days of summer when true spinach goes to seed.

Soybeans: Bansei is the variety most commonly available from seedsmen. Giant Green is earlier and therefore better suited for the northern part of the state. Mendota, a new variety released by the Wisconsin Experiment Station in 1943, is obtainable in limited quantity from a few seedsmen this year. This variety should be available in 1945.

Squash: Buttercup and Green Gold are especially recommended as medium-sized, early squash of excellent quality. Both store well. Kitchenette for those who like a small squash of the Green Hubbard type. Golden Hubbard is excellent.

Sweet Corn: Golden Gem (60 days), Golden Sunshine (68 days) and Extra Early Bantam (72 days) are best. Good hybrid varieties include North Star (69 days), Our Choice (71 days), Marcross 13-6 (72 days), Northern Cross (75 days) and Golden Cross Bantam (85 days).

Tomatoes: Bounty and Victor are very similar and are suggested along with Firesteel and Valient especially for home gardens in northern Wisconsin. Stokesdale is excellent for a second early and main crop. Rutgers is recommended as a late tomato especially for canning. Good yellow-fruited are Mingold and Jubilee.

Turnips: Purple Top White Globe is the most commonly grown. Shogain or Seven Top are best for greens.

Victory Gardeners and Treated Seed R. E. Vaughan

POSTAL laws and regulations have now been clarified in regard to acceptance by the Post Office of seed treated with a fungicide. This is important to victory gardeners, many of whom have become aware of the benefits to be derived from using treated seed. Such seed gives a surer stand where seed-borne fungi may do damage under unfavorable conditions. Seed treatment is protective insurance against damping-off and some forms of root rot. Victory Gardeners should ask for treated seed for their 1944 gardens.

The U. S. Post Office Department ruling is as follows: "Seeds treated with a fungicide will be accepted for transmission in the mails when enclosed in two strong envelopes, the inside envelope to contain the seed. In no case should the envelope bulge from too many seed enclosed." This ruling was given by Mr. J. D. Hardy, General Superintendent, Division of Railway Mail Service, U. S. Post Office Department, and dated July 27, 1943.

The seed companies and distributors who handle packaged seeds through the mails will take precaution to be certain that:

(1) All packets and boxes have the flaps completely and firmly sealed.

(2) Envelopes must not be overloaded so as to create excessive internal pressure.

(3) Single envelopes or packets must be enclosed in a strong envelope before mailing.

(4) Orders involving several packets will have to be enclosed in strong envelopes or preferably in strong cardboard or fiber boxes that will prevent crushing from external pressures.

Seedsmen can do a good job of seed treatment with small expense and little waste of material. Some

seedsmen have already been treating vegetable seed as a special service to their customers. Now that the postal regulations have been made clear more seeds will be treated. Gardeners wishing such seed should ask for it when placing their orders for the 1944 season. Fungicides used include: Semesan, Cuprocide, Spergon, Arasan and similar compounds, depending on the response of different kinds of seeds to the treatment given. These treatments are all based on carefully conducted trials under a variety of conditions.

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THE MINNETONKA PUBLISHING CO. LONG LAKE, MINNESOTA Box W

February, 1944

Whence Came the Malling Apple Rootstocks and What are They?

Many of These "New" Stocks Have Been Known for Years. But Recently They Have Been Separated Out Into Something Like "Varieties"

By H. B. Tukey, Geneva

THE name "Malling" associated with advertisements and stories about dwarf fruit trees raises the frequent questions, "What are the Malling rootstocks?", "Where did they come from?", "Where did they get their name?", "What value are they?".

Briefly, Malling rootstocks are rootstocks which were recently standardized at the East Malling Research Station, East Malling, Kent. England; hence the name. They are of special interest just now as offering possibilities for improved dwarf fruit trees for garden planting, for smaller than standard fruit trees for commercial orcharding, and for the adaptation of fruit trees to various soil and climatic situations.

Used as Dwarfing Stocks

The story behind the Malling rootstocks goes back to the use of special dwarfing rootstocks in England and on the continent. There, dwarfing rootstocks have been widely used, especially for apple and pear. Roughly, the dwarfing rootstocks for the apple were divided into the very dwarfing forms, called Paradise, and the semi-dwarfing forms, called Doucin, but the designationss are by no means accurate. It is of passing interest to note that Paradise is derived from "Pommier de Paradis" of the French and refers to the forbidden fruit of the Garden of Eden. Doucin is derived from the French word "douceur" meaning "sweetness." Both terms refer to the type of fruit which the plants will produce if allowed to fruit and if not grafted with some other sort.

In an examination of these rootstocks in European nurseries, Dr. R. G. Hatton of the East Malling Research Station, observed that they were badly mixed and that

there were several types masquerading under the name of Doucin and of Paradise. He separated these into pure lines or "clones."

From various sources, Doctor Hatton selected 16 types of rootstocks for the apple, propagated them, and worked various varieties of apples upon them. He designated the types by number, using Roman numerals. The prefix "Malling," "M," or "EM" is now used with the numbers to identify them further, as 'Malling IX," referring to the location where the standardization work was done.

Variation in Dwarfing Effect

Most interestingly, the performance of varieties on these rootstocks varied appreciably. Some rootstocks were extremely dwarfing, some were slightly less dwarfing, some were still less dwarfing, and some were not dwarfing at all. In a general way he grouped these stocks into (a) very dwarfing, (b) semidwarfing, (c) vigorous, and (d) very vigorous. American terminology has used a somewhat similar grouping but has referred to them as (a) dwarfing, (b) semi-dwarfing, (c) semi-standard, and (d) standard.

Here, then, are a series of apple rootstocks which are relatively "old" in that most of them have been known for many years-some of them several centuries-but which are at the same time relatively "new" to American horticulture and which are now under trial and being studied for what use they may be. They are not propagated from seed, as are the apple rootstocks now universally used in American nurseries, but by layers and cuttings in a manner similar to grapes and currants. Accordingly, all of the individual plants of a given numbered type are identical

in genetic make-up and their performance can be definitely foretold. When a variety of apple, as McIntosh, is budded onto a numbered Malling rootstock, as Malling I, the resulting tree is a combination of a known variety and a known rootstock, and it can be said definitely from previous experience just how the tree will behave.

Following is a brief summary of two Malling a p p l e rootstocks. their origin, and something about their performance from observation and trial at the Experiment Station at Geneva since the season of 1928 when they were introduced from England.

Malling I. Broad-leaved English Paradise (of Rivers).—Of English origin, selected by T. Rivers as a chance seedling about 1860. Vigorous and tall growing in stool beds; shoots heavy, mature early and can be removed from the mother plant in fall; roots easily and well; no injury from severe winters of 1933-34 and 1942-43; 100 per cent survival over 6-year period. Makes semi-dwarf tree, well anchored, early fruiting. Promising.

Malling IX. Jaune de Metz (of Dieudonné); also called Yellow Metz.-Selected as a chance seedling in France about 1879. Shoots of only medium height and diameter in stool beds, roots easily and well but requires care and attention; no injury from severe winter of 1933-34; no injury, 1942-43; 50 per cent survival over 6-year period. Roots snap and break easily. Makes very dwarf tree, bears very early, first or second year in orchard, shallow rooted, likely to lean unless supported, easily broken. Valued as a garden plant; recommended.

Condensed from January 1, 1944 Farm Research, N. Y. Experiment Station, Geneva.

How You May Improve Blooming of House Plants L. C. Grove, Iowa State College

THE use of the proper soil mixture is important in controlling bloom on house plants. Good flowering results from a soil mixture composed of two parts medium heavy garden soil, one part sand, and one part well-rotted manure. The use of peat moss in place of the manure delays flowering and causes dropping of the leaves.

Overfertilizing may result in blind growth or no bloom. Blind growth may result in your poinsettia if you feed with nitrogen betore the flower bracts start to show color. Wait until color develops and feed the liquid manure. Very dilute, but frequent (2 weeks) feedings of dissolved fertilizer should be the rule with flowering plants.

Bloom in geraniums may be controlled by planting in rather small sized pots. Use pots about four and not more than five inches in diameter. This allows the plants to be checked in vegetative growth when a reasonable size is attained. This check in growth allows food materials to be stored. The result is that your geranium is thrown over into a state of flowering. Many homemakers have had the experience of growing geraniums in large volumes of soil with little or no bloom resulting. Fertilizing and watering too well produce lots of beautiful foliage, but usually no bloom appears. Be sure to grow your geraniums on the dry side. Do not water until the soil feels dry to the touch.

You will do well to water most all your house plants in this fashion. Watering is the most important operation in growing house plants. The wise florist does not trust a novice to water the plants. Knowing how to water properly must be learned from practice and experience. Most troubles from house plants arise from over-watering. Roots of most plants resent constantly wet soil. The drying out action of the soil allows more air into the soil. This in turn develops a larger and healthier root system. Proper watering then is very important in controlling bloom in house plants.

Light, temperature and humidity all play an important part in controlling bloom. High humidity induces a healthier, more luxuriant growth. This makes for more beautiful bloom. Set your flowering plants immediately above wet sand. Use metal trays that will hold water. Keep the sand wet all the time. This method increases humidity around the plants.

Temperature is very important in controlling bloom. A 70 degree temperature during the day is best for most flowering house plants. Lower temperatures than this are better than higher temperatures. The temperature at night should be 10 degrees lower than the day temperature. No food is made by the plant at night, because leaves do not make food in the absence of light. Therefore, your plants are healthier at 55 to 60 degree night temperature. You can control the development of flower buds by growing your plants at the proper temperature. Experiments have shown that most flowering pot plants form their buds at about 65 degrees. At higher temperature than this, many plants will produce no blooms. The temperature can be raised to about 70 degrees when it is known that the buds have set.

Condensed from Iowa Extension Circular.

1944 ALL-AMERICA FLOWER AND VEGETABLE SELECTIONS

A GAIN through official trial gardens located throughout the country, outstanding new varieties of flowers and vegetables have been selected and are being introduced to the public in 1944.

Petunia Cheerful-Bronze Medal

Clear, light pink, free-flowering. Height, about one foot; moundshaped plants, $2\frac{1}{2}$ inch single flowers. Blooms from early in the season until killing frosts.

Marigold Mammoth Mum-Honorable Mention

Huge chrysanthemhm - flowered marigold. Plants are bushy, strong, and erect. Color rich lemon yellow. Flowers from August until freezing weather. Excellent long-lasting cut flowers for the house.

VEGETABLE AWARDS Lettuce Great Lakes— Bronze Medal

A variety developed at Michigan Experiment Station, in conjunction with the Department of Agriculture. Iceberg type similar to Imperial 456. It is a summer lettuce, standing the heat and sun, and does not go to seed until late.

Cucumber Cubit-Bronze Medal

A dark green, white spine, cylindrical cucumber, with rounded ends. Ideal for slicing and shipping. It is comparable to Colorado, A and C, and Straight 8, but makes better and more fruits for early picking, and is a more prolific bearer.

Bush Snap Bean Kenstonian Greenpod—Honorable Mention

Is entirely stringless and fiberless, round, meaty, straight pods. Plants hold up a long time, make good growth, and produce for a long time. A dependable producer.

	— SAVE TREES——	
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Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

Mrs. R. H. Sewell, President 957 No. 70th St., Wauwatosa 13

Mrs. F. E. Willard, 1st Vice-President Oakfield

Mrs. Walter Dakin, 2nd Vice-President 4110 Mandan Crescent, Madison 5

PRESIDENT'S MESSAGE

CGT. Milton Lehman wrote a S "Letter to America," which was published in Stars and Stripes Weekly, a N. Africa soldiers' newspaper.

"The world must build a new house, America; a house big enough for all its people to live in. For we are on the beaches in Africa waiting to splinter the old house, crash in its weak rafters, rip up its rotten floor boards-open it to the sky. A house so great will need a firm foundation, America, and the foundations we remember in your hills and valleys-the concrete of the structure needs firm lumber from your tall benevolent trees to make the form; water from cool and tolerant streams to make the mix; granite from your deepest quarries for toughness and strength and hardening by your warm and overseeing sun. IT IS TIME to begin these foundations now, America, time to draw up the blueprint !"

While paying tribute to the memories of Washington and Lincoln, what recognition are we planning for these Architects of Time? Are we answering Mrs. Dean's request to plant Highways of Memory. Have we submitted the "blueprint" of a permanent highway to the highway to the Highway Commission so that they may combine it with their plans? Are we beautifying entrances and preparing our villages, towns and cities for their peaceful and victorious return? Are

OFFICERS

Mrs. H. W. Schaefer, Recording Secretary-Treasurer 4416 Taft Road, Kenosha

H. J. Rahmlow, Corresponding Secretary 424 University Farm Pl., Madison 6



we planning this project for postwar employment?

Your President and Mrs. Thomas, your War Service Chairman, were elated at the wonderful cooperation of the Federation in donating jellies and Christmas decorations. The response far exceeded the request and we thank you for your generosity and service. We feel confident that you will give the same support to the 1944 projects.

Waste Paper Needed

In a night letter, Donald B. Nelson, WPB, informed Mrs. Frost of the National Council that "We must have 8,000,000 tons of waste paper in 1944." Accordingly, Mrs. Frost appeals to every member club to help with this important drive. To

DISTRICT PRESIDENTS

Mrs. F. J. Fitzgerald, 649 Broad St., Menasha; Fox River Valley District Mrs. H. R. English, 1722 Chadbourne Ave., Madison 5, Madison District Mrs. O. H. Burgermeister, 2127 S. 87th St., West Allis 14, Milwaukee District Mrs. John West, R. 2, Manitowoc Sheboygan District Mrs. Norma Robinson, Lake Geneva, South Central District

quote Eddie Cantor, "Let's hang the paperhanger with paper!"

Looking forward to meeting you at the Regionals, I am

> Patriotically yours. Mrs. R. H. Sewell.

SPECIAL BULLETIN

Just received \$21.00 from the Ceresco Garden Club, Ripon, as a contribution to the Federation's War Service Fund, this amount being the proceeds of a bake sale recently sponsored by the Club.

Excellent work, members of the Ceresco Garden Club and sincere thanks for your very fine support.

Mrs. Chester Thomas, War Service Chairman.

NEW GARDEN CLUB ORGAN-IZED AT MANITOWOC

A garden club was organized in Manitowoc in January by Mrs. John West, Manitowoc, District President

There were 49 charter members of the organization, most of them being present at the first meeting. Some interesting programs have been planned by the officers, who are: President, Harold H. Groth; Vice-President, Max P. Grimer: Secretary-Treasurer, Miss Catherine Danehy.

February, 1944

FOUR REGIONAL MEETINGS WISCONSIN GARDEN CLUB FEDERATION MARCH 7 - 10

THE Federation Executive Board voted in October to hold the Regional meetings in March this year. The following schedule has been arranged:

Tuesday, March 7. Madison and South Central Districts. Kennedy Manor, 1 Langdon Street, Madison.

Wednesday, March 8. Milwaukee District. YWCA, Milwaukee.

Thursday, March 9. Sheboygan District. First Reformed Church, Ninth and Hancock Sts., Manitowoc..

Friday, March 10. Fox River Valley District. Hotel Retlaw, Fond du Lac.

Registration will begin at 10:15 a. m.

State officers, district presidents, and committee chairmen will appreciate the cooperation of every club in each district in securing a large attendance.

Every garden club member is eligible to attend all sessions. Restricted travel conditions this war year will limit the number of visits to clubs which may be made by state officers. The regional meetings afford an opportunity to meet your officers, chairmen and associates in the Federation, to discuss objectives and get the help and inspiration that come from these contacts.

May we look forward to seeing you at your regional meeting the second week in March? We are anticipating that pleasure.

Mrs. Walter Dakin, General Committee Chairman.

Let us never forget that cultivation of the earth is the most important labor of man. Unstable is the future of a country which has lost its taste for agriculture. If there is one lesson of history that is unmistakable, it is that national strength lies very near the soil.— Daniel Webster.

Boys in Service Appreciate Jelly

The Red Cross Expresses Appreciation

A LETTER from the American Red Cross at Truax Field, Madison, signed by Agnes Kelliher, Assistant Field Director, and Samuel O. Satterfield, Field Director, to Mrs. Chester Thomas, our War Service Chairman, gives the following message:

"Glasses of jelly arrived from all over the state. I wish every member of your organization could have been here to see how attractively they were done. Frankly, we do not know exactly how many glasses were sent to the hospital, but our estimate was around two thousand.

"On Christmas morning each boy received a glass. Those who were bed patients had theirs on their trays, and the others who were able to walk to mess found a glass at each place. Captain Robert Leeds, who is in charge of hospital mess, told us that the boys were just like children they were so delighted, and he added that not one glass was left on a table. Each boy took his glass back to his ward to keep as a souvenir.

"Every shipment came through in perfect condition. Everyone mentioned the wreaths which helped so much to make the holidays more festive. The Red Cross staff had a lot of fun hanging them all over the Recreation Building. The patients were very cross when they had to be taken down.

"Please tell the members of your organization in your report to consider themselves unsung heroes. We know the numbers of hundreds of hours that went into the preparation. Without such interest and cooperation, our program could not be successful."

Letter From Camp McCoy

A letter from Florence A. Wells of the Station Hospital at Camp McCoy to Mrs. Thomas states in part as follows: "Not only was every single box of jelly in excellent con-

dition, but it was received at the hospital in ample time so that it could be gotten out to the wards and mess halls before Christmas morning. The amount so far exceeded our expectation that it was possible to serve this homemade jelly for breakfast during the week between Christmas and New Year's and even on New Year's morning. The glasses were beautifully wrapped and were a decorative as well as a delicious contribution to the patients' meals. The wreaths were beautiful and added so much to the festive appearance of the Red Cross House and the wards.

"We cannot sufficiently express the appreciation of the patients for the fine contribution you people made to their Christmas."

EDITOR'S NOTE ON REPORTS

Several issues of this magazine could have been filled with copy of reports made by the various chairmen and officers at the annual meeting. The question we must always ask is, "Which is most important—discussion of future plans and horticultural information—or reports of past activities?"

When the time comes to make the decision, the editor just does the best he can, knowing full well it will not be satisfactory to all.

Reports of programs or projects which were fully described when they took place should not be republished, because it would be repetition.

Boss—"Seems kinda sultry today, George, think it'll rain?"

George—"Suh, does you think ah'd be pushin' dis broom if ah could prognosticate de precipitation?"

Absent Minded

"Imagine my embarrassment," said Dumb Dora, "when, according to my usual custom, I looked under the bed before retiring. I had forgotten that I was in an upper berth."

DISTRICT REPORTS

MILWAUKEE DISTRICT REPORT

The Milwaukee District has had a very busy and successful year. Two new clubs have been added to our membership.

In December, 1942, the Milwaukee County clubs met under the direction of the War Service Chairman, Mrs. Chester Thomas, to make decorations for Christmas. These were 1,546 small sprays and miniature wreaths; 36 feet of evergreen garland, 4 large wreaths, 2 V's for Victory. All were shipped and delivered to Camp McCoy, Truax Field, Red Cross Headquarters, WAAC's Office and the Naval Reserve Office.

In February the district planned a regional meeting. The state officers and state chairmen came to Milwaukee and met with the Milwaukee district to discuss plans for an "all-out" Victory Program.

In March the district held an allday session for the purpose of instructing the members in Victory Garden and Harvest Show activities. War-time flower arrangements were also presented.

In April Milwaukee County had a scrap book matinee. At this time all the books made by the clubs during the winter were brought in. An enjoyable afternoon was spent in viewing the books. Bird houses, vases and more than 100 books were packed and shipped to Camp McCoy and other hospitals.

In August the Milwaukee district garden clubs played an important part in the Harvest Festival sponsored by the Milwaukee OCD Victory Garden Committee at the Milwaukee Auditorium.

In October the Milwaukee District held its last meeting of the year. In the forenoon, reports of the committees and officers were given. These will be compiled in the State Committee reports. The committees all worked hard and Milwaukee District is proud of their record and accomplishments.

Milwaukee District has worked hard and accomplished much. I have attended all State Board meetings, the National Council meeting in Chicago, conducted all district meetings. I have given advice and counsel to the many club presidents and chairmen who called on me during the year, and accepted an invitation to talk on the garden club program broadcast over Radio Station WTMJ.

Mrs. George Adami, District President.

FOX RIVER VALLEY DISTRICT REPORT (Condensed)

The District held two meetings in 1942, regional and annual. Regional meeting held at Oshkosh, February 25, state and district chairmen attending.

Annual meeting was held at Ripon, September 2nd. District is sponsoring the planting of Memorial Highway in memory of our boys overseas and home. State Trunk Highway 41 from Oshkosh to Little Chute.

Conducted flower judging schools in Green Bay, Wausau, Stevens Point, June 21, 22, 23, Mr. H. Sonn chairman.

Poster contest of victory gardens made by grade schools, Menasha garden club, Oakfield, Wisconsin Rapids. Prizes donated by president Fox River Valley district, awarded to Menasha and Oakfield.

Radio programs given last Friday and last Wednesday of the month, Mrs. U. F. Ammel, Fond du Lac, chairman.

Menasha Garden Club arranged a series of Victory Harvest Programs. Broadcasts were given on five successive Sundays at 1 p. m. at Oshkosh.

Attended three Board meetings, three judging schools, two district meetings, one convention — Chicago, National Council of State Garden Clubs, May 4th to 6th.

Three new clubs were organized, seven garden centers. Menasha garden club held victory harvest show, Waupaca garden club held victory harvest show, also are planting a living memorial in honor of service men and women. Cost \$125.

Mrs. F. J. Fitzgerald, President Fox River Valley District.

SHEBOYGAN DISTRICT REPORT (Condensed)

Our district has survived the strain of war-time activities and we have coordinated our efforts with the Civilian Defense Program and stressed Victory Gardens, with astonishing results and our experience will enable us to do even better next year.

Nearly all the clubs happily made scrap books for service men but Kohler's 1,500 Christmas scrap books aided by the Girl Scouts, and 1,000 calendars which were distributed to the Indian schools, shut-ins, and veterans' and local hospitals, overshadowed us all. Sheboygan made wreaths which were placed on Christmas trays for every person in the old people's home. Plymouth performed a like service for their local hospital.

Plymouth alone had a flower show. Sheboygan had to put forth a great effort for the local victory garden and State Gladiolus Show held at the new Armory.

The Sheboygan District was organized in 1938 and this is the first time we had a regional meeting. This meant a great deal to us for we are so few clubs.

We had our annual meeting on September 24 with a record attendance of 56.

The Sheboygan club has an official photographer and its own projector, so we were able to show our gardens in review to the visitors. We feel we can recommend this to other clubs.

Manitowoc sponsored a boulevard planting and Sheboygan has elected a project chairman and is sponsoring a city-wide cooperation for memorial planting.

Mrs. Zelma Snell, District President.

SAINTPAULIA DISCOVERED

IN EAST AFRICA

•HE Saintpaulia was discovered by Baron Walter von Saint Paul in the Primeval Forest of the Usambara, East Africa, ranging at elevations from fifty to five thousand feet, and growing not only in rich vegetative soil but on granite rock out-croppings, in shady places. This discovery was made in 1893, but since that time, until just recently, they have languished in conservatories without particularly attracting much attention. During the last twenty years quite a few new Saintpaulia's have been developed, but most of the earlier ones were different shades of blue, violet, and orchid. Just recently there have come to the markets plants with distinct new colors.

From November, 1943 Golden Gardens.

FOR THE CONSERVATION PROGRAM

New Bulletin Available for a Report on the Deer Problem

All garden clubs interested in conservation should study our deer problem. A valuable new bulletin entitled "Wisconsin's Deer Problem" may be obtained from the Wisconsin Conservation Department, State Capitol, Madison 2.

The bulletin was compiled by Prof. Aldo Leopold of the Natural Resources Committee. It is an accurate and scientific report of the problem of what to do about deer in Wisconsin. It also contains a majority report of the Citizen Deer Committee to the Wisconsin Conservation Committee, and a chapter entitled "Wisconsin Deer Today and Tomorrow" by W. S. Feeney.

Deer Irruptions

The following are the introductory paragraphs in the bulletin and will give an idea of the extent of the problems and the need for public understanding of them.

"From the fifteenth century until 1910, the deer problem of North America was a matter of too few, rather than of too many.

"About 1910 the Kaibab deer herd in Arizona, long stabilized at a level of about 4000 head, began to pryamid its numbers. By 1918 the range showed overbrowsing. Between 1918 and 1924, seven successive investigators warned of impending disaster, but nothing was done.

"In 1924, at a probable level of 100,-000 head, came the first of two catastrophic famines which reduced the herd 60 per cent in two winters. By 1939 the herd had dropped to a tenth of its peak size, and the range had lost much of its pre-irruption capacity.

"This was the first of a series of irruptions which have since threatened the future productivity of deer ranges from Oregon to North Carolina, California to Pennsylvania, Texas to Michigan. Wisconsin is one of the more recent irruptive states.

"This paper aims to present a background for the present Wisconsin problem."

LA CROSSE GARDEN CLUB HAS INTERESTING PROGRAM

THE outstanding event of 1943 for the La Crosse Garden Club was the June flower show. The show featured flower arrangements and many roses.

The club furnished many dozens of flowering plants for window box-

es at Camp McCoy last May. They were used at the Service Clubs and other buildings, as well as flower beds at the Station hospital.

Members of the club assisted in judging the 4-H victory gardens in various parts of the county during the summer.

While visiting gardens was curtailed last season, the club did hold one successful outdoor meeting at Riverdale on the Mississippi River. Supper was served on the large lawn high above the river.

As a part of our war service, the club sent 461 glasses of jelly and preserves for Christmas morning breakfast trays of hospitalized servicemen at Camp McCoy Station hospital.

The year ended with a Christmas party for members and friends held at the YWCA.

Condensed from report by Bertha C. Shuman, V. P.

MEMBERS CONTRIBUTE TO GARDEN CLUB PROGRAM

Members of the Waupaca Garden Club will be the speakers at the garden club meetings for 1944. As an aid to garden clubs who may wish to plan similar programs, we are listing the topics the Waupaca Garden Club has adopted for this year, and printed in their attractive Garden Club Program. We are omitting the names of the speakers but they are all members of the club.

January 10, 2 p. m. Waupaca Library. Bible Plants for American Gardens. Roll Call: What Are Your Garden Plans for This Year?

February. Birds — 10 minute talks. Bird Life in the Garden. Building Bird Houses and Feeding Stations. Usefulness of Birds. Roll Call: What I Have Learned From Birds in My Garden.

March. Round Table Discussion: Preparation of Soil for Gardens. Roll Call: Helpful Suggestions for Planting a Garden.

April. Herbs and Gourds—10 minute talks. What's New in Garden Seeds? Gourds Are Fun. Herbs.

May. Vegetables Are Vital. Memorial Program or Dedication-Memorial Day.

June. Oriental Poppies. Roll Call: Short Verse or Poem Suggestive of Month's Beauty. July. Gloxinia and African Violets. Begonias. Roll Call: An Interesting Color Combination of Flowers.

August. "Work Shop." Flower Arrangements by All Members. Roll Call: What I Have in Bloom Now.

September. Succession of Blooms in My Garden. Cover and Care for Perennials. Roll Call: What I Have Raised in the Garden.

October. Varieties and Care of Cactus. Dish Gardens and Terrariums, by Members.

November. Program Approval for 1945. Gourd Show. Exchange Gourd Seeds. Election of Officers.

December. Christmas Party. Pot Luck.

GREEN TEA VS. BLACK TEA Entirely a Matter of Preparation.

Black Tea Is Fermented.

THERE has been a shortage of green tea on the market and as a result the idea is prevalent that green tea is grown only in Japan and that it is a special variety of tea. This is not true. The difference between green and black tea is wholly a matter of preparation. The green variety is what makers call unfermented tea, and the black is fermented.

In making black tea, the freshly picked leaves are placed under cover and left for a day or two to wilt. They are then crushed by being passed through powerful rolling machines which brings the natural juices to the surface. The leaves are then spread out on tables and allowed to ferment. They are then again rolled and dried in a firing machine. The fermenting process changes the color of the tea and also works chemical changes which give the liquid tea a darker color and different flavor.

In the case of the green tea the fermentation is checked by heating and drying before fermentation takes place. Green tea is heated twice and the drying brings out the natural fragrance of the tea.

While Japan and Formosa were the most important producers of green tea, other countries did and can produce it. China produces both green and black tea.

A Conservation Program For Individuals and Clubs

Victor H. Ries, Ohio

ONSERVATION is in style. Everybody talks about their interest in it, almost every club has at least one program a year devoted to it, and it stops there. Is it not time that we did a little more about it? Here are some concrete suggestions that anyone can follow. Conservation involves our natural resources, our wild life, including plants as well as animals, our soil, the water in our streams, the plants in our gardens and the pests attacking them. Back in the old days we called this Nature Study, but now that it has become fashionable and stylish, we call it Conservation.

Birds. Get acquainted with our native birds. Learn to identify them. There is no better way than to start by feeding them this winter, preferably outside your window where you can watch them and identify them. Then next summer, learn those that are nesting in your neighborhood, encouraging them by supplying nesting sites in the form of shrubs, vines and evergreens which you may plant. Put out next, building materials such as cotton, string, and bits of old rags. Select those plants whose seeds and fruit they can use. Discourage stray and prowling cats. Later you can learn the migrating birds as they pass through in the spring and in the fall.

Books. Birds in the Garden-Margaret McKenney.

Birds of America edited by Gilbert T. Pearson

Natural History of the Birds —Forbush & May.

A Fieldguide to Birds-R. T. Peterson.

Audubon Guide to Attracting the Birds-J. H. Baker.

Trees and Shrubs. Learn to identify our native trees, both when they are in leaf and when they are bare in winter. Find out which are valuable and which are not. Which may be used for ornamental plantings.

Books. Our Native Trees—How to Identify Them—Harriet Keeler.

Our Northern Shrubs — How to Identify Them—Harriet Keeler.

Some American Trees--Wm. B. Werthner.

Handbook of Trees—Romeyn B. Hough.

Knowing Your Trees—G. H. Collingwood.

Trees of Eastern U. S. and Canada—W. M. Harlow.

Wild Flowers. Our spring wild flowers are relatively easy to find and to learn to identify. Find out which ones need protection from the careless picnicker.

Books. Wild Flowers—Homer D. House.

The Wild Garden—Margaret McKenney.

Wild Animals. Before blaming a harmless but beneficial shrew that you have caught in your compost pile, learn the different small animals. Find out the difference between a shrew, chipmunk, mole, fieldmouse, deermouse, ground squirrel and plain rat.

Books. American Mammals — Their Lives, Habits and Econom-

ic Relations—W. J. Hamilton, Jr. Meeting the Mammals—Victor

Cahalane.

Fieldbook of Mammals—H. E. Anthony.

Fieldbook of Animals in Winter—Ann H. Morgan.

Snakes, Frogs, Toads, Etc.—Before killing every snake, make sure it isn't a harmless and desirable garter or milk snake. Find out how really beneficial many snakes are. Learn to know the difference between a frog and a toad when they come to your garden and pool. The difference between a lizard and a salamander. What they eat, and why they should be protected.

Books. Field Books of Snakes of the U. S. and Canada — K. P. Schmidt and D. D. Davis.

Handbook of Salamanders-Sherman Bishop.

Handbook of Frogs and Toads —Wright and Wright.

Insects. Although we may feel all insects are pests to be killed on sight, there are many that are really beneficial. The beauty of butterflies and moths has attracted many from childhood on. Whether they be on land or in water, they are a fascinating hobby. Why not learn to know some of the larger and more conspicuous insects?

Books. A Lot of Insects—F. E. Lutz.

Field Book of Insects—F. E. Lutz.

Moth Book-W. J. Holland.

Butterfly Book—W. J. Holland. How to Know the Insects—H.

E. Jaques.

Fieldbook of Ponds and Streams—Ann H. Morgan.

Life of Inland Waters—Needham and Lloyd.

Condensed from Ohio Garden Club News Letter.

POPCORN NEEDS MOISTURE

POPCORN if it becomes too dry, may pop weakly or be tough. Such corn should be placed in a sealed container such as a Mason jar, and about a teaspoonful of water added to a pint of the popcorn several days before it is to be used so that it may absorb some moisture.

We must beware of trying to build a society in which nobody counts for anything except a politician or an official, a society where enterprise gains no reward, and thrift no privileges. — Winston Churchill.

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Horticultural Fact-Finding

By Dr. R. C. Allen, Horticulture Chairman, New York

HORTICULTURAL Fact-Finding is to be the program for the coming year. The objective of such a program is to improve gardening in the United States by encouraging a more observant and critical attitude toward plants and gardening practices.

This program was selected because:

1. It is broad and flexible enough to interest individuals and clubs in all parts of the country.

2. It is specific enough to permit each club to cooperate fully.

3. It will stimulate and encourage individual participation within local clubs.

4. It will focus attention on plants of special merit in the area and provide interesting, entertaining and valuable discussion in club meetings.

For the first year the problem is to evaluate, under existing climatic conditions, kinds and varieties of ornamental and food plants adapted to the area of each local club. As a beginning, information is desired on the best kinds (general and species) or varieties of the following:

Onions	Beans, Snap
Peas	Beets
Peppers	Cabbage
Tomatoes	Carrots
Sweet Potatoes	Cauliflower
Spinach	Celery
Sweet Corn	Cucumbers
Summer Squash	Irish Potatoes
Watermelons	Lettuce
Winter Squash	Muskmelons
Kinds of annuals	
Kinds of perennials	
Kinds of bulbous plants	
Kinds of flowering shrubs	
Kinds of evergreens, narrow or	
broad leaf	
Shade and street trees	
Small fruits sand varieties	
House plants	
Plants	

To make the material most worthwhile, the information should be the result of club discussions rather than the opinion of an individual or committee delegated to do the work. The club chairman of horticulture should be responsible for conducting the discussion and reporting the information.

Condensed from August - September, 1943 National Council Bulletin.

KEEP HOUSE PLANTS HEALTHY BY PROPER CARE By The Master Gardener

Be sure that you—

Water plants properly. Keep soil moist but do not overwater. Overwatering is a common fault during the short dark days of winter.

Keep leaves of plants free of dust and dirt. You may wash smoothieaved plants, brush those with hairy, fuzzy leaves.

Turn plants regularly so all sides receive equal light. This treatment will produce a well-formed symmetrical plant.

Remove all dead or damaged leaves. Good sanitation reduces the danger from disease and insects.

Feed your plants with a complete balanced plant food. Either powder or tablet form may be used, but the tablet form is much more convenient. Feed sparingly during short dark days of winter, when plants are not making much growth.

Air the room daily, but do not allow drafts to come in direct contact with plants.

Keep the air moist. Suggested methods: Pans of water on radiators, or other types of humidifiers; troughs filled with gravel, partly filled with water, so that pots will set on gravel without allowing roots of plants to rest in water.

Keep the temperature moderate. Plants thrive best in a temperature below 70 degrees.

HINTS FOR ARRANGING FLOWERS By Mrs. Walter Brewster

L like to say there is no such thing as specific rules for flower arrangement but in my years as practitioner I have evolved certain precepts such as the following:

1.—The better the quality of the flowers the fewer needed. Specimen blooms should be given a chance to display their full beauty. With inferior flowers a better effect is achieved by crowding.

2.—Green is a harmonizer but too much green detracts from the beauty of any arrangement. It should be used as carefully as the flowers themselves. Good foliage and good stems add immeasurably to the beauty of an arrangement if they are used sparingly. Too much green is bunchy and crowded except in an all green arrangement.

3.—In arranging a mixed bouquet the best and brightest flowers and all accents should be left until the last. They are the final strokes of the painter's brush.

4.—Above all, flowers must be placed to give a sense of balance and security. Nothing looks or is right if it gives the effect of being about to topple over or fall to pieces.

These are very concrete rules which are not governed by any scale of judging but I am sure they should be implanted firmly in the judge's mind and be used in a preliminary and extra-curricular manner. The instinctive application of them is a sort of evidence of acumen of the arranger and the recognition of their successful use is a very good test of a judge.

—(Excerpt from lecture given by Mrs. Brewster at the 1942 Judging School of the Garden Club of Illinois.)

"When Wilber brings his report card home why do you always sign it with an X?"

"I don't want the teacher to think that anyone who can read and write would have a son like that." — Tommy Riggs Show (NBC).

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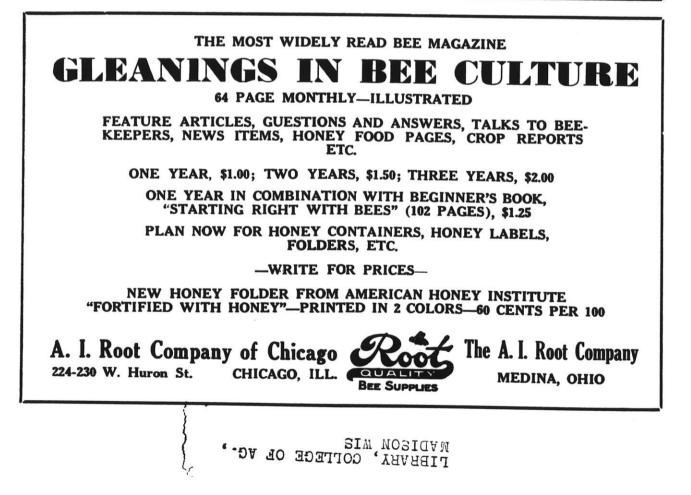
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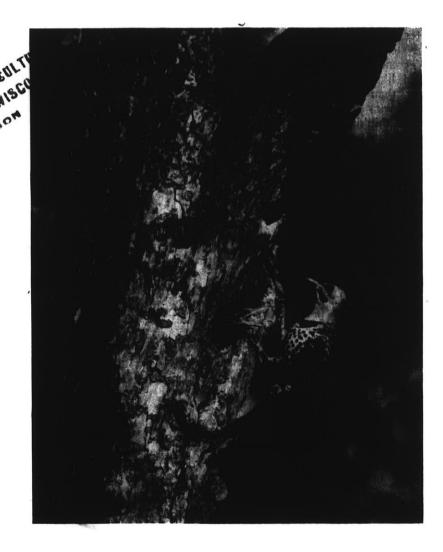
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WAINERSITY MULEOF

MARCH 1944

TAMPALA, A NEW GREEN A RTHUR Herrington has a good word to say in Horticulture for New Zealand spinach. What he writes is true enough, but now let me suggest for next season the new vegetable Burpee's tampala, a cultivated or selected form of Amaranthus tricolor. This novelty I have had the pleasure of testing in a small way this season and while not a substitute for the true spinach, which comes early in spring, it is a grand all-summer item.

The plants are vigorous (two feet or so) and one can keep on picking the leaves without interfering with the main and branching stems. Thus it is a real cut- and - come - again green. Although cooked like spinach, it is less watery than that vegetable and is a very dark green in color. To my way of thinking, it is far nicer than the true spinach or, for that matter, than New Zealand spinach or even Swiss chard.

From Rambling Observations of a Roving Gardener, in September 15, 1943 Horticulture.



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No. 7

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t Atkinson	Fort	White .	L.	E.

Term Ending December 1946

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. Term Ending December, 1944

Mrs.	R.	L.	MarkenKe	nosha
Jos.	L.	Mon	awetzWest	Bend
N. A	. R	asm	ussenOs	hkosh

Term Ending December, 1945

Virgil	Fi	eldhouse	Dodg	eville
N. C.	Ja	cobs	Sturgeon	Bay
Peter	L.	Swartz,	JrWauk	esha

R. W. Riggert, Pres. Wis. Nurserymen's Assn. Fort Atkinson

Mrs. R. H. Sewell, Wauwatosa, Pres. Wis. Garden Club Federation

Subscription to Wisconsin Horticulture is obtained by membership in the Wisconsin State Horticultural Society for which the annual dues are \$1 per year or \$1.50 for two years. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Fifty cents of the annual dues paid by each member is for a year's subscription to Wisconsin Horticulture.

APPLE SCAB CONTROL

Experiments With Ground and Tree Spraying in 1943 By G. W. Keitt and J. Duain Moore

Why Both Ground and Tree Spraying?

THE chief method for apple scab control has for many years consisted of repeated applications of spray to the trees throughout most of the growing season. The main purpose has been to protect the iruit from infection. Under the severe conditions for scab development in Wisconsin, much difficulty has been experienced because such tree-spray programs strong enough to give reasonable probability of controlling the disease often cause severe spray injury. A further defect of such programs is that they commonly fail under our conditions to prevent the scab fungus from infecting the apple leaves and producing an abundant crop of ascospores, sufficient to start a severe outbreak of the disease in the fol-I wing year. The greater the supply of ascospores,, the greater the chance of a severe epidemic. The more severe the epidemic, the stronger the tree sprays necessary to control it and the greater the danger of failure to control. The stronger the tree sprays, with the fungicides now available, the greater the danger of injury.

A basic factor in this "vicious circle" is the failure to keep the scab fungus at a low level of survival from year to year, with the result that each year the spray program must be planned to meet a very severe test. What might be accomplished if a means could be found to limit the severity of scab epidemics, so that tree spray programs could be adapted to the conditions to be met, rather than to the most severe conditions that might be encountered if there were no control on the severity of the epidemic? Could economical spray programs then be developed that



would assure satisfactory control without objectionable spray injury? For some years this Station has conducted investigations directed at this basic aspect of plant disease control.

The first step to be studied was a means of cutting down the severity of the epidemics. This was approached through a direct attack on the scab fungus at a weak point in its life history by applying an eradicant fungicidal spray to the overwintered leaves on the orchard floor in early spring. It was shown that Elgetol, I gallon in 200, applied just before bud-break at 600 gallons per acre could reduce the effective supply of ascospores by about 95 to more than 99 per cent in orchards that were not cultivated during the period of ascospore discharge. It was further shown that such a treatment commonly reduced by about nine-tenths the severity of the scab outbreak in the critical period from bud-break to some two weeks after petal-fall.

The Plan of Last Year's Experiments

In the past season special attention has been given to experiments seeking to adapt tree-spray programs for use in orchards in which the severity of scab occurrence had

been reduced by application of the ground spray.

The chief experiment was in a 60-acre orchard in Door County, containing the McIntosh, Starking, and Grimes Golden varieties. For the ground spray Elgetol, 1 gallon in 200, was applied at the rate of 600 gallons per acre by means of a specially constructed boom supplemented by a spray gun, using a rig of 25-gallon-per-minute capacity and spraying approximately an acre per hour. Since the work of previous seasons had compared results in ground-sprayed and nonground-sprayed areas, and since ascospores blown from the nonground-treated part may somewhat affect results in the ground-treated part, the entire orchard received the ground spray. Tree-spray programs of varied types and strengths were used, with special attention to disease control, spray injury, and effects on yield. In many cases the same programs had been applied to the same trees in the preceding vear.

Results

The season was cool, with frequent rains, and scab development in non-ground-treated orchards was unusually severe.

In certain programs lime - sulphur, 1-50, was used in 3 applications before bloom, followed by various materials or concentrations in 5 applications after bloom. Lead arsenate, 1-50, was used in all applications. Some of the results, according to the material used after bloom, in terms of McIntosh fruits scabbed at harvest, follow: (1) lime-sulphur, 1-60, 1 per cent; (2) lime-sulphur, 1-75, 2 per cent (average of 3 plots); Flotation sulphur, 8-100, plus lime, 1-100, 9 per cent (average of 3 plots); Kolofog, 6-100, 12 per cent; Mike sulphur. 5-100, plus lime, 1-100, 7 per cent; Fermate, 1-100, plus lime, 1-100, 4 per cent.

Severe foliage injury occurred on the plots that received lime-sulphur throughout the season, with little difference whether the concentration was 1-60 or 1-75 after bloom, or whether lime, 2-100, was added throughout the season. However, this injury was greatly reduced by substituting Flotation Sulphur, Mike Sulphur, Kolofog, or Fermate in all applications after bloom. Yield data, while not yet conclusive, suggest that plots that have received these substitute materials instead of lime-sulphur in all after-bloom applications in the past 2 years outyielded the lime-sulphur plots.

Discussion

These results show that in a year of exceptionally severe scab occurrence the disease was well controlled in a ground-sprayed orchard by various programs mild enough to eliminate severe spray injury. In our previous experience with programs of this type in non-groundsprayed orchards in years of severe scab occurrence, the disease has not been satisfactorily controlled.

While an appraisal of the place of ground spraying in the scab control program and the adaptation of tree-spray programs to follow it must await further experience, the ground spray has given good results in the experimental work and in the hands of numerous growers under the conditions met in the past year. It is recommended for the consideration of Wisconsin growers who, in spite of good spraying practice, have experienced difficulty in scab control. However, those who use the ground spray are cautioned against relaxing in the thoroughness or timeliness of their treespray applications.

It is suggested that growers who have secured satisfactory scab control but objectionable spray injury from use of the full lime-sulphur tree-spray program following the ground spray begin to try substitution of a milder fungicide in the after-bloom sprays on parts of their orchards according to their own judgment. It should be borne in mind that the milder fungicides commonly should be applied at somewhat shorter intervals than lime-sulphur.

When and How to Apply the Ground Spray

The following sections from last year's report are included for the convenience of growers who may wish to use the ground spray.

The ground spray should be applied in the spring after the ground is in suitable condition and before the buds have broken enough to expose tissues susceptible to scab infection. In Wisconsin this will usually be in a period of about 2 weeks before the first tree spray for scab control (delayed dormant). The ground should be as free as possible from surface water, but the application can be made while the leaves are still moist. The exact time required for the Elgetol to be effectice in case rain follows soon after the application is not known, but in experiments it has been effective in a 3-hour period. Until further information is available, it is suggested that an effort be made to work at such times that a period of at least 3 hours without rain seems probable. It is well under Wisconsin conditions to use the earliest favorable opportunity to apply the ground spray, or unfavorable weather may delay it past the time of best effectiveness.

In the experimental work the ground spray has usually been applied by 2 men walking backwards behind the rig, each using a singlenozzle gun and spraying only about one-fourth the distance between two rows. This necessitates 2 trips of the rig down each middle, but is more workable than treating the entire middle in 1 trip. The spray is applied at 550 to 650 lbs. pressure, using a 5/32-inch disk in each of the 2 guns. This permits use of 25-gallon-per-minute pump at a nearly its full capacity. The speed of driving is regulated so that about 600 gallons of spray is applied per acre. A strip of ground about 50 feet wide at the edge of the orchard is sprayed to cover leaves that have blown away from the orchard.

Various modifications in method of application are possible, but in all cases outlets should be near the ground and good pressure and thorough coverage should be provided Spraying from the top of the rig has not been successful. Experiments with booms are in progress.

Elgetol (1 gallon in 200 gallons of spray, to be applied 600 gallons per acre) should be thoroughly stirred before it is put into the spray tank. To a void excessive foaming it is well to add the Elgetol after the tank is filled and just before beginning to spray. If there is still enough foaming to cause loss of pressure, the problem may be met by using smaller agitator blades.

Orchard Cultivation After Treatment

Where the ground treatment is used the orchard should not be cultivated before the end of the ascospore discharge period (usually about 2 or 3 weeks after petal-fall in Wisconsin), since this would tend to uncover some leaves that escaped treatment because they were covered by others. As long as they remain well covered they cannot discharge their ascospores into free air.

The question is often asked whether it is advisable to spray the ground at the same time the trees are being sprayed with Elgetol for insect control. This is generally not advisable, because in most cases it is not workable to make efficient application to the ground and trees at the same time.

One Old Maid—"Which would you prefer in a man, brains, wealth or appearance?"

The Other One—"Appearance. and the sooner, the better."

Orchard Supplies.

Purchase your requirements from this Co-operative and save DOLLARS by participating in the earnings. Patrons Refunds to all customers at the end of the season. Our prices are conservative because we do not strive for large profits. This Co-operative was formed for the sole purpose of serving the fruit growers of this state at reasonable prices. Your continued patronage will make a larger and better organization.

SPRAY MATERIALS

Arsenate of Lead **Calcium** Arsenate Bordeaux C.O.C.S. Spray Dry Lime Sulphur Liquid Lime Sulphur Flotation Sulphur Mike Sulphur Kolo-Spray Kolo Fog

Copper Sulphate Black Leaf 155 **Cucurbit Dust** Paris Green **Casein** Spreader **Du Pont Spreader Sticker** Nicotine Sulphate Spray Oils Elgetol

SPRAYER SUPPLIES

Spray Guns Friend Pecan Bean 780 Bean Fog Guns Bean Spray Nozzles

Spray Hose 600 # Pressure 800 # Pressure Hose Swivels Hose Coupling & Clamp Suction Hose

PRUNING EQUIPMENT

Pruning Snips-9" Pruning Saws Point Cut Pruners

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ALL INQUIRIES PROMPTLY ANSWERED

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SOUTHEASTERN WISCONSIN FRUIT GROWERS CO-OPERATIVE, INC.

227 Cutler Street, Waukesha, Wis.

Office: Telephone Waukesha 4107

Residence: Telephone Big Bend 2821 Route 2

Apple Varieties For Wisconsin

WHAT varieties of apples shall I plant? That is a very common question these days. There has been a considerable increase in apple tree planting in Wisconsin. In fact, probably the percentage of increase has been greater than in most states. Apple growing is really becoming an important industry in Wisconsin as evidenced by the number of growers who have joined the Wisconsin Apple Institute, affiliated with the National.

Plant Only Best Varieties

Competition with other fruits will be more keen in the future than in the past. Unless therefore we can give the consumer the kind of apples they like, and will use in quantity, apples will lose out in the competition. Remember, too, that in planting a tree this spring, it will be almost 10 years before it comes into good production and 20 years before it is at its best. Children now in their teens will have families by that time. Plant the kind that they like because they will be the future buyers. We know older people who prefer to eat a N.W. Greening over any other variety. but we know no young people who do.

Best Early Varieties

Plant early varieties only if you are sure you have a good market for them, or for your own use. The two best early varieties for Wisconsin are *Melba* and *Milton*.

Melba is an open-pollinated seedling of McIntosh, produced by the Ottawa Experiment Station.

Milton is a cross of McIntosh and Yellow Transparent, produced by the New York Experiment Station. Both are red in color and of excellent quality.

Some Growers like Early McIntosh, but it is small in all but southern Wisconsin. Duchess are still being planted, but there are a lot of them in the country now and it is questionable if they will be profitable.

Mid-Season Varieties

For mid-season varieties we recommend the following: Wealthy, McIntosh, Snow, Cortland, and Macoun.

Wealthy is still popular, but there are a lot of trees in Wisconsin, and it is questionable whether we should plant many more. McIntosh is our most popular apple and many growers plant 50 per cent of their acreage to this variety. Do not plant more than you can pick before they drop.

Snow is small in Wisconsin, and is losing in popularity, but still has a market.

Cortland is increasing in popularity. It is a cross of McIntosh and Ben Davis by the New York Experiment Station. It ranks next to McIntosh in favor at the present time.

Macoun, a cross of McIntosh, by the New York Experiment Station, is a high quality variety. In fact, it is next to Delicious in quality, and will sell well. We may have to learn how to grow it so that it will come into bearing earlier.

Late Varieties

For southern Wisconsin, Red Delicious, Golden Delicious, Secor, N. W. Greening, Perkins. The time will probably come when we will plant Delicious only by top-working onto hardy stock such as Hibernal or McIntosh. It is not an entirely satisfactory variety, but growers will continue to plant some for its quality.

Secor, a cross of Jonathan and Salome by the Iowa Experiment Station, is better than either parent for our conditions. It is the best late keeping apple of good quality we have. It will keep well until spring.

N.W. Greening is still popular in spite of its faults, one of them being green color, another that it is only a cooking apple, and the tree is not too hardy. *Perkins* is becoming popular in southern Wisconsin, but still on trial.

For the Colder Sections

Central and northern Wisconsin should grow the hardy varieties, especially those introduced by the Minnesota Experiment Station, including Haralson, Prairie Spy, and Minjon. Bayfield is testing Lobo and Hume which hold promise. Haralson bears early and heavily, and is a money-maker as a cooking apple in the latitude of Minneapolis.

Prairie Spy has good quality as a hardy apple. If Bayfield growers find Lobo and Hume to be as promising as they are at Ottawa, Canada, these varieties may some day become very popular.

That is our list. There are a large number of other varieties still be ing grown. There are some new ones on test, but as far as we know. none are better than the above.

IF YOU CAN'T COVER THE TOP — TOP THE TREE

D^{R.} Burkholder of the Indiana Extension Service told the growers at the Central States Conference recently, that when he climbed up a tree in their Bedford orchard, which had just been sprayed, he found that it was a "lousy" job. So he quit, got his pruning tools, and cut out limbs which had not been covered properly. It took on the average 15 minutes per tree, but then they were able to spray thoroughly.

A. N. Pratt in January 15 Tennessee Horticulture.

"Goodness, weren't you nervous the first time you asked George for shopping money?"

Bride—"Not a bit—I was calm and collected."

Student: "I hear the Board of Trustees is trying to stop necking."

Second Student: "That so? First thing you know they'll be trying to make the students stop, too."

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Order Your Sprayer Parts NOW!

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1/2 in. High Pressure Hose-
with fittings36c per ft.
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ALL TYPES OF VALVES AND FITTINGS
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2 Cylinder Bean Pump, _____\$118.00

Send us your old Bean Spray Guns-We can fix them up for you.

-Row Crop Booms are Still Available-4 row, 12 nozzle (adjustable) _____\$55.00

4 row, 12 nozzle (Penna.) _____ 45.00

2 row, 6 nozzle (Penna.) _____ 25.00

-Write for further information and prices-

FOR SPRAY MATERIALS—Please refer to your Jan. or Feb. issue of Horticulture Magazine NOTE: The prices for the Liquid Lime Sulphur given in the Jan. and Feb. issues of Horticulture magazine

have been changed.

Liquid Lime Sulphur _____20 gal.____\$5.00 } 50 gal.____ 8.75 F.O.B. MADISON

Drums are included and are not returnable. The Diston 16 inch swivel saws are all sold out.

IF YOU HAVE NOT ALREADY RECEIVED A COPY OF OUR 1944 VICTORY GAR-DEN CATALOG, WRITE FOR YOURS TODAY!

F. R. GIFFORD COMPANY GARDEN AND ORCHARD SUPPLIES

2201 University Ave.

Madison 5, Wisconsin

Wisconsin Apple Institute Membership Growing

THE Wisconsin Apple Institute membership continues to grow. On February 23rd there were 55 members.

A letter from Mr. Arnold Nieman, Recording Secretary-Treasurer of the Institute states: "Your press release in regard to the organization and aims of the Wisconsin Apple Institute appeared in the Milwaukee papers on February 14, and seems to have been read with lots of interest, judging from questions and comments which I have run across, especially among apple buyers."

Plans Have Been Developed

The Wisconsin Department of Agriculture has discussed with us a number of plans for the promotion of Wisconsin apples. These will be announced as soon as we can determine the prospective crop for 1944. If the crop is large, nationally as well as in Wisconsin, several of these plans will be put into effect.

One of the proposals is to promote a state-wide apple recipe contest, the winning recipe to be announced over radio stations and through the press. Details for testing recipes will be worked out.

New Members

The following members have joined the Institute since the February issue came out:

N. C. Jacobs, Sawyer

Branc	h,	Stu	rgeo	on 1	Bay.	\$	8.	5	0
Proctor	O	rchai	rds,	Dr.	. T.	C.			

Proctor, Egg Harbor ____ 5.00 Honadel's Orchard, Elroy O.

- Honadel, Hales Corners __ 10.00 Goff Orchard, Sturgeon Bay,
- Moulton B. Goff _____ 35.00 Edw. Kassner, Casco, Rt. 1_ 10.00
- Henry Kreutzfeldt, Chippewa
- Falls, Rt. 5
 10.00

 Martin H. Wiepking, Cedarburg, Rt. 2
 6.50
- Shuga & Torbick, Bayfield, Rt. 1 _____ 10.00

P. G. Hohlweck, 4734 W.	
Brown Deer Rd., Milwau-	
kee	5.00
Oscar Conrad, West Allis,	
R. 4	8.00
Dawson Bros., Franksville	10.00
Ledgewood Orchards, John	
P. Zahn, Fond du Lac,	
R. 4	5.00
Friedlund Orchards, Inc., J.	
Arthur Friedlund, Ellison	
Bay	5.00
Cherry Hill Fruit Farm, S.	
F. Herdrich, Adell, R. 1	5.00
The Homestead Orchard	

Walter D. Corrigan, Cedarburg, R. 2 _____ 15.00

LIKES APPLE INSTITUTE PROGRAM

"I must tell you that I like the way the Wisconsin Apple Institute does things. The bulletins sent out from the National Apple Institute are highly interesting reading and it is a very desirable start and a good thing for the future of the apple industry." — Olaf Selfors, Bayfield.

VALUE OF BEES FOR POLLINATION

Research at the Ohio Experiment Station as well as other stations, shows that, when pollinating insects are excluded from clover blossoms, no more than one to three seeds develop per head. Under maximum honey bee pollination, alsike enclosed in cages yielded 120 to 155 seeds per head. This represents from 15 to 20 bushels per acre. In all the fields checked, where there were only natural pollinating insects present, the farmers cut such fields for hay, because of the poor seed-set. The magnitude of the work of pollinating an acre of alsike clover is apparent when we consider that there may be from 300,000,000 to 500,000,000 blossoming florets per acre. It was found that when fields of alsike were within a mile of a commercial yard of bees ranging from 45 to 200 colonies, the number of seeds per clover head were 41 to 90.

From Illinois Beekeepers' Association Bulletin.

APPLES NEED TO BE CROSS-POLLINATED IN WISCONSIN

THE idea that most varieties of apples are fruited only when fertilized with the pollen of other varieties is correct as far as Wisconsin is concerned, report R. H. Roberts and B. Esther Struckmeyer of the Horticulture Department of the University of Wisconsin.

This question came up because of recent reports that some of these apples are self-fruitful in certain other states.

In a study conducted at Madison, Gays Mills and Sturgeon Bay, only one variety among those tested—a southern one named Red Rome proved capable of setting fruit with its own pollen.

However, most of the apple varieties grown in Wisconsin made good pollenizers for one another. This held true for Dudley, Wealthy. McIntosh, Snow, Cortland, and Northwestern Greening.

Delicious and its red sport, Starking, appear to present special problems of fertilization. They set no fruit at all in these experiments, which involved removing the stamens and pollinating the pistils by hand. It is common experience in commercial orchards to find these varieties setting fruit rather unsatisfactorily.

BLENDED FRUIT JUICES

A N interesting article on the possibilities of blended fruit juices from apple-raspberry, apple-strawberry, apple-elderberry, and similar fruit juice blends, appearing in the "Fruit Products Journal" by Pederson and Beattie, shows that there are many fine products in store for Mr. and Mrs. Consumer when and if the details of variety selection, blending, processing, and distribution are thoroughly worked out.

By H. B. Tukey, from The Rural New-Yorker.

A man's mental age can be accurately measured by the degree of pain he feels as he comes in contact with a new idea.—The Ambassador.

SUPPLEMENT YOUR SPRAY PROGRAM WITH

Kolodust

ANY GROWERS who do not rely on dusting as their chief control measure prefer to use KOLODUST for those applications where rainy weather prevents spraying because KOLO-DUST can be applied in the rain with effective results. It is possible to effectively protect large acreages during critical periods much faster by dusting than by spraying.

Prolonged rain is most favorable to the development of fungus diseases. It is the type of weather when the most dusting is needed, but when the least is actually done. Why? Many growers think of spraying or dusting principally as a dry weather operation, because they're under the impression that ordinary fungicides will be washed away to ineffectiveness. That's true about most sprays and dusts but notKOLODUST, which was formulated by Niagara as a rain penetrating dust. KOLODUST is also an effective fungicide if applied to dry foliage ahead of infection. Therefore KOLODUST is the ideal all weather dust.

J. Henry Smith, Wisconsin Representative

NIAGARA SPRAYER & CHEMICAL COMPANY

Middleport, N. Y.

USED SPRAYERS

BEAN, MYER, "FRIEND," and HARDIE

Both Power Take Off and Engine Types All Reconditioned and Guaranteed to Be in Good Running Order

Priced from \$125.00

COMPLETE LINE OF NEW BEAN PUMPS

Priced from \$118.00

We also have a few used pumps.

COMPLETE LINE OF SPRAY GUNS, HOSE, and SPRAYER ACCESSORIES

ELGETOL

For Control of Apple Scab and Cherry and Apple Insects. Can be used in conjunction with Dormant Spray Oils.



STURGEON BAY, WISCONSIN

Cost of Producing Strawberries

PROF. J. D. Winter of the Division of Horticulture, University of Minnesota, has prepared a mimeographed c i r c u l a r entitled, "Cost of Strawberry Production in Hennepin County, Minnesota."

The data concerning labor requirements, supplies, and equipment were obtained from cost studies made in 1924 by the Division of Horticulture on the premises of eight commercial strawberry growers in Hennepin County.

The circular presents an itemized list of cost for labor, supplies, interest and taxes. We give here the summary of the cost of producing a crate of strawberries.

"The production cost is based on the fact that the average commercial strawberry planting produces two crops. On this basis a grower with one acre in production in 1942 must plant an additional one-half acre in the spring of 1942 and prepare ground in the fall of 1942 for another one-half acre in order to maintain one acre in production annually.

"Total production cost per acre, 1942, \$197.07; 1943, \$230.61.

"Man labor costs per hour: 40 cents in 1942; 50 cents in 1943. Horse labor costs per hour: 17.5 cents in 1942; 20 cents in 1943.

Cost of Strawberry Production Per Crate

		1943 (yield 85 crates)
Production cost per		
crate (from above		
data)	\$1.78	\$2.71
Payment to pickers,		
per crate	.75	1.00
Cost of crate		.39
Marketing expense		
through Coop.		
Ass'n	32	.55
Total cost por		

Total cost per

crate _____\$3.21 \$4.65 "The United States Census for the 1939 crop, a year of good production, shows an average yield in Hennepin County of 111 24-quart crates per acre. The average yield for 1942 is estimated at 111 crates per acre.

"The average yield was greatly reduced in 1943 due to an early freeze in the fall of 1942 and because of flood damage in the spring of 1943. The average *estimated* yield for 1943 is placed at 85 crates per acre."

HOW TO PREPARE THE LAND FOR STRAWBERRIES

TN very early spring the land should be plowed or (in small plots) spaded to a depth of 6 or 8 inches. Then with harrow or rake it should be leveled off to form a smooth friable planting bed.

Here are some things which are not necessary—but which are very helpful in getting bigger, better crops of berries:

(1) Plowing under in late summer a heavy growth of green crops such as peas, beans, clover, sowed corn, weeds, grass, etc. All these rot quickly and are much more valuable if plowed under while still green.

(2) Early fall sowing of rye or wheat to give a heavy sod to be plowed under in early spring. This will be easier to handle if disced up thoroughly before plowing.

(3) Applications of manure at the rate of 5 to 20 tons per acre. This is the best of all preparation for a fine crop of berries. Results are almost equally good if one of these applications has been made for the previous crop. Boultry manure is better when applied to the previous crop but is helpful to current crop if full of litter and only three to four tons per acre are used. Excessive applications of poultry manure may cause some burning, especially in dry seasons.

For small areas a good guide in

the application of horse, cow, sheep or hog manure is to figure 1 to 2 bushels for every 100 square feet.

From Allen's Book of Berries for 1944.

CATSKILL STRAWBERRY PRAISED BY PLANT GROWERS

A leading Eastern grower of strawberry plants has this to say about the Catskill: "Large berries and big yields have made Catskill boss of all mid-season varieties."

They have sold more plants of this variety than of any other in recent years.

Catskill is a native of New York and a perfect running mate for Premier, being just a little bit laterwhen Premier begins to taper off.

The berries are large, firm, and attractive. The plants are vigorous and productive. In New York State yields up to 15,000 quarts per acre had been reported.

We would like to hear from Wisconsin growers as to their success with Catskill.

NEED BETTER BLACKBERRY

There is still no really satisfactory bush blackberry variety available. Lack of productiveness, shipping quality, and edible quality characterize the varieties now available. Breeding work to produce better blackberry varieties is being carried on by the New Jersey Experiment Station, the New York Experiment Station, and the U. S. Department of Agriculture.

From January, 1944 Horticultural News, New Jersey.

LATHAM STILL POPULAR IN NEW JERSEY

Many red raspberry varieties have been tested at the New Jersey Experiment Station during recent years. So far none has successfully challenged the *Latham* as the most profitable commercial variety. *Sunrise* is doing well in a limited way as an extra early.

From January, 1944 Horticultural News, New Jersey.

BUY YOUR BERRY PLANTS EARLY

A LETTER from the W. F. Allen Company of Salisbury, Maryland, among the largest growers of strawberry plants in the nation, states that they will be completely sold out by the first of April.

This is an indication of the situation in regard to strawberry plants. If you are in the market, don't wait.

Best Varieties

Leading varieties today are Beaver, Premier and Senator Dunlap, with Dresden and Catskill on trial. The kind to grow depends largely upon the locality and soil conditions. The Beaver does well only on the lighter sand, particularly in the Sparta, Warrens, Alma Center, and Sturgeon Bay areas. Premier does better on the heavier and slightly more alkaline soil.

Senator Dunlap is still being grown by thousands of farmers as a garden patch strawberry, but is not grown for commercial sales to any extent.

Dresden and Catskill are showing up well, but here again there is a difference in the locality in which they do well. We know of no other way than to try them both on a small scale and see which one is best adapted to your conditions.

Drop These Varieties From Your List

A list of Wisconsin growers of raspberries and strawberries furnished us by the State Department of Entomology, State Capitol, lists the names of a number of growers who had their strawberries inspected. We find on this list, varieties which have been proven by many tests not to be suitable for Wisconsin conditions, or at least not as productive or profitable as varieties mentioned above.

Among the varieties of this class which should be dropped from Wisconsin farms are the following: Aroma, Aberdeen, Blakemore, Bellmar, Ettersberg and Warfield.

STRAWBERRY PLANTS

Dunlap, Beaver, Premier, Dorset, Fairfax, Catskill, Ambrosia, and Majestic. Gem Everbearing.

RASPBERRY PLANTS Latham. The Zimmerman Nursery, 973—2nd St., Baraboo, Wis.

STRAWBERRY PLANTS

State inspected, fresh dug, postpaid. Everbearing Gem; Mastadon; Premier; Dorset; Fairfax; Catskill; Beaver; Dunlap; Warfield.

RASPBERRY PLANTS Latham and Chief raspberry

plants.

H. R. Kinney, Baraboo, Wisconsin, R. 3.

BERRY PLANTS

New Sunrise raspberry, new Lowden Blackberry, Hardee Blackberry, Cumberland raspberry and other standard varieties. Red Lake Currant, new Gemzata everbearing strawberry. Red Ruby Rhubarb. Mary Washington asparagus. Ornamental shrubs and trees.

Hall Nursery, Elmwood, Wis.

A darky soldier's definition of morale—"The thing that keeps yo' feet goin' when yo' haid says it cain't be done."

The dude and the hill-billy were both rear rank privates and occupied adjoining bunks in barracks. One day the dude inspected his toilet kit, glanced at his neighbor and demanded sharply, "Did you take my tooth paste?"

'No, I didn't take no tooth paste," came the answer. "I don't need no tooth paste. My teeth ain't loose."

Everything you need in Fruit and Vegetable Boxes and Crates

65 years of dependable service

Sheboygan Fruit Box Co. Sheboygan, Wisconsin



Estimated Cost of Raspberry Production In Hennepin County, Minnesota

By J. D. Winter Division of Horticulture, University of Minnesota

Summary of Production Costs Per Acre

(exclusive of pickers, containers, marketing)

Development year (based on 1940 costs)\$	120.50
Second development year	
(babea on is in course) -	154.80
Third year (based on 1942	188.55
costs) Fourth year (based on	100.55
1943 costs) 2	217.25
Fifth year (based on 1943	217.25
costs) Sixth year (based on 1943	217.25
	217.25
Seventh year (based on	
	217.25
Eighth and final year (based on 1943 costs) _	177.75

Total cost per acre for eight years _____\$1,510.60

Cost of Raspberry Production Per Crate in 1943

NOTE: Additional data have been obtained since the original cost study was made in July, 1943, showing that some of the figures used at that time were too conservative. The estimated cost per 24-pint crate for 1943 is now shown to be \$3.97 instead of \$3.85 as given in the earlier computation.

*Production cost per crate

(\$1,510.60 for 675 crates__\$2.24 Payment to pickers per crate 1.00 Cost of crate _______.33 Marketing expense through

Cooperative Association _ .40

Total cost per crate____\$3.97

*Based on an average production of 110 24-pint crates per acre for 6 years and 15 crates the second year from a planting established in 1940. For comparison, the United States Census for the 1939 crop, a year of good production, shows an average yield in Hennepin County of 110 24-pint crates per acre.

Man labor costs per hour: 30

cents in 1940-41; 40 cents in 1942; 50 cents from 1943.

Tractor costs per hour: 45 cents in 1940-41; 50 cents from 1942.

Team costs per hour: 30 cents in 1940-41; 40 cents in 1942; 50 cents from 1943.

Sprayer costs per hour: 25 cents from 1940.

Condensed from Circular by Minnesota College of Agriculture.

RHUBARB VARIETIES TEST-ED AT MORDEN EXPERI-MENT STATION

A REPORT by W. R. Leslie, Superintendent of the Morden, Manitoba Experiment Station on rhubarb varieties is of considerable interest. The most complete test of rhubarb varieties that we know of is being carried on at Morden.

We give Superintendent Leslie's results in condensed form as follows:

Valentine is again the most fully satisfactory commercial variety. The plants are vigorous, healthy and productive. An average stalk measured 23 inches with 111/4 by 7/8 inches in cross section. Sauce was deep red, of full flavor with a suggestion of tartness.

Coulter improves in comparative rating as the season advances. Stalk measured 23 by 15/16 by % inches. Considerable seed stalks were in evidence. Sauce was rich red, somewhat soft and of full pleasing flavor.

Earl Sunrise rated lower than usual. Apparently it is at its best earlier in the season. A few seed stalks formed. An average stalk was 20 inches by 1½ by 7%. Sauce was clear red, pieces held their shape, flavor rather sour.

Canada Red plants were only moderately productive.

Macdonald is a vigorous, heavy cropper and rates higher in late season than in May. Sauce was pinky orange, shapely, tender, pleasant acid.

Ruby Select is more vigorous than Ruby. Sauce was a lively red with some lighter zoning, sweetish tart in flavor.

Ruby produced many long thin stalks and considerable seed. Sauce was rose red, shapely, tart but pleasing.

In descending order, color rating or sauce was Early Sunrise, Coulter, Ruby Select, Valentine, Canada Red, Ruby, Macdonald and Advance.

Condensed from September North and South Dakota Horticulture.

TIPS TO PREVENT WASTE WITH APPLES, POTATOES IN TIMES like these, it is especially important that all possible precautions be taken to avoid waste in handling fruits and vegetables. say state department of agriculture officials.

Here are a few suggestions for everybody from the producer to the consumer:

Don't mash and bruise apples by pinching them with the fingers to see if they are ripe.

Don't bruise apples or potatoes by dropping them into the bag or box, or by dropping the container.

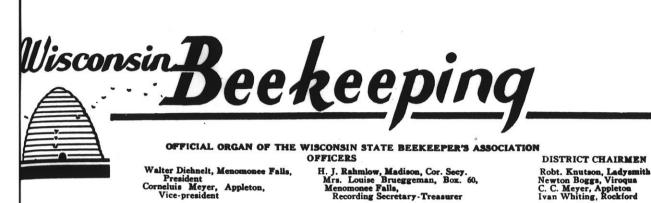
Don't break the skin on mature apples. Decay molds enter through finger nail cuts and stem punctures.

Don't bang or shove apples against each other because it bruises them.

If possible, store potatoes in baskets or boxes in a cool place away from your heating unit.

If a cool place is not available. storage of potatoes can be improved by covering the tops of the boxes or baskets with dampened newspapers.. This treatment retards evaporation from the potatoes and reduces the temperature.

War is no laughing business, yet it is a business we shall all do better if once in a while we take time out to laugh.—Lincoln.



Watch for Starvation This Month

MARCH and April are critical months for the beekeeper. There is considerable danger of colonies starving unless provided with plenty of stores.

Remember the exceedingly warm weather we had in January? It greatly increased colony activity which means increased consumption of stores. It did not necessarily mean increased brood rearing at that time because brood rearing is dependent largely upon the amount of pollen available.

Dr. C. L. Farrar, Madison, examined a number of colonies the latter part of January and found each one had from one to five irames with brood. He encourages brood rearing at this time because he says if young bees are added to the colony during February and March, such a colony will build up much better than if brood is not reared and all the bees are old bees when spring comes. *Colonies of all old bees dwindle rapidly in April* and May.

Brood rearing may have been increased during the warm weather because the bees expanded in the brood nest and were able to get pollen which might otherwise not have been available had they been in a tight cluster. At any rate, many colonies will be short of stores in Wisconsin this spring, according to observation.

Even if colonies are packed heavily they should be opened now and examined to see if they are low in stores and fed at once if they are.

It won't hurt the packed colonies to open them up, and if you don't get the packing all back on, it will probably be an advantage because experiments indicate that *unpacked* colonics have more brood in proportion to the total number of bees than have heavily packed colonics during the spring months. This is no doubt due to the days of warm sunshine we have from now on that will warm up the unpacked colonies and increase the activity of the bees.

We have found that feeding by the sprinkling can method is the easiest at this time of year. Mr. Walter Diehnelt, our state president, reports good results by forcing warm sugar syrup into the cells by spraying under pressure with the use of a honey pump. Combs are filled with sugar syrup, placed into hives, and taken to the yard in the truck with dripping pans underneath to catch the excess syrup. Full combs of syrup are simply put in place of an empty comb, close to the brood nest.

Another simple way is to use an ordinary garden sprinkling can. Enlarge the holes in the spout with a shingle nail, and fill it with warm sugar syrup made of two parts of sugar to one of water. Place empty combs from the hives into a wash boiler. If the sugar syrup is warm enough it will spray well through the enlarged holes and fill the cells readily. Three or four frames should be filled so that the work will not have to be repeated too often. Place the sugar syrup directly next to the brood so the bees can get it even during cold weather.

Bees are too valuable to let them starve from now on.

THE AGE OF BEES IN THE WINTER CLUSTER

EXPERIMENTS carried on by Dr. C. L. Farrar of the Central States Bee Laboratory on the age of bees in the winter cluster and whether or not the oldest bees die first, are very interesting.

During the summer of 1932 a majority of the bees that emerge daily in several colonies were marked (approximately 35 colors or color combinations were used). The bees which died during early winter consisted of bees of all ages in about the same proportion as the number they had marked.

Two colonies were killed while tightly clustered and marked bees of all ages were found distributed throughout the cluster. In other words, a bee that emerged October 1st was just as likely to be lost January 1st as was one emerging September 1st. Dr. Farrar concludes that the bees hatched during the six weeks just preceding the end of brood rearing., usually early October, do not wear out as do those bees that rear brood heavily and bring in honey during the earlier months of the summer. He considers that all late emerging bees in the fall cluster are really young bees, even though they vary in age as much as six weeks.

Loss Made Up By Winter Brood Rearing

It was found that about 15 per cent or less of the winter cluster died during the winter months. This loss is normal, but does not materially reduce the population of a full strength colony. A normal colony has about 30,000 young bees (8-10 lbs.). If such a colony has plenty of honey and pollen available, it will raise enough young bees during February and March to take care of the loss of dead bees, and emerge in the spring as a good colony.

The real importance of this experiment, showing that bees hatched during the last six weeks of brood rearing may be considered as young bees in the winter cluster, is that we should try to stimulate maximum brood rearing during the month of September in order to have a strong winter cluster. Such a cluster provided with plenty of food is the kind that will survive. A few ill advised attempts have been made to limit late brood rearing and decrease the size of the winter cluster. Such a program can only result in disaster.

BEES WINTERING WELL

This has been a good winter for bees. I have been feeding one colony thick sugar syrup all winter and they have taken down five 10-lb. pails to date (February 17) and the scale is about the same as last fall. In January they had two frames of good brood in all stages. This colony has no packing of any kind.

S. P. Elliott, Menomonie.

FROM SHAWANO COUNTY

Bees seem to have had an ideal winter for outside wintering so far this year. Those wrapped in paper with auger hole entrance had a good cleansing flight. I examined three colonies and found they had brood in from 1 to 3 frames, and all in good condition.

G. W. Jeske, Cecil, Secretary Shawano County Beekeepers Association.

MARKING HIVES FOR RECORDS

Have you ever tried blue carpenter's chalk to mark hives for keeping records in the bee yard? If not, try it.

In the spring of the year we

often wish to mark hives in such a way that we can quickly see any record of their condition, whether they have a good or poor queen, whether they are low in feed, weak or strong, and other like information. By carrying a piece of blue carpenter's chalk we can make marks on the backs of the hives which will not be permanent and will wash off within a period of about two or three months.

REPORT ON BEEKEEPING CONDITIONS

IN the package bee and queen producing area labor shortage is expected to be acute this season. Many package bee and queen producers have been booked to capacity for some time, and northern beekeepers report that it is becoming increasingly difficult to place orders for spring delivery of either package bees or queens. This fact may be a determining factor in plans being made for expansion of beekeeping operations next season. Present indications are that for the country as a whole there will be very little increase in the number of colonies, although some individual beekeepers indicate that they plan some increase provided bees and labor can be obtained.

Supplies of domestic honey are becoming increasingly scarce. Many sections indicate some decrease in demand for honey, both from large buyers and consumers. More cane sirups have appeared on the market recently and have possibly filled some of the recent heavy demand for honey, particularly in view of the lower prices for the sirup. There has been no change in the prices on either honey or beeswax.

From Honey Report by War Food Administration.

PRICE OF SOYBEAN FLOUR FOR FEEDING BEES

Soybean flour made by the expeller process may be purchased from the Allied Mills, Inc., Board of Trade Building, Chicago 4, Ill. The price is \$4.75 per hundred pounds, f.o.b. Peoria, Ill. If less than 100 pounds is ordered, the price is 5 cents per pound.

The company states that they are wholesalers, and that they are selling to beekeepers only because of their interest in this new work. All orders, however, must be accompanied with cash or check, as they cannot open accounts.

SUGAR FOR BEEKEEPERS

A beekeeper is entitled to a regular annual quota of ten pounds of sugar per colony for feeding bees. This is the OPA regulation.

In case of an emergency, and if really necessary, an additional fifteen pounds per colony can be obtained if the need can be proven, and it is certified to by the local county agent.

Obtain the necessary application blank from your local County Ration Board to be filled out and signed. Do it in plenty of time so that if any colonies are found on the verge of starvation they may be saved without delay.

ANISE-HYSSOP SEED SUPPLY EXHAUSTED

A LETTER from Mr. Frank Pellett in charge of the plant test gardens and one of the editors of the American Bee Journal writes that hundreds of orders have been coming in for seed of Anise-Hyssop, and that the supply of seed is all gone. It was available from Melvin Pellett of Atlantic, Iowa. and also from Rex D. Pearce. Moorestown, New Jersey. However, we will now have to wait until next year before any more seed will be available.

To conserve seed Mr. Pellett advised sowing the seed in flats in the greenhouse and setting the plants out in the garden in the spring. It will grow if sown in early spring while the ground is still frozen, but that is very wasteful of seed.

"I don't need none!" said the lady of the house before the agent had opened his mouth.

"How do you know? I might be selling grammars."

Beekeepers Meeting

Fox River Valley District

CITY HALL, APPLETON, THURSDAY, APRIL 6

---- PROGRAM ----

10:00 a.m. Announcements by President Cornelius Meyer.

10:30 a.m. Identification of bee diseases and discussion of beekeeping conditions. Nosema. John F. Long, Madison.

11:15 a.m. Plans for disease eradication in 1944. Results of the National Beekeepers Conference. James Gwin. Madison.

12:00 m. Payment of dues during luncheon hour.

1:30 p.m. Business meeting.

2:00 p.m. Government regulations concerning beekeepers. Walter Diehnelt, president Wisconsin Beekeepers Association, Menomonee Falls.

2:30 p.m. Spring Summer and Fall Management. Beekeeping question round table. H. J. Rahmlow, Madison.

BEEKEEPERS MEETING AT JUNEAU COURT HOUSE, TUESDAY, APR. 4, 10:30 A. M.

THE Dodge County Beekeepers Association has arranged for a meeting of beekeepers to be held at the Court House in Juneau, Circuit Court Room, on Tuesday, Apr. 4th, beginning at 10:30 a. m.

Beekeepers in surrounding counties are especially invited to attend this meeting.

On the program will be Mr. James Gwin, inspector of apiaries; Mr. John Long, Deputy Inspector; Mr. Walter Diehnelt, president of the State Association, Menomonee Falls; and H. J. Rahmlow, secretary of the State Association.

Many important topics will be covered such as governmental regulations affecting beekeepers, disease control, spring management, and summer care of bees.

Mr. Rahmlow will also give a short talk on the care of the orchard and small fruits, answering questions on the subject.

All beekeepers are invited to attend.

Is That Clear?

A mother who had a daughter employed in defense work in Washington, wrote to ask her just what she was doing. The reply follows:

"I work in the data-analysis group of the aptitude-test sub-unit of the worker analysis section of the division of occupational analysis and manning tables of the bureau of labor utilication of the War Manpower Commission."

BEES WANTED

Wanted to buy or work on shares, full colonies of bees with equipment. Write Carlton Wieckert, R. 2, Appleton, Wis.

KEEP MORE BEES And Keep Posted by Reading the BEEKEEPERS MAGAZINE

Published every month by Beekeepers

Special Introductory Offer to Wisconsin Horticulture Readers—18 Months for \$1

BEEKEEPERS MAGAZINE

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HONEY WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company, Oconomowoc, Wisconsin.

HONEY CANS

We can give you immediate delivery on 60# cans.

Order your glass supply for the new crop now, as it takes from 3 to 6 months to receive same from the factory. We new have a good supply of 5#, 2#, 1# and ½# on hand, and can make immediate shipment.

To insure prompt service, order your Association labels now for your new crop of honey.

Write for Complete Price List.

Order Through Your State Beekeepers Association

HONEY ACRES Menomonee Falls, Wis.

BUY LOTZ SECTIONS

Raise Comb Honey

Container shortage and price ceiling worries will not be yours.

Comb Honey furnishes its own container.

Comb Honey has no ceiling price.

Lotz sections are morale builders to comb honey raisers. They save valuable time because they do not break when being folded. Less breakage means lower cost. The smooth white section adds eye appeal.

AS COMPLETE A STOCK OF BEE SUPPLIES AS WARTIME RESTRICTIONS PERMIT.

AUGUST LOTZ COMPANY BOYD, WISCONSIN

1944 catalog published soon.



THE WEATHER It Was a Warm January, But Not the Warmest We Have Had

"Have you ever seen a winter like this?" was the frequent comment the first part of February. "We are having our spring this winter," some folks said.

Yes, it was warm in January, especially the latter part of the month. Many people wondered if it meant that we would have very cold weather later on—whether a warm winter would mean a very cold spring.

Warmest in 1880

After looking up Madison weather records back to 1875, we find that in 1880, January was warmer than in 1944. The average temperature for January this year was 27° F. The highest temperature for the month was 56°, and the lowest was -2°

In 1880, however, the highest was 58°, and the lowest 6° with an average of 34.5° .

There are two other years in which average temperatures were as high as January, 1944. They were in 1933, when it was 31° F., and in 1934 when it was also 27° F.

Does a warm winter mean a cold spring? If we go back to 1880 we find that it does not. For example, the year before, in 1879 the highest in January was 46° F., and the lowest -22° F. February had a low of -12° ; the low in March was 5°; in April 12°; and in May 35° F.

No Late Frosts After Warm Winter

The following year, in 1880, the low in January was 6°; in February 0°; in March 7°; in April 23°; and in May 44° F. In other words, 1880 was warmer every month from January to May, than was 1879.

At any rate, there have only been two winters since 1875 that have



had warmer Januarys, and only one that has equalled it.

Where are the forecasters who were predicting last fall that we would have a very cold winter because the fur on wild animals was very heavy, and the buds of trees were heavily covered?

We think the only sure thing about the weather is that it is unpredictable.

SHRUBS OF MICHIGAN

A valuable book for the scientific horticulturist, nurserymen and botanists is the new book "Shrubs of Michigan" by Cecil Billington. It is published by the Cranbrook Institute of Science, Bloomfield Hills, Michigan. The price is \$2.50, postpaid.

The book contains 250 pages, 161 line drawings of shrubs; 161 distribution maps; state map; and 10 pages of pictorial glossary. It contains a botanical description of all the shrubs of Michigan.

A woman in Wisconsin wants to divorce her husband, a retired naval officer, "because he insists we sleep in a hammock." She has slipped to the floor 16 times during their 23 years of marriage, she told the court, "and I'm getting too old." —Fred Sparks in *Parade*.

NURSERYMEN HAVE SUCCESSFUL CONVENTION

THE Wisconsin Nurserymen's Association met at Milwaukee on February 2-3, with an unusually large attendance.

Officers elected for the coming year are Mr. H. W. Riggert, Fort Atkinson, president; Mr. Edward Eschrich, Wayside Nursery, Milwaukee, vice-president; and Mr. Thos. S. Pinney, Evergreen Nursery, Sturgeon Bay, secretary-treasurer.

Directors are Mr. Walter Remond, Milwaukee, and Mr. E. H. Niles, Hartland. Directors whose term did not expire include J. G. Uecke, Oshkosh; James Livingstone, Milwaukee; T. A. Singer, Milwaukee; and R. C. Pippert, Cleveland.

Ten new memberships were received during the convention which increases the total to 59 members.

Speakers from Madison on the program included E. L. Chambers, State Entomologist: Dr. S. A. Wilde, Soils Department; Prof. G. Wm. Longenecker, Department of Horticulture; and H. J. Rahmlow, secretary of the Horticultural Society. Others were: C. R. Dineen, President of Milwaukee County Park Board; Jens Jensen, landscape architect of Ellison Bay who was the guest speaker at the banquet; S. S. Telfer, Ellison Bay, fruit grower; K. D. Andrews of the Andrews Nursery, Faribault, Minnesota; and Wm. J. Smart of the D. Hill Nursery Co., Dundee, Illinois.

Starting from a small nucleus, the Wisconsin Nurserymen's Association has grown into a large and important organization, and is giving valuable service to the nurserymen.

SOME FACTS ON FOOD WASTING

TN the language of the street urchin "corksy" means "save me the core." There's food for thought in the almost classic response one urchin made to this bid, "There ain't gonna be no core." The eyes of the World's urchins are on the "core" of food which the average American throws away. Competent observers tell us that nearly a billion people on this globe of ours will suffer from hunger this winter. Millions of them will starve to death and other millions will be permanently injured by diseases caused by malnutrition.

In a recent leaflet on food waste, the OWI gave some interesting jacts. The average American buys + pounds of food a day and analysis of the garbage collections of 247 cities showed that he throws away 1/4 pound a day-about 15% of the edible food he purchases. Green and other vegetables make up 50% of garbage waste, fruits 29% and baked goods 14%. The American Bakers' Association figures that we buy two pounds of bread per person per week. If each home wastes only one slice per week, this means 34 million slices or 2 million loaves!

Fruit Loss

Fruit growers will be interested in some of the figures on fruit waste revealed in this study. It showed the avoidable loss of edible fruit on farms, on the basis of total production, amounts to 5% for apples, 3.7% for plums and cantaloupes, and 3.5% for cherries. From the claim records of Class I railroads, it was found that loss in transit amounted to 2% of all food moved, and the loss on fresh foods is probably much higher. A study of the New York Wholesale Produce Market in 1940 showed that there was a loss of 7% of fresh fruits and vegetables in the wholesale phase of marketing. In retail stores there is an over-all food loss of 3%, and the loss in fresh fruits is much higher. Using these conservative figures - 5% on farms,

2% in transit, 7% at wholesale, 3% at retail and 15% in the homes —we see that our food waste adds up to 32%!

From November 15, 1943 Tennessee Horticulture.

OUR COVER PICTURE

The Flicker

THE Flicker, a member of the woodpecker family, is a hard working and useful citizen. He feeds largely upon ants, often eating thousands at a meal. His tongue is the longest, in proportion to his size of any bird, being over three inches in length. He thrusts his head into the ant hill, extends his barbed and sticky tongue, and withdraws it covered with ants. Like the doves, he feeds his young by regurgitation.

In flight, his conspicuous white rump is one sure means of identification. The nest is usually excavated in the wood of some dead tree, although, if nesting boxes are provided, they are often occupied. From five to nine white eggs are laid.

By: Mrs. R. A. Walker

Wouldn't Do

"Why are you looking so fedup?"

"I bought a book called 'How to Make Love,' and now I don't know what to do."

"Why ?"

"Well, it says you take the girl's hand, look into her eyes, and say: 'I love you, Beatrice'."

"What's wrong with that?"

"My girl's name is Lizzie."

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The Northwestern Mail Order House, Green Bay, Dept. H, Wis.

NEW GARDEN BOOK FOR NORTHERN CLIMATES

A NEW book on gardening, "Live At Home and Like It" by Franc P. Daniels is just off the press. It is published by the Minnetonka Publishing Co., Long Lake, Minnesota. (Price \$1.00.)

This book is written for northern conditions. Not often do we find a good, informative garden book that has accurate information for gardeners in northern states—in areas where only hardy plants will grow.

Here are a few of the chapters in the book: Soils and Fertilizers; Planting Nursery Stock; Pruning; Propagation; Pest Control; Landscape Arrangement; The Best Hardy Shrubs; Pruning Shrubs; Rose Culture; Vines; Shade Trees; Evergreens; Perennials; Annuals; Lawn Management, and Fruit Growing. There is also a portion devoted to vegetable culture.

We have checked much of the information and have found it reliable.

75th ANNIVERSARY NUMBER HAS VALUE TO CLUB

THAS VALUE TO CLUB

A LETTER from the Antigo Garden Club commenting on the 75-year history of the Wisconsin Horticultural Society states as follows:

The Seventy-Fifth Anniversary number of the 'Wisconsin Horticulture' is a very informative and interesting copy. We, who are latecomers in the organization tried to learn what was being done in the present and to visualize the plans for the future, but we lacked the background for complete understanding. Your historical issue gave us this necessary background. It was like living among the dense leaves of a tree top without knowing what held us up so high and now we see the tree trunk. Thank you."

Hilda Lukas, Antigo.

We still have a supply of the History at 10 cents per copy.



OFFICERS Harold Janes, Whitewater, President David Fuerner, Milwaukee, Vice-President H. J. Rahmlow, Madison, Cor. Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Ilinois Ave., Sheboygan

A MESSAGE FROM THE PRESIDENT

DURING the past two years, our Society did not realize any income from our State Show because the net proceeds were donated to War Relief. Our only income has been membership dues and the annual bulb auction. This year too the Society assumed the expenses of our delegate to the Pittsburgh conference and contributed towards the compilation of a national standard classification.

Our annual bulb auction will be held in connection with our spring meeting in **Milwaukee**, **Sunday, March 26**, at the Public Museum. I especially wish to ask the cooperation of all members to contribute what bulbs they can in order that we may make this a big success. Contributors should send a list of their donations to our secretary, Mr. Otto Kapschitzke, and either mail offerings to him prior to the meeting, or bring them to Milwaukee.

Harold E. Janes.

PRE-NOTES ON THE PITTSBURGH CONFERENCE

THE delegates of the New England Gladiolus Society, Inc., and its affiliated societies, together with commercial growers, introducers, hybridists and cataloguers, met at Pittsburg February 12th and 13th, 1944, at the Pittsburger Hotel, for a consideration of unified classification and other subjects.

The fine spirit of co-operation shown by the delegates allowed of DIRECTORS Frank Blood, Stevens Point Dr. F. Graff, Freeport, III. Fred Hagedorn, Sheboygan J. R. Hopkins, Deerfield, III. Walter C. Krueger, Oconomowoc

the successful conclusion of the purpose, a classification system acceptable to all societies, and one flexible enough to allow for all sizes of shows and one usable for 1944 shows.

Specific details are not given at this time because of the unavailability of the secretarial notes to every delegate and the importance of exactness of verbology. Wisconsin members who favored a show schedule based on size of floret will be pleased with the results. This material will appear in coming editions of Horticulture.

It is estimated that there were some sixty persons present. It was the opinion of most persons present that the Pittsburg conferences brought out more potential good to the interest of the Gladiolus than any other meeting.

The program presented was modified but slightly as to time of speaker appearances.

Walter C. Krueger

TIMELY SUGGESTIONS

Noel F. Thompson

LOOK over your glad corms to see if they are all right. Keep them dry and cool (but not frozen).

If you use naphthalene flakes for thrips, remove what is left now. This treatment is good while the corms are dormant, but should not be continued into the spring. Screen the flakes out with a coarse screen.

Did you sort out the badly diseased corms when you cleaned them? If not, now is a good time to do it. Burn the discards.

Clean up and burn any refuse

E. A. Lins, Spring Green Walter F. Miller, Sun Prairie Dr. Geo. Scheer, Sheboygan Leland Shaw, Milton Noel Thompson, Madison

from cleaning or sorting your corms. Such trash may harbor thrips.

Stock up with Bichloride of Mercury or Lysol or whatever you use as a thrips treatment before planting. Don't buy too much but get enough to treat all the corms you have and use it just before you plant. This includes corms you bought which may or may not be infested with thrips. It is easier to control thrips before planting than after.

Check over your sprayer and put it in condition for another season. You will need it if you have neighbors who grow glads, and you probably will anyway.

Prepare your labels or stakes so you can keep the different varieties distinct when planted.

WISCONSIN GLADIOLUS SOCIETY MEETING

MILWAUKEE, SUNDAY, MARCH 26

PUBLIC MUSEUM, 1 P. M.

The annual spring meeting of the Wisconsin Gladiolus Society will be held at the Milwaukee Public Museum on Sunday, Mar. 26th, at 1 p. m.

In addition to an excellent program there will be a bulb auction well worth attending. All interested gladiolus growers are invited.

Mother to Daughter: "I don't want you to marry. I've seen the folly of it."

Daughter: "But, Mother, I want to see the folly of it, too!"

STATE GLADIOLUS SHOW TO BE HELD AT STATE FAIR August 19-21, 1944

The Board of Directors of the Wisconsin Gladiolus Society voted in February to accept the invitation and plan of the State Fair management to hold the 1944 Gladiolus Show at the State Fair on August 19-21.

A special plan was presented to the Board by the Fair management. Some of the terms include the following:

All members of the Society in good standing will be admitted to the Fair for the three-day period free. This will include automobile.

Only one entry fee will be charged, to be paid by the Society. No entry fee will be charged exhibitors.

The State Fair will pay a premium of \$200 to the Society in lieu of all individual premiums and ribbons. The Society will provide premiums as in the past.

The Fair will furnish all facilities and property for staging the exhibit in the Fruits and Flowers Building. They will also furnish help to stage the show.

The Society will prepare its own premium list, arrange and manage the staging of the exhibits, furnish judges and clerks, furnish and distribute the ribbons, and see that the exhibits are in place and the show is ready by 8 a. m. on the opening day, August 19.

Commercial exhibits where orders are taken shall not be included as a part of this exhibit. Commercial exhibits of gladiolus arranged for effect may be included, providing they are not used as sales booths. A small sign, not exceeding 1'x2' with the name of the exhibitor may be used.

A special arrangement will be made to permit all members of the Society to enter the enclosure so as to examine the flowers and have the convention feature which is so appreciated at our State Shows.

The regular State Fair Gladiolus Show as held in past years, will be continued the second and third threeday periods of the Fair, with cash premiums.

GLAD CHOICES OF 1943 By Donald Palmer, Bridgton, Maine

FOLLOWING is a brief account of our experiences this past season. For exhibition bouquets in homes and stores and for the Honor Roll in our town, the demand has been for the bright, striking colors of huges spikes with many open blooms, such as Picardy, Jasmine, Zauberflote, King Lear, Debonair, Wurtembergia, Milford, and Rewi Fallu. For funeral work the soft clear colors are preferred like Duna, Wasaga, Reverie, Margaret Fulton and all white and lavenders. For wedding bouquets we have found Mammoth White, Maid of Orleans, Margaret Beaton, and Camellia very popular.

From 1944 Year book of Maine Gladiolus Society.

MADISON GLADIOLUS SOCIETY HAS MEETING

The Madison Gladiolus Society held their annual meeting and election of officers in February. Mr. R. B. Russell showed some beautiful slides of spikes and gladiolus arrangements. The latter were commented upon by Mrs. F. Middleton and Mrs. H. S. Bostock of Madison, who gave suggestions for arrangements of gladiolus.

The officers elected for the coming year were as follows: President, Theodore Woods, 1238 E. Dayton Street, Madison; Secretary-Treasurer, James H. Torrie, 1413 Mound Street, Madison.

SHEBOYGAN GLADIOLUS

CHAPTER HAS SUCCESSFUL MEETING

THE Sheboygan Gladiolus Society, a Chapter of the Wisconsin Gladiolus Society, held a meeting in February with 33 members present.

An auction sale of bulbs was held which netted more than \$30. Four new members were enrolled, according to Dr. Geo. Scheer, president of the Chapter.

The next meeting of the Chapter will be held Wednesday evening, April 5, when H. J. Rahmlow, Madison, will be the speaker.

Officers of the Chapter for 1944 are: President, Dr. Geo. H. Scheer; Vice - President, Mr. Holtzmann; Secretary-Treasurer, Alfred Hinz. Directors: Fred Hagedorn, Walter Axel, Bernhard Nickels.

THE OLIVE TREES OF AFRICA

D^{EAR} Editor—Here in Tunisia, as in the greater part of North Africa, olive orchards and vineyards abound-an age-old horticultural cultivation. The native takes these things as a matter-of-course, for his life has been pre-destined to carry and pass on his timeless art to future generations. However, there is interest in an olive orchard and I would like to pass on to you some of my observations. I was prepared for a blooming period of delightful fragrance, but was disappointed. The flowers had very little odor but come out in profuse numbers. They are very small.

As for the wood, it is pale yellow and possesses a very stringy character. The limbs are very brittle in the more mature trees. The old trees bear little and no attempt is made to keep them in production, as the heartwood rots away, leaving very little sapwood. Practically all of these mature trees have enormous cavities in the trunk.

Young olive orchards have a certain pleasantness about them that brings recollections of prim New England orchards.

In a perfect rectangular planting, broken only by the flowing contours of the terrain, the trees are set about 20 to 30 feet apart. And the orchards cover acres of lowrolling hills under a mulch of warmbrown cereal grains — wheat and barley.

The fruit ripens in August, and at that time it is picked, packed, and shipped for pickling and processing.

Just to see olive trees impudently surviving torrid heats and arid conditions peculiar to North Africa is to enough appreciate their economic and horticultural dominance in the plant realm.

By Sgt. Ernest J. Zevitas, Tunisia, in September 15, 1943 Horticulture.

Washington, D. C., Negro taxidriver: "Ah've nevah seen so many uniforms as there are heah now, and so few soldiers."

Common Mistakes in Victory Gardens

R ECALLING mistakes isn't very profitable unless we are going to make every reasonable effort to correct them when we garden again or by recounting them some one else avoids making the same errors. Many of the mistakes made by Victory Gardeners, both rural and urban, may be rather easily avoided by spending a little more thought and effort on the project.

Suitable Tract Basis of Success

Many gardeners are doomed to failure or only mediocre success before they start gardening because the character of their garden tract precludes having a good garden. Unfavorable soil, presence of many tree roots and excessive shade are things which most often render garden tracts unsatisfactory. Trying to garden on such a tract is the most disastrous mistake in gardening. Last year many tracts used for community gardens were unsuited to gardening. The result, lots of wasted effort, and a host of discouraged, and often disgruntled gardeners.

Those having charge of selecting areas for community gardening should avoid selecting such tracts unless it is practical to put them in reasonably good condition. The garden project and the gardener will both be better off if only those tracts are used on which there is a good chance of getting good results, even though securing such tracts may involve greater expense to the individual gardener. One might a great deal better spend his efforts in some other way than to attempt a garden on an impossible garden tract.

If you are not sure concerning the suitability of the tract you plan on gardening, consult your county agricultural agent, vocational agriculture teacher, or a successful gardener or farmer in your section. James G. Moore



What is a Garden Without a Plan?

Most gardeners spend much time in studying seed catalogs which could be spent more profitably in planning the garden. Making garden plans isn't popular because to do it well requires knowledge and much thinking. A garden is seldom a really good garden unless it was well planned before "making the garden" even started. There are so many garden mistakes which result from little or poor planning. One should remember that good gardening consists in more than growing good vegetables.

Common garden errors due to faulty garden planning are numerous. Perhaps we should consider some of the most serious ones.

Waste of Produce

No one can plan so as to hit the nail right on the head all the time when it comes to desirable quantity. But greatly excessive amounts are usually due to faulty planning. Here are a few examples:

Planting too much of a given vegetable. When a home gardener plants a 20 foot row of parsley, he's quite likely to have too much parsley. Chard is another vegetable likely to be overplanted, unless yours is a farm garden, then any excess is excellent chicken feed.

Making too large a planting at a given time; radish and lettuce immediately come to mind at this suggestion. Small, frequent plantings should be the rule. Corn is also likely to come in this class. As a rule, there should be only enough of a vegetable planted so that it can be used during the interval in which it possesses good quality. Unless this is done, either we eat poor quality vegetables or there is considerable waste.

Waste of Land

For the urban gardener this is a very important consideration. With limited garden area, we need to plan so that it will produce the maximum amount. To do this requires very careful planning. First the elimination of crops requiring relative great space. Planning as far as possible to make the same area produce two or more crops by (1) following early crops with later ones, (2) growing vegetables requiring little space and short season ones between those requiring more space and longer time, for example, spinach between rows of corn; (3) with plants grown individually or in hills, growing intermediate plants or crops as lettuce between broccoli or early radishes where tomatoes are to be set, removing the interfering radish plants.

Another method of reducing waste of land is to be careful about the distances between rows. A precaution here is in place. Be sure to leave enough space for proper development of the vegetable. Comparative ease of tillage and on light soils the probable soil moisture supply should not be overlooked.

Waste of Labor

The farm gardener seldom needs to worry about limited space, but be always worries about the time spent in the garden. Proper planning, accompanied with proper garden tillage equipment will materially reduce the time ordinarily spent in keeping down the weeds in the farm garden as compared with the way it is usually planted and tilled. Many urban gardeners also waste labor because they fail to use intercropping.

Fat Summer-Lean Winter

Failure to plan results in excess in summer and an inadequate supply for winter and the spring months. Although there is adequate land available to grow enough vegetables for winter use, data collected from farm women indicate that probably not one-fourth of our farm families have an adequate winter vegetable supply. Some of this deficiency is doubtless due to inadequate storage facilities, but all too often it is because insufficient amounts of winter vegetables are grown. A majority of urban gardeners do not have space to grow a 12-months' supply of vegetables and many of them would have no suitable place to store them if they did. However, many urban gardeners having individual homes could improve their situation by better planning both for production and storage.

A Well-Rounded Diet

Variety may be the spice of life, but in the garden it is also one way of meeting the vitamins and mineral problems of nutrition. The war gardener of World War I whose garden consisted entirely of navy beans and potatoes easily solved the garden planning program, but he left something to be desired so far as adequate nutrition was concerned. He doubtless would have strenuously objected if the only vegetables which his wife served him had been beans and potatoes. Have variety in the garden; it makes gardening more interesting, it insures better nutrition, it makes eating more pleasurable and from the housewife's standpoint it simplifies the question, "What shall we have to eat?"

Suggested Plans Available

One seldom makes a garden plan which fully suits himself. He is, of course, less likely to make one that will suit someone else. Garden plans should, therefore, be considered suggestive. They are intended to help those inexperienced in garden planning to have a better garden and to enable them to make better plans for themselves. State agencies and county agencies have proposed such plans and are making them available to any gardener who feels he might possibly benefit from their use. If you want a plan for a garden approximating the dimensions of the one you expect to have, it is quite likely that you can secure one from your County Agricultural Agent, or your local Victory Garden organization.

Don't Crowd

One of the most common mistakes in gardening is the failure to properly thin vegetables, especially root crops. Thinning is the least interesting and seemingly the most wasteful garden operation. In order to be sure that we will have enough plants, we usually sow more seed than is necessary. Then if our seed was good and we had good luck, the young plants are often as thick as the proverbial "hair on a dog's back." Under such conditions, the plants cannot develop properly. The undersized useless beets, carrots and turnips which are so common in gardens most often are due to not giving the plants enough room by pulling out the excess ones. I have been watching gardens for years and feel safe in saying that over 25 per cent fail to thin either at the right time or sufficiently for best results.

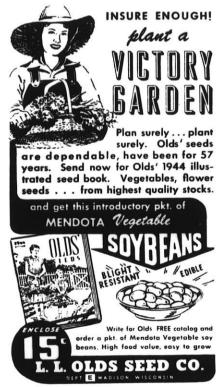
Conserve Seed

Many gardeners last year purchased garden seeds without any very definite idea or just what or how much of a particular vegetable they were going to grow. This practice is almost certain to be expensive and wasteful. This is another reason for having a definite garden plan. This year it is more imperative than ever to plan on sowing more sparingly and buying no more seed than you actually need. Supplies of some vegetable seed is dangerously scarce. So for the good of the cause, be careful with that seed order.

Quack Grass and Its Friends

Many 1943 Victory Gardeners will say that the worst mistake they made was to garden on a heavy quack grass sod, and not a few have hung out the sign "Never Again." No doubt many quack infested tracts were used for gardens last year which should not have been used. Even though the season was favorable to quack grass and therefore unfavorable to the gardener and in many cases the initial plowing and preparation tillage were scarcely deserving of the names, a large majority of the gardeners with grit and determination, who felt that quack grass wasn't a more serious enemy of the gardener than a German and Jap were to a marine, finished the season figuratively with the flag still flying rather than a sheet or tablecloth waving. Those last year quack grass tracts will be less obstinate this year and even if they were as bad as last year, they should not be too serious an obstacle to tackle for those who realize what our food problems in 1944 are likely to be if they are the only tracts available for gardening.

(Continued on page 161)



HOW TO GET YOUR SEEDS TO GROW By Victor H. Ries Ohio State University, Columbus Where to Sow Seed—A Cold-Frame is a Necessity

OUTDOORS is usually more satisfactory than indoors. Plants will be more stocky and sturdy. Cellar windows are cool, but do not let seedlings have sufficient light. Windows in the house may have almost enough light, but temperatures are too high, resulting in weak, spindly seedlings.

A coldframe is highly desirable for raising plants from seed as it gives protection from the cold, from rain and snow and from the wind. It may be placed in any sunny location where it will soon pay for itself in the plants it grows and saves.

A coldframe may be placed on the south, east, or west side of your house, garage, or shed, for growing seedlings or plants. The north side may be used for rooting cuttings or storage of plants over winter. It may be placed *outside a cellar window* to furnish a little extra heat to get an earlier start. However, a hotbed heated by manure or an electric cable is hardly worth while for home use.

A coldframe may be made of four 1-inch boards, 6 to 8 inches wide, preferably cypress or redwood. It may be made to fit an old window sash or to fit a standard 3 by 6-foot coldframe sash. Back of frame should be higher than front to drain off water. A frame of 1 by 2-inch wood strips may be covered with celoglass or cellulose acetate instead of glass. Other glass substitutes are too perishable.

Set coldframe on top of the ground so seedbed is slightly higher than surrounding level. This prevents water from running into seedbed. The sash is used to give earlier plants by taking in the heat of the sun.

GARDEN QUIZ FOR YOUR APRIL MEETING

(Answers will be found on page 167)

Write true or false in front of each statement.

Each correct statement will score 5. What is your total score? 1. It is well to add some form of lime to the garden before planting flowers or vegetables.

- 2. Many Wisconsin soils are low in phosphorus so that this element is an important fertilizer for our gardens.
- 3. We can make a satisfactory equivalent of liquid manure by adding one ounce of ammonium sulphate to two gallons of water.
- 4. Rotenone will control many insects of both the chewing and sucking types.
- _____ 5. Black leaf 40 is good only for sucking insects such as plant lice.
- ----- 6. Sulphur is valuable spraying or dusting material in the control of insects.
- _____ 7. Arsenate of lead will not kill plant lice.

- 10. Sweet peas can be grown well in the garden in northern Wisconsin, but not well in southern Wisconsin.
- _____11. Milorganite is a good source of nitrogen for the garden and lawn.
- _____12. Early blooming shrubs produce their flower buds the preceding year, but late blooming shrubs produce their flower buds on new growth of the same year.
- -----13. It is impossible to produce apples free from scab and worms in Wisconsin without spraying.
- _____14. Peonies may do well for 15 to 25 years without being divided.
- _____15. Iris should be divided as soon as the clump becomes large and crowded.
- _____16. Lupine grows well anywhere in Wisconsin if we inoculate the soil.
- _____18. Blossom end rot of tomatoes can be controlled by spraying with Bordeaux mixture.
- _____19. Each beet seed will produce several plants and so the seeds should be planted thinly.
- - NOTE: Check answers with the correct answers, deducting 5 points for each error.

DAMPING OFF DISEASE CONTROL

THERE will be but little disease with sand or sphagnum seedbed. If seedlings start to rot off at surface of seedbed and die, it is damping off disease. Over-watering and high temperatures tend to increase damage. May be controlled by watering with 1 oz. red copper

oxide in 3 gallons water. Use 2

quarts per square foot of seedbed.

Apply after sowing seed and again

when seedlings are 1 inch high.

Watering. Seedlings are like babies — they require regular attention—at least once a day! Never allow a seedbed to dry out. Apply water slowly with a fine sprinkler. Apply enough to soak the seedbed clear to the bottom. Water again as soon as top starts to dry out. After seedlings have come up, keeping seedbed too wet will encourage damping off disease.

Women never tire of redecorating rooms or reforming men.

Chemicals Improve Set of Fruit on Winter Tomatoes

THE difficulty of getting a good set of fruit on "hot-house" tomatoes appears pretty well solved.

Working in the greenhouses of the University of Wisconsin, R. H. Roberts and Esther Struckmeyer have found that certain chemical sprays markedly promote fruiting under greenhouse conditions.

This development is expected to make it possible for greenhouse operators to plant tomatoes earlier than in the past, obtain larger yields, and to complete the marketing of the crop by the time fieldgrown tomatoes become available.

One Spray Enough

One thorough spraying of welladvanced blossom clusters is believed to be enough, usually producing "hands" of four to six uniformly-sized fruits. Frequent spraying is undesirable, since it not only involves more work, but also results in greater variation in the size of fruit. Early spraying also is to be avoided, since it tends to produce smaller fruit.

As a suitable chemical for this purpose Roberts and his co-worker suggest beta-naphthoxy acetic acid, more conveniently known as BNA. Trials proved it effective when diluted in water at 1 to 1500. It is on the market, is economical to use, and can be stored in solution for several months.

Although chemical s p r a y s are highly effective in most cases, particularly in producing a set of fruit on the lower clusters which ordinarily yield poorly, they are not rated by the Wisconsin investigators as panacea for all difficulties in growing hot-house tomatoes. They will not, for example, prevent the type of blossom-drop in which the flowers turn yellow and abscess, an effect which is usually ascribed to faulty plant nutrition.

Probably the use of chemical sprays to obtain a heavy set of fruit will make necessary certain changes

in cultural practices with hot-house tomatoes. Since sturdy plant stems are needed to support a heavy crop, it may be desirable to space the plants farther apart than in the past, as well as use more fertilizer and water.

SULPHUR BEST FOR ROSES DR. L. M. Massey of Cornell University reports that sulphur continues to be the best material for controlling the black spot of roses and other fungus diseases. Its chief fault is that it may burn the leaves during periods of high temperature. We should therefore be cautious in applying it during the very hot weather. As a matter of fact, during periods of dry, hot weather, it is not necessary to use the dust at all because there is little danger of the spread or germination of fungus spores.

One of the best combinations is a mixture of sulphur and rotenone which can be purchased at most garden supply firms. If you have many roses, purchase in quantity lots such as 5 pounds or more because the price is much less than in one pound fancy cartons.

Do not attempt to use common sulphur because it is not fine enough. The sulphur should be at least of 325 mesh fineness to make a good dust.

While some bulletins on insect and disease control advocate mixing the sulphur with insecticides such as rotenone and arsenate of lead, we believe that the small gardener will find it impractical to do the mixing himself. It is very difficult to do a thorough job and the dust stirred up in mixing may effect some persons injuriously.

It might be well to buy insecticides fairly early this season.

A youth who applied for a job as a movie usher was immediately rushed into uniform, put to work. But he was back an hour or so later: "I'm quitting."

"What's the matter, son?" asked the proprietor. "Aren't the hours and pay good enough for you?"

"Sure. But I've seen the picture." —This Week.



March, 1944

.. GARDEN GOSSIP.

DO YOU HAVE A SHADY SPOT WHERE VEGETABLES WILL NOT THRIVE? Plant Torenia Fournieri! By The Master Gardener

THIS is one of the most highly praised annuals for shade. It was named for Olaf Toren, Swedish clergyman and botanist.

Growth is low and bushy, height 8 to 10 inches. Foliage is darkgreen. Flowers are violet-blue, blotched with dark purplish-blue, and have a yellow throat. The torenia is often called the Wishbone Flower because the stamens form somewhat the shape of a wishbone. The blossoms resemble snapdragons.

This flower should be planted in masses.

It blooms from June to early fall.

The torenia prefers a shady location and plenty of moisture. It thrives best in a light, rich soil.

The torenia is a tender annual, and plants must not become chilled. So it is best to sow seed indoors in March, transplanting the seedlings into the garden when settled warm weather appears. Seed may be sown directly in the garden in May, but plants will not produce flowers nearly as early. In transplanting, set plants 8 to 10 inches apart. In the extreme South this plant will self-sow.

Torenia is a good subject for vases and hanging baskets, as well as being a satisfactory garden flower for shaded areas.

As with other ornamental plants, especially flowers, best results are achieved if the plants are fed with a balanced plant food.

DELPHINIUM MAY NOT NEED LIME

DR. R. C. Allen, the editor of the Delphinium Yearbook, has contributed a statement on the fundamentals of fertilization. While Dr. Allen had delphinium in mind,

his outline of the principal plant food elements and the way in which they contribute to plant growth have a much more general application. Among other things, Dr. Allen points out that much of the importance formerly given to liming the soil for delphiniums grow best in soil which is slightly acid. There is also evidence that delphiniums will grow well in soils which are much more acid if they are well supplied with organic matter. In fact, if the soil is already sweet, lime added to delphiniums may be more harmful than beneficial.

When soil is too sweet, the thing to do, apparently, is to make it more sour through the addition of powdered sulfur. The sulfur can be mixed with the soil at the rate of one to five pounds per 100 square feet of ground area, depending on the degree of alkalinity. This treatment will usually lower the acidity sufficiently, but it is desirable to retest the soil after about two months to make sure.

Condensed from November 15, 1943 Horticulture (Mass.).

BELLADONNA IS A NEW WISCONSIN FARM CROP

BELLADONNA — "war baby" farm crop—now is grown in Wisconsin, its culture developing with the encouragement of drug concerns and the assistance of Prof. James Johnson

The demand for belladonna is small'but critical. It is used in making a medicinal drug, and imports have been cut off by the war.

Under the method developed to grow belladonna in Wisconsin, the seed is sprouted in sterilized soil in the greenhouse during early March. Later the young plants are transplanted to sterilized outdoor beds, and finally transplanted to the field in late May or in June.

When the stems become large

enough they are cut and hung in tobacco sheds or corn driers to evaporate the excess moisture. The roots promptly send up new sprouts, so that several cuttings a year are possible under favorable conditions.

Although belladonna no doubt will bring a worth-while supplement to the incomes of some farmers during war-time, it offers nothing in the way of "easy money" or "get rich quick" possibilities. Seed is scarce, the work is hard and exacting, there is some risk of failure with a relatively untried crop, and the demand for the product is strictly limited.

From Bulletin 460, "What's New in Farm Science,"—University of Wisconsin.

FLOWER ARRANGEMENT ESSENTIALS

T is good for us not to have so much time for flower arrangement, because in making intensely studied, highly stylized arrangements, we had lost sight of the important element of spontaneity and the essential "quality of transcience" which fresh flowers contribute. Writing in the Bulletin of the Garden Club of America, Mrs. Anson Howe Smith says that with our arrangements more casual, we must dispense with intricate detail, with elaborate "build up" and painstaking manipulation, and concentrate on essentials: color and proportion: the right flowers in the right room: the most becoming container; strategic placing. And in so doing we begin to appreciate the effectiveness of understatement. Mrs. Smith says that we find ourselves with a return to the old favorites such as roses and sweet peas now that we can no longer get to town for exotic material, or cruise around from one greenhouse to another in search of "something different."

From October 1, 1943 Horticulture (Mass.).

PLANTS OF AMERICAN ORIGIN

By W. R. Leslie Experimental Station, Morden, Manitoba

WHEN a very great deal of thought is being given to the growing of new crops on the Canadian prairies, it is of interest to note the long list of crop plants that are strictly of American origin. The following are prominentcorn, potato, sweet potato, Kidney hean, Lima bean, Scarlet runner hean, String bean, Jerusalem artichoke, pumpkin, tomato, blueberry, cranberry, blackberry, pineapple, Avacado, red pepper, cassava, vanilla, sugar maple, peanut, Brazil nut. pecan, cashew, cocoa, cocaine, quinine, ipecac, sarsaparilla, sassafras, sisal, mahogany, rosewood, logwood, Brazilwood, rubber trees, chicle and tobacco.

Other crops of American origin but also native to some other region or regions of the world are turpentine, resin, cotton, chestnut, beech, plum, raspberry, strawberry, gooseberry, currant and grape.

American plants of the grass family used as a staple human food appear to be limited to Indian corn or maize. Of the vegetables, potatoes, tomatoes and red pepper belong to the Nightshade family. Sweet potato is of the Morningglory family. The pea family is well represented in the various beans and the peanut. In the rose family come plums, raspberry and strawberry. Tobacco swells the list of useful plants in the Nightshade family. The Jerusalem artichoke is one of the aster family.

Vanilla comes from the pod of an orchid. Sarsaparilla comes from the roots of a lily. Sassafras is the bark off the root of a laurel. The two American natural dyes come from the wood of logwood and Brazilwood, both being members of the pea family. The American fiber, sisal, is derived from the leaves of an Amaryllis. Of the two valuable cabinet woods, mahogany and rosewood, the former is of the mahogany family, the latter a pea. The pecan is a walnut. The native black walnut and the white walnut, or butternut, are widely used but do not attain much importance commercially as a source of nut meat.

HIGHWAY BEAUTIFICATION IN MARCO POLO'S TIME

KUBLAI Khan lived between 1256 and 1294 A. D., a long time before roadside planting became the vogue in the U.S.A. He had the idea, however. Here is what Marco Polo said about it:

"There is another regulation adopted by the Great Khan, equally ornamental and useful. At both sides of the public roads he causes trees to be planted, of a kind that become large and tall, and being only two paces asunder, they serve, besides the advantage of their shade in summer, to point out the road when the ground is covered with snow. And this is of great assistance and affords much comfort to travelers. This is done along all the high roads, where the nature of the soil allows; but when the road lies through sandy deserts or over rocky mountains, where it is impossible to have trees, he orders stones to be placed and columns to be erected, as marks for guidance.

"He also appoints officers of rank, whose duty it is to see that all these are properly arranged and the roads constantly kept in good order. Besides the motives that have been mentioned, it may be added that the Great Khan is the more disposed to plant trees because astrologers tell him that those who plant trees are rewarded with long life."

From September 15 American Nurseryman.

VICTORY GARDEN MISTAKES

(Continued from page 157)

When one has encountered quack grass and conquered, other weeds have no terror for him. But other weeds neglected eventually become quite as destructive to crops. Many gardens last year and every year fail to be good gardens merely because the gardener let the weeds get ahead of him rather than keeping ahead of the weeds. That is a common and serious mistake in gardening. The same rule applies to serious garden pests.

These are not all the gardening mistakes to avoid, but if one avoids these, he is well on his way to success in his Victory Garden effort.

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Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

Mrs. R. H. Sewell, President 957 No. 70th St., Wauwatosa 13

Mrs. F. E. Willard, 1st Vice-President Oakfield

Mrs. Walter Dakin, 2nd Vice-President 4110 Mandan Crescent, Madison 5

PRESIDENT'S MESSAGE

•HE most important issue for the Wisconsin Garden Clubs is, again, the question of food supply, a nation's health, and how can we help to bring the final victory?

In reply, I present the message given by Dr. H. W. Hochbaum, Victory Garden Chairman, Washington, D. C.

"We have the longest line of communications ever attempted for the largest army in the history of our Nation. We must add 2 million Victory Gardens to the 20 million of last year. Of the 22 million gardens, 16 million must be developed in the cities, towns, and suburbs.

"The production from Victory Gardens must increase from .16 lbs. to .50 lbs. per square foot. This is over three times the amount produced in 1943.

"More green and leafy vegetables, yellow vegetables, and tomatoes grown and used daily would supply the protecting elements of vitamins A and C, which are reported lacking in the Nation's health reports.

"School gardens should be established and cared for by the students. These gardens should furnish fresh and canned vegetables for school lunches or cafeterias.

"Americans working clay and filled lands, planting and replanting after heavy rains, controlling pests and insects answered the Nation's plea for food. With the same courage and patriotism, they will

OFFICERS

Mrs. H. W. Schaefer, Recording Secretary-4416 Taft Road, Kenosha

H. J. Rahmlow, Corresponding Secretary 424 University Farm Pl., Madison 6



respond in 1944, by planting more gardens and by increasing the production of last year in the established gardens.'

> Sincerely, Mrs. R. H. Sewell.

BIRD STUDY BY GARDEN CLUBS Mrs. R. A. Walker, Madison,

State Bird Chairman

Each year garden clubs are giving increasing attention to birds and their relation to gardens. This is most fitting for birds are an inherent part of every garden. Their songs and callstheir movements and their control over harmful insect life-entitle them to a most appreciative recognition.

Garden clubs and their individual members can study birds with both pleasure and profit. Learn to identify the garden frequenting visitors. Some stop for but a few days or weeks in their annual migration. Others remain with us for the entire spring and summer to raise their families. Still others remain the year around. Learn their markings and colors. Learn their feeding habits. Learn their calls and songs. Build bird baths and pools. Erect feeding stations. Plant shrubs bearing attractive and tasteful seeds and berries. Do your part in protecting birds-their nests, eggs and young from squirrels, stray cats and over eager children.

DISTRICT PRESIDENTS

DISTRICT PRESIDENTS Mrs. F. J. Fitzgerald, 649 Broad St., Menasha, For River Valley District Mrs. H. R. English, 1722 Chadbourne Ave... Madison 5, Madison District Mrs. O. H. Burgermeister, 2127 S. 87th St.. West Allis 14, Milwaukee District Mrs. John West, R. 2, Manitowoc Sheboygan District Mrs. Norma Robinson, Lake Geneva, South Central District

The following bird calendar is useful in learning to know your birds as it lists the dates you may expect to see certain birds.

Resident Birds

Downy Woodpecker	Starling
Hairy Woodpecker	English Sparrow
Red-bellied	Cardinal
Woodpecker	Junco
Horned Lark	Bob-White
Blue Jay	Screech Owl
Crow	Horned Owl
Black-capped	Barred Owl
Chickadee	Long-eared Owl
White-breasted	Short-eared Owl
Nuthatch	

Winten Visitante

winter	VIBICALICS
Flicker	Red-tailed Hawk
Goldfinch	Meadow Lark
Mourning Dove	Tree Sparrow
Golden-crowned	Song Sparrow
Kinglet	Red-headed
Robin	Woodpecker
Red-breasted	Belted Kingfisher
Nuthatch	Bronzed Grackle
Purple Finch	Sparrow Hawk

Migrations

March 1 to March 15 Robin Bluebird Killdeer Meadowlark Bronzed Grackle Song Sparrow Red-winged Blackbird

Crow Tree Sparrow Mourning Dove Sparrow Hawk Red-tailed Hawk Marsh Hawk Herring Gull

Migrations

March 15	to April 1
Increased numbers	of foregoing group
Flicker	Vesper Sparrow
Yellow-bellied	Slate-colored
Sapsucker	Junco
Phoebe	Fox Sparrow
Hermit-Thrush	Song Sparrow
Golden-crowned	Red-tailed Hawk
Kinglet	Red-shouldered
Western	Hawk
Meadowlark	Marsh Hawk
Rusty Blackbird	Sparrow Hawk
Cowbird	Ring-billed Gull
Purple Finch	Towhee

The Garden Club Program

Mrs. H. J. Anderson, State Program Chairman

The program chairman is a very important position in any organization and a garden club program chairman is no exception. Squarely on the shoulders of this chairman and her committee rests the responsibility of supplying the members with seasonable information relative to their gardens' needs. Consider carefully the choice of subjects in relation to the type of projects your members are most interested in. There is no limit to the variety of subjects.

Finances usually have to be considered in planning a well-rounded program. Quite often representatives of nurseries, fertilizer manufacturing concerns, tree surgery, florists, landscape architects, etc.. are very generous in addressing clubs on their specialties. Most every club boasts a few members well qualified to talk on various phases of gardening. By all means give these members the necessary encouragement. How are we ever going to develop leaders if we fail to recognize those in our own midst?

The capable chairman will always be prepared for a last minute disappointment. In such an emergency perhaps a member of a neighboring club, having her subject fresh in mind, would oblige with a talk or paper recently given.

Question and Answer Period

Question and answer periods, or round-table discussions unearth a wealth of valuable information usually at the time it is most needed. The more informal your meetings become, as, informality among gardeners is always enjoyed, the more information is circulated, and quite often attendance improves.

Slides Available

Many excellent programs can be secured through the help of the Wisconsin Horticultural Society, Madison. Their slide sets, accompanied with a complete printed lecture, is yours for the asking. You are requested only to treat the slides as you would your own, and pay return postage.

The Conservation Department, Madison, Wisconsin, offers many fine motion picture lectures on innumerable conservation subjects. They are free, asking only that you return the material promptly, and pay express or parcel post charges.

The National Council of Garden Clubs, Hotel Roosevelt, Madison Ave., at 45th St., New York, offers much program material to member clubs in the form of illustrated lectures with lantern slides for a rental fee of from two to five dollars. Conservation movies may be had for express charges only. They are also offering some free program-making aids, some hand-books and bulletins for a very nominal fee, and many, many articles and papers that may be borrowed for a two-week period.

I understand your state program chairman last year, Miss Katherine Melcher, sent all this information, together with a list of speakers available through the Garden Clubs of Illinois, Inc., and the Wisconsin Garden Club Federation to every garden club president in the Wisconsin Federation. That was a splendid piece of work. I hope you have all saved this material and are making good use of it.

Year Books

Do plan your Year Books, and may t have one from each of your clubs? would like to have each program thairman write me at the end of the year and tell me what program was enjoyed most by your club. I will then pass this information on to our National program chairman, Mrs. Benton F. Murphy, who is making the same request of other states, and will use this "measuring stick" in arriving at the kind of programs most appreciated by garden clubs.

If I can be of any assistance in helping you plan your programs for this year, will you please write me. And remember — that **raising vegetables** should still remain our greatest concern for 1944, so that the empty jars that are daily finding their way back to the once overloaded shelves in the fruit-cellar may again display the fine spirit of cooperation found within our ranks.

(To be continued)

Question and Answer: In Columbus, Ohio, William Oliver told the judge why he had sabotaged a juke box; every time he tried to get "I Wonder What's Become of Sally," he got "Somebody Else Is Taking My Place."

GARDEN RADIO PROGRAMS WTMJ-MILWAUKEE STATION Saturday at 11:45 a.m.

March 11. Seed germination and good neighbors in the garden. Mrs. Wm. F. Poepp.

March 25. Soil Preparation. Mr. Kenneth Greaves.

April 8. Herbs-Romantical and Practical. Mrs. Dorothy H. Miller.

April 22. Romantic Adventure Into Early Wisconsin. Mr. Anthony Wuchterl.

May 6. Small Fruits. Mrs. Oscar Conrad.

EPIC OF RUSSIAN GARDENS GUILD HALL, SHEBOYGAN

MARCH 23, 8 P. M.

The Sheboygan Garden Club presents Irina Khrabroff of New York City in the "Epic of Russian Gardens" at Guild Hall, Sheboygan, 7th and Ontario Avenue, Thursday evening, March 23rd, at 8 p. m. Admission 50 cents.

Mme. Khrabroff has appeared in most of the larger cities in the East. All garden club members are invited to attend. The talk will be illustrated with photographs and slides and depicts Russian Gardens down through the years.

BEST VEGETABLE VARIETIES FOR WISCONSIN

The list of vegetable varieties for the home garden by Prof. O. B. Combs, vegetable specialist at the Wisconsin College of Agriculture, should be studied by all gardeners. Save the February issue of Wisconsin Horticulture and especially this article on page 126 for future reference.

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GARDEN CLUB DIRECTORY FOR 1944

FOX RIVER VALLEY DISTRICT OFFICERS

Pres: Mrs. F. J. Fitzgerald, 649 Broad St., Menasha

Secy.-Treas.: Mrs. G. A. Loescher, 429-1st St., Menasha

FOX RIVER VALLEY DISTRICT COMMITTEE CHAIRMEN

Bird: Mrs. R. Byron Freed, Stevens Point, R. 2

Conservation: Mrs. H. A. Fenner, 338 Oak St., Menasha

Garden Centers: Mrs. C. Engbretson, R. R. 2, Stevens Point

Judging Schools: H. Sonn, Oakfield Membership: Mrs. Chas. Braman, Waupaca

Program: Miss Merle Rasmussen, R. 4, Oshkosh

Radio: Mrs. U. Ammell, 440 S. Park Ave., Fond du Lac, Chm.; Assistants, Mrs. D. Waters, Wisconsin Rapids; Mrs. A. Steves, 78 Myrtle, Oshkosh; Mrs. H. Coleman, R. 2, Stevens Point Roadside Development and Memorial

Planting: Mrs. Clarence Schultz, 112 N. Commercial, Neenah

War Service: Miss Clare Mears, Newbury Blvd., Ripon

GARDEN CLUB OFFICERS Antigo Garden Club

Pres.: Mrs. A. M. Weise, 418 Fifth Avenue

Vice-Pres.: Mrs. D. B. McIntyre. 209 Clermont St.

Secy.-Treas.: Mrs. R. N. Lehman, 228 North Avenue

Berlin Home Garden Club

Pres.: Mrs. Earl Kolb, R. 2 Vice-Pres.: Mrs. J. A. Younglove, 312 Noyes St.

Secy.: Mrs. B. R. Swan, 709 Park Ave.

Brandon Community Garden Club

Pres.: Mrs. E. Gentles Vice-Pres.: Miss Lulu Sherwin Secy.: Mrs. J. L. Scott

FOND DU LAC Fond du Lac Community Garden Club

Pres.: Mrs. Walter J. Schaefer, R. D. 3

Vice-Pres.: Mrs. Uriah Ammell, 440 S. Park Ave.

Secy.: Mrs. Lawrence Skilbred, 132-4th St.

Meetings: 4th Friday at homes of members

Ledgeview Garden Club

Pres.: Mrs. Leo J. Promen, 190 E. Johnson St.

1st Vice-Pres.: Mrs. Wm. Mowbray, 131 Brush St. Secy.-Treas.: Mrs. G. J. Thibadeau, 199 E. Rees St.

Green Bay Garden Club

Pres.: Miss Minnie Diekman, 421 Doty St.

Vice-Pres.: Sandy Duket, Lazarre Rd., R. 6

Secy.: Mrs. Charles F. Kelly, 632 South Webster Ave.

Horicon Garden Club

Pres.: Mrs. Gordon Kavolski, 314 Palmatory St.

Secy.-Treas.: Mrs. John Radke, 409 N. Finch St.

Iola Garden Club

Pres.: Mrs. J. L. Larson Vice-Pres.: Mrs. E. B. Benson

Secy-Treas.: Mrs. R. C. Cleaves

Marinette Garden Club

Pres.: Ralph Garland, 1217 Merryman St.

Vice-Pres.: N. S. Nelson, 609 Ogden Secy.-Treas.: Mrs. Jos. Clumb, 904 Miller St.

Menasha Garden Club

Pres.: Miss Daisy Trilling, 415 Tayco St.

Vice-Pres.: Miss Buddie Dudley, 22 Main St.

Secy.-Treas.: Miss Barbara Thom, 354 Naymut St.

Neenah Garden Club

Pres.: Mrs. F. S. Seaborne, Menasha Vice-Pres.: Mrs. Ronald Rogers, 909 E. Forest Ave.

Secy.-Treas.: Miss Virginia Beals, 220 N. Park Ave.

Oakfield Garden Club

Pres.: Mrs. J. E. Steiner Vice-Pres.: Mrs. D. C. Kenyon Secy.-Treas.: Mrs. C. H. Cragoe Meeting: 2nd Thursday at 8 p. m.

Omro Garden Club

Pres.: Mrs. Charles Samphier Vice-Pres.: Mrs. Wm. Belloway Secy.-Treas.: Miss Elizabeth M. King

Oshkosh Horticultural Society

Pres.: Charles A. Wiechering, R.F.D. 1, Box 97 Vice-Pres.: Joseph Rodler, 26 Pow-

ers Ave.

Secy.-Treas.: Marjorie Knoll, 215 West Irving St.

RIPON

Ceresco Garden Club

Pres.: Mrs. Earl Beier, R. 1 Vice-Pres.: Mrs. Gene Quick, 120 Tygert St.

Secy.: Mrs. Noel Thiel, R. 2

Home Garden Club

Pres.: Mrs. W. N. Pearson, 504 Woodside Ave. Vice-Pres.: Mrs. J. B. Murray, 703 Woodside Ave.

Secy.-Treas.: Mrs. H. L. Williams, 400 State St.

Ripon Garden Club

Pres.: Mrs. Anna Genske, 102 Doty St.

Vice-Pres.: Mrs. May Labisky, 116 Lane St.

Secy.: Mrs. Helen Clausen, 646 Woodside Ave.

Meeting: 3rd Monday at 7:45 in homes of members

Yard and Garden Club

Pres.: Miss Helen Bottum, 518 Lincoln St.

Vice-Pres.: Miss Jennie B. Henderson, 616 S. Grove St.

Secy.: Miss Belle Lawson, 515 Ransom St.

Rosholt Garden Club

Pres.: Mrs. J. O. Nelson Vice-Pres.: Mrs. Seymour Iverson Secy.-Treas.: Mrs. Norman Rosholt

Park Ridge Garden Club Stevens Point

Pres.: Mrs. J. J. Kobach, Park Ridge Vice-Pres.: Mrs. Charles Engbretson, Park Ridge

Secy.: Mrs. R. Byron Freed, Park Ridge

Home and Garden Club Sturgeon Bay

Chairman: Mrs. Emil Hanson Vice-Chm.: Mrs. Robert Laurie Secy.-Treas.: Mrs. Walter Kurth

Waupaca Garden Club

Pres.: Mrs. Ben Dance, 421 So. State St.

Vice-Pres.: Mrs. Don Farmer, 613 School

Rec. Secy.-Treas.: Mrs. George Haebig, 303 Jefferson St.

Wausau Garden Club

Pres.: Mrs. A. G. Anderson, Forest Park

Vice-Pres.: Mrs. C. H. Brimmer, Forest Park

Secy.-Treas.: Mrs. J. N. Doyle, 109 Eau Claire Blvd.

Meetings: 2nd Tuesday at 2:30 p. m.

WISCONSIN RAPIDS Horticulture Club

Pres.: Mrs. Wm. H. Liebe, Box 341 Vice-Pres.: Mrs. Wm. A. Rowland, 131-14th St. S.

Secy.-Treas.: Mrs. Archie Diggles, 321 Third Ave. N.

Lake Wazeecha Garden Club

Pres.: Mrs. W. H. Miller, R. l. Box 180

Vice-Pres.: Mrs. Ai Ketchum, R. l.

Box 274

Secy.-Treas.: Mrs. Glenn B. Moore, R. 1. Box 184

Two Mile Garden Club

Pres.: Mrs. C. M. Renne, 1751-8th St. S.

Vice-Pres.: Mrs. Louis Petrie, R.F.D. Secy.-Treas.: Mrs. Blanche C. Mullenix, 2710-3rd St. S.

MADISON DISTRICT **OFFICERS**

Pres.: Mrs. H. R. English, 1722 Chadbourne Ave., Madison 5

Vice-Pres.: Mrs. Joseph Wirka, 1408 Vilas Ave., Madison 5

Secv.-Treas.: Mrs. R. J. Colbert, 3901 Council Crest, Madison 5

MADISON DISTRICT **CHAIRMEN**

Bird: Mrs. Donald R. Mitchell, 311 Campbell St., Madison 5

Conservation: Mrs. Harriet Steele, Lodi

Constitution and By - Laws: Mrs. Martha Lowry, 204 Kensington Dr., Madison 4

Garden Centers: Mrs. Chas. M. Huffer, 2119 Regent St., Madison 5

Historian: Mrs. R. E. Kartack, 115-Tenth St., Baraboo

Horticulture: Mrs. W. T. Lindsay, 942 Lake Ct., Madison 5

Judging Schools: Mrs. R. E. Kartack, 115-Tenth St., Baraboo

Junior Garden Clubs: Mrs. Paul H. Rehfeld, 3010 Cherokee Dr., Madison 5

Membership: Mrs. Joseph Wirka, 1408 Vilas Ave., Madison 5 Nominating: Mrs. Oliver S. Rundell,

2227 Van Hise Ave., Madison 5

Parliamentarian: Mrs. Martha Lowry, 204 Kensington Dr., Madison 4

- **Program:** Mrs. C. E. Mohs, 3525 Lake Mendota Dr., Madison 5
- Publicity: Mrs. B. W. Wells, 2526 Gregory St., Madison 5

Radio: Mr. George W. Simmons, 4202 Bagley Parkway, Madison 5

Roadside and Memorial Highways: Mrs. George Harbort, 3102 E. Washington Ave., Madison 4

War Service: Mrs. Walter Dakin, 4110 Mandan Crescent, Madison 5

GARDEN CLUB OFFICERS **Baraboo Garden Club**

Pres.: Mrs. Leonard Schneller, 221-8th St.

1st Vice-Pres.: Miss Della Payne, 522-2nd St.

Secy.: Mrs. Clark Wilkinson, 112-3th Ave.

Meetings: 2nd Tuesday at 2:30 p.m. **Darlington Garden Club**

Pres.: Mrs. Ernest Ruf, 704 Washington St

Vice-Pres.: Miss Elizabeth Walker, 202 W. North St.

Lodi Garden Club

Pres.: Mrs. Alice Irwin Vice-Pres.: Mrs. Lerna Steckelberg Secy.: Mrs. Carol Bartholomew

MADISON

Little Garden Club

Pres.: Mrs. Arthur Collentine, 1113 Vilas Ave.

Vice-Pres.: Mrs. C. A. Delaney, Middleton

Secy.-Treas.: Mrs. R. J. Melby, 3234 Oakridge Ave.

Madison Garden Club

Pres.: Glenn Dunn, 2201 University Ave.

Vice-Pres.: Mrs. Martha Lowry, 204 Kensington Dr.

Secy.: Miss Dagny Borge, 862 Terry P1.

Sunset Village Garden Club

Pres.: Mrs. George Simmons, 4202 Bagley Parkway

Vice-Pres.: Mrs. Ben E. Peterson. 4221 Bagley Parkway

Secy.-Treas.: Mrs. R. O. Wissler, 4126 N. Sunset Ct.

West Side Garden Club

Pres.: Mrs. R. A. Walker, 2222 Chamberlain Ave.

1st Vice-Pres.: Mrs. P. A. Hauver, 633 S. Orchard St.

Secy.: Mrs. F. M. Distelhorst, 3630 Spring Trail

Portage Garden Club

Pres.: Mrs. George Flanders, 806 W. Wisconsin

1st Vice-Pres.: Mrs. Earl Winkler, 1115 W. Conant St.

Secy.-Treas.: Mrs. A. J. Henkel, 622 Edgewater St.

MILWAUKEE DISTRICT **OFFICERS**

Pres.: Mrs. O. Burgermeister, 2127 S. 87th St., West Allis

Vice-Pres.: Mrs. Victor Schmitt, 1717 S. 82nd St., West Allis Secy.-Treas.: Mrs. William Bauer,

2555 S. 77th St., West Allis

MILWAUKEE DISTRICT **COMMITTEE CHAIRMEN**

Bird: Mrs. Walter A. Peirce, 2335 Carmel Ave., Racine

Conservation: Mrs. Max Schmitt, 1912 N. 84th St., Wauwatosa

Flower Judging: Mrs. Harry Wilson, 1423 W. 6th St., Racine

Garden Center: Mrs. John Stevens, 434 N. Lake Rd., Oconomowoc

Historian: Mrs. Carl Lemke, West Allis

Horticulture: Mrs. A. R. Jaeger, 7015 N. Pierron Rd., Milwaukee 9

Junior Gardens: Mrs. Roy C. Chopp, West Allis

Membership: Mrs. Roy Larson, West Allis

Nominating: Mrs. Otto J. Reuss, 2131 N. 62nd St., Wauwatosa

Program: Mrs. William J. Armitage, Port Washington

Publicity: Mrs. Fred C. Marquardt, R. 1. Hales Corners

Radio: Mrs. Rudolph H. Malisch, Hales Corners

Roadside Development: Mrs. Walter Kuebler, Burlington

Plant Testing: Mrs. A. R. Jaeger, Milwaukee

War Service: Mrs. Chester Thomas, 2579 No. Downer Ave., Milwaukee 11

GARDEN CLUB OFFICERS **Burlington Garden Club**

Pres.: Mrs. Elmer F. Kitterer, 560 Elmwood Ave.

Vice-Pres.: Mrs. Walter L. Kuebler, 331 Randolph St.

Secy.-Treas.: Mrs. G. P. Luetten, 565 State St.

Cedarburg Garden Club

Pres.: Miss Elsie Dehmel, 147 Highland Dr.

Vice-Pres.: Mrs. George Oswald, 7 E. Jackson St.

Secy.-Treas.: Miss Elizabeth Kiefer. 4 Sheboygan St.

Dousman-Ottawa Garden Club Dousman

Pres.: Mrs. Frank Ludwig Vice-Pres.: Mrs. Case McConnell Secy.: Mrs. Donald Stewart, R. R.

Elm Grove Garden Club

Pres.: Mrs. R. H. Myers. R. 5. Box 512. Waukesha

Vice-Pres.: Mrs. Carl A. Isaacson, Box 55

1, Box 3

Box 63

W. Luther Ave.

Secy.: Mrs. Stuart C. Johnson, R. 5. Box 564, Waukesha

> Greendale Garden Club Milwaukee

No report

HALES CORNERS

Hales Corners Garden Club

Pres.: Mrs. J. Heil

Vice-Pres.: Mrs. H. E. Smith

Secy.-Treas.: Mrs. Earl D. Miller Hawthorn Garden Club Pres.: Mrs. M. W. Schneider, Box 27

Vice-Pres.: Mrs. Gladys Dineen, R.

Secy.: Mrs. Karl H. Hinrichs, 10827

Tess Corners Garden Club

Vice-Pres.: Mrs. Wm. Boldt, R. 2

Whitnall Park Garden Club

Pres.: Mrs. F. C. Marquardt, R. !.

Vice-Pres.: Mrs. William Herkt, R.1

Secy.: Mrs. Robert Froeming, R. 1

Pres.: Mrs. Chas. Fickau, R. 2

Secy.: Mrs. Geo. Wenzel, R. 2

Kenosha County Garden Club Pres.: Mrs. Theo. Vanderheide, 6507

166

-29th Ave. Vice-Pres.: Mrs. Ollie O'Mara, 1315

-75th St. Rec. Secy.: Mrs. Chas. Excell, 7404-37th Ave.

Menomonee Falls Garden Club

Pres.: Mrs. John Dexheimer, 207 W. 3rd St.

Vice-Pres.: Mrs. Henry Jung, 309 E. Park Ave.

Secy.: Mrs. Otis Motz, 111 N. Grand Ave.

MILWAUKEE Art Institute Garden Club

Pres.: Mrs. Curtis Wilson, 2626 N. Farwell Ave.

Vice-Pres.: Mrs. N. F. Hennekemper, 718 N. 22nd St.

Rec. Secy.: Miss Alma Hoffman, 1002 N. 21st St.

Meetings: 3rd Friday at 2:30 p. m.

Blue Beech Garden Club

Pres.: Mrs. Chester Thomas, 2579 No. Downer Ave.

Secy.-Treas.: Mrs. James Livingstone, 9150 N. Cedarburg Rd.

Meetings: 1st Wednesday at 1:30 p. m. at homes of members

Galecrest Garden Club

Pres.: Mrs. Elmer Rohan, 2808 N. Hartung

Vice-Pres.: Mrs. Hugo F. Kreiter, 2839 N. 69th St.

Secy.-Treas.: Mrs. Robert C. Rumpel, 2751 No. 72nd St.

Green Tree Garden Club

Pres.: Mrs. Donald C. Cottrell, 1069 E. Lilac Lane, R. 6

Vice-Pres.: Mrs. Harry M. Stratton, River Rd., Sta. F, R. 9

Rec. Secy.: Mrs. Martin Fladoes, Sta. F, R. 9, Box 426

Milwaukee County Horticultural Society

Pres.: Mrs. O. J. Reuss, 2131 N. 62nd St., Wauwatosa 13

Vice-Pres.: George Helgert, 144 E. Ring St.

Secy.-Treas.: Mrs. M. Vallier, 2502 Whitacker Ave., Cudahy

Shorewood Woman's Club, Garden Section

Chm.: Mrs. John C. Lazenby, 3544 N. Frederick Ave.

Secy.: Mrs. Lynn Wilkinson, 501 E. Lexington Blvd.

OCONOMOWOC La Belle Garden Club

Pres.: Mrs. Robt. Klaus, R. 4 Vice-Pres.: Mrs. H. MacFadden, 520 W. Wisconsin Ave.

Secy.: Mrs. M. Reid, 143 E. Pine St.

Pewaukee Garden Club

Pres.: Hans Schmidt

Vice-Pres.: Geo. Kleiner, P. O. Box 172

Secy.-Treas.: Mrs. Lloyd Bartlett, P. O. Box 97

Racine Garden Club

Pres.: Mrs. Fred Schulz, 1130 Main St.

Vice-Pres.: Mrs. Elmer Voigt, 3225 Michigan Blvd.

Secy.: Mrs. O. T. Jacobsen, 2625 Taylor Ave.

WAUKESHA

Sum-Mer-Del Garden Club Pres.: Mrs. Chas. B. Jackson, R. R.,

Nashotah

Vice-Pres.: Mrs. A. E. Prior, Box 14, Delafield

Secy.: Mrs. E. F. Chapman, Hartland

Spring City Garden Club

Pres.: Mrs. Ervin Kulow, R. 2, Box 464

Vice-Pres.: Mrs. Jeff Johnson, 213 W. Newhall Ave.

Secy.: Mrs. Roy Brower, 415 N. Greenfield Ave.

Waukesha Town Garden Club

Pres.: Miss Meda Neubecker, 803 Pleasant St.

Vice-Pres.: Mrs. A. B. Hicken, 800 E. Broadway

Rec. Secy.: Miss Clara Gysel, Maple Ave.

WAUWATOSA

Bluemound Garden Club

Pres.: Mrs. H. F. Dennett, 6934 Cedar St.

Vice-Pres.: Mrs. E. Rohan, 2808 Hartung Ave., Milwaukee

Sec.-Treas.: Mrs. I. Koch, 6430 W. Wisconsin Ave.

Meetings: 1st Tuesday of month

Ravenswood Garden Club Pres.: Mrs. William J. Armitage, 190

N. 89th St.

1st Vice-Pres.: Mrs. Harold Towell, 8726 Glencoe Circle

Rec. Secy.: Mrs. Erwin J. Kronsnoble, 117 N. 88th St.

Wauwatosa Garden Club

Pres.: Mrs. E. A. St. Clair, 2418 No. 65th St.

Vice-Pres.: J. Kornacki, 2414 N. 88th St.

Secy.-Treas.: Ernest Lefeber, 7500 Hillcrest Drive

WEST ALLIS Brookdale Garden Club

Pres.: Mrs. Richard Harman, R. 4 Vice-Pres.: Mrs. Ralph Brownell, R.

Secy.-Treas.: Mrs. Philip Ritzenthaler

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Hillcrest Garden Club

March, 1944

Pres.: Mrs. R. Myers, 2177 So. 86th St.

Vice-Pres.: Mrs. J. Steffek, 2401 So. 84th St.

Secy.: Mrs. A. C. Hook, 2131 So. 87th St.

The Home Gardeners Club

Pres.: Mrs. Val J. Suttinger, 6709 W. Monona Pl.

Vice-Pres.: Mrs. Lloyd Cadieu, 8202 Richmond Ct.

Secy.: Mrs. John W. Bailie, 8228 Gridley Ave.

Victory Garden Club

Pres.: Mrs. E. Dahlmann, 2665 So. 77th St., Milwaukee 14

Secy.-Treas.: Mrs. Andrew Hetzer, 2610 So. 78th St., Milwaukee 14

West Allis Garden Club

Pres.: Mrs. J. Kienzle, 3439 S. 92nd St.

Vice-Pres.: Mrs. C. Lemke, R. 11, Box 239

Secy.-Treas.: Miss Janet Buckeridge. R. 1, Nashotah

SHEBOYGAN DISTRICT OFFICERS

Pres.: Mrs. John West, R. 2, Manitowoc

Vice-Pres.: Mrs. Fred Wilkerson. 724 National Ave., Sheboygan

Sec.-Treas.: Rev. A. H. Otto, 208 S. 7th Ave., West Bend

SHEBOYGAN DISTRICT COMMITTEE CHAIRMEN

General Chm.: Mrs. Fred Wilkerson, 724 National Ave., Sheboygan

Bird: Mrs. Leland Dietsch, Oak Lee, Plymouth

Conservation: J. F. Garner, Kohler Flower and Garden Show: Rev. A.

H. Otto, 208 S. 7th Ave., West Bend

Garden Center: Miss Anna Ubbink, 214 Pier St., Port Washington

Horticulture: Mrs. Ida Wiebe, 322 No. 8th St., West Bend

Membership: Mrs. Harvey Vollendorf, 715 No. 6th St., Manitowoc Publicity: Mrs. William Curtiss, R.

Radio: Mrs. Newton Jones, 409

Highways: Mrs. Gilbert Snell, 414 Erie

widdie, Grand Ave., Port Washington

GARDEN CLUB OFFICERS

Kohler Garden Club

Pres.: Lillie B. Kohler, 606 New York

1st Vice-Pres.: Mrs. F. W. Eppling,

Secy.: Mrs. Albert L. Treick, 435

War Service: Mrs. Walter R. Dun-

Memorial

Cleveland Ave., Manitowoc

Roadside Development,

1, Plymouth

St., Sheboygan

Ave., Sheboygan

238 E. Park Lane

Church St.

MANITOWOC

A. A. U. W. Garden Club

Pres.: Miss Clara Swenson, 858 N. 15th St.

Vice-Pres.: Miss Ora Fetzer, 1016 N. 11th St.

Secy.-Treas.: Miss Gertrude McCauley, 1122 So. 8th St.

Manitowoc Garden Club

Pres.: Harold H. Groth, 1615 Wisconsin Ave.

Vice-Pres.: Max P. Grimer, 920 Lincoln Blvd.

Secy.-Treas.: Miss Catherine Danehy, 851 N. 13th St.

PLYMOUTH

Plymouth Garden Club Pres.: Mrs. L. C. Dietsch, "Oak Lee," R. R. 1

Vice-Pres.: Mrs. C. R. Nutt, 521 Western Ave.

Secy.: Mrs. W. J. Curtiss, R. R. 1

Port Washington Garden Club

Pres.: Mrs. Herbert Peters, 129 No. Crocker Ave.

Vice-Pres.: Mrs. J. J. Ubbink, Saukville Rd.

Secy.-Treas.: Mrs. John Mehringer, 133 So. Eva St.

Sheboygan Garden Club

Pres.: Miss Charlotte Meissner, 1534 No. Second St.

lst Vice-Pres.: Mrs. Fred Wilkerson, 724 National Ave.

Secy.: Mrs. Otto Hobson, 2313 No. Sixth St.

Meetings: 2nd Thursday of month at 7:30 p. m. in Public Library

West Bend Garden Club

Pres.: Mrs. Austin J. Hancock, 146 Wilson Ave.

Vice-Pres.: Mrs. Golden Gill, 241 S.

Secy.-Treas.: Mrs. Herbert G. Kahl, 647 No. St.

Cambridge and Lake Ripley Garden Club, Cambridge

Pres.: Miss Mary Potter Vice-Pres.: Miss Hilda Jensen Secy.-Treas.: Mrs. Hattie Thronson Meetings: 3rd Tuesday of month

Edgerton Garden Club

Pres.: Mrs. August Ratzlaff, 218 Blaine St.

Vice-Pres.: Mrs. Carl Venske, 14 Lord St.

Secy.: Mrs. C. S. Farman, 105 N. Catlin St.

Elkhorn Garden Club

Pres.: Mrs. Charles Jahr, Sr., 312 N. Broad St.

Vice-Pres.: Mrs. Delorme Grey, 406 W. Walworth St. Secy.: Mrs. David Dudley, 241 Randall Pl.

Fort Atkinson Garden Club

Pres.: E. L. White, Box 334 Vice-Pres.: Oscar Langholff, 418 E. Sherman Secy.: E. R. Parker, R. 2

Meeting: 2nd Wednesday night

Jefferson Garden Club

Pres.: Mrs. Wilbur Strohbusch Vice-Pres.: Mrs. Geo. Krause Secy.-Treas.: Mrs. Anna Kispert

LAKE GENEVA

Town and Country Garden Club Pres.: Mrs. Frederick Taggart 1st Vice-Pres.: Mrs. John Raup Rec. Secy.: Miss Ruth Dickinson

Whitewater Garden Club

Pres.: Mrs. W. H. Farnham, 103 So. Prairie St.

Vice-Pres.: Mrs. William Elliott, 101 Case St.

Secy.-Treas.: Miss Avis Cleland, 111 So. Prairie St.

The following clubs are not as yet in a district.

Namekagon Garden Club Hayward

Pres.: Mrs. Arnold Hansen Vice-Pres.: Mrs. V. Z. Edwards Secy.-Treas.: Mrs. H. C. Greve

La Crosse Garden Club

Pres.: A. O. Scott, 740 N. 24th St. Vice-Pres.: Miss Bertha C. Shuman, 136 S. 19th St.

Secy.-Treas.: G. C. Ellis, 234 So. 20th St.

Washington Island Garden Club

Pres.: Mrs. Anne T. Whitney Vice-Pres.: Mrs. Blyde Koyen Secy.-Treas.: Mrs. Claude Cornell Meeting: 4th Tuesday at homes of members

COOKING WITH HONEY

MEASURE for measure, honey yields more energy than sugar, because it is heavier. For example, one and one-half tablespoons of honey weigh a trifle over an ounce, exactly 100 calories' worth. It takes two tablespoons of sugar to give the same amount of energy.

Besides using the uncooked honey as a spread to save on butter, as a sweetening in beverages and cereals — warming makes it pour more easily—in sandwich fillings, and in ice cream to make a smoother custard, nutritionists of the Colorada State College at Fort Collins recommend cooking with honey.

For making quick breads and cakes, the honey should be mixed with the liquid called for in the recipe, reducing the amount of milk by about one-half. If the honey is very thin or very thick, the proportion may need to be altered. Usually honey may be substituted for sugar cup by cup in a cake recipe. The cake or cookies should be baked at the lowest possible temperature to prevent changing the flavor of the honey and to avoid burning.

From November 1 Horticulture (Mass.).

ANSWERS TO GARDEN QUIZ QUESTIONS ON PAGE 158

.1 False. Many Wisconsin gardens are already too high in lime. Flowers and vegetables prefer a slightly acid soil.

2. True.

3. True. Liquid manure is largely soluble nitrogen material and ammonium sulphate gives much the same results with much less trouble in preparation.

4. True.

5. True.

6. False. Sulphur does not control insects, but controls fungus diseases. notably apple scab, rose black spot, etc.

7. True. Arsenate of lead is a stomach poison and effective only for chewing insects.

8. False. Bone meal is a good source of phosphorus. Contains a very small amount of nitrogen and no potash.

9. True. 10. True. 11 True. 12. True. 13. True. 14. True. 15. True.

16. False. Lupine grows best in cool climates, but good plants set out in the spring may bloom well the first year. and sometimes for one or two years longer.

17. False. Hybrid tea roses must be protected with a mound of soil and mulching to survive our severe winters.

 False. Tomato blossom end rot can be controlled by the uniform supply of moisture in the soil.
 True. 20. True.

Doing business without advertising is like winking at a girl in the dark. You know what you are doing, but nobody else does.(---Robt. Kahn & Associates).

March, 1944

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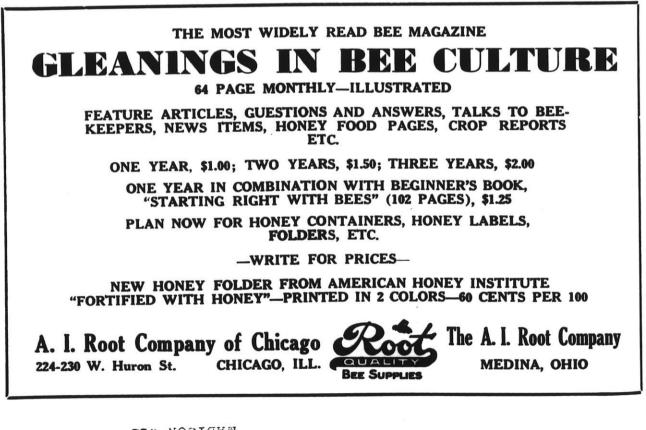
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LOYALTY

Visitor: "Look at that man swimming out there. Isn't he afraid of sharks?"

Student: "No, he's got 'California is the best school in the world' tattooed on his chest, and even a shark won't swallow that."-Pelican

SALAD

"Give me a chicken salad," said a student in the Co-op.

"Do you want the 40-cent one or the 50-cent one?" asked the wait-TPSS

"What's the difference?"

"The 40-cent ones are made of veal and pork, the 50-cent ones are made of tuna."-Pelican.

Missed Connections

Lady-"Why can't I see Henry Jones? He's serving in your unit, and I'm his grandmother."

Exec. Officer-"I'm sorry, madam, but he's away on special leave attending your funeral."



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WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Horticultu

ESTABLISHED 1910

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April, 1944

Volume XXXV

No. 8

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Subscription to Wisconsin Horticulture is obtained by membership in the Wisconsin State Horticultural Society for which the annual dues are \$1 per year or \$1.50 for two years. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Fifty cents of the annual dues paid by each member is for a year's subscription to Wisconsin Horticulture.

Codling Moth Control

Questions Answered by Dr. C. L. Fluke,

Department of Entomology

Question: What is the outlook for 1944 in regard to codling moth in Wisconsin?

Answer: It is too early at this time of year to predict codling moth investigations for 1944. This insect is always with us and we should be ready to control it and have our sprays on whether or not we see the insect.

Question: Approximately when does the first brood of codling moth hatch out in different parts of the state?

Answer: The first brood of codling moth appears as a moth about two weeks after blossoming. The larvae begin to hatch from three to four weeks following the blossoming period. In years of extreme warmth the first larvae may be found entering the fruit as early as two weeks after the calyx spray, and in years of cool weather during this period they may not be found for a month after the calyx spray.

Bait Traps

Question: Is it advisable to have bait traps in the orchard for codling moth, and how is the bait trap prepared?

Answer: Because the moth does emerge at variable times as given in the answer above, it is always advisable to use bait traps to determine the emergences. These traps are made by placing a solution of 5 per cent honey, 5 per cent molasses, and 90 per cent water in open stew pans and suspended as near the tops of the trees as possible. The bait should be changed every week or after heavy rains. During continued dry spells, water should be added as needed. To determine the spray dates the grower should wait until there is a large emergence of moths and then apply



the spray ten days after a flight.

Question: What are the most important early sprays to control codling moth, and how can we determine the correct time to apply them?

Answer: The most important early sprays are those following the calyx. It should be remembered that the calyx spray is easily timed and that it is also a very important application. Growers who do not use bait pails should spray three times, every ten days following the calyx. If they wish to put on only those absolutely necessary, they should use the bait pails and apply only ten days after a flight of moths.

Question: How much arsenate of lead shall we use for the early sprays for codling moth?

Answer: For these early sprays arsenate of lead should be used at the rate of two and one-half to three pounds to each one hundred gallons of spray.

Sticker or Spreader?

Question: Shall we use a sticker or spreader in the early sprays?

Answer: The early sprays should always contain some sticker or spreader or both. Most spreaders are pretty good stickers. Soybean flour is a splendid sticker and dried milk powder helps to give a more even coating of the spray. There are numerous proprietary materials on the market in case the grower wishes to use something of that nature. In these early sprays, repetition is more important than sticking qualities as the apple grows rapidly in size during the first six weeks.

QUESTIONS ON PLUM CURCULIO CONTROL

Question: What does the curculio look like, and what injury does it do?

Answer: The plum curculio is a small reddish-brown snout beetle that plays possum when disturbed. The adult lays its eggs under the skin of the fruit causing it to drop or to become gnarled if it does not drop. This insect is doing more damage to fruit in Wisconsin the past few years than it formerly did and is becoming quite a serious pest.

Question: How does the curculio overwinter in Wisconsin? Can I determine in advance whether I will have curculio injury to my fruit?

Answer: It overwinters in the adult stage in plum thickets and any grower who has his orchard near such thickets will have continuous trouble from this insect. Other than this there is no way of determining in advance possible injury from curculio. Those growers who have had trouble in the past will likely continue to have trouble in the future.

Question: When and with what

should I spray to control curculio?

Answer: So far the best control is lead arsenate at the rate of 3 pounds to 100 gallons of spray applied at the calyx time and about a week following the calyx spray. For those growers who have had continuous trouble we would strongly urge this extra spray five days after the calyx. Where possible, all early drops should be picked up and destroyed.

APPLE SYRUP RESTRICTED

Apple syrup, or what "Old Gold" calls apple "honey," is going to be in smaller, rather than larger supply, due to the fact that the Food **Distribution Administration believes** it is more important that apples be used for food rather than as a substitute for glycerin in tobacco or other products. Producers of apple products approached by people wanting the syrup have been told by FDA not to take the contracts, so the exploitation of this syrup may have to wait until after the war. Until then at least it is pretty much a dead pigeon. (The Drug and Cosmetic Industry.)

MULCH ORCHARD AREAS LOW IN MOISTURE

THIS is the "on" year for many apple orchards. Where the soil moisture tends to be deficient, mulch along the rows under the trees across the slope is ideal.

Not less than from 2 to 3 tons of mulch per acre is desirable. It costs quite a little, but there is no treatment which will equal it where the organic matter content of the soil and the water holding capacity is low. Perhaps the areas in orchards which need mulch most can be treated as a start toward finally mulching the entire orchards.— From Feb. 1944 Horticultural News, New Jersey.

Two Other Fellows

Sarge—"This package yours, soldier? The name is obliterated."

Soldier—"Can't be mine, Sarge; my name is O'Shaughnessy."

National Apple Institute Confers With Selective Service

ONE man cannot h a n d l e 32 acres of orchard. That is the opinion of growers, so the National Apple Institute called a meeting of officers and growers to meet with government agencies in Washington during March to consider the matter. Growers were disturbed by the pending review of agricultural deferment cases and by the fact that one regular man for 32 acres of orchard is the governing rule for Selective Service Boards in judging requests of fruit growers for deferments.

The following statement by the National Apple Institute will be of interest to our growers:

"The growers presented evidence to show that one acre of orchard was correct for one war unit, which on the basis of 16 war units per man, allows for one regular man for 16 acres of orchard, but that the present rule for the guidance of Selective Service Boards of two acres per war unit, or one man per 32 acres was out of line with practical operation. They showed that no great injustice had been done so far since the boards had realized the difficulty in most cases and had used their discretionary authority. However, it was pointed out that the Selective Service Boards are now asked to review these deferment cases and find more men for the armed services. Therefore the growers felt that they could no longer rely on the discretion of the Boards, and asked that the guiding rule be changed to one acre of orchard as one war unit.

"In the general discussion with all the official's present, the point which stood out as most important, was the need for working closely with the local and state Selective Service Boards so that they would understand the needs of orchardists for permanent crews of strong young men capable of performing all the important orchard operations as well as supervising green harvest labor. Without enough help of this kind, growers said they would be obliged to abandon part of the orchards thereby reducing their maximum potential production.

"It was also pointed out that some local Selective Service Boards were requiring the listing of temporary help, such as men employed for picking or thinning, in determining the deferment of permanent employees. This practice, if allowed to continue, will deprive growers of their year-round key men and will thereby make it impossible for them to continue in full operation."

More Members Join

Membership in the Wisconsin Apple Institute is climbing steadily. Those whose memberships have been received since our March issue, are as follows:

Gygax Bros., R. 2., Box 170,
Waukesha\$ 8.50
Gust Strege, Cedarburg 7.00
Tansdale Orchard — Lester
Tans, R. 2, Box 367, Wau-
kesha 7.50
J. G. Walecka, Kewaunee,
Wisconsin 5.00
Lone Elm Farm, Martin H.
Wetzel, Thiensville, R. 1 6.00
Bingham Orchards, D. E.
Bingham, Sturgeon Bay, R.
1 25.00
Fruit Growers Co-operative,
Sturgeon Bay 15.00
Jefferson Co. Fruit Grow-
ers Assn 10.00
ers Assn 10.00 Manitowoc Co. Fruit Grow-
ers Assn 10.00
Milwaukee Co. Fruit Grow-
ers Assn 10.00
Ozaukee Co. Fruit Growers
Assn 10.00
Racine Co. Fruit Growers
Assn 10.00
Sheboygan Co. Fruit Grow-
ers Assn 10.00
Washington Co. Fruit Grow-
ers Assn 10.00
Waukesha Co. Fruit Grow-
ers Assn 10.00

Orchard Supplies . . .

Purchase your requirements from this Co-operative and save DOLLARS by participating in the earnings. Patrons Refunds to all customers at the end of the season. Our prices are conservative because we do not strive for large profits. This Co-operative was formed for the sole purpose of serving the fruit growers of this state at reasonable prices. Your continued patronage will make a larger and better organization.

SPRAY MATERIALS

Arsenate of Lead Calcium Arsenate Bordeaux C.O.C.S. Spray Dry Lime Sulphur Liquid Lime Sulphur Flotation Sulphur Mike Sulphur Kolo-Spray Kolo Fog

Copper Sulphate Black Leaf 155 Cucurbit Dust Paris Green Casein Spreader Du Pont Spreader Sticker Nicotine Sulphate Spray Oils Elgetol

PRUNING EQUIPMENT

Pruning Saws Pruning Snips-9" Point Cut Pruners

GRAFTING EQUIPMENT

Grafting Knives Budding Knives Tree Sea.' (Grafting Compound)

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Catalog and Price List on Request. All Orders Must Be In Prior to March 1st.

SPRAYER SUPPLIES

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Spray Hose 600# Pressure 800# Pressure Hose Swivels Hose Coupling & Clamp Suction Hose

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OUR 1944 GENERAL CATALOG AND PRICE LIST WILL BE AVAILABLE FEBRUARY 15.

Complete Line of Repair Parts for Bean Orchard Sprayers.

WRITE FOR PRICES

ALL INQUIRIES PROMPTLY ANSWERED

We have leased a new warehouse and installed new offices, and will transact all business at our Waukesha address as someone will be in attendance there every day including myself, from 8:30 a.m. to 5 p.m.

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County Fruit Growers Associations Have Excellent Meetings

The eight County Fruit Growers Association meetings as listed in the February issue were the best ever held by these organizations.

The attendance was excellent, ranging from 60 to 100, ninety-two members and their wives being present at the Manitowoc meeting. Interest in the discussion on apple maggot, fruit varieties and orchard problems as presented by the speakers, C. L. Kuehner and H. J. Rahmlow, Madison, was keen. Mr. Lester Tans gave a very optimistic report of the work of the Southeastern Wisconsin Fruit Growers Association at most of these meetings.

County agents took an active part and helped in the discussion.

All Join Wisconsin Apple Institute

Each of the eight county associations voted to join the Wisconsin Apple Institute and to pay a membership fee of \$10.00 for this year.

Officers Elected

In most cases the officers were reelected for 1944. They are as follows:

Jefferson County Fruit Association President: Wm. Leonard, R. 1, Fort Atkinson

Vice-Pres.: Frank Guttenberg, Jr., Jefferson

Secy.-Treas.: Carroll Krippner, R. 1, Fort Atkinson

Manitowoc County Fruit Growers Association

President: Kurt Wiegand, Cleveland Vice-Pres.: William Ahrens, R. 5, Manitowoc

Secy.-Treas.: Ervin Tuma, R. 1, Cato Milwaukee County Fruit Growers

Association President: Albert Schreiber, Sta. F, R. 1, Box 416, Milwaukee

Vice-Pres.: Allen Guenther, R. 1, South Milwaukee

Secy.-Treas.: Alfred J. Meyer, R. 1. Box 227, Hales Corners

Ozaukee County Fruit Growers Association

President: Martin Wiepking, Cedarburg

Vice-Pres.: B. J. Otting, Cedarburg Secy.-Treas.: Arnold Nieman, Cedarburg

Racine County Fruit Growers Association

President : Charles Patterson, Franksville

Vice-Pres.: Wm. Verhulst, Franksville

Secy.-Treas.: Lyman Skewes, Union Grove

Sheboygan County Fruit Growers Association

President: Arno Meyer, Waldo Vice-Pres.: Hugo E. Wunsch, R. 1, Sheboygan

Secy.-Treas.: Joseph Thackray, Glenbeulah

Washington County Fruit Growers Association

President: Jos. L. Morawetz, R. 4, West Bend

Vice-Pres.: John Mayer, R. 3, West Bend

Secy.-Treas.: E. E. Skaliskey, Post Office Bldg., West Bend

Waukesha County Fruit Growers Association

President: Peter L. Swartz, R. 4, Waukesha

Vice-Pres.: Wm. Steele, Pewaukee Secy.-Treas.: Wm. Basse, R. 3, Box 225, Waukesha

BAYFIELD GROWER

APPLIES MULCH TO HIS

APPLE ORCHARD

DAWSON Hauser, Superior View Farm, Bayfield, now Bayfield County's largest apple grower, writes in March: "Two years ago we used some quack grass mulch on McIntosh trees, and this year our crop was the best we have ever had on these trees.

"We have spread about 25 tons of mulch in our orchard so far this year. The material has been mostly quack grass, hay and flax straw. It seems to take about 200 pounds per tree to cover the ground as far out as the branches reach.

"Before spreading the mulch about five pounds of ammonium sulphate was applied around each tree. My hope and aim is to increase the growth and yield Ly holding moisture and possibly adding certain elements in which our lighter soils may be deficient. When spring opens up I hope to spread a few stacks of old hay, but just now (March 18) the snow is too deep for us to be able to get into the orchard."

HOW TO APPLY FERTILIZER IN THE ORCHARD Why We Think Broadcasting Is Best

RECENTLY a state experiment station advised fruit growers that applying fertilizers in bands under the trees was economical and suggested it as another conservation measure.

We have held for some time that in Wisconsin the fertilizer should be broadcast over the entire orchard floor. The main reason for this argument is that we need to grow humus in our orchards. By broadcasting the nitrogen fertilizer, the trees get it no matter where it is applied because tree roots in older orchards are equally numerous in the space between the rows as under the branches. Most important, too, the orchard cover crop will be greatly benefited.

Now it may be argued that it is a waste of nitrogen to feed the cover crop. That is not true. If the cover crop takes up some of the fertilizer, and if then we do not remove that cover crop but allow it to remain and decay, the trees will get it later. Furthermore, most of our soils are low in humus or organic matter. Growing good cover crops will increase this organic mater, enable the soil to hold its moisture better, and greatly benefit the trees.

On lighter soils where nitrogen leaches away rapidly, this suggestion of growing a better cover crop is most important.

At any rate, the roots of the trees are everywhere in the orchard. Who can say which roots should and should not be fed?

Shhhh!

The family was seated at the table with a man who was a business acquaintance of the father, when the five-year-old blurted out: "Isn't this roast beef?"

"Yes," said the mother, noting his surprised look. "What of it?"

"Well, daddy said this morning that he was going to bring a big fish home for dinner." April, 1944

ORCHARD AND GARDEN SUPPLIES

Orchard . . .

Arsenate of Lead, 48 lb. case
Arsenate of Calcium, 48 lbs
Bordeaux Mixture, 48 lb. case
Copper-A-Compound, 48 lbs
Copper Sulphate-Powder-cwt
Dry Lime Sulphur, 100 lbs
Liquid Lime Sulphur, 50 gals
DuPont Spreader Sticker, gal
Flotation Sulphur Paste
Tree Wound Paint, quart
Tree Seal, quart
Sulforon, 48 lb. case
Harvest Spray—"Parmone Concentrate"— 4 oz. bottle
Nicotine Sulphate 40%
Picking Ladders—Pointed Top (Closed Top)— 14, 16, 18, 20, 22 ft. lengths60c per foot

Orchard Step Ladders-

BER		While t		CRA	TES	5
Knock D						
	Qt			\$8.50	per	1000
	Pt			7.50	per	1000
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				10.25		
American					per	
				\$10.00	ner	1000
	D.			0.50	per	1000
16 Qt. C				3.30	per	1000
-	Each .				. 20	cente
Till Bask	ets					
	Three	Ouart.	250 m	er crate		\$4.50
				er crate		

.. All Quotations F.O.B. Madison Prices subject to change without notice ...

Garden. -Write for Free Seed Catalog-

Arsenate of Lead, lb	.35
Arsenate of Calcium, Ib	
Bordeaux Mixture, Ib.	
Copper-A-Compound, 6 lb. bag	1.65
Dry Lime Sulphur, lb. can 35c; 5 lbs	1.10
Dusting Sulphur, 2 lb. canister	.30
Kryocide, lb. box	.40
Mike Sulphur, 10 lb. bag	1.00
Nicotine Sulphate 40%	1.00
Rotenone Dust 50%- 1 lb. 40c; 5 lbs	1.00
Tree Tanglefoot	3.75
DuPont Potato Dust, 5 lb. bag	1.00
DuPont Garden Dust, 5 lb. bag	1.25

- TOOLS -Garden Dusters-Sprayers-HOES_ Ladies' .90 Field 1.25 CULTIVATORS-..... 1.25 4-prong Speedy

KILLS POISON IVY
DuPont Weed Killer (Ammate)
2 lbs\$.60 5 lbs
(1 lb. in 1 gallon of water and thoroughly wet the ivy plant)
WIST-EMS-
4 in., box of 250\$.2
8 in., box of 125
OIL SOAKER-
12 feet long
18 feet long 1.7
RI-OGEN-
A-Kit 1.5

4.00

B-Kit

F. R. GIFFORD COMPA **GLENN A. DUNN, Manager** Madison 5, Wisconsin 2201 University Ave.

175

How Mulches Improve Tree Growth

THE value of mulches in plant growth is being brought out through experiments carried on in different states. Yet, mulches are not used nearly as much as they should be. Perhaps fruit growers do not yet appreciate the value of mulches, or perhaps mulches are too difficult to obtain.

Mulch in Bayfield Orchard

Still, a beginning is being made here and there. Mr. Dawson Hauser of Bayfield, now one of the largest apple growers in Bayfield County, writes in a letter recently: "The weather in January was very favorable and I hauled and spread 22 tons of mulch in my orchard. The material is mostly flax straw. I have been putting this on at the rate of about two bales per tree on Wealthy."

Mr. Hauser shipped in this flax straw from some distance, and so he must be convinced of its value.

The editor spoke several times in February before the Manitoba Horticultural Association at Winnipeg. Coming into the city on the train we noticed pile after pile of straw in the grain fields. With straw so readily available one might expect that it is being used as a mulch, but we did not find it so. The need of mulching in Manitoba for fruit growing as well as some vegetables, was apparent, and so we undertook to discuss the value of mulches where the material can be obtained so easily.

Mulches Discussed in Ohio

At a recent meeting of the Ohio Nurserymen's Association Dr. J. G. Gourley, Chief of the Horticulture Department, Ohio State University talked on the "Importance of Mulches to Plant Growth."

Some of his comments as reported in the American Nurseryman, are as follows:

"The soil beneath a heavy mulch was high in moisture, better aerated and more absorptive of water than either sod or cultivated plots. Under cultivation the soil is broken down into much smaller aggregates that water has a hard time penetrating. These cultivated soils may puddle if the particle size becomes too small. These soils can be brought back fairly rapidly by application of a heavy mulch.

Cultivated Plots Poorest

Under mulched trees the soil was high in organic matter. The sod plots were almost as high, and the cultivated plots were the poorest. As the depth of sampling increased. the amount of organic matter under all treatments became more or less equal. However, the large number of roots in the upper surface were getting great benefits from the high amounts of organic material under the mulched soil. He showed that these organic materials were breaking down and giving valuable nutrients to the trees. He showed that under the heavy straw mulch, potassium which leached out of decaying straw was kept relatively mobile by the continually moist condition. If potassium is added to a soil and the soil is allowed to dry out, the potassium becomes immobile. Because of the mulch around the trees, it was not necessary to add potassium to any of the trees nor was it necessary to add nitrogen, phosphorus or other elements. They all accumulate in sufficient quantities from the decomposing mulch. Under sod there is some accumulation, but under cultivated soils there is none and fertilizer must be added.

Dr. Gourley pointed out that the organic acids formed in decomposition of the mulch do not change the acidity of the soil very much. The change is mainly due to aluminum and sulphur compounds, of which there is little in a straw mulch. He considers a straw mulch best. If you want nutrients from the straw, the best results are obtained from new, freshly cut straw. Old straw has little value from the nutritional standpoint.

Reduce Tillage

Dr. Gourley agrees with many agronomists that tillage should be reduced. The organic matter content of many soils is being reduced drastically. He advises growing as big a cover crop as is possible and working it into the soil. There are a few hazards with the use of mulches. In a few cases there have been fires in orchards where mulches have been used. In some areas the effect of mice living in the mulch material renders the use of mulches impractical. In other parts of the country, other factors seem to limit their use.

LITTLE RABBIT INJURY IN ORCHARDS THIS YEAR

A LETTER from Mr. Paul Lange of Delavan, is typical of what many orchardists are saying this year. He writes: "This year rabbits seem to find an abundance of food elsewhere, for wherever we have been we find little or no evidence of rabbit damage to trees or shrubbery."

That, of course, is the case this year as there is very little snow on the ground. However, we should issue a warning in this connection. Whenever there is plenty of food there undoubtedly will be an increase in numbers for two reasons: first, there is a tendency not to hunt them because they are not molesting us; and second, a good food supply means increased reproduction.

If the rabbit population increases, then of course the danger will be still greater in another winter when we have a heavy snowfall. There is only one remedy: keep down the rabbit population around orchards.

[&]quot;How did you get that bump on your head?"

[&]quot;My wife threw a vase at me." "Why on earth didn't you duck?" "I did, but she allowed for it?"

HOW TO BOIL VEGETABLES TO PRESERVE VITAMINS

TO preserve the vitamin content I of green vegetables they should be cooked properly. Cook them in a kettle with the lid on, in slightly salted, but not too much water. Seasoning may be added.

The extension nutritionists of the Colorado State College recommend the time table below for best results

Suits.	
Asparagus	15 to 20 minutes
Beans, snap	20 to 30 minutes
Beans, lima	30 minutes
Beet greens	10 to 15 minutes
Broccoli	15 to 25 minutes
Brussells sprouts	15 to 20 minutes
Cabbage, shredded	5 to 10 minutes
Cabbage, quartered	10 to 15 minutes
Collards	20 minutes
Dandelion greens	10 to 20 minutes
Kale	10 to 25 minutes
Okra	10 to 20 minutes
Peas	10 to 20 minutes
Spinach	5 to 10 minutes
Summer squash	15 minutes
Turnip greens	10 to 20 minutes





They have been moving fast, but we still have a few left. These have been reconditioned and will do a good job of spraying your orchard.

Write or phone us, stating your spraying problem, and we will suggest the best that is available for your particular case.



COMPLETE LINE OF SPRAY GUNS, HOSE, AND ACCESSORIES

It is time to order your ELGETOL, the dormant spray for control of apple scab and cherry and apple insects.



BEAN SPRAYERS

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Sturgeon Bay, Wisconsin

IN THE BERRY PATCH

COMMENTS ON RASPBERRY VARIETIES

By Stanley Hall, Hall Nurseries, Elmwood, Wis.

THE Sunrise raspberry has done very well with us. It seems to be unusually hardy. The fruit is first-rate, but cannot compare with Taylor.

We have had very good results from Newburgh, Taylor, Indian Summer and Sunrise.

With raspberries the most serious problem is keeping the canes healthy and free from disease. A good spray program insures a good crop. Perhaps this is the reason these varieties have done well with us.

The Gemzata Everbearing Strawberry

During the past season the Gemzata looked very good to us, performing equally with standard varieties. The quality of the berry for eating is as good as Gem though not sugar-sweet as some say. In size it is larger than Gem and like Wayzata has very healthy foliage better than the Gem. It is a good plant producer. In flavor it cannot compare with Wayzata.

RIDEAU, N E W RASPBERRY FROM CANADA, VERY PROMISING

At the meeting of the Manitoba Horticultural Association which the editor attended February 16-18, the new raspberry variety Rideau was mentioned as being very promising.

Two years ago four varieties under number were obtained from the Canadian Experiment Station at Ottawa and sent to growers at Bayfield. Among them was the Rideau. While the variety has not been on test long enough to make any definite statements, several of the growers at Bayfield have stated that this variety also showed promise there. It will be watched with interest this coming year.

NITROGEN FERTILIZER BENEFITS GRAPES

ESTS by the Geneva, New York Experiment Station indicate that grapes benefit greatly from the application of nitrogen fertilizer. The tests were conducted on a depleted Concord grape vinevard. The application of 150 pounds of ammonium sulphate, and 200 pounds of sodium nitrate per acre -each furnishing 32 pounds of nitrogen, were compared, and both produced an increase of nearly 1,400 pounds yield of grapes per acre as compared with no nitrogen plots. When the amount of nitrogen was doubled there was no increase in vield.

The amount of nitrogen to use for grapes will depend greatly upon the condition of the soil. A soil low in humus and nitrogen, especially sandy soils, should be benefited greatly by an application of nitrogen.

EXPERIENCE WITH RASP-BERRY VARIETIES AT ELLISON BAY

A LETTER from Mr. Frank A. Morey of Ellison Bay, Door County, gives the following experience with six varieties of raspberries.

"Taylor has not been satisfactory, somewhat subject to mosaic and anthracnose.

"Indian Summer is a good summer bearer and free from disease.

"Newburgh has no mosaic, but is very subject to leaf spot. Has very large berries but sometimes sunscald.

"Chief does not hang to the bushes very well after ripening.

"Latham is still the most dependable, although subject to mosaic and anthracnose."

Experience With Peaches and Apricots

Mr. Morey has two Sungold peach trees four years old, and last year had over one-half bushel of peaches on one of them.

He also has the Manchu and Scout apricots, but so far only had a few apricots on each tree.

LETTER FROM A STRAW-BERRY GROWER IN RACINE COUNTY

A letter from Mrs. Frank Shilhavy, Sr., of Racine, Route 1, encloses membership fee for the Wisconsin Horticultural Society, and makes this statement:

"I am 72 years old and lived 36 years on the same 40 acre farm here in Racine County and every one of these 36 years I have planted strawberries, ranging from 1,000 to 2,000 plants and personally care for them. Although I obtain all available farm bulletins and other literature, none is so adaptable as that contained in the Wisconsin Horticulture. It's 'just like the way we had been doing it'."

RASPBERRY SPRAY PROGRAM

Recommended by Divisions of Entomology and Plant Pathology, University of Minnesota

First Spray

Use liquid lime sulfur, 1 gallon to $12\frac{1}{2}$ gallons of water, as buds break. For control of anthracnose and spur blight.

Second Spray

Use a copper fungicide at rate given on the package, plus one pound of lead arsenate in 50 gallons water, just before blossoms appear. For control of fruit worm, sawfly, and anthracnose. Addition of a sticker will greatly improve control.

Note: Dusts may be used to control insects on raspberries but they have little value for control of diseases. Use rotenone or pyrethrum, when available, if necessary to spray for leaf eating insects after the berries have formed.

From March, 1944 The Minnesota Fruit Grower.

Fertilizer Responses of Black Raspberries

THERE has been an increase in growing black raspberries in western New York as the result of increasing demand. This demand has resulted in better prices to growers.

The New York Experiment Station at Geneva carried on some demonstrational and experimental plots in western New York to determine the best method of fertilizing black raspberries, with interesting results.

The rows were 7 feet apart and the plants $2\frac{1}{2}$ feet in the row.

Six different fertilizer treatments along with no treatment were given in spring of 1942. Fertilizers used were nitrate of soda (300 lbs. per acre), ammonia (240 lbs.), Uramon (115 lbs.), mixtures of nitrate of soda and sulfate of potash, and also superphosphate. Soybean meal at 700 lbs. per acre was used, and of course there was a check plot with no fertilizer.

Nitrogen Most Effective

The following are some of the conclusions reached from this experiment:

"Every one of the treatments was significantly superior to no treatment. That *nitrogen was the effeclive factor* is shown by the fact that there was *no significant difference* due to the presence in the fertilizer of either phosphorus or potassium. The three nitrogen carriers, nitrate of soda, sulfate of ammonia and Uramon were equally effective when used in equivalent amounts of nitrogen.

"Soybean meal, an organic source of nitrogen, although giving a significant yield increase over notreatment was a poorer source of nitrogen than the other three carriers, and in fact gave a yield significantly below two of them. The highest yield represented an acre yield of about 4,700 quarts. Nitrogen at the rate applied increased the acre yield by over 1,500 quarts which at 12 cents represents a gross profit of \$180 per acre at an expenditure of only \$4 to \$6 for fertilizer.

Nitrogen Increased Size of Berries

"Next as regards size of berries, fertilizer effects were highly significant. Every treatment showed a significant difference, soybean meal, however, barely so. Here again the organic source of nitrogen was less effective than other sources, in fact significantly less than three of the other treatments. Complete fertilizer was significantly superior to three of the other treatments but not to the treatment involving the same nitrogen carrier, namely nitrate of soda.

"Sulfate of ammonia and Uramon treatments dropped below nitrate of soda but not significantly so. These latter two facts will have to be verified by subsequent seasons' results. It seems quite safe to say that nitrogen not only increased yields, but also made larger berries.

"From the practical standpoint the results show a highly worth while return for money invested in nitrogen for black raspberries, even on what may be considered a quite productive soil.

"The interpretations made are, of course, subject to the usual limitations incident to specific local conditions and a short experimental period. The work is being continued."

RASPBERRY VARIETIES J. D. Winter

N^O variety has yet successfully challenged the Latham as the most profitable variety for commercial planting in Minnesota. The Taylor is now being tested commercially in plantings up to an acre or two, with winter covering a necessity. Newburgh continues to show promise near Lake Superior, largely because it is much less susceptible to anthracnose disease than Latham and is therefore able to withstand dampness and fog which favor the spread of anthracnose.

Chief is doing well in a limited way in some locations, particularly in the prairie sections of the state.

In most places, Marcy and Tahoma have not shown enough promise to be worthy of further trial.

Condensed from March, 1944 The Minnesota Fruit Grower.

BERRY PLANTS

New Sunrise raspberry, new Lowden Blackberry, Hardee Blackberry, Cumberland raspberry and other standard varieties. Red Lake Currant, new Gemzata everbearing strawberry. Red Ruby Rhubarb. Mary Washington asparagus. Ornamental shrubs and trees.

Hall Nursery, Elmwood, Wis.

STRAWBERRY PLANTS

State inspected, fresh dug, postpaid. Everbearing Gem; Mastadon; Premier; Dorset; Fairfax; Catskill; Beaver; Dunlap; Warfield.

RASPBERRY PLANTS

Latham and Chief raspberry plants.

H. R. Kinney, Baraboo, Wisconsin, R. 3.

Everything you need in

Fruit and Vegetable Boxes and Crates

65 years of dependable service

Sheboygan Fruit Box Co. Sheboygan, Wisconsin

1pril, 1944



Walter Dichnelt, Menomones Falls, President Corneluis Meyer, Appleton, Vice-president H. J. Rahmlow, Madison, Cor. Secy. Mrs. Louise Brueggeman, Box. 60, Menomonee Falls, Recording Secretary-Treasurer DISTRICT CHAIRMEN Robt. Knutson, Ladysmith Newton Boggs, Viroqua C. C. Meyer, Appleton Ivan Whiting, Rockford

April Work in the Bee Yard

DURING the last half of April beekeepers can determine whether or not a colony will be a producer.

If a colony has a poor queen it will now be evident by the quality of the brood. If the brood is scattered, if the queen appears sluggish and the colony is not developing, something must be done.

If the colony has a good population with a good percentage of young bees, introduction of a young queen may save the colony and still make it a profitable one to keep. If a queen is not at hand and it is impossible to get one from the South in time, it may be just as well to unite this colony with one having a good queen.

It is often difficult to determine if a queen is failing, or whether the poor brood present is due to a lack of food. If there has been a shortage of pollen the colony may have stopped brood rearing and this may be blamed upon the queen. We should be careful, therefore, not to pass judgment too quickly.

Unite Colonies Over Moving Screen

Perhaps the safest way to unite a *weak* colony or one with a poor queen is to place it over a strong colony with a moving screen, or simply a wire screen in between the two. If there is an auger hole entrance below the hand hold of the upper colony, bees may drift above from the stronger colony below, and thereby strengthen the weaker one. If it becomes positive that the queen is failing or is of poor quality, the moving screen can be removed and the colonies united. This should also be done if the upper colony does not make good progress for any reason whatever.

Shall We Feed Soybean Flour?

By this time the supply of pollen from the field may be adequate to meet brood rearing requirements. If, however, the weather is bad for a period so that the bees cannot fly and gather pollen regularly, it will pay to continue feeding soybean flour so brood rearing will be maintained. At any rate, we must watch the condition of our colonies regularly from now on because this is a critical time. Maximum brood rearing now will mean maximum honey production in June and July.

Feeding

From now on we must watch carefully both the quantity and the quality of the honey in the hives. With heavier brood rearing the *consumption of stores will be heavy*. Frequently, too, the overwintered honey may absorb moisture and become sour. Pull out a frame occasionally, especially one containing honey that is not sealed, and shake it. If the honey is thin, taste it to see if it is sour. If it is, it should be shaken out and sugar syrup fed to replace it.

The best way to feed now is with the sprinkling can as described in previous issues.

SWARM CONTROL IN EARLY MAY

THERE was an old saying that "a swarm in May is worth a load of hay." To keep a colony from swarming, however, is worth still more.

Strong colonies may get the swarming fever by the middle of May if they are not given plenty of room. Remember that the colony and queen should be allowed to expand in an upward direction. Just as soon as one brood chamber is full of brood, bees, and stores. another should be set on top to allow for this expansion. If the colony has been wintered in two hive bodies the lower one should be placed on top when the upper one is filled.

Remember, too, never to place empty frames in the middle of the brood nest, or in other words. "spread the brood." The colony should be allowed to expand normally and the brood nest kept intact. If empty frames are placed in the middle of the brood nest. dividing it, an unnatural condition is established which may lead to supersedure of the queen. Do not shift brood during the spring. All empty combs should be given in an upward direction.

It may be necessary to reverse hive bodies again in about two weeks, depending upon the strength of the colony. Just as soon as two hive bodies are well filled, a third should be given on top. Some colonies may be strong enough to occupy three hive bodies before the honey flow begins.

THE PACKAGE BEE SITUATION

MOST Southern breeders and shippers of bees are booked to capacity for early delivery. Some of them seem to want to make a racket of keeping orders and deferring them for June and July delivery at the high schedule of spring prices.

Anyone in Wisconsin knows that packages delivered in June or July are worthless as far as the honey crop is concerned. Furthermore, they should be bought at a reduction if the beekeeper wishes simply to restock for the following year. In fact, it is doubtful if packages installed in July would build up in time for winter.

The winter in the Southern states seems to have been quite favorable for beekeepers and perhaps they will have more packages for our use than anticipated.

IS DYSENTERY IN BEES CAUSED BY NOSEMA?

THERE is a question in the minds of many beekeepers as to whether *Nosema* is responsible for dysentery so often found in colonies after the winter months are over.

A number of years ago the theory was advanced that dysentery was the result of stores high in moisture content. The bees being unable to expel the moisture became sick. Still earlier it was thought to be the result of bees eating pollen during the winter months, and often pollen was entirely removed in the fall to prevent it.

Dr. C. L. Farrar has found many colonies suffering from dysentery to be affected with *Nosema*.

Send Bees to Laboratory

If you find colonies showing evidence of dysentery, take some of the bæs from the top of the cluster right above the frames around the inner cover where it is warmest, and send them in a small box or vial to the Central States Bee Laboratory, College of Agriculture, Madison, for examination.

We would like to have a large

BEEKEEPERS MEETING NORTHERN WISCONSIN DISTRICT BARRON SALES PAVILION, BARRON WEDNESDAY, MAY 3 — PROGRAM —

10:00 a.m. Call to order by district president, Mr. Robert Knutson, Ladysmith.

10:15 a.m. Identification of bee diseases and discussion of beekeeping conditions. Nosema. John F. Long, Madison.

11:15 a.m. Plans for disease eradication in 1944. Results of the National Beekeepers Conference. James Gwin, Madison.

12:00 m. Luncheon. Payment of State and District dues.

1:30 p.m. Business meeting and election of officers.

2:00 p.m. Farmers in Post War Agriculture. County Agent I. O. Hembre, Barron.

2:15 p.m. Information Hour. Questions and answers on practical beekeeping problems by leading beekeepers in attendance. Conducted by H. J. Rahmlow, Madison.

3:00 p.m. Spring and summer management of bees. H. J. Rahmlow, Madison.

3:30 p.m. Government regulations concerning beekeepers. Observations among northern beekeepers. Robert Knutson, Ladysmith.

be shown.

number of apiaries examined, in order to see how extensive Nosema really is, and what percentage of cases of dysentery are caused by Nosema.

TAYLOR COUNTY BEEKEEPERS TO MEET

The Taylor County Beekeepers Association will meet in the Taylor County Court House at Medford on Tuesday, May 2nd, at 7:30 p.m.

The speaker will be Mr. H. J. Rahmlow, Madison, secretary of the State Beekeepers Association, who will speak on new beekeeping methods for better honey production.

All beekeepers are invited to attend. A moving picture film on beekeeping methods will be shown.

MARATHON COUNTY BEE-KEEPERS ASSOCIATION MEETING

President Joseph Garre of the Marathon County Beekeepers Association announces a meeting of beekeepers to be held at Wausau on Tuesday, May 2, at 1:30 p.m.

The speaker will be Mr. H. J. Rahmlow, secretary of Wisconsin Beekeepers Association, who will discuss spring, summer and fall management of bees for better honey production. A colored movie showing the beekeeping methods as

AN EASY WAY TO MAKE SUGAR SYRUP

practiced by the Central States Bee-

keeping Laboratory, Madison, will

THE easiest and quickest way we have found for making up sugar syrup for feeding bees is to mix it in the family washing machine (if you can get away with it).

Here is the way we do it. We measure out $12\frac{1}{2}$ lbs. of sugar in a pail. Since we mix the syrup at the rate of two measures of sugar to one of water, that means that filling the pails with water to the same level as $12\frac{1}{2}$ lbs. of sugar, four such pails of water will require a 100 lb. sack of sugar.

We pour four pails of boiling water into the washing machine, set the machine running, and gradually pour in a 100 lb. sack of sugar. The agitator does the mixing for us. We allow the agitator to run about five or ten minutes afterwards to do a thorough job of mixing and then let the syrup run into 60 lb. cans and it is ready for feeding.

Sugar dissolves so easily in water that it takes only a few minutes to thoroughly clean the machine.

April, 1944

The Best Way to Install Package Bees

The direct-release method of installing package bees as introduced by the Federal Division of Bee Culture has proven so satisfactory that we again show the pictures illustrating how it is done, in this issue. A bulletin entitled "Recommendations for the Installation of Package Bees," using a spray and direct-release method may be obtained by writing the Central States Bee Laboratory, College of Agriculture, Madison 6, Wisconsin, for complete description.

Briefly, the pictures show the following steps:

(b) Spraying the packages with sugar syrup as they arrive from the South. Sugar syrup should be warm. Spray on all sides several times so that all bees are gorged.

(d) Remove four or five frames from the hive bodies to receive the bees from the packages.

(e) Spray the package again to prevent bees from flying.

(f) Jar package so that the bees fall into one end. Cut the screen for an opening through which to pour them. Sometimes removing the feeder can provides sufficient space for this purpose.

(g) Shake the bees into the hive after removing the queen in her cage which is placed on the frame.

(h) A few sharp blows with a rubber mallet or fist dislodges all the bees and they fall onto the bottom board.

(i) Quickly level the bees with hive tool so that the frames can be replaced without crushing them.

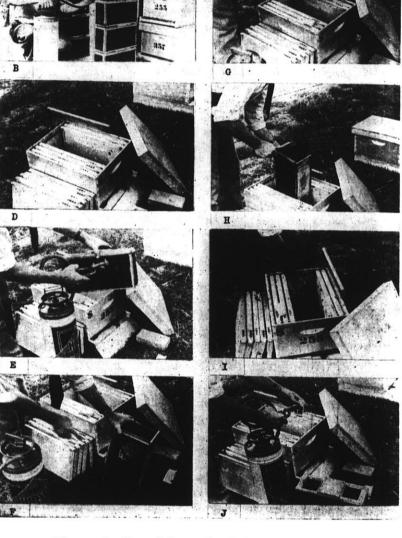
(j) Spray the queen through the wire screen. Then remove screen and shake wet queen onto wet bees.

Replace the frames and the job is done. Be sure to close the entrance to prevent robbing.

WHAT TO DO ABOUT DISEASE CONTROL

John F. Long, Madison

About 50 apiary inspectors are already at work. With more than 15,000 beekeepers in the state, everyone cannot be inspected early. You are asked to check all colonies every week. Dead colonies should be placed inside. Weak colonies should have their entrances reduced, to prevent robbing. If you find dead brood in a colony and are in doubt, notify this office immediately. Early detection and eradication go a long way in disease control. Do not destroy the combs or shake off the



Pictures by Central States Bee Laboratory, Madison

bees. Let the inspector decide on what you have and follow his instructions.

Inspectors have instructions to check all parties operating outyards for blanket permits. It is necessary to have a permit to move bees or used beekeeping equipment from one location to another. This office is now furnishing blanket permits, which cover the moving of any used bee equipment to and from any yard listed thereon. These permits are issued to cover the entire season. They should be carried with you whenever you are moving used bee equipment. They are issued to cover only yards in existence and do not cover the establishment of new yards, as a separate permit is required for that purpose. These permits may be obtained from the office of the Bet and Honey Section, Department of Agriculture, State Capitol, Madison. Wisconsin. In your application, you must give the exact location by section, quarter section, township, and town and range of each yard. This information can be obtained from the town assessor or town clerk of the

April, 1944

April, 1944

township where the bees are located. Report Purchase of Package Bees

We should also like to call your attention to Wisconsin Statute 94.76, Sub-section 10 B, which requires you to report all importation of package bees and queens within five (5) days of the receipt thereof; to the Bee and Honey Section, State Capitol, Madison, Wisconsin.

Let's have 100 per cent cooperation on all of the above!

HONEY WILL NOT BE RATIONED

Size of Container Will Not Be Limited

THERE will not be any rationing of honey or any limitation to the size of containers in which honey may be marketed in 1944, according to the latest information received from Washington.

The proposal to limit the size of honey packages to the one pound jar or smaller was one of the most dangerous proposals ever made to the beekeeping industry.

Beekeepers know very well that more than half of the honey produced in the United States is sold in sizes larger than the one pound jar and to customers who really eat honey. Customers who use it in many ways such as cooking, baking and eat it as a sweet.

The announcement from Washington states that reports have reached them from many parts of the country that honey is *moving slowly in city markets* and that chain stores are asking packers to release them from their previously agreed upon allotment of bottled honey.

The One Pound Jar

That is as much as to say they have suddenly discovered that the one pound jar is not a fast seller at present prices. We in Wisconsin have known that for some time. In March a beekeeper at Madison reported that he was unable to dispose of nine cases of one pound jars in the stores of Madison because they were all filled up with this size. They were anxious to buy five pound pails, however.

This simply proves that the hon-

ey crop of America could not be sold in one pound jars at the prices now prevailing, or at any price for that matter, sufficient to give a profit to the beekeeper.

If the size limitation order had passed, it would have ruined the market we now have among farmers and laboring classes who buy in five and ten pound pails, and 60 pound cans. We believe that more than half the honey of the United States is sold in these sizes.

Need For Federation

It all points to the fact too that the honey producers must have an organization of their own. That is why we believe the National Federation of State Beekeepers Associations composed of the beekeepers of America, is a vital organization and that it has a job to do protecting the interests of the producer.

We also need an organization embracing all the various branches of the honey industry, but the producer must be adequately represented and also consulted on important matters in such an organization.

CLARK COUNTY BEEKEEP-ERS TO MEET AT NEILLSVILLE

A meeting of the Clark County Beekeepers Association has been called for Neillsville in the Court House, on Thursday, May 4, beginning at 1:15 p.m., by Frank E. Greeler, president.

All beekeepers are invited to attend.



HONEY WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company, Oconomowoc, Wisconsin.

HONEY CANS

We can give you immediate delivery on 60# cans.

Order your glass supply for the new crop now, as it takes from 3 to 6 months to receive same from the factory. We now have a good supply of 5#, 2#, 1# and ½# on hand, and can make immediate shipment.

To insure prompt service, order your Association labels now for your new crop of honey.

Write for Complete Price List.

Order Through Your State Beekeepers Association

HONEY ACRES Menomonee Falls, Wis.

BUY LOTZ SECTIONS

Raise Comb Honey

Container shortage and price ceiling worries will not be yours.

Comb Honey furnishes its own container.

Comb Honey has no ceiling price.

Lotz sections are morale builders to comb honey raisers. They save valuable time because they do not break when being folded. Less breakage means lower cost. The smooth white section adds eye appeal.

AS COMPLETE A STOCK OF BEE SUPPLIES AS WARTIME RESTRICTIONS PERMIT.

AUGUST LOTZ COMPANY BOYD, WISCONSIN

1944 catalog published soon.



RACINE GARDEN CLUB APPRECIATES HISTORY

The seventy-fifth anniversary edition of the Wisconsin Horticulture magazine received in November, 1943, has been very much enjoyed by our members.

At a recent meeting of the Racine Garden Club an unanimous vote of thanks for compiling this edition was expressed.

I hereby convey our sincere appreciation for the seventy-fifth anniversary edition of Wisconsin Horticulture.

Racine Garden Club, by Mrs. Elsie W. Jacobsen, Secretary.

Copies of the history are still available at 10 cents each.

WHAT IS YOUR FAVORITE HARDY CHRYSANTHEMUM?

We haven't found anyone yet who doesn't like hardy chrysanthemums for fall bloom in the garden, and for cut flowers. Many of our members have tested varieties and found early blooming and hardy varieties suitable to our conditions. We would appreciate a letter or card from members giving the names of varieties that have proven satisfactory in Wisconsin.

HARDY VARIETIES IN OHIO

Mr. Victor Ries of Ohio states that he will plant the following varieties which he considers extra hardy: A u t u m n Lights, Louise Schling, Romany, Saturn, Granny Scovill, Ember, Clara Curtis, Ostego, Manatico, Diana, Barbara Cumming, Pigmy Gold, Acacia, Normandie, Caliph, Vivid, Eugene A. Wander, and Milky Way.



NEW STRAIN OF EGG PLANT FOR WISCONSIN

O. B. Combs Develops Earlier Variety

An improved strain of early egg plant, named Badger State, has been developed by O. B. Combs, garden specialist at the University of Wisconsin.

The new strain originated from a cross which Combs made in 1932 between the Black Beauty and Black Bountiful varieties.

Only about two pounds of Badger State seed is now available. This is being released to seedsmen for increase in 1944, so that some seed should be on the market in 1945.

Under Wisconsin conditions, Badger State is seven to ten days earlier than Black Beauty and approximately the same season as New Hampshire Hybrid. The plants are more upright than those of New Hampshire Hybrid, though slightly smaller than Black Beauty.

The fruits of Badger State are six to seven inches long, symmetricallly elongated, and light purple in color. They retain the purple color longer than New Hampshire Hybrid and almost as long as Black Beauty. Badger State contains fewer seeds than either of the other two varieties.

NATIONAL PEONY SHOW TO BE HELD IN MILWAUKEE

THE American Peony Society has decided to hold its national show in the Milwaukee Auditorium, Milwaukee, this year. The dates will be either June 17-18 or June 24-25, probably the latter dates, according to Mr. Charles E. Hammersley of Milwaukee, Wisconsin chairman of the show.

The show will be held in one of the larger halls of the Auditorium and Wisconsin peony growers will be asked to exhibit their blooms and help make the show a success. There will be a special prize schedule for Wisconsin growers.

WISCONSIN SEED DEALERS ELECT OFFICERS

THE Wisconsin Seed Dealers Association held their annual meeting in Fond du Lac in February. The following officers were elected for the coming year:

President, Ben J. Dance of the Central Wisconsin Seed Company, Waupaca; Vice-President, L. J. Kaasa; Secretary-Treasurer, J. W. Jung, Jung Seed Co., Randolph.

WEATHER REPORT OVER WHA AND WLBL FOR SPRAYING OPERATIONS

Mr. Eric Miller, Chief of the Weather Bureau, University of Wisconsin, announces that a Weather Bureau service for fruit and vegetable growers will be available beginning early in April.

Weather reports will be given over the **Farm Hour at 12:35 p. m. each day**, with suggestions for spraying operations which are affected by wind and rain.

All fruit and vegetable growers interested in this service should listen to the University Station WHA, or the Stevens Point Station, WLBL, at that hour. Mr. John F. Hauser of Bayfield, and Mr. William E. Thompson of Kenosha, received honorary recognition by the University of Wisconsin in connection with the Short Course graduation program on March 11.

Mr. Hauser's testimonial read in part as follows:

"The University of Wisconsin, recognizing the eminent services of John Frederick Hauser, who has employed orcharding, floriculture, and gardening to stimulate better agricultural and civic conditions in his own and adjacent counties presents this testimonial upon the recommendation of the faculty of the College of Agriculture with the approval of the Regents of the University."

President C. A. Dykstra of the University, and Dean E. B. Fred stressed the work of Mr. Hauser as a garden specialist who gave "unstinted help" in the victory garden program for 1943, and for neighborhood leadership in his community.

Mr. Thompson's certificate read in part as follows:

"The University of Wisconsin, recognizing the eminent service of William Eugene Thompson, a highly successful f a r m e r, vegetable grower, and orchardist who has always found time to give service to his community and state."

Mr. Thompson's recognition cited his work as director of the Racine-Kenosha Beet Association when he developed a plan which led to the equitable adjustment of prevailing difficulties between growers and processors and has since gained wide acceptance.

He has been very active as a community leader, as secretary of the County Farm Bureau, director of the Kenosha County Dairy Herd Improvement Association, and a member of the managing committee of the Vegetable Growers Association, and his leadership in establishing much needed research on the problems of growing truck crops in southeastern Wisconsin.

Value of Honeybees to the Fruit Grower

A^T a meeting of biologists held in London last December, a number of papers were given on the value of honeybees to the nation as pollenizers. Dr. C. G. Butler, head of the Bee Research Laboratory, Rothamsted Experimental Station, in his paper, "Position of the Honeybee in the National Economy," said: "The main function of beekeeping both in peace and war, is the provision of pollinators for fruit and important seed crops. * * * It has recently been estimated that each colony of bees in this country is worth at least 9 pounds Sterling per annum to the nation for its pollination of commercial fruit crops alone." (If a pound is equal to \$5.00, then a colony of bees is worth \$45.00 in our money.)

The following are some more statements made at this meeting in London:

"Figures have been obtained which indicate that in such cold spring weather as that of 1941, honeybees were almosts the only pollinating insects present in those orchards where comparative counts were made, and there is no doubt that they were responsible for a high proportion of the fruit set. It has also been shown at Wisley that premature stripping of the petals of apple flowers by abnormal gales does not prevent a high proportion of the honeybees previously working these flowers from continuing to do so, whereas many other important pollinating insects neglect the petalless flowers almost entirely. Furthermore, there is good evidence that in many districts where large orchards and large acreages of seed crops are being grown there are insufficient wild pollinating insects for full production.

"Quite apart from this crowding effect of crops upsetting the natural balance between pollinating insects and flowers requiring pollination, the methods practised in intensive cultivation such as undercropping, ploughing up of grassland and clearing of hedgerows, has resulted in destruction of the nests and habitats of many wild pollinating insects. Fortunately, however, recognition of the honeybee as the most important pollinating insect and the only one whose numbers and location can readily be controlled is gradually becoming realized and expressed by the growers, and experience has shown that in many cases increased yields of between 50 per cent, and 150 per cent, can be obtained by the intelligent use of honeybees."

HARDY APPLE ROOTSTOCKS SHOULD BE GRAFTED, NOT BUDDED

SOME nurserymen are offering budded Hibernal trees as rootstocks. Prof. T. J. Maney of Iowa has had years of experience with Hibernal and Virginia Crab rootstocks. In a letter dated November 2, 1943, he writes:

"For use here in the Middle West I would not consider Hibernal trees propagated by budding. For stock working I think it is rather essential that the stock get on its own roots. This is more readily accomplished when the tree is propagated by root-grafting. If the budded tree was planted deep enough, own rooting might be expected. Our experience here in the Middle West is that budded trees kill out in the nursery and in the orchards during periods of unusually low temperature. It is difficult to convince people that a difference of 4 or 5 inches in the planting depth could prevent winter injury. However, such is the case." - M. A. Blake in Feb. 1944 Horticultural News, New Jersey.



OFFICERS Harold Janes, Whitewater, President David Puerner, Milwaukee, Vice-President H. J. Rahmlow, Madison, Cor. Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Illinois Ave., Sheboygan

SPRING MEETING WELL ATTENDED

FIFTY members of the Wisconsin Gladiolus Society attended the annual spring meeting in the Milwaukee Public Museum on March 26th. The meeting was the best attended and most interesting for some time.

Mr. Walter Krueger of Oconomowoc gave an interesting report on the Pittsburgh conference. A great deal was accomplished and the results will be far reaching. Report and recommendations of the conference were unanimously adopted by the Wisconsin Society.

It was voted to send \$10 to the N.E.G.S. for compilation of a national classification list.

Mr. Krueger discussed research in control of various diseases of gladiolus bulbs mentioning the work done in Illinois by Dr. D. B. Creager. New improved Seresan is reported to be valuable for certain types of diseases.

State Show Report

Mr. Noel Thompson, Madison, unable to be present due to illness, sent a floor plan of the State Gladiolus Show at the State Fair with H. J. Rahmlow, Madison, who gave a brief report on plans. Admission tickets will be sent to all members several weeks before the Fair. It was pointed out that wives of members can join the State Society for a fee of 60 cents which will entitle them to a ticket to the State Fair and admission to the Gladiolus Show "inner circle."

There was some discussion on the desirability of holding a banquet in connection with the show. DIRECTORS Frank Blood, Stevens Point Dr. F. Graff, Freeport, Ill. Fred Hagedorn, Sheboygan J. R. Hopkins, Deerfield, Ill. Walter C. Krueger, Oconomowoc

President Janes will appoint a special committee to investigate.

Mr. Archie Spatz, Wausau, invited members to exhibit at a special gladiolus show to be held in connection with the county fair at Wausau. More details on this later.

Very successful was the gladiolus bulb auction. There was spirited bidding. Walter Sprangers, Waldo, again did an excellent job as auctioneer.

Liberal Donation of Bulbs for Auction

The annual bulb auction was a big success. According to Secretary Otto Kapschitzke, Sheboygan, the following are members who donated bulbs:

Dr. F. X. Graff, Freeport, Illinois; Harold Janes, Whitewater; Walter F. Miller, Sun Prairie; Archie Spatz, Wausau; Leland Shaw, Milton; Walter C. Krueger, Oconomowoc; J. R. Hopkins, Deerfield, Illinois; A. E. Zamzow, Beaver Dam; A. S. Haugen, Stoughton; Henry Wolfert, Sheboygan; and Theo. Scheer, Sheboygan; and Theo. Woods and Paul Hoppe, Madison.

Mr. Kapschcitzke reports receipts of \$86.01 from the sale. Last year's sale totaled \$52.45.

Anxious to Help

Peebles—"I notice lots of people stop at this stand and ask the way to Long Pond. Where is it? I never heard of the place."

Jeebles—"Neither did I; I give 'em directions, but I often wonder where they wind up." E. A. Lins, Spring Green Walter F. Miller, Sun Prairie Dr. Geo. Scheer, Sheboygan Leland Shaw, Milton Noel Thompson, Madison

QUALITIES REQUIRED OF COMMERCIAL GLADIOLUS By Walter C. Krueger

Condensed from Paper at Pittsburgh Conference

A COMMERCIAL variety is one that violates few, if any, or at least in small degree, of the laws of beauty, of color and form; which may be used in floralwork without specially colored accessory material; which when used does not detract from the finished product, and which can be produced with maximum profit to the grower.

Please note how definitely this definition throws out the poorperforming varieties. Take cognizance how most blotched varieties. which require special tints, shades and hues of floral accessory material, and the weird colors, which include most smokes, fail in this definition, in spite of the fact that a few are used for window dressing, in a particular situation, or for certain customers. Reflect also on the implication of the definition for those varieties that possess a unique feature, interesting in itself, like excessive ruffling, odd-shaped petals, etc., which in a floral piece detract from the total effect by centering attention on the peculiarity. These "special demand" varieties form the group, if they possess commercial color and habit. that for lack of a better term 1 designate as the restricted commercials.

Within this group fall also colored varieties in lesser demand. even if they meet the terms of the above definition, the apricots, oranges, the reds and scarlets, pur-

WISCONSIN HORTICULTURE

ples and blues. This latter opinion derives from the fact that the "glads" that I furnish follow the approximate color distribution that follows: Whites and creams, twenty per cent; all shades of pink, thirty per cent; lavenders, twenty per cent; yellow, fifteen per cent, and all other colors, fifteen per cent.

Favorite Varieties

I shall enumerate my nominations of the coming commercials as follows: In white, Leading Lady: in cream, Lady Jane, White Gold and Winston; in pink, Ethel Cave Cole, Pink Radiance and Criterion: in lavender, Elizabeth the Queen and Badger Beauty; in the area of restricted commercials, Red Charm (Butt).

THE PITTSBURGH CONFERENCE by

Walter C. Krueger

The notes of the secretary of the meeting of gladiolus societies in Pittsburgh on Feb. 12 and 13 are now on hand. Since the material is volumninous an effort will be made at this time to isolate the most important subject for this first specific report. Classification

The confusion resulting because of the important uses of classifications in cataloging and for exhibitions was easily solved by separating the two items. This was accomplished as follows by unanimous vote:

All varieties of gladiolus are to be classified uniformly by giving the name of the variety, name of originator, date of introduction in the U.S.A., size (100 series for miniatures-21/2"; small, 200 series-21/2" to 31/2"; medium, 300 series-31/2" through 41/2" large, 400 series $-4\frac{1}{2}$ " to $5\frac{1}{2}$ "; and giant, 500 series over $5\frac{1}{2}$ ") color (in present N.E.G.S. color code) and petal formation described by "R" for ruffled, "L" for lacinated, "Pr" for primulinas, and "P" for plain petaled, and "I" for informal type, and "F" for formal type.

Example-Algonquin-Palmer-'39-536-F-Pl.

This classification is to be called the American Gladiolus Nomenclature and Basic Classification. It is now being compiled from existing records and is to be available in the near future. This work of compilation is to be paid for by co-operating societies as foilows: In 1944-\$10.00; in subsequent years, at cost.

Each society assumes the obligation to co-operate in obtaining the correct size and type for each variety, to sum-

marize a state's total finding, and to relay it to the North American affiliate. Blanks for this purpose are to be ready by the time of the coming blooming season. The president of our society, Mr. Harold Janes, will no doubt appreciate volunteer reporters for this important work.

These findings in the several states will achieve uniformity by revision of the first compilation.

Cost of this summarization from all of the co-operating societies is included in the before-mentioned cost figure.

Classification and Show Schedules

The basic classification referred to above becomes the basic classification for final statistical variety winnings, etc., but each society is left free to make its premium list based on type; or size within type; or size alone, in as many gradations of size, as the society may deem best to suit its own finances or conditions. There is however the reeponsibility of each society to provide the N.E.G.S. with an alphabetical list of the names of winning varieties.

EXPERIMENTS ON FUSARIUM BROWN ROT CONTROLLED

TN the March 2, 1944 issue of the Florists' Review which gladiolus growers may be able to find in most any florist shop, we find an interesting article entitled "Treatment of Gladiolus Bulbs Before They Are Planted" by D. B. Craeger of the Natural History Survey, Urbana, Illinois. It tells of experiments carried on with several materials, including lysol and new improved Ceresan.

The Ceresan is especially valuable for bulblets because a larger percentage of the bulblets grew and the reduction in fusarium brown rot was the best of any material tried. No tests have been made of this material for thrips control, however.

This material is a DuPont product and may be obtained through seed supply houses, including the Vaughan Seed Store, Chicago.

In these tests bulblets treated with corrosive sublimate yielded less bulbs than those receiving no treatment, while those treated with Ceresan yielded twice as many.

HOW TO GROW GOOD GLADS By Haugen's Glad Gardens

Care of New Bulbs-When bulbs arrive, open package at once to admit air. If not wanted to plant soon, store in cool, dry place. A fruit cellar is just right.

When to Plant-When the trees native to your vicinity are unfolding their leaves, then all dangers of damaging frosts are past. From then until last of June.

Where to Plant-In beds, rows, borders, etc., and a mong other light-rooted plants. Plant in open, sunny places not too near buildings nor close to foundations. Buildings shade and retard development or reflect strong sunlight and burn. Lack of free drainage, sunshine and aeration as well as ingredients in mortar make unfertile and sour soils. Keep away from trees and heavy rooted shrubs especially.

Kind of Soil-A sandy loam is best. Works freely, retains moisture, and is productive. Any good garden soil will do, but some require more work to keep loose, to keep weeds down, etc.

How to Plant - In springtime, use only well rotted manures cr commercial fertilizers. Spade not less than 8 or 9 inches deep. Open rows or trenches 5 inches deep, 18 or 20 inches apart. Set large bulbs in trenches the width of the bulbs apart. Farther apart if you care to, but not closer. Small bulbs not so deep. Five inches is deep planting. Cover bulbs and ridge up the rows. If the soil is poor, cover only one inch, then sprinkle liberally with sheep fertilizer or bone meal before covering and ridging. Firm down by walking on rows or with lawn roller to eliminate air pockets around the bulbs. If soil is dry when planted, water thoroughly after planting. If planted in beds set bulbs about six inches apart.

How to Mark-Put in stakes and label each variety as planted. Use waterproof ink or lead pencil for marking labels. Common ink will fade from rains and watering.

Cultivating - Always keep soil loose and free from weeds. Never

(Continued on page 188)

Wild Ginger as a Ground Cover

HE Wild Ginger (Asarum canadense), which is fairly common in the woodland areas, is outstanding in its ability to hold its foliage in spite of drought and competition with trees. Plants that had been growing satisfactorily in the Medicinal Garden of the Missouri Botanical Garden suggested that they "could take it" as a ground cover in the city, and in 1938 Dr. Edgar Anderson collected some rootstocks for testing in the Mausoleum enclosure. Now, after five years, the Mausoleum plot still produces an excellent cover despite the lack of special attention. A perfect growth of dark satiny foliage covers the entire area planted, one from which direct sunlight is practically excluded by the surrounding trees.

The dark green kidney - shaped leaves are from 4 to 6 inches broad. The leaf-stalks are produced in pairs from the perennial thick creeping rootstock, supporting the foliage one foot above the ground. The bell-shaped flowers are brownish or madder-purple, surrounded by a 3-pointed calyx. This somewhat curious flower is usually concealed by its low position and the foliage above.

The accompanying illustration is from a photograph taken on September 1 to illustrate the condition of the cover following an extended dry period. Since Wild Ginger is easily grown f r o m seeds, stock should be obtained by this means and the native wild plants left unmolested.

From October, 1943 Missouri Botanical Garden Bulletin.

Help Problem

Perkins—"I hear you have a maid; how long has she been with you?"

Gherkins — "Never; she's been against us from the start."

G. H. Pring



WILD GINGER

-Cut courtesy the Missouri Botanical Garden Bulletin

HOW TO GROW GLADS

(Continued from page 187) permit caking or crusting of soil after rains or watering. Keep cultivating. The more you do, the better your plants and flowers.

Thrips-Several years ago this pest caused untold damage. Thrips are easily controlled if proper precautions are taken. There is no reason why anyone should be bothered with this pest. First, buy clean bulbs that have been properly fumigated. Corrosive Sublimate (Bichloride of Mercury) is perhaps the best known dip. Corrosive Sublimate should be used at the rate of 1 oz. to 71/2 gals. of water and the bulbs should be submerged from 8 to 10 hours. Corrosive Sublimate is soluble in hot water. Dissolve thoroughly in a (glass) jar of hot water before putting into main container. Do not use a metallic container. Use wooden barrel or crock. Sack and label your bulbs, submerge as above stated. Corrosive Sublimate is a deadly poison, so great care should be taken with it. Haugen's Glad Gardens, R. 3, Stoughton.

MAPLE SYRUP YIELD REDUCED BY PASTURING

Decreased yields of maple syrup from trees under which cattle have been pastured have been reported by investigators from time to time. We have noticed orchards doing poorly where cattle are pastured. The reason is no doubt that the destruction of the humus and the tramping of the soil by the cattle leaves it in poor condition so that it will not retain moisture well and the organic content of the soil is also lowered. Just another illustration of the value of humus to the soil.

A Poet Speaks

Let me own a place on earth, Where happiness may have rebirth; A place where sun and rich brown sod, Will help to make my peace with God. A spot that I may search my soul In silence when I near my goal. A small white house with a small white gate.

Unlatched early and unlatched late; This green spot with laughter's mirth, Will make my "Paradise on Earth."

> Marion F. Haugseth In The Country Bard.

Garden Questions and Answers

Burning Over the Lawn. Question: Our lawn is filled with dead grass and leaves. Shall we burn it over?

Answer: There is much danger from fire. One never knows where it might go and the damage it might cause. Furthermore, the chief danger is to plant roots below. We believe that small amounts of dead grass will decompose and form a much needed humus, especially on a lawn which has been clipped.

Lime On Lawn and Garden. Question: I have been told that the soil in my garden and lawn is sour and to use lime. Will this be beneficial?

Answer: Lime is unnecessary for the lawn, flower or vegetable garden in Wisconsin cities, at least where we have hard city water. Many such gardens are already too high in lime. Furthermore, June grass, most flowers and vegetables prefer a slightly acid soil. We cannot tell whether our soil is acid simply by the way the plants grow. Something else may be the cause of the trouble. By all means have your soil tested before adding lime.

Bone meal for the Garden. Question: Is bone meal the best fertilizer for the garden? I have heard that it is.

Answer: Bone meal contains only phosphorus, lime, and a very small percentage of nitrogen. It is therefore not a complete fertilizer and should be used only where phosphorus and lime are lacking, and then probably with the addition of nitrogen and potash because these elements will no doubt be needed.

Ashes in the Garden. Question: Are ashes desirable in the garden?

Answer: You did not state what kind of ashes — whether wood or coal ashes. However, wood ashes contain a large percentage of lime and a small percentage of potash. The soil should first be tested to see if these elements are lacking. If the soil is already high in lime, wood ashes should not be used. Hard coal ashes if sifted, are recommended to loosen a heavy soil and make it more porous for roots of plants. Soft coal ashes should not be used because they are likely to contain toxic materials which may be injurious to the plants.

Vegetables on Poor Soil. Question: A part of our lawn does not grow grass well. We have been advised to dig this up and use it for vegetables. Would this be advisable?

Answer: Certainly not. If the soil does not grow grass well, it certainly would not grow vegetables well. In fact, vegetables require a very fertile soil, full of humus and it is a waste of labor to try to grow vegetables on a poor soil. Perhaps the soil could be improved by the addition of plenty of well rotted manure, or peat and commercial fertilizer.

Value of Earth Worms in the Soil. Question: Our soil is sandy and we do not find any earth worms in it. We have been advised to bring in some worms because they improve the soil. Is this advisable?

Answer: The reason why earth worms do not live in your soil is because it is low in humus. Unless you added plenty of organic matter the earth worms are still not going to increase or live. By adding plenty of manure or compost to your soil and then bringing in earth worms, they would of course feed on the organic matter and help decompose it. However, any soil high in organic matter will be a good garden soil even without earth worms.

Dandelions Again. Question: We have a great many dandelions on our lawn and very little time to dig them. Is digging the only way to get rid of them?

Answer: The answer is briefly, no. I believe digging dandelions is a waste of time these days. Remember that dandelions are biennials which means that the plants which bloom will die the same season in which they bloom. Young plants grow from seed and bloom the second year. If now you can improve your lawn by fertilizing with a nitrogen fertilizer and by sowing additional seed to get a better stand of grass, then the young seedlings cannot do well and the number should be decreased to a point where the few that do grow will do no harm. Why not consider a few dandelion flowers as being ornamental?

—H. J. R.

Perennial Plants 8 Perennials, 1 each, 8 varieties _____\$1.00 5 Hardy Early Flowering Mums _____ 1.00 4 Cushion Mums, 4 varieties ___ ----- 1.00 New early English hardy Chrysanthemums. 12 varieties, in all colors, 5 and 6 inch double flowers, at 50 cents each. Special, our choice, 3 plants \$1.00 New Hardy Chrysanthemums for 1944 Red Velvet-double velvety Crimson ____ ____50c each **Ruby Pompom - Double Ruby Crimson**, flowers in large sprays-wonderful bloomer _____50c each Lavender Lassie-A new Cushion type with two inch double flowers___50c each Mme. Chiang Kai-Shek-beautifully formed oldold flowers in full bloom in September ____ 75c each Tiffany rose—double deep rose flowers with faint cream undertones, 3 inch flowers, blooms from September on___65c each Order now. Plants will be shipped at proper planting time.

Gartman's Lake View Gardens 123 Ledgeview Avenue Fond du Lac, Wis.

.. GARDEN GOSSIP.

SHALL WE PLOW THE GARDEN?

GARDEN club members in various parts of the state have mentioned that they have seen articles to the effect that it is not necessary to plow the garden before sowing seeds this spring.

Perhaps there are loose, sandy soils in which it would be possible to prepare a seed bed without plowing or digging. However, as a general practice, it is all wrong. First of all, we must use more humus in our gardens than we have been doing for best results. Rotted manure, peat, or compost are the limiting factors in good vegetable production and we cannot put this material down where the roots are unless we dig deeply or plow.

The English gardeners obtain excellent results by trenching and digging in plenty of organic material. That, of course, requires more labor than we can provide now. However, we must not go to the other extreme and not dig at all.

Heavy soils should by all means be dug or plowed because the roots do not develop well in shallow cultivated areas. This is especially true in growing root crops such as carrots and parsnips.

NEW TABLE SOYBEAN DEVELOPED Outyields Other Varieties of Edible Soys

THE new Mendota variety of vegetable soybean continues to make good.

O. B. Combs, garden specialist at the University of Wisconsin, released the Mendota to seedsmen in 1943. Limited amounts of seed are on the market in 1944, although most of the available seed is being used for increase.

Mendota appears to be the highest-yielding variety of edible soybean now grown in Wisconsin. For example, the yield of mature beans from the 1942 crop on the University farms at Madison reduced to a uniform moisture content, was about 31 bushels to the acre for Mendota, compared with 27 for Bansei and 23 for Sousei.

Earliness is considered an outstanding advantage of Mendota under Wisconsin conditions, for it reaches the immature harvest stage about 10 days ahead of Bansei, or 90 to 95 days from seeding. Mendota matures in 115 to 120 days.

Other advantages are said to be that it is unusually uniform in plant type and maturity, is comparatively free from crinkle mosaic disease, and is of excellent quality for canning or freezing.

Mendota plants usually grow 28 to 30 inches high. The pods contain two to three seeds, 10 per cent or more of them carrying the larger number. Immature seeds are light green. Mature seeds are light strawyellow in color, with a pale hilum and yellow germ, and are of medium size, averaging about 2100 a pound.

NEW BULLETIN ON ROSES

Prof. C. E. Wildon of the Division of Horticulture, Michigan State College, East Lansing, Mich., is the author of special bulletin 222 issued January, 1944, entitled "Garden Roses."

It is a bulletin of 62 pages with a number of excellent illustrations including several in color. The varieties shown in color are Pinocchio, Caledonia, Paul's Scarlet Climber, and Mabelle Stearns.

The bulletin contains chapters on diseases, culture, in sect control, planting, propagation and pruning, but is especially outstanding in the description of varieties and types.

INCREASED YIELDS OF TOMATOES OBTAINED BY INTERPLANTING C. H. Nissley

TNCREASED yields of market tomatoes were obtained by the Virginia Truck Experiment Station in 1942 by interplanting one variety with another. The Rutgers and Marglobe tomato varieties were set 4 feet by 5 feet apart, and interplanted the 5-foot way with Victor, an early maturing variety. This made all tomato plants in the field set $4x2\frac{1}{2}$ feet.

The Rutgers and Victor planted together yielded 60 per cent more tomatoes than the Rutgers alone, and the Marglobe and Victor together 46 per cent more than the Marglobe alone. Since the Rutgers and Marglobe in the interplanted blocks yielded just as much fruit as when set alone, the increased yield was attributed to the Victor production.

The earliness of the Victor tomato tended to lengthen the production period for market and increased yields in the early part of the season. The lack of foliage of the Victor vines was partially made up by the abundant foliage of both the Marglobe and the Rutgers vines, and considerably less rotting of the mature fruit of the Victor was produced by interplanting.— From Feb. 1944 Horticultural News, New Jersey.

HONORS EVEN

The street-corner orator had been called on to answer more questions than he expected and he was becoming rather muddled.

"Tell them all you know," shouted a heckler during an awkward pause. "It won't take you long."

"I'll tell them all we both know." replied the orator, "and it won't t ke me any longer!"

HOW DEEP SHOULD THE GARDEN BE DUG?

GARDENERS who receive their training in Europe usually recommend that the garden be dug at least two spades deep. Where this method has been practiced for years and a heavy sod has been placed at the lower depth to decompose, the method may have advantages. Bringing a subsoil to the surface, however, as would be the case with most gardens in this country, would be disastrous.

Now we find the conclusion that single digging produces better crops with less work than double digging, according to the English "Gardeners' Chronicle" reporting on experiments at Edinburgh College. A series of plots were planted to onions and those which had been single dug, or to one spade depth, together with infrequent hoeing were the best.

Onions, of course, are shallow rooted crops. The benefits to two spade depth, or even three, are no doubt due to the large amounts of manure and organic matter which can be incorporated by this method. Such root crops as parsnips which penetrate deeply might also do better.

In the English experiment eight wheelbarrow loads of cow manure were applied to each plot measuring 33x18 feet. Lack of organic matter is a serious handicap to vegetable gardening. Our soils need humus more than anything else.

BEST ROSES "If I Could Have But One"

A few weeks ago, under the title of "If I Could Have But One," I asked the members to send me the name of the rose they would select if they could have but one. The nominations came from the length and breadth of the country and from Canada. The following is the result:

Crimson Glory, 19; Etoile de Hollande, 7; The Doctor, 2; Golden Dawn, 3.

By Edward W. Burt, New Bedford, Mass., in The American Rose Magazine.

NEW INSECTICIDES

SYNTHETIC insecticides loom important in the pest control field. Last year, for example, one type of Lethane saved 2,000,000 pounds of scarce rotenone. This year a new Lethane which completely eliminates rotenone and pyrethrum is being introduced.

There are interesting sidelights: The use of synthetic insecticides for cattle lice, body lice (carriers of the deadly typhus and controlled by a Lethane impregnated on a cotton belt for armies and labor battalions); use of synthetic in head lice control (the British recommend and distribute Lethane Hair Oil); use of synthetics in aerosol "insect bombing" in ships, planes, mushroom cultures, etc., and now the introduction of a new synthetic for household pests and even the pelt and leather destroying ticks on silver foxes and cattle.

Private: "See that sailor over there annoying that girl?"

M.P.: "Why, he's not even looking at her."

Private: "That's what's annoying her."

ROLL THE LAWN WITH CAUTION

A N open winter usually results in a rough lawn surface. Water in the soil freezes, expands, and many grass plants are pushed up from their moorings. The object of rolling is to push such plants back, not to iron out a normally rough surface. Compacting when the ground is wet results in the forming of a crust which tender seedlings simply cannot penetrate.

Rolling is a chore which the average person likes to get out of the way early. Actually it is better to wait. The surface may be damp but not wet when rolled and regardless of the soil, a heavy roller is injurious. A water ballast roller, empty or at least not more than half full, insures sufficient weight. If the surface is still uneven after rolling, topdress lightly to fill in the low spots.

The winter's accumulation of leaves and other debris should be raked or brushed out before rolling them.

From "Lawn Care."



April, 1944

April, 1944

Some Apples Come High

(A Dispatch From the Farm) By John Gould

"T"S a good thing Great-Grandfather wasn't around today or I'd have given him a piece of my mind. In most matters I have considerable respect for the old pioneer, but every time I pick the Sweet Graft apple tree I long to address him intimately and improve his knowledge of pomology.

"The Sweet Graft is the tallest tree in our orchards. Great-Grandfather grafted it when he was a young man, and through the years he nurtured it into a tall and rangy specimen with the general shape and reach of an elm. We have no idea how old it is. My father says it looked just the same when he was a boy. Grandfather picked it carefully every Fall for something like 80 years.

"Great-Grandfather came up here with all his possessions on his back and carved out a home. He brought in his pocket a few apple seeds, and after he whacked down the forest he planted them. In a few years they were small trees, and their first fruit was 'native.' Then Great-Grandfather hiked back the long trail to civilization and cut some scions from apple trees in the orchards of friends. He grafted these, and in a few years he had true varieties growing on his seedlings. One of the scions was cut in the old King Orchards, owned by the family that gave Maine her first governor. We were always told Governor King's father originated the King Sweet-extant today (as far as I know) only on our place.

"That's all very well—it's a fine apple with a fine history and an appreciative clientele. But Great-Grandfather made one powerful mistake. He grew his tree tall and straight. This is not good orchard practice. The higher the apples, the harder they are to pick—the fruit nearest the ground is the cheapest to gather. Every time I pick the tree I wish I might have pointed that out in the beginning.

"The old Sweet Graft, however, was probably subjected to many trimming operations in its youth. No doubt sheep stood on their hind legs and ate off the lower limbs. Untold cows must have reached up as they went by and snagged a mouthload of leaves, bark, wood, and fruit. Horses probably did the same, but could reach higher. And probably Great - Grandfather took his saw to the tree at times, fixing so he could drive a load of hay underneath without having the top combed off. Nowadays sheep, cows, horses, hay, and saws are left in such fashion apple trees are left dragging on the ground, and one can pick a whole orchard with a ladder he can manage one-handed.

"The old Sweet Graft stands by the road, self-evident proof it grew in another century. The thirty-foot ladder isn't quite tall enough to reach the topmost apples, and when I start up to garner the crop I feel like kissing everyone good-bye and carrying a lunch. It's lonesome up there, and far away, and vague miles stretch between me and those I love. Today, while I was farthest from home, musing to myself in the rare atmosphere, I heard a voice.

"At first it seemed barely possible the voice was celestial, but it really came from the road down below. I focused at infinity and made out a man with his hands cupped to his mouth. He shouted again, and I heard him say, 'How much are apples?"

"I continued to pick, but answered, 'Three dollars a bushel.'

"'They're kind of high, aren't they?' He objected.

"'This is a high tree,' I called back.

"He went away then, and as I thought it over it appeared to be a fairly good joke, and in the end I didn't feel so badly toward Great-Grandfather, after all."

CANNED FRUITS AND VEGETABLES FOR CIVILIANS REDUCED

THE civilian supply of canned fruits will be cut 43 per cent and canned vegetables 19 per cent, according to a recent announcement by the government. This has given great importance to the national victory garden program.

Last year the weather conditions in the nation were favorable for the production of a large crop of vegetables and so our supply has been adequate for needs the past year. Should the weather be unfavorable the coming season, many people will be unable to get the vegetables they need for an adequate diet, unless they operate a victory garden.

The Government's Requirements of Canned Fruits and Vegetables

The War Food Administration has ordered that fruit and vegetable canners must set-aside from their 1944 production about 70 per cent of their 1942-43 average annual production of canned fruits, and about 50 per cent of canned vegetables. Requirements are estimated at 36 million cases of canned fruits. and 92 million cases of canned vegetables.

The increase principally is for canned apples, fruit cocktail, peaches, pears (Bartlett), lima beans. sweet corn, peas, tomatoes, and tomato juice.

IS IT A FRUIT, OR A VEGETABLE?

TN this issue we have a very interesting article by Prof. J. H. Gourley of Ohio State Experiment Station, answering the age-old question—"What is the difference between a fruit and a vegetable?"

We think it is very well answered. We feel that all members of a Horticultural Society will wish to have the answer clearly in mind and recommend the article for careful study.

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The Best Lilacs

W. R. Leslie, Morden Experiment Station

ILACS perform in high excellence on the high lime soils of the prairies.

Of the 25 species of Wild Lilacs recognized by botanists 23 are natives to Asia. The other two, Syringa vulgaris and S. josikaea, are credited to Europe. Names are sometimes inappropriately applied. As examples, note the Persian Lilac which is from China, and the useful Chinese Lilac, S. chinensis, which is a hybrid-Persian crossed with common, and developed in France by plant breeding.

The booklet, Lilacs for America. published for the American Association of Botanic Gardens and Arboretums by Arthur Hoyt Scott, Horticultural Foundation, Swarthmore College, Swarthmore, Pa., classifies a total of 640 varieties and species. That publication is authoritative and very valuable to the study of the increasingly popular lilac shrub.

The Amur lilac is a large bush, requiring a space about 12 feet. It is fully hardy, adds a charming billowy mass of creamy fragrant blossoms from top to toe in late June, and deserves a place on all large prairie grounds.

The Cutleaf Persian is small and dainty. The foliage is fine, being small and deeply lobed. Twigs are thin, and flowers mauve.

The season of blossoms opens with the early hybrids-Assessippi, a fragrant pinky-mauve, developed by F. L. Skinner; and Buffon, Catinat and Necker, all three being pinkish.

There are over 200 varieties of improved Common lilac at the Morden Station. A selection of excellent kinds follows:

White, single: Vestale, Jan Van Tol

White, double : Edith Cavell, Ellen Willmott, Mme. Lemoine

Violet, single: De Miribel, Cavour Violet, double: Marechal Lannes, Violetta

- Blue, single : Maurice Barres, Pres. Lincoln
- Blue, double: Olivier de Serres. Emile Gentil
- Lilac, single: Marengo, Jacques Callot

Lilac, double: President Fallieres, Leon Gambetta, Victor Lemoine

Pinkish, single: Lucie Baltet, Macrostachva

Pinkish, double : Mme. A. Buchner, Montaigne

Reddish, single: Marechal Foch, Mme. F. Morel

Reddish, double : Paul Thirion, Paul Deschanel, Mrs. Edward Harding

Purple, single: Monge, Mrs. W. E. Marshall, Ludwig Spaeth

Purple, double : Paul Hariot. Adelaide Dunbar.

There are scores of other varieties that are pleasing. The above listings have all won high ratings and represent the upper aristocracy in lilacdom.-Condensed from Mar. 11, 1944 letter-Dominion Experimental Station, Morden, Man

GOOD ROSE VARIETIES

•HE following is a special list of L. fairly hardy roses which give abundant bloom in autumn and which are reasonably resistant to blackspot; thrifty in growth.

1. A BAKER'S DOZEN OF HYBRID TEAS:

Red: Crimson Glory, Etoile de Hollande, Grenoble.

Pink: Pink Princess, Radiance, Mrs. Charles Bell, Picture, Break o' Day.

Yellow: King Boreas, Golden Dawn. White: Lily Pons. Two-Tone: Edith Nellie Perkins,

- Soeur Therese.
- 2. A TRIO OF HYBRID PERPETU-ALS: Frau Karl Druschki (white), Mrs. John Laing (pink), Henry Nevard (red). 3. SEVEN ESPECIALLY GOOD
- **TESTED LARGE-FLOWERED POLYANTHAS:** Red: Donald Prior, World's Fair. Pink: Else Poulsen, Betty Prior, Mrs. R. M. Finch, Lafayette.
- White: Summer Snow.
- 4. ONE OUTSTANDING SINGLE: Dainty Bess (pink).

From The American Rose Annual-1944.

OUR READERS

write about the

HORTICULTURAL BOOK

"Live at Home and Like It"

Read what they say-

The Home Gardener Says:-

"The best Book of its kind ever put on the market."-Says "Number One," Minnesota.

"It is the best book on Horticulture for the Northwest that we have read."—Says "Number Two," Wisconsin.

Just brim full of knowledge, and most ful and interesting." — Says "Number useful and interesting." Three," New York.

"I have found it interesting and useful. Enclosed is \$1.00 for another copy."—Says "Number Four," Minnesota.

"Appreciate the book greatly. It is unique and just about 'It' in its field." — Says 'Number Five," Sask., Canada. and

"After reading the first few paragraphs of Live At Home and Like It, you have had your money's worth even if the book stopped there."—Says "Number Six," Minnesota.

"We enjoyed this book very much and use it constantly as a hand-book of infor-mation on practically everything we want to know about things that grow."—Says "Number Seven," Iowa.

"So simple and scientifically correct—so well and cleverly illustrated."—Says "Num-ber Eight," Alabama.

Experts Who Know Say:-

"An excellent contribution in an area where specific, helpful information is need-ed."-Says Professor No. One, Agricultural Education, University of Minnesota.

"I have read the book from cover to cover three times and thoroughly enjoy it as a practical reference on the entire field of Horticulture as it especially relates to this area."—Says County Agent, Minnesota.

"I can think of few questions relating to home grounds, its planting, and care, which you have not answered."-Says Professor No. Two, Horticulture, University of Minnesota.

"The book is very comprehensive. The special needs of this region are particularly stressed, also, in cultural directions and in pest control methods."—Says Professor No. Three, Horticulture, University of Minnesota.

"The book contains so much information that it may well be considered a reference book, and yet it is readable and entertain-ing withal."-Says Editor A. N. Wilcox in the "Minnesota Horticulturist."

Price only \$1.00 postpaid

Send orders to



Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

Mrs. R. H. Sewell, President 957 No. 70th St., Wauwatosa 13 Mrs. F. E. Willard, 1st Vice-President Oakfield

Mrs. Walter Dakin, 2nd Vice-President 4110 Mandan Crescent, Madison 5

THE PRESIDENT'S MESSAGE

"Underfoot, overhead, and on every side the evidence of life resurgent, bursting the wrappings of the shroud of winter, carry a message so palpitant and stirring that even the most prosaic mind reacts to it."

The Regional meetings held Mar. 7, 8, 9, and 10 were a spring tonic for the Wisconsin State Garden Club Federation. The Second Vice-President and District Presidents were untiring in their efforts to make them a success. The attendance of officers, chairmen and members was most gratifying.

The motto "Food for Ammunition" was paramount. Every plan presented proved the organization to be an important factor in the rehabilitation and war service program.

However, the inspiration received must not be forgotten. If your club cannot support all, select one project for the year's endeavor. Emphasize Garden Centers, Juniors, Conservation; increase all garden plans and food production and for added pleasure remember the Bird and Radio programs.

In behalf of the Federation, I wish to thank Mrs. Dakin, the State officers, the District Presidents, the State Chairmen and all the members who contributed to the success of "The 1944 Regional Meetings."

Sincerely,

Mrs. R. H. Sewell,

OFFICERS

Mrs. H. W. Schaefer, Recording Secretary-Treasurer 4416 Taft Road, Kenosha

H. J. Rahmlow, Corresponding Secretary 424 University Farm Pl., Madison 6



MAKE PLANS FOR ARBOR DAY PLANTINGS

N^{OW} that our gardens are safe-ly put away for the winter and our plans for the Victory gardens we are anticipating for the coming season completed and with the longing for spring work to get under way, let us give a little thought to the community about us and make some plans for its improvement.

Arbor Day is in the offing and with our plans for Memorial plantings very close to our hearts because the effects of the war are being brought ever closer to us by the return of our first casualties it would seem that these next few weeks could well be given over to definite work on plans for plantings on our highways, in roadside parks,

DISTRICT PRESIDENTS

DISTRICT PRESIDENTS Mrs. F. J. Fitzgerald, 649 Broad St., Menasha; Fox River Valley District Mrs. H. R. English, 1722 Chadbourne Ave., Madison 5, Madison District Mrs. O. H. Burgermeister, 2127 S. 87th St., West Allis 14, Milwaukee District Mrs. John Weat, R. 2, Manitowoc Sheboygan District Mrs. Norma Robinson, Lake Geneva, South Central District

our rural school grounds, where in so many cases there is much that should be done and on the sites of our town halls which all too often are the most neglected places on the highway.

We would not necessarily need to plant only trees. A plum thicket or some such planting would add much to the landscaping of many places, is not expensive, a joy to behold when in bloom, a place loved by birds for nesting, and a shelter for wild game birds in winter.

And best of all, such a planting is not too difficult for school children to do and to maintain. It could serve as a wind break for snow control and much could be learned by observing the resulting benefits.

If we are planting trees let us not be too ambitious to make a fine showing immediately. It has been proven by experiments that the use of large trees has not been as successful as had been hoped. We have learned that the percentage of loss is very high and that the life span of the tree is greatly shortened, and the expense much greater both in maintenance and first cost.

Let us get about the business of civic improvement, giving vent to our fury at passing events by building beauty into our surroundings with the same enthusiasm, spirit and energy that we would like to expend on a wood pile if we were fortunate enough to have one these days.

Mrs. C. L. Dean, Chairman of Committee On Roadsides and Memorial Highways.

THE TRUAX FIELD PLANTING PROJECT

A Summary of 1943 Accomplishments and a Presentation of 1944 Objectives

A recapitulation of the planting at Truax in 1943 follows: (figures approximate)

Deciduous trees1	287
Evergreens	66
Deciduous shrubs7	798
Flower gardens made	41

Thousands of bulbs, annuals, and perennials were used in the flower beds at the hospital entrance, the flag pole, the hospital, the officers' club, and the Waac's, besides gifts to the squadrons.

A statement of finances: Total money raised in 1943_\$1.660.10

On hand in general fund De-	
cember 1, 1943	34.13
On hand in Radio School's	
contribution for replace-	
ments in its planting	50.00

Gifts received in 194420.00Total on hand in general54.13

A conservative estimate places the value of the planting, including labor, at \$10,000. This also includes gifts of 3,000 to 4,000 trees and shrubs from nurseries and individuals.

1944 Spring Objectives

(1) To set out maples on hand approximately 225, 12-ft. trees. (A gift.)

(2) To replace winter losses where necessary.

(3) To design and execute evergreen plantings as requested for the three chapels. (Funds for this project are provided by the Chaplains.)

(4) To meet the request for larger cutting gardens at the hospital.

(5) To replace annuals in the six red, white, and blue formal beds at the flag pole.

(6) To plant annuals in such gardens as need them for all-season bloom.

(7) To beautify the area, where one of the Radio School buildings was razed by fire in the early winter. The government does not plan to replace the building. During the winter the plot was flooded for skating. It is directly across from the rectangular park which we made last spring and which is centered by the flag pole memorial planting to "Bud" Truax. You can readily visualize the bareness and the need of an effective planting to complement that across the way and possibly enclose the recreation plot.

Several of the 30 ft. elms which were in the row of 14 facing this building were so badly burned that they will have to be replaced.

Your gifts, those of individuals, clubs, and donations from the Federation's War Service Committee's Fund have been most gratefully received. We shall be equally appreciative of your cooperation in putting our 1944 plans across.

(Mrs. Walter)

Genevieve C. Dakin Chairman War Service, Madison District.

ILLUSTRATED LECTURES FOR GARDEN CLUBS BY NORBERT W. ROEDER

Mr. Norbert W. Roeder, Curator of the Kenosha Historical Museum, Kenosha, is available for illustrated lectures. He has the following two topics, each taking about one hour and ten minutes:

"Song of the Seasons," illustrated with 160 Kodachrome slides. Presents nature in its many varying moods throughout the year. It stresses conservation values throughout and is suitable for a conservation meeting.

"Southwest Scenes" is illustrated with one thousand feet of Kodachrome motion picture film and seventy-five Kodachrome slides. The material was gathered in July and stresses the desert flora of New Mexico and Arizona. Included are trips to White Sands National Monument, Petrified Forest of Arizona, Indian pueblos, with a fine sequence of pottery making at San Ildefonse, N. M.

Mr. Roeder supplies all projection equipment and screen. Fees are arranged to suit the exigencies of travel and the purse of the organization.

AWARDS FOR GARDEN CLUB YEAR BOOKS

Mrs. H. J. Anderson, Racine, Program Chairman

T WAS my privilege to have the opportunity of announcing the awards for the 1943 year books at all the Regional meetings. They were most attractive and contained a wealth of fine program material.

The year books were judged by Mr. Albert M. Fuller and Mr. Emil Kruschke of the Milwaukee Public Museum for horticultural research and educational value. Mr. Keith Gebhardt, chief artist of the Museum, judged for artistry and compilation. Mr. Louis A. LeMieux of Marquette University stated, "I tried to make a careful review of the programs and considered this characteristic an important one in making my selection."

Year books were judged according to the merit system and using the following score card:

Artistry20%	
Compilation10%	
Horticultural research30%	
Educational value40%	
Total100%	

Awards

Excellent: Ravenswood and Elm Grove Garden Clubs.

Very Good: Blue Mound and Antigo Garden Clubs.

Honorable Mention: Edgerton, Omro, Iola, Fond du Lac, Menomonee Falls, Oakfield, Portage, Shorewood Hills (Madison), Wausau, Ripon, Waukesha Town, and Wauwatosa Garden Clubs.

All garden clubs should send their 1944 year book to the program chairman as soon as possible. Address: Mrs. H. J. Anderson, 317 West Blvd., Racine, Wisconsin.

	—SAVE TREES—	
Cavity Treatment	General Landscaping Las	rge Tree Moving
Fertilizing	We are insured Lakenide 2907	Removale
Pruning	Wisconsin Tree Service	Spraying
	2335 N. Murray Aya. Milwaukaa	

Report of the State Judging School Chairman

EACH District President has been asked to refer to the State Judging School' Chairman's report as printed in the December 1943 issue of Horticulture, and request a vote by all clubs on the following suggestions:

1. To require all present and future judges to appear before a board of 3, elected at large by the garden clubs, for an oral and written examination.

2. To require accredited judges to attend a refresher course every 5 years for renewal of certificate.

District Judging School Chairmen have been asked to ascertain whether their local districts wish to sponsor a judging school this year. Accredited judges will please notify their District Chairman of shows they will judge, so that new judges can work with them and obtain the required experience.

We had hoped to present a State Judging School this year in Milwaukee, but due to general conditions and lack of speakers it does not seem feasible at this time. Your chairman suggests to those interested in obtaining a judging certificate that they purchase a "Handbook of Flower Show Judging" for fifty cents, or the one with the color chart for one dollar and follow the course of study outlined. These books and judging blanks may be obtained from your State Judging School Chairman, Requirements for Accredited Judges of Wisconsin are as follows:

For Master Judges: 5 years of exhibiting and 3 years of judging. Other requirements the same as for assistant judges.

For Assistant Judges: 3 years of exhibiting with winning exhibits in at least 3 shows. Attendance at 3 or more flower arrangement or judging lectures. Knowledge of judging at least 2 in the perfection of bloom classes (giving scores). Please feel free to write me in regard to any of your problems and for further information. It is gratifying to know that so many new people are interested in becoming judges. The aims of this chairman for 1944, as in 1943, are to raise the standards of judging, and assist and encourage the judges of tomorrow.

Vicky Lee Hirsh, 604 N. 119th St., Wauwatosa, Wis., State Judging School Chairman.

THE PURPOSE OF A GARDEN CENTER

1. To promote such knowledge and love of gardening as will result in a more beautiful community.

2. To offer a place where people may come for free information on gardening problems, such as cultivating, fertilizing, planning, planting and caring for their gardens generally.

3. To conduct classes on gardening subjects.

4. To establish a definite place where people may study books and be inspired to do more worth while work in helping themselves—and beautifying the community.

5. Always have flower exhibits in season with books and information appropriate to the subject.

6. To work with the school children and interest them in the use of the center. *They* are the future gardeners of America.

Mrs. C. A. Namur, Kenosha, Garden Center Chairman.

GARDEN CLUBS HELP FEDERATION FINANCES

A NUMBER of years ago the Wisconsin Garden Club Federation Board of Managers adopted a plan providing for contributing and honorary memberships. Clubs who voluntarily paid an additional 10 cents in dues were to be called contributing members, and those who paid an additional 25 cents

were to be given honorary membership. All of the additional funds were retained in the treasury of the Wisconsin Garden Club Federation and used for current expenses.

The following are the memberships for 1944:

Contributing

Fond du Lac Community Garden Club, 37 members.

Menasha Garden Club, 15 members.

Hales Corners Garden Club, 18 members.

Brandon Garden Club, 10 members.

Honorary

Blue Beech Garden Club, 14 members.

Hillcrest Garden Club, West Allis, 11 members.

West Allis Garden Club, 16 members.

Wausau Garden Club, 26 members.

PLANT 15,000 TREES A DAY

The Wisconsin tree planter, consisting of a middle-breaking plow, planting shoe, and packing wheels, plants from 12,000 to 15,000 trees a day. The same three-man crew, working by usual methods, would do well to put in 3,000. Developed by a University of Wisconsin extension forester and agricultural engineer, the machine is being purchased or built, by towns, soil conservation districts, and county boards for loan or rental to individual farmers.

GARDEN CLUB RADIO PROGRAM

STATION KFIZ-1450 KC Fond du Lac Station

Mr. U. F. Ammell, Radio Chairman for the Fox River Valley District, announces a garden program on the last Friday of every month at 11:15 a. m. over KFIZ.

On April 28th Mrs. Earl Beyer of the Ceresco Garden Club, Ripon, will talk on a garden topic to be announced at that time.

A Selected List of Reading For Garden Club Members

Mrs. H. J. Anderson, State Program Chairman

American Garden Book by Bush-Brown. 1939. Every phase of gardening from planning of formal landscapes to the cultivation of vegetables.

Be Your Own Gardener. By Patterson. 1940. How to make, maintain, and find satisfaction in intimate flower gardens.

Better Lawns For Homes and Parks. Sprague. 1940. Soil conditions and treatments, behavior of grasses, and pest control.

Do You Know Your Garden? Goshorn. 1941. Question and answer book of wide scope.

Gardens and Gardening — The Studio Garden Annual. 1938. Design of gardens of medium and small areas.

Modern Guide to Successful Gardening. Kains. 1934.

Old Dirt Dobber's Garden Book. Williams, 1943.

Planting Design. Robinson. 1940. Color, texture, mass and grouping, with suggestions a b o u t choosing plants that will provide effects under different conditions of soil, climate and location.

Trees and Shrubs for Landscape Effects. Coffin. 1940.

Your Ganden in the City. Gomez. 1941.

Plant Explorers

Exploring for Plants. Fairchild. 1931. Account of numerous expeditions into many lands for the study of plants.

How Plants Get Their Names. Bailey. 1933.

Manual of Cultivated Plants. Bailey. 1924. A flora for the identification of the most common or significant species of plants grown in the continental U. S. and Canada.

Outline of Plant Geography. Campbell. 1926.

Partner of Nature. Burbank. 1939. Comprehensive survey of methods of plant-breeding. Plant Hunters in the Andes. Goodspeed. 1941.

Plant Hunting. Wilson. 1927.

World of Plant Life. Hylander. 1939. Plants, both native and introduced found in the U. S.

World Was My Garden. Fairchild. 1938. Travels of a plant explorer.

Conservation

Adventures in Bird Protection. Pearson. 1937.

American Conservation in Picture and Story. Butler. 1935. Short articles on the national forests, parks and monuments, and on conservation of the soil, wild life and fishes.

American Wild Life Compiled by the Writer's Program, New York (City). 1940.

Conservation in the U. S. Gustafson. 1939.

Conservation of the soil. Gustafson. 1937. For land owners and general readers.

Nation's Forests. DuPuy. 1938. A plea for conservation.

Remaking America. Carter. 1942. Government's programs for conservation, flood-control, economic stability, personal security, and employment.

Wardens of the Wild. Bridges. 1938. Conservation of wild life, national parks and reserves, habits and behavior of animals.

Bird Study

A.B.C. of Attracting Birds. Alvin Peterson. 1937.

Audubon Guide to Attracting Birds. Baker. 1941.

Bird Portraits in Color. Roberts. 1934. Two hundred ninety-five North American species.

Birds in the Garden and How to Attract Them. McKenny.

Field Guide to the Birds. Rodger Tory Peterson. 1939. Giving field marks of all species found east of the Rockies.

Pageant in the Sky. Deck. 1941.

Modern sport of watching birds. Wild Bird Neighbors. Peterson. 1940.

Wings At My Window. Govan. 1940. The record of a back yard sanctuary kept by a woman with a unique bird banding score.

WELCOME TO NEW GARDEN CLUBS

N^{EW} garden clubs joining the Wisconsin Garden Club Federation and the Wisconsin Horticultural Society during the past month are the Parklawn Garden Association, Milwaukee; the Two Rivers Garden Club; the Manitowoc Garden Club, and the North Prairie Garden Club.

Officers of the Parklawn Garden Association, not published in the March issue, are as follows:

President: Anthony Hein, 4614 W. Olive St.

Vice-Pres.: Royden T. Wiler, 4633 W. Rice St.

Secretary: Mrs. Marie Rathmann, 4613 W. Olive St.

Treasurer: Mrs. Linda Wiler, 4633 W. Rice St.

Officers of the Two Rivers Garden Club are:

President: Carl H. Schinke, 1515-24th St.

Vice-Pres.: E. A. Meckelberg, 1611 Washington St.

Secy.-Treas.: Mrs. G. W. Neuenberger, 2407—10th St.

Meetings are held the first Wednesday of the month.

The North Prairie Club was affiliated but dropped out for a few years. We again welcome them to membership.

The Board of Directors of both state organizations give a hearty welcome to these clubs and hope they will benefit by their affiliation.

Sergeant (on rifle range): "This new bullet will penetrate nearly two feet of solid wood, so remember to keep your heads down."

Draftee: "Do you think they'!! ever send me overseas, doctor?"

Examining Physician: "Not unless we're invaded!"

April and May Bird Migration

The bird conscious gardener who would like to know what feathered visitors to expect in her garden during the months of April and May, will find in the following lists a working guide to the bird migration. The April migration moves with increasing speed into the month of May-the peak of the annual bird pilgrimage to the North. The feature of this is the warbler migration. Myriads of these cheerful, colorful, active little visitors drop in for a few days and then are suddenly gone. Most of them nest in the more northerly regions. The discovery and identification of over thirty varieties of warblers is the high adventure of the season for most bird lovers.

•••••	
April 1	to 15
Loon	Blue-winged
Coot	Belted Kingfi
Horned Lark	Tree Swallow
Brown Creeper	Ruby-crowned
Cedar Waxwing	Kinglet
Eastern Meadow	Migrant-Shril
Lark	Pine Siskin
Savannah Sparrow	Chipping Spa
Field Sparrow	White-throate
Swamp Sparrow	Sparrow
April 15 t	o May 1
Yellow-legs	Cowbird
Red-headed	Chimney Swi
Woodpecker	Bank Swallo
Rough-winged	Purple Martin
Swallow	Brown Thras
Red-breasted	Myrtle Warb
Nuthatch	
Hermit Thrush	
Ma	y
Spotted Sandpiper	Yellow-billed
Black Tern	Cuckoo
Black-billed Cuckoo	Ruby-throate

Black-billed Cuckoo Ruby-throated Nighthawk Kingbird Least Flycatcher Cliff Swallow Cathird Olive-backed Thrush Veery Yellow-throated Vireo Red-eyed Vireo Bobolink Orchard Oriole Scarlet Tanager Indigo Bunting Common Tern Whip-poor-will Black and White Golden-winged

isher đ ke worn ed ift w n sher oler

Teal

Humming Bird Crested Flycatcher Wood Pewee House Wren Wood Thrush Gray-cheeked Thrush Blue-gray Gnatcatcher Blue-headed Vireo Warbling Vireo Yellow-headed Blackbird Baltimore Oriole Rose-breasted Grosbeak Dickcissel May Warblers Prothonotary Tennessee

Nashville Parula Yellow Magnolia Cape May Black-throated Black-throated Blue Green Blackburnian Chestnut-sided **Bay-breasted** Black-poll Pine Palm Oven-bird Water-Thrush Connecticut Mourning Northern Wilson's Yellow-throat American Redstart Canada Mrs. R. A. Walker, Madison, State

Bird Chairman.

GARDEN TOIL NOT ALWAYS

WELL SPENT

A HARD working "victory garden" toiler told us last week about his experience with a quackinfested plot last season. "Never again," he declared, "will I spend my spare time with such a project."

No one could criticize this amateur gardener for his resolve. He was unfortunate in selection of a piece of land which was almost impossible to subdue in one season. He and his Kiwanis Club associates were warned, but went ahead in vain attempts to plant and cultivate. The experience of plowing, harrowing, hoeing and the expense of seed and spraying was considerable. They raised scarcely any corn or potatoes and even small items were nil. His seed and labor were practically wasted, except for the exercise.

Victory gardens were generally profitable and will be more successfully handled this year. But truck and fruit growers are so hard pressed for peak load help that they would gladly make use of town workers when available.

A canvass of disappointed city gardeners might help the farm labor situation in specialized areas this coming summer.

Editorial in March 4 Wisconsin Agriculturist and Farmer.

THE ROSE STERLING IS PRAISED

"The rose Sterling has proven about perfect with me," writes Mrs. George R. Leist of Elroy. "It winters well by just hilling dirt about it and is an abundant producer of lovely long stemmed blossoms. Our garden where they grow is on a northwest hillside and the soil is clay loam."

Sterling is a U. S. plant patent rose of a flaming pink color, good form in bud as well as when open. The base of the bloom is yellow, giving it a richness and clarity of color seldom seen. It was the winner of the Hubbard medal in 1939 as the "best American rose of the past five years" awarded by the American Rose Society.

BOSTON'S SPRING FLOWER SHOW

HE gardens of the United Na-L tions will constitute the theme of the 1944 spring flower show in Boston. In the list will be a Pan-American garden, emphasizing the good neighbor policy of the present day, something which can be emphasized in the language of flowers and plants, as well as in a political manner. A Chinese garden, a Russian garden and an English garden will be among those to have a place in this show, and of course, an all-American garden.

In addition to these gardens, which will occupy the main hall, there will be great numbers of flower groups throughout the building in which orchids, roses, acacias, azaleas, carnations and other flowers will be included. As in 1943, this year's show will be held in Horticultural Hall, the home of the Massachusetts Horticultural Society. It will be continued for eight days, from March 18 through March 25.

From February 1, 1944 Horticulture. Boston.

You know this paving of rock and asphalt over a layer of cotton? The guide where I go hunting has a piece of it, but he calls it a mattress.

Growing Tomatoes in the House

WHAT is so rare as a day in June?" A perfect tomato raised and ripened in your own home, picked red and delicious on Christmas Day and eaten as salad with your Christmas turkey. That indeed is a perfect treat.

The latter part of August 1 noticed two waif tomato plants growing in with my flowers in my country garden. I had not planted the seed. These two wayward strays had evidently been in the manure I had procured from a nearby farm or a sly little bird had had a mind to "garden for victory." The plants were allowed to grow and they proved to be healthy, perfect specimens. When the time came to return to the city, these plants were about six and eight inches tall so I potted them and brought them to town. Fortunately we have a large vita glass sky light in the attic with a south exposure. This admits over 90 per cent of the true value of the sun's rays.

The two tomato plants were repotted into ten inch pots with drainage and good garden soil provided in both. In turn these ten inch pots were placed in a large ash bucket with gravel in the bucket under and around the pots to afford drainage and provide moisture from below. A wooden trellis was built for supporting the growing plants.

At first feedings of vigoro applied in the water and intermittent applications of bone meal were the only fertilizers. Later manure too was used. The water for soaking the ground was always applied warm because the temperature during the night often went as low as 48°, there being no heat in the room. The warmth in the room came from the sun and the door opening into the hall. Some times when the sun was bright, the thermometer registered over 100° at noon. Each day fresh air from out doors was given the plants-this did not blow on the plants and was cautiously done. The plants blossomed and I shook the blossoms in the sunshine for pollination. Tiny green tomatoes formed, grew and ripened. I picked my first lovely, fully ripe tomatoes on Christmas Day and over a period of from six to seven weeks I picked thirty-one tomatoes, two of which weighed over a half pound each. All the fruit was deliciously vine ripened and beautiful to look lat—not a blemish or spot of any kind, very firm and solid meat with few seeds.

The experiment took but a little time each day but afforded much interest and a great deal of satisfaction and pleasure.

By Mrs. Frank C. Courtenay, Blue Beech Garden Club, Milwaukee.

THE BEST VEGETABLES TO GROW

THE University of California has made a study of the best vegetables to grow based on nutrients per pound, per acre, and economy of labor. The following vegetables are the best: broccoli, cabbage, mustard, spinach, sweet potatoes, white potatoes, and winter squash.

In the second best list come brussels sprouts, bunch carrots, onions, tomatoes, and turnips.

In the third group, and these are considered below average, but not the poorest, are artichokes, cauliflower, honey dew melons, celery, asparagus, lettuce, lima beans, peas, and snap beans. The *poorest group* includes bell peppers, cantaloupe, cucumbers, radishes, summer squash, sweet corn, and watermelons.

The gentler sex has pitched into the heavy work in the Boeing Flying Fortress plant in Seattle with such spirit that recently it was found necessary to erect a big sign: "Ladies! Please watch your language! Men present!"

A PLANT INDENTIFICATION GAME

HERE is a suggestion for playing a game which will be of interest to students and garden club members. It might work too for fruit growers to identify fruit varieties.

Ernest Hemming describes in the American Nurseryman a game he played when getting his horticultural education. He writes: "The game of 'What is it?' consisted of a bunch of us going for walks in the long summer evenings and challenging one another's knowledge of plants anywhere and everywhere, along the lanes, in the woods and fields, or in the nursery, where we were all working. It took in all plants, weeds and cultivated ones.

"Of course, the game required getting acquainted with the plants vourself before challenging the other fellow. As I recall, some of the rules were: Only Latin names counted. The challenger must know what the plant was before he asked the other fellow; if it proved he did not, he was penalized two points. The game was complete in one stroll. If the challenged named the plant correctly, he was given one point. The challenger was given two points for every plant the challenged could not name. Of course, the game led to many arguments as to identity, but, as I recall it, the game was extremely educational, much more than poring over a botany book or nursery catalog."

A soldier got a letter from his wife containing a sketch of their car's instrument panel. "This is the exact way the dashboard looks," she wrote. "Do we need a quart of oil?"—Liberty.

Remember that peanuts are considered to be one of the best brain foods and that's why the guy in the bleachers always knows more about running the team than the manager himself.—*The Hour Glass*.

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Wisconsin Horticulture



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MAY 1944

You Betcha!

A candidate for the police force was being verbally examined.

"If you were by yourself in a police car, and were being pursued by a desperate gang of criminals in another car doing forty miles an hour on a lonely road, what would you do?"

"Fifty," promptly replied the candidate.—*Pointer*.

Burglar: "Don't be scairt, old lady, all I want is your money and . . . "

Old Maid: "Oh, go away. You're just like all the other men."

Willing Candidate

"I wish I could," sighed the overly stout lady, ruefully, as she gazed on the sign in a grocery store, reading: "Give your fat to Uncle Sam."

"Has your new baby brother learned to talk yet?"

"Sure! Now they're trying to teach him to keep quiet."



CUMBERLAND FRUIT PACKAGE COMPANY

Dept. D, Cumberland, Wis.

WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Horticultural Society

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No. 9

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Subscription to Wisconsin Horticulture is obtained by membership in the Wisconsin State Horticultural Society for which the annual dues are \$1 per year or \$1.50 for two years. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Fifty cents of the annual dues paid he each member is for a year's subscription to Wisconsin Horticulture.

Plum Brown Rot and Curculio Control

R. E. Vaughan and C. L. Fluke

THE plum brown rot disease and curculio insect injury is a combination of troubles that causes extensive losses to plum raisers every year. The brown rot fungus is so closely associated with curculio injury that the two topics are considered together. The essential control is a spray program coupled with a clean up program of the mummied plums of the previous season and a thinning program when the fruit is two-thirds grown. If the mummied plums are allowed to remain on the ground or hang in the tree fungus spores are produced in great abundance especially during periods of wet weather, and are carried by the wind to the developing plums. The mummies should be buried under 4 inches of soil or raked and burned before growth starts. Great quantities of summer spores are produced on rotting plums in the trees and blown to new centers of infection to increase the disease. Wild plum thickets are frequent sources of both brown rot and curculio and should be destroyed in the vicinity of cultivated plum trees.

Spray Program

The spray program is a mixture of sulphur and arsenate of lead with an added safener to prevent arsenical burning. Lime-sulphur as used for apple scab control may be used in mixed small orchards when a safener (see formula below) is added, although some foliage injury may result, especially on Japanese and American varieties.

The timing of the applications on plums will usually be (1) when the shucks split, (2) 10 days later, (3) 20-28 days after shucks split and (4) 10 days to 2 weeks before



BROWN ROT ON PLUMS

Picture courtesy Dept. of Pathology, Wisconsin College of Agriculture.

ripening. In cases of severe brown rot infection the previous year, it is advisable to add a spray of wettable sulphur only when the buds are white just before blooming. In the last application before harvest, the lead arsenate and safener should be omitted.

Formulas

The formulas are as follows: Garden Amounts:

Zinc sulphate	2/3	oz.
Spray lime	2/3	oz.
Lead arsenate	1/2	oz.
Wettable sulphur	1	oz.
Water	1	gal.

If paste forms of sulphur or dry lime-sulphur are used follow manufacturers' directions for amounts. Two rounded tablespoonfuls of ar-

senate of lead weigh about $\frac{1}{2}$ oz.

Procedure

Procedure: Make the zinc sulphate into a thin paste and add to about 2/3 of the water in sprayer or pail. Shake in the spray lime or make a paste whichever is more convenient. Then add the arsenate of lead and finish with the sulphur and balance of water.

Orchard Amounts:

1. Begin filling the spray tank with water.

2. Prepare a paste of 4 lbs. zinc sulphate (commercial grade, containing $25\frac{1}{2}\%$ zinc) and add to the water in the tank. Keep water running until the tank is two-thirds full.

3. Add 4 lbs. of hydrated lime as a powder washed through strainer or first made into a thin paste.

4. Add 2 to 3 lbs. lead arsenate, wash in the dry powder or make paste.

5. Add last 4 to 6 lbs. wettable sulphur or the manufacturers' recommendations if sulphur paste or lime-sulphur or dry lime-sulphur are used.

6. Water to make 100 gallons.

The Use of Dusts

Dusts may be preferred by some growers. The prepared sulphur dusts are suggested. The applications after shucks fall and 10 days later should be with the spray on account of the need for lead arsenate to control curculio. The later application should be with prepared dusting sulphurs. Dusts are slightly more expensive and less efficient but decidedly more convenient than sprays, and add no poison to the nearly devloped fruit before harvest.

Tips on Spraying

Be careful to avoid driving the spray with the nozzle too close to the trees. Stand back and let the spray fog do the covering. Foliage injury may come from dusting as well as spraying. The curculio must be controlled first because brown rot infection gets a start through the injury made by the curculio. In case of damp foggy weather it may be necessary to apply additional sprays or dusts with sulphur alone as the fruit approaches maturity. To prevent brown rot the sulphur must be present before infection occurs. Spraying is preventive insurance. Note: The experimental work on brown rot and curculio control on which the above recommendations are based, has been done chiefly in other states where plum culture is more extensive than in Wisconsin.

VALUE OF GRASS IN THE ORCHARD

ONE of the big jobs of the fruit growers' feeding programs is to provide means by which water in times of plentiful rainfall can be conserved and held for use by the trees in times of scarcity.

The growing of cover crops can be used to prevent run off. Organic matter produced with excess rain water can be used to increase the water storage capacity of the soil to furnish moisture during summer dry periods. Organic matter conserves plant food elements and in the process of decomposing makes them available to the trees. Another important function of growing and decomposing cover crops is that of improving aeration to the tree roots. The penetration and breaking up impervious and compacted soils by cover crop root systems and the cushioning resulting from root growth and vegetation growth over the surface of the soils play an important part in good annual performance of fruit trees.

By A. H. Teske, V.P.I., in March, 1944 Virginia Fruit.

Student-"The telephone rings."

WISCONSIN APPLE INSTITUTE NEWS

BULLETINS from the Wisconsin Apple Institute and the National Apple Institute continue to go out to all members about every two weeks. These bulletins contain much valuable information for commercial apple growers.

On April 15 Alric Erickson, manager Horse Shoe Bay Farms, Egg Harbor, attended a meeting called by the Michigan Apple Institute at Grand Rapids to consider apple ceiling prices for 1944. The meeting favored a 6 cent per pound price on loose apples to growers, instead of 5 cents per pound as suggested by Northwest apple growers.

They favored monthly mark-ups to encourage holding apples for the late season market, such mark-ups to begin January 1.

The importance of maintaining a good quality pack, regardless of what plan is adopted by the OPA was stressed at the meeting. Mr. Erickson heartily endorsed this program.

Weather Reports

Weather Forecaster Eric Miller of Madison says, "Tune in State Stations Madison WHA or Stevens Point WLBL at 12:35 noon for special weather broadcasts for fruit growers.

Much damage was reported in April to peaches in Georgia and other southern states from frost. The strawberry crop was heavily damaged and apples were injured.

New Members

The following growers have joined the Wisconsin Apple Institute since our April issue came out: Fred Sacia, Galesville _____ 25.00 Decoraland — Young Broth-

ers, Galesville _____ 20.00 Carl Erickson, Herbster ____ 5.00 Brit. Burtness, Bayfield ____ 5.00

Arithmetic Teacher : "Yes, Willie, you had your hand up; what is it?"

Willie: "Why is it you can't subtract apples from peaches or oranges, but you can add them and make fruit salad?"

TO CONTROL SEVERE INFESTATIONS OF CODLING MOTH

THE New York Experiment Station is recommending that growers "spike" with nicotine the regular arsenate of lead sprays for codling moth.

At the New York Horticultural Society convention the question was asked, "What would you recommend for codling moth control this year?" The answer by Mr. Harman, entomologist, was, "I would use the lead arsenate spray program and in the heavier infested orchards, would plan to 'spike' the spray with nicotine during the most active periods of insect development."

Mr. Harman also brought out that if used in the second and third cover sprays (20 and 30 day spray) the nicotine kills all crawling worms and most of those that have entered the fruit during the preceding hours. If the air is quiet and the temperature high the nicotine may destroy quite a few moths. Spraying with nicotine should be done when the air is quiet and warm, says Mr. Harman.

Question: How much nicotine should be used?

Answer: Use three-fourths pint of nicotine sulphate in 100 gallons of water.

This program with nicotine will greatly increase the cost of codling moth sprays. However, there are a few orchards in Wisconsin in which codling moth control is a serious problem and use of nicotine would be justified.

A GOOD FARMER

What should be the aspirations of a good farmer? Iiberty Hyde Bailey has stated it very well. He says: "To make a full and comfortable living from the land. To raise a family carefully. To be of good service to the community. To leave the farm more productive than he found it."

Voice of Experience—Instructor —"What happens when the human body is completely immersed in water?"

Orchard and Garden Supplies

Buy co-operatively and save dollars by participating in the earning. Everyone receives a patron's refund at the end of the season. We are the largest co-operative of its kind in the state. If you are producing fruit or vegetables and need supplies, give us a try.

SPRAY MATERIALS

Hose Couplings

Hose Clamps

Lead Arsenate Calcium Arsenate Rotene Dusts Special Potato Sprays Copper Sulphate Kolofog Mike Sulphur Apple Stick Sulforon Parmone

PACKING HOUSE EQUIPMENT

Fruit Sizers Basket Turners Fruit Cleaners Vegetable Washers Potato Graders

PACKING EQUIPMENT

Baskets Decorative Fringe Basket Liners

Shredded Tissue Top Pads Packing Forms

SPRAYING EQUIPMENT

Spray Hose Spray Guns Hose Swivels Spray Brooms Spray Booms—4 to 6 rows Spray Booms—8 to 20 rows

PICKING LADDERS

Step — Pointed Top — Closed Top Picking Bags — Roll Conveyors — Hydraulic Lifts

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We are the larget dealers in the state for this equipment. Complete line of repair parts. We are now equipped to repair any size of sprayer or power pump in our new repair shop. Complete overhauling and repainting.

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If you are in need of special sprockets and chain, send us your old ones or specifications. We can supply all sizes.

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1—Vegetable Bunch Washer Used—Priced to Sell.

1—Gravil Fruit Grader Grower's Model—New.

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Bushel and Half-Bushel. Supply will be limited.

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WORMS ARE HARDER TO CONTROL IN THE TREE TOPS

By A. M. Woodside, Virginia

T is a common observation that worms are more numerous in the tops of apple trees than near the ground. In 1922 Hough examined fruits in a heavily infested block of apple trees and found that there were more than three times as many worms above the height of 11 feet than below that level. One reason is that codling moths lay more eggs near the tops of the trees, but the more important reason is the poorer spray coverage. In 1941 Hough told the Horticultural Society that "the weakest point in codling moth control in Virginia orchards is spraving the tree-tops." Analyses of spray deposits of different heights in apple trees have shown that the initial deposits in the tree-tops are lighter than those below, and that they wash off more rapidly.

In 1942 there were five times as many worms at 12 feet as at 6 feet, 16 times as many at 18 feet and 26 times as many at 24 feet. Similar conditions were found in 1943. The deposits of arsenic on the samples from the bottom of the trees were heavier than those on samples from the tops in every case. The lead deposits were heavier on the samples from the bottoms with one exception.

Condensed from April, 1944 Virginia Fruit.

One of the two workmen was called and asked to answer the charge.

"Well, me and Mike Murphy were on this job. I went up the pole and accidentally I let the hot lead fall on Mike. It trickled down his back and all he said was, 'Really, Joe, you should try to be a little more careful'."

Comments on Thinning and Spraying

CARROLL R. Miller, Secretary of the Appalachian Apple Service Inst., regularly issues an excellent bulletin for members of that organization. On the subject of thinning he makes these comments:

"THINNING — Investigate and use intelligently the 'birth control' sprays for thinning the crop by spraying at blossom time; Elgetol, etc.

"Georgia peach growers have developed a very satisfactory thinning implement, the 'brush hook.' Originally made of a few pieces of dogwood brush tied together, about 2 feet long, women raked these down the limbs to give a fairly effective thinning. They proved fast and successful and are now being made of wire. They work well on loaded peach trees. Perhaps they will do as well on full apple trees; on some varieties, at any rate-summer apples, etc. The very best labor-saver in thinning may be a thorough, complete pruning. It is shiftlessness to say now that thinning, like pruning, spraying or almost any other practice, can be 'let go.' It can, but the cost is huge. It is management's job to see that costs like this do not occur.

Pruning Helps

"A thorough pruning is about the equivalent of a thinning; only better: done before the tree wastes needed strength and food on the 'discards.' Probably your best bet, to save labor and labor expense, is in hustling together more pruning help, and doing a really good job of this winter's pruning.

"SPRAYING — The one - man 'speed' or rotary sprayers—investigate them. But investigate thoroughly. They don't fit in some orchards. If you have little, low-powered, spray equipment with small tanks, scour the earth until you get something big; something your help won't be wasting time on. The machinery can be had, if you hunt hard enough. Perhaps a re-fill tankand-truck, to haul the mixed materials to your sprayers in the field. may be a real labor-saver, even though it means another man to handle the supply tank. Perhaps more spray-stations over your orchard will help. Concrete is still available and there is some pipe around. This spraying problem, after last year's codling moth infestation and their continuous gain on us in the belt, will repay hours of concentrated preliminary study and effort."

NEW SYRUP FROM APPLES

Question: What is this new product called "apple honey?"

Answer: It is simply fresh apple juice, treated with lime and heated to precipitate the pectin, then filtered and treated with acid to lighten the color and take away any alkaline flavor. The juice is then concentrated under a vacuum, until it becomes a syrup of 75 per cent soluble solids. The syrup is clear, amber-colored, and one-third sweeter than cane syrup of the same density, but otherwise tasteless. One hundred pounds of apples makes about a gallon of syrup, weighing $11\frac{1}{2}$ pounds.

From March, 1944 The Minnesota Horticulturist.

PERKINS APPLE

Question: Do you know why the Perkins apple has not been more widely planted in Minnesota?

Answer: The Perkins is a very good apple and it keeps well. However, experience shows that the tree, unless top-worked on Hibernal or other hardy stock, has a tendency to break down as it gets older and, furthermore, the variety is quite subject to fire blight in Minnesota.

From February, 1944 The Minnesota Horticulturist.

An old lady was shocked at the language of two electricians who were working near her house. She went to the Electric Company and complained.

ORCHARD AND GARDEN SUPPLIES

Orchard . . .

Arsenate of Lead, 48 lb. case
Arsenate of Calcium, 48 lbs 4.95
Bordeaux Mixture, 48 lb. case 6.95
Copper-A-Compound, 48 lbs
Copper Sulphate-Powder-cwt
Dry Lime Sulphur, 100 lbs
Liquid Lime Sulphur, 50 gals
DuPont Spreader Sticker, gal
Flotation Sulphur Paste- 450 lb. drum, cwt
Tree Wound Paint, quart
Tree Seal, quart
Sulforon, 48 lb. case
Harvest Spray—"Parmone Concentrate"— 4 oz. bottle
Nicotine Sulphate 40%
Picking Ladders—Pointed Top (Closed Top)— 14, 16, 18, 20, 22 ft. lengths60c per foot

BERRY BOXES & CRATES

Pt			
American Flat Bottom- Qt.	¢10.00	ner	1000
Pt	10.25	per	1000
Folding Style— Qt.	\$11.25	per	1000
Qt Pt	7.50	per	1000

... All Quotations F.O.B. Madison

Garden . . .

-----Write for Free Seed Catalog-----

Arsenate of Lead, Ib.	.35
Arsenate of Calcium, lb	
Bordeaux Mixture, Ib.	.30
Copper-A-Compound, 6 lb. bag	1.65
Dry Lime Sulphur, lb. can 35c; 5 lbs	1.10
Dusting Sulphur, 2 lb. canister	
Kryocide, lb. box	
Mike Sulphur, 10 lb. bag	
Nicotine Sulphate 40%-	
1 oz. 30c; 5 oz.	1.00
Rotenone Dust 50%	
1 lb. 40c; 5 lbs	1.00
Tree Tanglefoot-	
1/2 lb	3.75
DuPont Potato Dust, 5 lb. bag	1.00
DuPont Garden Dust, 5 lb. bag	1.25

Garden Dusters-	
Rawleigh Duster, each	.65
Niagara 1 qt. size	1.50
Niagara 2 qt. size	
Sprayers-	
Hudson, 1 qt. size, each	.50
Harco, each	2.35
HOES-	
Ladies'	.90
Onion	1.00
Field	1.25
CULTIVATORS-	
4-prong Speedy	1.25

— BIRD HOUSES ——

Wren and bluebird houses, well constructed, 50c each Postage and mailing, 15c.

	KILLS POISON IVY	
	DuPont Weed Killer (Ammate)	
	2 lbs\$.60	
1	5 lbs 1.25	
	(1 lb. in 1 gallon of water and thoroughly wet the ivy plant)	
TWIST	Г-EMS—	
	4 in., box of 250	\$.25
	8 in., box of 125	.25
SOIL	SOAKER-	
	12 feet long	1.50
	18 feet long	1.75
TRI-O	GEN—	
	A-Kit	
	B-Kit	4.00
Prie	ces subject to change without notic	ce.



An Impression of Apple Growing in the Northwest

HENRY W. Miller, Paw Paw, W. Va., and William F. Young, Staunton, Va., two keen practical Eastern a pple growers, recently visited the Northwest and made a careful survey of productive and economic conditions in Washington and Oregon. Mr. Miller reports:

"Apple people of the Northwest are much like apple people of our Appalachian apple area. They are an extremely rugged, practical, and resourceful group, the survivors of many years of adversity and hard toil. Evidence of the terrific economic battle of the thirties was easy to find just as it is here. We saw literally thousands of acres of once fine apple orchards of acres of been pushed over and burned in their prime years. They have a state regulation or law which forces the owner to destroy all trees not kept sprayed.

"Speculators, front porch growers, absentee owners and professional men who operated orchards as side-lines have practically all gotten out of the game. Those who command the industry today are genuine, first-class operators, blessed with the determination, hope, faith and courage that will never admit defeat, the kind of people who made the West and have helped to make America the greatest country on earth, the kind of people it is a privilege to know.

Conclusions About the Apple Industry

"Mr. Young and I reached the following conclusions:

"First, there won't be any funeral for the Northwest apple industry because it's well and hearty today, on a firm, financial foundation, highly organized, ably led and admirably equipped.

"Second, if you think you can produce apples here in the East cheaper than our Northwest friends, forget it because you probably can not and probably never will. Our labor cost and other advantages are transportation, comparatively low entirely offset by the difference in production per acre. Our western friends can produce a thousand bushels per acre as easily as we can produce three hundred. And don't forget that a crop failure from frost is almost unheard of and that even a partial failure is rare.

"Third, Northwest leaders now have a wholesome respect for the Eastern apple industry. They know that we are also here to stay, that we, too, are financially able to carry on and that we have vastly improved our pack in recent years and can furnish some respectable competition in the markets.

"Fourth, our friends out there fully realize the tremendous value and absolute necessity of national industry cooperation in order to present a solid front in dealing with the many federal bureaus and departments controlling the industry from Washington, D. C. They generally feel that the National Apple Institute, which is completely grower supported and grower controlled, has been and will continue to be a stabilizing factor in helping our government arrange war-time industry control measures.

"Fifth, many Northwest apple growers that we met were unalterably against federal subsidy. In fact the word subsidy is almost a fighting word out there. They realize, just as we do, that subsidy means federal control which in turn means a surrenner of freedom and independence."

(Signed)

Henry W. Miller, Jr. Condensed from Bulletin No. 154, National Apple Institute.

Patron: Say, waiter, how long have you been employed here? Waiter: About six weeks, sir.

Patron: Oh, then it wasn't you who took my order.

ECONOMY AND APPLE THINNING

T may pay to thin apples if the work is done economically. A statement in the bulletin "Factors Which Make for Success in Orcharding" by H. P. Gaston of Michigan State College, East Lansing, is of interest in this connection. Mr. Gaston states:

"Grower No. 30 was visited at apple thinning time. In talking about the work he said that the crew had been instructed to concentrate their efforts on the tops of the trees where the set was heavy. Attention was also called to the fact that each member of the crew carried a ladder which enabled him to reach the upper sections of the trees. Large numbers of fruits were being removed and, as most of the work was being done from a ladder, progress was rather slow and laborious.

When visited later the same day Grower No. 12 was also thinning, but in a somewhat different manner. His crew had been instructed to concentrate on that fruit which grew on the lower and inner part of the tree, most of which could be reached from the ground. Two men were assigned to each tree; one worked from the ground entirely and the other carried a short step-ladder from which he worked a part of the time. Although the trees were of approximately the same size in both orchards the crew which worked low in the trees was covering more than twice as many per day. The cost of doing the work was less than half the amount spent by Grower No. 30.

"Though other factors may have influenced the final result, the fruit produced by Grower No. 12 was equal in grade and exceeded in volume that which came from orchard No. 30. The results indicated that in doing most of the work from the ground *successful* Grower No. 12 was practicing wise economy. Knowing as he did that the tops of apple trees normally produce the best sizes, he saved money by concentrating thinning effort where it did the most good."

Transplanting Four Year Old Apple Trees

Better to Buy Young Trees Than Move Old Ones

PRACTICALLY every fruit grower agrees that moving of trees beyond two years of age is a risky thing. Ohio Bimonthly Bulletin, March-April, 1934, published by Ohio Agricultural Experiment Station confirms the belief that apple trees have a limit of endurance when moved after they have become established.

Some Stayman trees, set in spring of 1916 were moved in the spring of 1920. A circular trench about 3 feet in diameter was dug around each tree, and as much soil as possible was moved with the tree. The new holes were dug just before trees were moved, and they were immediately set and well planted. The tops of the trees were pruned "considably." In an adjacent orchard some Stayman trees had been planted in 1916, and the total average yields of these trees were compared from 1916 through the 1941 crop. Also the total average vields of some other Stavman trees set in 1922 were included for comparison

Yield

By 1941 trees set in 1916 and not moved produced an average total of 143.6 bushels. Trees set in 1916 and moved in 1920 produced an average of 85.3 bushels. Trees set in 1922 produced an average total of 80.1 bushels including the 1941 crop. While the transplanted trees were vigorous and healthy, they were smaller in size. Records of the average total yield per tree 1938-1941, inclusive, showed : transplanted tree, 28.6 bushels; permanent tree, 48.8 bushels; tree planted 1922, 30.9 bushels.

Summary

In summary, the yields of the transplanted trees moved four years after planting, yielded a little less than trees set 2 years after these trees were transplanted. While this work concerns only one variety, it seems to show that considering costs involved, it would be better to purchase new nursery stock than to attempt to move trees already established.

-From Maryland Fruit Grower.

WHY RYE IS HARDY

A note by L. Southwick in Fruit Notes states that the ability of a rye plant to withstand deep freezing of the soil may be due in part to the elasticity of the roots? Unlike the roots of many other plants, including strawberries, a rye root may stretch an inch or more without damage. Thus the rye plant possesses at least two advantages as a cover crop, namely, its ability to grow in late fall and early spring, when the temperature is too low for most other plants, and the ability of its roots to withstand stretching.

From April 15, 1944 Horticulture.

GLASS JUGS USEFUL FOR KEEPING LIME SULPHUR

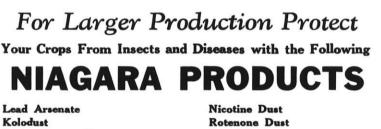
A Tip to Small Orchardists By Virgil Fieldhouse, Dodgeville

WITH the present scarcity of lime sulphur drums, coupled with the fact that the lime sulphur soon ruins them, here is a tip for the small orchardist. It is very easy to secure gallon jugs of glass from soda fountains or druggists. These can be filled and the drum washed out, returned or sold. The jugs furnish an accurate measure for filling the spray rig. They also show plainly how much material is left on hand.

At present I have a total of about 70 jugs on hand at a cost of 35 cents plus a little time. (I paid 1 cent each at a sale for 35 and a druggist is giving me a lot more free.) These last are dark brown with a screw cap of composition material.

It Does Happen: "Did you know that Dorothy married Bill Smith when he was home on furlough?" "Bill Smith! Why, he was the

guy she was engaged to!"



Kolodust Dinitro Dry 40% Dusting Sulphur Dry Lime Sulphur Liquid Lime Sulphur Colloidal Spreader Nicotine Sulphate

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J. Henry Smith, Wisconsin Representative

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IN THE BERRY PATCH

STRAWBERRY AND RASP-BERRY SOILS REQUIRE ORGANIC MATTER

A GOOD crop of strawberries or raspberries can only be grown if the soils contain an adequate amount of organic matter or humus. Experiment Stations all over the United States in tests in recent years to find out how to improve soils for growing berries have found this to be true.

The Wisconsin Horticultural Society conducted tests more than ten years ago at Sparta and Warrens to find what fertilizers would improve the strawberry crop. Results in d i c a t e d commercial fertilizers alone did not improve the crop, but that organic matter such as manure or a cover crop plowed under was the important thing.

That statement made then still stands and has been verified by repeated tests since in other states.

That is why strawberries do so well on new soils — because they contain plenty of organic matter.

More Cover Crops Needed

Conservationists tell us that certain European countries are keeping up the fertility of their soil much better than we in America. We are losing our top soil—even on prairie land. Principal reason is we are not humus conscious. We must plow under more cover crops in addition to manure.

It would not be difficult to plow under the old strawberry bed when through picking, late in June, and soon thereafter sow a cover crop which could also be plowed under in fall or the next spring, thereby giving two crops as organic matter.

Only until we realize the need and the value of doing this will it be done.

A Michigan wife obtained a divorce because her husband had given each of her five stepchildren a saxophone. — William LaVarre, *Consolidated News Features*.

ITEMS ABOUT STRAWBERRY GROWING

FAR too many strawberry beds are planted too late in the season. Many growers do not realize that the flowers which produce next year's strawberry crop are formed in September. Runners set late in spring will not have time to produce large, vigorous plants and a good set of fruit buds. We cannot produce a good crop of berries in June from plants which are weak in fall.

The 1944 strawberry crop will not be large, according to reports. Prices should be good. If labor is available it will pay to give them good care. Carefully placing the overwintering mulch between rows and among plants will help conserve moisture that will really help should the weather turn dry at picking time. Irrigation will pay in case of a dry spell.

Cost of Producing Raspberries in New Jersey

A cost of production survey was made in New Jersey to find what it costs to produce raspberries at present prices for labor and material. Preliminary studies indicated it cost 21 cents per pint to produce raspberries on the average farm in that section.

The cost of producing berries varies more with yield per acre than any other factor. A small yield will make the cost per pint or quart very high. That applies to all kinds of fruit.

GRAPE BLEEDING DOES NO HARM

If grapes are pruned late in spring and they bleed it does no harm, according to experiments conducted at a number of experiment stations. This is contrary to some opinions.

Objection to late pruning is that if the canes are handled when the buds have expanded, many buds may be broken off.

The mild winter we have just had may lead some to think the climate is changing and not to fear winter injury. It is still best to plan on covering grapes of tender varieties in the fall in Wisconsin.

CARE OF THE YOUNG STRAWBERRY BED

DURING the first season frequent cultivation is essential to success. As soon as plants are set out a cultivation with a spike-tooth cultivator should be given. This should be followed up at intervals of about two weeks or oftener, largely depending upon soil and weather conditions. Not only is this cultivation necessary for the elimination of weeds, but also for maintaining a friable condition of the soil necessarv for the young rooting runners, and to provide air to the soil for the liberation of plant food. On all except very light soils the early cultivations (after the first one) should be fairly deep, in order to loosen the soil and promote soil activities. For this purpose a scuffler will generally give better results than the spike-tooth. The strawberry, being a plant whose roots go almost straight down, can be cultivated at close quarters.

Hoeing also will be necessary to destroy weeds which cannot be got at by the cultivator. Some growers prefer a wheel hoe or hand cultivator for this purpose, and generally two or three times during the first year is all that is necessary to go over the plantation with this implement. As the season advances and the runners commence to form, it will become necessary to narrow the cultivator in order not to disturb the newly rooted plants. After midsummer when light cultivation is sufficient, the spike-tooth cultivator is used. The placing of the runners can usually be done when hoeing through the plantation. On small plantations it is generally possible to pay more attention to this than on larger areas. It is a good plan when cultivating to start always from the same corner and in the same direction, as in this way one is not so liable to rip out plants which the cultivator has previously trailed into position.

From Bulletin The Strawberry and Its Cultivation in Canada by M. B. Davis and D. S. Blair.

RASPBERRY BREEDING HAS SEVERAL MAJOR OBJECTIVES

By George L. Slate, Geneva

PRESENT-DAY raspberry varieties are far superior to their wild ancestors of a hundred years ago. They are far inferior to what they could be if our present knowledge of plant breeding was utilized to the fullest extent and if the best characteristics of all varieties were combined in one variety. It is one of the principal objects of the raspberry breeding project at Geneva to produce new varieties containing as many as possible of these superior characteristics. Another object is the accumulation of facts concerning inheritance in raspberries which will facilitate future breeding operations.

Breeding for Mosaic Resistance

One of the most important objectives of the red raspberry breeding program is the production of varieties that are not troubled by virus diseases. There are two ways of attacking this problem. One is the production of varieties highly tolerant of the virus and that will grow and fruit well even though infected. Renere and Latham are varieties of this type. It is difficult to rogue out infected plants and plantings of these varieties are a menace to mosaic-susceptible and less tolerant raspberries that may be grown near them.

The other approach is the production of varieties that rarely become infected with the mosaic virus, probably because of the inability of aphids to survive on or infect the plants. When these varieties do become infected, symptoms of mosaic are very distinct, thus facilitating the roguing of diseased plants. The Station is following this method of attack and has achieved considerable success in producing varieties that usually escape mosaic.

It is hoped that eventually we shall have varieties of red raspberries that will escape mosaic infection, produce two crops a year, and be good enough in all fruit and plant characteristics to be standard commerccial varieties. Other characteristics, such as winter-hardiness and productivity of plants, size, and firmness and quality of fruit are all receiving attention. Much progress has been made and the varieties of today are far superior to the varieties of 25 years ago.

Condensed from April 1, 1944 Farm Research, Geneva, N. Y.

HONEYBEES NECESSARY FOR CLOVER POLLINATION

EXPERIMENTAL studies conducted by the Department of Entomology, Ohio Agricultural Experiment Station, show that seed yields are directly correlated with the density of the honeybee population.

Extensive studies were carried on over a 3-year period involving detailed observations in fields of red clover for each day of the second blooming period. The pollination of red clover by honeybees is incidental to the collection of large quantities of pollen, and nectar in small amounts. During the 3-year period, studies showed that more than four-fifths of the total pollination services was performed by honeybees.

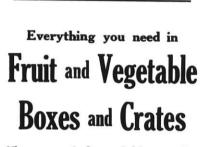
Providing an Adequate Honeybee Population

Since the pollinating services from honeybees is free, the density of the bee population will be determined by the number of colonies that the community will support for profitable honey production. A commercial yard of bees, that is, 60 to 100 colonies of bees in one location, is about as dense a population as can be expected. A farmer having a commercial yard of bees on his farm, and farmers close to bee yards should be urged to grow legume seed.

If all farmers would take advantage of the established bee yards, it would be the most effective means of "stepping up" legume seed production. A farmer desiring to increase his legume seed yields, but who lacks the necessary pollinating insect force, could, in many cases, correct this limiting factor by offering a free apiary site as a special inducement to a beekeeper to establish a yard of bees on his farm.

For purposes of heavy seed production it may be desirable to increase the honeybee population to a degree where honey production becomes unprofitable. Such a program would necessitate the renting of colonies of bees during the blooming period of legumes, and might involve as many as four to five colonies per acre. Such a heavy concentration of honeybees would be especially desirable in cases where it seems highly important to make superior strains of legume seeds rapidly available to farmers.

Condensed from bulletin: "Clovers Will Help Win the War!" by Ohio State University.



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Plan To Trap Pollen This Summer

Feeding Pollen and Soybean Flour An Important Spring Practice

WISCONSIN beekeepers may almost double their honey production by feeding pollen and soybean flour early in spring. That conviction has come to me during the past few years by watching the work of Dr. C. L. Farrar, Central States Bee Laboratory, Madison.

The third week in March Dr. Farrar invited the editor to visit one of his yards near Madison. It was a cool day with temperature in the lower 30's. After reaching the apiary I followed Dr. Farrar, carrying a box of soybean flour pollen cakes wrapped in wax paper. When we opened the hives bees clustered over the frame covering brood. It was so chilly they did not go down readily when we smoked them. All colonies had pollen cakes as Dr. Farrar starts feeding the latter part of February. Some of the cakes were almost consumed so a new one was added. Some cakes had been only partially used and were allowed to remain.

The bees covered seven or eight frames with most of the clusters extending into the combs below. The colonies had from three to six frames of brood.

Wisconsin Packages in April

Colonies were certainly building up in nice shape. By April 20th Dr. Farrar expected to shake from three to five pounds of bees on the average from each colony, leaving about half the bees to take care of the brood. In other words, by April 20th the total population would average from six to ten pounds of young bees, and that's about the time when the rest of us who do not feed pollen worry because we are having spring dwindling. What a population one could build up by June 1st, simply feeding soybean flour as a supplement to trapped pollen, whenever it is needed. If the honey flow comes early in June as it sometimes does, we would be ready for it instead of building up our colonies on the June clover and having them ready by July when there may not be a flow.

Questions and Answers

Here are some the questions I asked Dr. Farrar, with his answers:

Question: How much brood was there the last week in February when you first started feeding pollen?

Answer: About three to five frames of brood, depending upon the size of the cluster and the amount of reserve pollen available. If pollen is close by and they can get it, there is very little change in the amount of brood during March. It is' only when the pollen supply is gone that they stop brood rearing.

Question: Did the colonies start increasing in population right away, or was there a decrease at first?

Answer: There was a decrease in population when brood rearing started because brood rearing wears out bees rapidly. However, when young bees start to emerge there is a gradual increase in population.

Question: Then that is why those

of us who do not feed pollen have spring dwindling in April when the bees get pollen from outdoors?

Answer: Yes, that's it. As a rule. by February or March very little if any pollen is left in the brood chamber and so brood rearing stops.

Question: Have you found anything yet that will take the place of pollen in the soybean mixture. or any substitute that is equal to pollen?

Answer: No, we haven't. We find that soybean flour gives good temporary results, but with the flour alone brood rearing continues for only a few weeks.

Question: Then that being true. most of us who do not have any pollen will find it useless to feed soybean flour more than a week or two before we expect pollen from the field?

Answer: Yes, that's right. However, it would pay every beekeeper to get pollen traps and trap enough pollen in the summer to feed all of his colonies a mixture of one part of pollen to three parts of soybean flour. Pollen trapped from one good c o l o n y usually provides enough (average 20 pounds) to feed 50 colonies when it is supplemented with soybean flour.

Question: Do you think we'll ever find a perfect substitute for pollen so we won't need to trap any?

Answer: We hope so. We are working toward that objective all the time.

Complete Change in Our Method

May, 1944

As soon as beekeepers are convinced of the value of building up colonies early and adopting this plan, it will mean that our beekeeping methods will be changed completely. First, we cannot pack them in the winter in such a way that we cannot get at them during March. but then the results will be far better if we feed them and build up the colonies early than by keeping them packed. Second, it means an entirely different program of work. We will be going out to the bee yard regularly during March and April to inspect the colonies and keep them supplied with the pollen-soybean mixture.

Most important of all, it will mean that we must leave them far more honey than we have been accustomed to in the past because we must always bear in mind that considerable honey is used in brood rearing. We must plan to leave 60 or more pounds of honey in the hives in late fall, and that will mean the use of three hive bodies as a brood nest during August and September for best results.

It will mean too a change in our methods of swarm control. With colonies building up rapidly in April and May, the tendency for early swarming will be greater than ever. We must learn to provide room for the upward expansion of the colony.

The result will be, however, that if there is any nectar available during the summer, our strong colonies will get it.

WILL THE DEMAND FOR HONEY DECREASE?

MUCH corn syrup and other syrup mixtures have appeared in city markets. They sell at about one-half the price of honey and it looks as if consumers are buying them instead of honey. Reports are that the sale of honey has slowed down. Some retailers, in fact, are asking honey packers to release them from orders for honey previously placed.

Importers are quoting prices on

honey from Cuba, Argentine and Mexico. These have been mixed with domestic honey, or sold without being mixed. When consumers accustomed to using white Wisconsin honey buy a jar labeled *honey*, and find it of a flavor they have never tasted before and probably do not like, they quit using it. The jar is never emptied and since they have honey on the shelf, they need not buy any more.

It is unfortunate there are so many flavors of honey because introduction of unusual flavors certainly affects the demand.

Of one thing we are sure. Wisconsin consumers prefer white Wisconsin honey. When they can get it, they buy and use it. Packers who mix it with honey of inferior quality will have trouble.

SWARM CONTROL IN WEAK COLONIES

OLONIES of small populations may require a special method of swarm control at the beginning of the honey flow. Such colonies may not respond to the method of reversing hive bodies which is so successful with strong colonies having vigorous queens. These vigorous queens will move upward into an empty hive body when it is placed on top. The weaker colonies, however, may not do this. Instead, they store honey around the brood nest. The queen will remain in one brood chamber. and as more honey comes in, the bees do not carry it into an empty super above, causing the brood chamber to become more and more congested.

The only way to prevent swarming in such colonies is to remove frames of honey and brood from the brood nest and exchange them with empty combs from a hive body which is placed on top. Do not spread the brood, however. Placing empty combs between combs of brood may cause supersedure. It is all right to place frames of brood above each other. If hatching brood is placed on top, the queen will go upward and lay in the cells as they become ready.

REPORT ON RESISTANT QUEENS

The Federal Division of Bee Culture under Jas. I. Hambleton, is working on the problem of queens of resistant stock. These queens have been sent to beekeepers in various parts of the country who are in position to test them for resistance to American foulbrood.

Stock Varies in Quality

A letter from Dr. Jas. I. Hambleton indicates that the stock varies in several respects. He writes as follows:

"As is to be expected, a few reports indicate that some of the stock sent out last year did not show a high degree of resistance. For the most part, however, the stock showed up well in this respect and in any number of cases those who used the stock found it equal in honey production and other respects to the average run of good bees. Some, however, voiced complaint that the bees were too dark and inclined to sting.

"We wish also to call your attention to a particular observation that has been made on some of the resistant strains. In three widely separated localities the stock which showed good resistance to American foulbrood proved susceptible to European foulbrood. It does not necessarily follow that because a strain can handle American foulbrood it will also prove resistant to European foulbrood. The two diseases are entirely different and the bees apparently react to them differently. Persons using the American foulbrood resistant stock should be warned to be on the lookout for European foulbrood and not take for granted that the resistant stock will also dispose of European foulbrood."

VITAMIN B FOUND IN HONEY

Choose honey when you want a sweetener, and you'll be helping your nerves as well as satisfying your sweet tooth.

Experimenters at the University of Wisconsin report in the *Journal* of Nutrition that honey is a fair source of Vitamin B complex needed for healthy nerves, energy, appetitie and digestion. Since honey also c o n t a i n s minerals (chiefly iron), it is far superior to ordinary cane sugar as a sweetener, and should be substituted for it whenever possible.—Journal of Living, March, 1944.

THE SWEET CLOVER SITUATION

Seed of New Varieties Not Yet Available

Question: I would like to locate some seed of the Evergreen sweet clover, the Spanish, or the Madrid sweet clover seed, which I hear are very good for bees.

Why is it that sweet clover practically disappeared here during the past two years? G. E. S., West Bend.

Answer: There is now no seed of the new varieties of sweet clover available. They are said to have advantages for bees because they bloom over a longer period or late into the season, and consequently make excellent pasture which is what they were bred for. However, they do not bear seed as well as the common sweet clover, and also because they are new, seed is not available. Then, too, the seed supply was curtailed due to the damage from sweet clover weevil in Iowa, Nebraska, and Ohio where these varieties originated.

There is a difference of opinion as to why we had so little sweet clover during the past two years. Some believe that it was due largely to damage by the sweet clover weevil. Others think that the two preceding winters were unfavorable for germination of the wild seeds.

It now appears as if there is much more sweet clover in Wisconsin than in the past two years. Perhaps March, 1943, was favorable for seed germination. We hear too that the weevil seems to be decreasing in numbers. It is an insect that comes in cycles, injury being very serious for two or three years and then decreasing. Perhaps the natural enemies or parasites of the weevil control the pest.

There is no known practical control for the weevil, so we must hope and rely on enemies and parasites.

At any rate, it seems that the situation has improved.

ABC AND XYZ OF BEE CULTURE BEING REVISED BY E. R. ROOT

MR. E. R. Root, who is well known to beekeepers of Wisconsin because of his talks at our summer meetings, and through Gleanings in Bee Culture, is revising ABC and XYZ of Bee Culture, one of the best books on the subject ever printed.

Mr. D. C. Babcock of the Root Company, writes in March: "Mr. Root is getting along very nicely with the new edition of ABC and XYZ of Bee Culture. He has spent many hours and days reading and re-checking numerous articles that come to him.

"We had hoped that the new edition of the book would be ready this spring, but now it looks as if it will not be ready until early fall."

Mr. Root is over 80 years old and in vigorous health. We wish him continued success.

NEW USES FOR HONEY

FOOD manufacturers who have developed new formulas involving the use of honey may receive a special added quota of honey for their new products if such products have post-war marketing possibilities. Already, manufacturers of new kinds of cookies, graham crackers, soft drinks, candies, and other products have been given authorization to use additional honey in these products.

To permit the greater part of the honey crop to be packed by beekeepers, or commercial packers for table use, a supplemented order of the Director of Food Distribution dated April 6, 1943, restricts the amount of honey which can be used during any three-month period by bakers, candy makers, manufacturers, or any other person, to 120 per cent of their usings during the corresponding three-month period in 1941, except where special exemptions are granted.

Isn't it a pity this country isn't as smart as it thought it was back in 1929?

MOVING BEES WITH OPEN ENTRANCES

FROM time to time we read in the bee journals a b o u t beekeepers moving bees by truck without closing the entrances. We have often wondered how many bees were lost in this way by individual bees coming out of the entrances. flying up and then being carried away by the wind from the moving trucks.

M. J. Deyell tells in Gleanings in Bee Culture of a North Dakota beekeeper who tried this method and noticed many bees being lost. At one point along the road he slowed down for a sharp corner and many bees seemed to leave the hive. He returned on the same road and he noticed bees flying about and then on that corner he found a small sized swarm clustering on the fence.

Well, that is about what we would expect in moving bees with open entrances in daylight. At night, when it is dark, it would be different.

WATCH THOSE STRONG COLONIES FOR SWARMING

WITH good wintering and stimulated feeding this spring. many colonies may become very strong during May and start to swarm. In the case of large populations before the honey flow, it may be advisable to divide a colony, placing one hive body of brood and several queen cells above an inner cover or moving screen with a separate entrance. Such colonies can be run as two-queen colonies or united at the beginning of the main honey flow. In case increase is needed during these days of difficulty in getting packages it may be advisable to set a hive body of brood with queen cells on a new stand.

Crushed bananas preserved in honey are being packed in 5 gallon cans by a firm in Mexico City. The banana flavor is retained by the use of honey.

HONEY AND BEESWAX

PRODUCTION-1943

TN 1943, 4,901,000 colonies of bees produced about 189,049,000 pounds of honey and 3,750,000 pounds of beeswax. These estimates are based upon reports to the United States Department of Agriculture from beekeepers producing about 15 per cent of the 1943 honey crop and relate to all bees those owned by farmers and by townsmen, apiaries for home supplies and large holdings for commercial production.

Production was low in comparison with recent years but was above the short 1942 crop of 177,-833,000 pounds. The cold wet spring, late delivery of package bees, shortage of labor and the delay in obtaining or lack of adequate sugar supplies for winter feeding were major factors accounting for the low yields and consequent low production. The average honey yield per colony of 38.6 pounds compares with 36.3 pounds in 1942 and with the 3-year average (1939-41) average of 44.0 pounds.

There were 4,901,000 colonies in 1943 or practically the same number as last year. The number in November was about 7 per cent larger than the number on hand at the beginning of the main honey flow. Considering the average winter losses which ordinarily exceed 7 per cent, a heavy spring increase in colonies will be necessary if the present number of colonies is to be maintained or increased next year.

Total beeswax production was about 12 per cent above the 1942 production. Producers have been responding to the need for more beeswax by deeper capping, and by saving of burr and old comb.

FOR SALE

100 or more 10-frame shallow extracting super with combs and a quantity of 8-frame hive bodies, without frames. The Schultz Honey Farms, Ripon, Wisconsin.

POLLEN TRAPS AVAILABLE

A letter from Mr. Geo. DeKoeyer, 815 West Street, Baraboo, states that he has been able to get a small quantity of screen for making pollen collecting traps so that beekeepers may collect pollen this summer in order to feed their bees with pollen and soybean flour mixture early next spring.

The price will be \$2.50, postpaid. Those who wish to get traps should order at once as the supply is limited.

Mr. DeKoeyer has obtained plans from Dr. C. L. Farrar for making the traps, and made a number of them a few years ago which beekeepers have used with success.

Modern inventions are wonderful; the radio enables us to dislike people we have never even seen.

EXTRACTOR FOR SALE

One 45 Fr. Root honey extractor. Has been used but is in good shape. A. I. Root Co. dealer, Elliott Honey Co., Menomonie, Wis.

FOR SALE

4-frame Root reversible honey extractor with power attachment and motor. George Stanek, Brillion, Wisconsin.

EXTRACTOR FOR SALE

Root 8-frame automatic extractor, or will trade for smaller one. Reason: sold most of bees. Josef Legner, Knowlton, Wis.

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AS COMPLETE A STOCK OF BEE SUPPLIES AS WARTIME RESTRICTIONS PERMIT.

AUGUST LOTZ COMPANY BOYD, WISCONSIN

1944 catalog published soon.



OUR FRUIT TESTING PROGRAM

THE Wisconsin Horticultural Society began a program of fruit testing in 1931. Since that time a few new varieties have been put on test each year.

There seems to be some misunderstanding as to the reason for this project and the results achieved. We have been accused of introducing too many varieties.

All horticulturists know that fruit varieties perform differently under different climatic conditions, and that the area in which a variety may do well if often quite small.

For example, a strawberry variety may do well on a sandy soil but not so well on a heavy soil, and vice versa. Some of the new varieties of apples from the Minnesota Fruit Breeding Farm do well in the latitude of Minneapolis, but not so well in sections farther south. The McIntosh apple does well in parts of Wisconsin; not so well in states to the south of us.

Our program is to have varieties tested by members of the Horticultural Society in different parts of the state, under different soil and climatic conditions; then publish results and recommendations of these members, based on their experience. This work cannot be carried on very well by the experiment stations for two reasons. First, while there is a good program of variety testing at the College of Agriculture, Madison, the results are not applicable to all parts of the state. Second, the Branch Experiment Stations are not equipped to test fruit varieties. They do not have the personnel or the machinery to do the work.

The Plan

Our plan of fruit testing adopted in 1931 is as follows: (1) A com-



mittee of the Society, which includes the secretary, studied recommendations of fruit breeding farms, organizations or individuals who introduced new varieties. When they found a variety which was worthy of being tested it was described in Wisconsin Horticulture with the statement that the Society would pay one-half the cost of a limited number of plants or trees. In the case of apples, only two trees of one variety were sent out.

Cions of new apple trees were sent to members who agreed to topwork them in order to obtain fruit within a few years to earlier determine value and quality.

(2) No further mention was made of varieties under test for a period of years until the members testing had opportunity to observe their value, excepting that comments from experiment stations were published in Wisconsin Horticulture from time to time if they seemed to have merit.

(3) As soon as the testers had come to some decision, they were asked to make comments. These were published in Wisconsin Horticulture.

Varieties on Test Meet With Favor

That the committees used good judgment in their selections is shown by the fact that a majority of varieties placed on trial have been adopted in Wisconsin since the tests began. On checking the records we find the following varieties of apples have been placed on test.

Apple Varieties on Test

Haralson, Melba, Early McIntosh, Milton, Macoun, Medina, Newfane, Orleans, Secor, Kendall, Sweet Delicious, Prairie Spy, Beacon, Lobo, Hume, and Alton.

It is too early to announce results from Lobo, Hume, Alton and to some extent, Prairie Spy and Beacon because these tests were started in 1937 and 1939.

Most of the other varieties have found a place in Wisconsin. Exceptions are Newfane and Orleans. That, we maintain, shows a high percentage of success.

We do publish in Wisconsin Horticulture from time to time, news items from experiment stations and other sources describing new varieties. Such news items are not meant to convey the idea that they should be planted, and we doubt if our members consider them so.

Our aim at all times has been to reduce the number of fruit varieties being planted in Wisconsin by elimination of poor quality varieties. This is an important and valuable program. The future reputation of Wisconsin as a fruit growing state depends upon whether or not we produce varieties of good quality. If we don't our competitors will.

May, 1944

R. S. MACKINTOSH

On March 23, 1944, a life of long devotion to horticulture was ended with the death of R. S. Mackintosh, secretary-treasurer of the Minnesota Horticultural Society for more than 22 years.

Mr. Mackintosh served as extension specialist in horticulture, University of Minnesota, from 1913 to 1922. During the past few years he has not been active in the work of the Society because of ill health.

As editor of the Minneosta Horticulturist he was well known to many of our members. His loss will be greatly felt throughout the horticultural world.

LOUIS SANDO

While on a trip to Red Wing, Minnesota, where he addressed the Horticultural Society, Louis Sando, acting secretary of the Minnesota Horticultural Society, died suddenly on March 9th.

Mr. Sando had long been associated with the Horticulture Department at University Farm, where he had long served as gardener, florist and instructor in floriculture. In 1942 he was called upon to serve as assistant secretary, due to the illness of Mr. R. S. Mackintosh.

Mr. Sando was held in great esteem by all who knew him.

WISCONSIN IRIS SHOW KNICKERBOCKER HOTEL, MILWAUKEE SUNDAY, JUNE 4

The Wisconsin State Iris Society announces its annual iris show which will be held this year in the Knickerbocker Hotel, Milwaukee, 1028 East Juneau Street, on Sunday, June 4.

Wisconsin iris growers are up-todate in growing the latest and best iris varieties known today and these will be on display at the show.

Admission to the show will be 25 cents. Officers of the Wisconsin Iris Society are Mrs. Arthur Jaeger, Milwaukee, president; Mr. C. D. Adams, Wauwatosa, vice-president; Mrs. R. Baehring, treasurer; Mrs. R. Baumgartner, secretary.



NOEL F. THOMPSON

ONE of our horticulturists best friend and worker, Mr. Noel F. Thompson, Madison, passed away on Thursday, April 27, after a short illness, at the age of 53.

Mr. Thompson was born in Oakland, California, attended Yakima High School, Whitworth College, Washington, and received his Master's Degree at the University of Washington at Seattle. He served in the first World War, and then was assistant professor of botany at the University of Idaho.

Coming to Wisconsin for further study in his chosen field, plant pathology, he took the position of associate pathologist with the U. S. Department of Agriculture and began the work of barberry eradication in Wisconsin. He also carried on research in the field of barberry eradication in Wisconsin, and in 1927 he joined the State Department of Entomology where he served so well our nurserymen, gladiolus growers and cranberry growers.

As a nursery inspector he was always welcomed by the nurserymen who appreciated his helpfulness and advice. There was hardly a meeting of gladiolus growers at which Mr. Thompson was not called upon to talk on the subject of insect and disease control. He

gave much time to helping with the annual state gladiolus show. During the past few years he has been doing research on the control of cranberry diseases.

He will be greatly missed by all of us, and Wisconsin horticulturists extend sympathy to the bereaved family.

NATIONAL PEONY SHOW MILWAUKEE GAS LIGHT COMPANY BUILDING 626 E. Wisconsin Ave., Milwaukee PROBABLE DATES— June 17-18 or 24-25

The American Peony Society will hold its National Show in the Milwaukee Gas and Light Company Building, 626 East Wisconsin Avenue, either June 17-18 or June 24-25, according to word just received from Mr. Charles E. Hammersley of Milwaukee, in charge of local arrangements.

Admission to the show will be free. The Gas Company has donated use of the building. A Milwaukee store will contribute funds to pay expenses. Milwaukee County Garden Clubs, the Iris Society, and the Milwaukee Florists' Association will stage separate displays.

Chairman of committees for staging the show is Alfred Boerner of the Milwaukee County Park Commission. The Commission will furnish the background for the show.

Adequate cold storage facilities have been secured so that exhibitors may send in their peonies early.

The Milwaukee Gas Company Auditorium which will seat about 500 people will be used for lectures and showing pictures.

No charge will be made exhibitors, for admission, or lectures.

All Wisconsin peony growers are invited to show their blooms. Make this Wisconsin show the best ever held by the American Peony Society.

A Wisconsin Peony Society will be organized during the show, according to Mr. Hammersley. More than 3,000 exhibits are expected.

For information write Mr. Charles E. Hammersley, 714 Majestic Building, Milwaukee.



OFFICERS Harold Janes, Whitewater, President David Puerner, Milwaukee, Vice-President H. J. Rahmlow, Madison, Cor. Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Illinois Ave., Sheboygan DIRECTORS Frank Blood, Stevens Point Dr. F. Graff, Freeport, Ill. Fred Hagedorn, Sheboygan J. R. Hopkins, Deerfield, Ill. Walter C. Krueger, Oconomowoc

E. A. Lins, Spring Green Walter F. Miller, Sun Prairie Dr. Geo. Scheer, Sheboygan Leland Shaw, Milton Noel Thompson, Madison

Hybridizing Hints to the Beginner

M^{ANY} who have always had an idea lurking about in some remote corner of their mind that they would like to try their hand at hybridizing will bring that idea out, dust it off and put it into effect. The setting is perfect, an idea and a patch of Glads, both in full bloom and here we go.

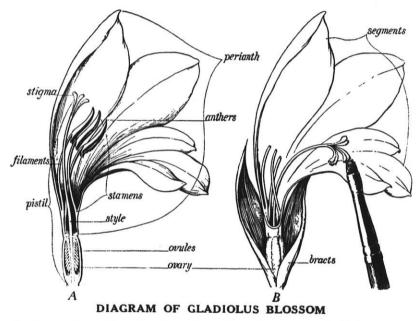
First, let's start off on the right foot. Let's select a big healthy, robust plant having the qualities we have in mind we would like to reproduce in the seedling. If we do not have that definite idea of what we wish to obtain, then let's pick a healthy plant anyway. Like begets like applies with modifications. Now we have found one healthy robust parent. Let's do the same for the other parent.

Purity of Color

A suggestion here might help. Purity of color may depend on the selection of parents with not too great a color contrast, unless you want to produce novelties with peculiar color combinations, and peculiar blotches.

Without confusing the beginner too much, I might point out that modern society has made laws in this country preventing the marriage of Father and Daughter, Mother and Son, and first cousins. There is a genetic reason for this. It is a safe rule to follow in all breeding, including plant breeding for they carry the same genetic laws as that of the human race.

When you take into consideration



A, shows ripe anthers bearing pollen. B, anthers removed. Pollen being applied to stigma. From annual Report of New England Gladiolus Society.

the fact that there are some 350 varieties, most of them popular at this time, on which Picardy is either the seed parent or the pollen parent, it is quite evident that unguided effort on the part of the beginner, yes even some who are much more experienced, will lead to these closely related marriages in Gladiolus breeding.

How to Cover Buds

When you have selected the parents to be used, cover both the seed parent as well as the pollen parent spikes as soon as they start to show color in bud. For this purpose, I have found that a cheesecloth bag, about three feet long. with a pair of tapes sewed to the mouth or open end makes a very desirable bag for this purpose. It can be easily slipped over the budded spike and tied at the base of the spike. In this manner you will be sure that a bumblebee, humming bird or night flying moth will not get to the floret and make a cross before you do. Keep the spikes covered, taking them off only when making the cross and be absolutely sure that one of the above of Nature's friends does not slip in and do the work for you while you are getting ready to make the cross.

Leave the bag on until the seed pods start to show, and then you will be absolutely sure.

Condensed from Glad Tidings, Twentieth Anniversary Yearbook, Iowa Gladiolus Society.

OUR 1944 PREMIUM LIST Walter C. Krueger

THE 1944 premium list for the 1944 annual show of the Wisconsin Gladiolus Society needs but few changes to carry out the policies adopted at the Pittsburgh conference by the affiliate members of the N.E.G.S.

The major change is one of consistency rather than an outgrowth of the conference mentioned above.

Instead of a formal champion and an informal champion, there will be a champion large sized flower over $4\frac{3}{4}$ inches, and a champion of the smaller sized floret group, under $4\frac{3}{4}$ inches. This should be done since Wisconsin showed by size, with $4\frac{3}{4}$ inches as the dividing line, and in addition had one color coupled division for flowers under $3\frac{1}{2}$ inches.

An informal conference at the directors' meeting revealed a preference for this 1943 set-up to be used again for 1944. Since the division for novices brought few blooms, and since no chapter society is host for the state show, those two divisions will be discontinued. (The J and K divisions of last year.)

The only existing inconsistency that remains is that the 1943 dividing lines $4\frac{3}{4}$ inches and $3\frac{1}{2}$ inches do not fall at the size division groups established at Pittsburgh, whether this becomes a problem remains to be seen. If the basic nomenclature is at hand it will offer no problem. If it is not received in time for use in preparing the prize schedule it may necessitate a quick classification for temporary use.

Welcome News For Johnny

Castor oil is finding a new use. Combined with ethyl cellulose it becomes a new plastic to replace rubber in many of its uses.

NEW COMMERCIAL VARIETIES OF GLADIOLUS

A^T the Pittsburgh conference, Walter C. Krueger nominated the following gladiolus varieties as leading new commercials: white, Leading Lady; cream, Lady Jane, White Gold, and Winston; pink, Ethel Cave-Cole, Pink Radiance, and Criterion; lavender, Elizabeth the Queen and Badger Beauty.

The following varieties he said show considerable promise as commercials: P-39 (Ritsema Bros. white sport of Picardy), Corona, Marguerite, Greta Garbo, Hoosier Lady, Vangold, Lady Boo, Purple Supreme, Vulcan, Parnassus, Stoplight, Miss Wisconsin, Oregon Gold, Glamis, Lantana, Discovery, Vee Cream and King Bee.

Albert Moses of Lima, New York, gave the following varieties as his choice of commercials: Snow Princess, Silentium, Leading Lady, Wanda, Lady Jane, Pink Radiance, Margaret Fulton, Rosa van Lima, Mother Kadel, Stoplight, Lavender Queen, Badger Beauty, Charles Dickens, and Corona.

H. O. Evans of Solon, Ohio, added to these lists, Red Charm and H. R. Hancock as excellent commercials.

ILLINOIS GLADIOLUS SHOWS

The following announcement of show dates appeared in the Notebook of the Illinois Gladiolus Society.

Illinois State Show, August 17-19. Momence, Illinois.

Champaign County Regional Show, July 18-21. County Fair, Urbana, Ill. Amateurs only.

Springfield Regional Show, July 30. Classes open to all.

North Central Illinois Regional Show, August 26-27. Ottawa, Ill.

Ten Wisconsin gladiolus growers have joined the Illinois Gladiolus Society. A large membership is reported by Dr. D. B. Creager, 507 N. New Street, Champaign, Illinois, secretary of the Society.

WISCONSIN GLADIOLUS SHOW WISCONSIN STATE FAIR West Allis, Aug. 19-21, 1944 Entries Open to All No Entry Fee

NEW TESTS TO BE CONDUCTED ON GLADIOLUS BULB TREATMENT

TMPROVED Ceresan and Cresol Solution will be tested on germinated bulblets this coming season, according to Dr. D. B. Creager of Urbana, Illinois, in a letter to Mr. David Puerner of Milwaukee.

Dr. Creager stated that since commercial gladiolus growers rarely soak their bulbs to start germination before planting, he has worked only with dormant stock. However, so many questions have been asked about it that he will test the material on germinated bulblets this coming season. There is no information available at this time as to whether these materials will injure germinated bulblets.

NEW ENGLAND GLADIOLUS SOCIETY CELEBRATES 25th ANNIVERSARY

A special invitation has been issued by the New England Gladiolus Society for all members to exhibit at the 25th anniversary show. Entries should arrive before noon of August 15th.

There will be a committee to receive, care for and enter all outof-town shipments coming by mail or express.

The Wisconsin Gladiolus Society extends congratulations to the N. E. G. S. on the occasion of its 25th anniversary.

QUICK! NEW! EFFECTIVE! CONTACT Gladiolus Bulb Dip and Plant Spray

Will kill thrips and eggs on your bulbs in 20 minutes without any special equipment. 3 oz. bottle makes over 9 gallons of solution.

Price Postpaid, \$1.00 NORTHERN LABORATORIES Box 251 Manitowoc, Wis.

How To Grow Chrysanthemums

Hattie Wilhelmy, Manitowoc Garden Club

T^F I had tut a few square feet of garden space at my disposal for flowers, my first and last choice would be chrysanthemums.

Mums can be grown today in almost any color and size. Their range includes single daisy-like blossoms, large doubles more than five inches across, semi-doubles, pompoms, large ball-like heads, quilled varieties, decorative types, exhibition types and many others.

While it is possible to secure chrysanthemums which bloom in July, authorities tell us these very early kinds usually lack color. The chrysanthemum is a cold loving plant, and the cool days of autumn actually improve the color of the flowers. Hardiness, although of real importance, is hard to define. The identical variety may winter beautifully in your garden and altogether fail to come through in mine. Heaviness of soil and drainage are supposed to be responsible. Alternate freezing and thawing in the spring are hard on the dormant plant, as the water settles around the crown. Be sure this cannot happen in your garden!

Six Good Varieties

If 1 were limited to six different kinds 1 would select six different colors. The six listed here have been tried and found good. First choice of all the yellows is *Eugene A. Wander*, a brilliant, very early bloomer. It grows about $1\frac{1}{2}$ feet high.

Lavender Lady is distinct, perfect in growing habit, and altogether lovely. Fully double, it blooms in early October and grows to a height of $2\frac{1}{2}$ feet.

Milky Way is double, intensely white with a pale yellow center when the flowers open. It grows about 2 feet high and flowers in September. Mrs. Pierre S. DuPont 111 for a bronze. It is impossible to adequately describe this gorgeous chrysanthemum, but the overall impression is a soft peach-bronze. It blooms in early October and grows about $2\frac{1}{2}$ feet high.

Burgundy is a nother double beauty guaranteed to flower before killing frost. It is a glowing winered color, long stemmed, and a perfect cut flower. It blooms in early October to a height of $2\frac{1}{2}$ feet.

Gertrude is a remarkably clear soft pink, blooming in early October. Height 2 feet.

Growing mums is really simple. Regardless of neglect they will flower year after year, but there is a big difference in the quality of the flower if you give it a bit of care. Chrysanthemums can readily be transplanted without injury at any stage of their development if you do it carefully. If lifted with a ball of dirt, even after the buds have formed, you can set them out in any spot you may have in mind.

Culture

A few things which will assure success with chrysanthemums: first, and most important, give them sun! Any space will do, if it is open to the sun two-thirds of the day and air circulation is good. There should be no interference from tree roots. The soil should be well drained. If there is any question about proper drainage, hill your plants as if they were potatoes the last time you cultivate them. Or if you wish, you can take them up and put them in a cold frame for the winter.

Any soil that will grow good vegetables will grow chrysanthemums. They are voracious feeders however, and really startling results can be attained by a generous application of well rotted barnyard manure at planting time. Prepare the soil to a depth of 15 inches, as deep-rooted plants can more easily withstand both extremes of heat and cold.

Mums can be planted in the fall

but it is best to plant in spring before hot weather. A single healthy shoot from an old plant will give good results; the farther the shoot is away from the mother plant the sturdier it is. If you really want to keep your stock young, destroy the old plant when you divide them in the spring. Old plants should be separated and this separating is best done when the suckers or stools begin to leaf out. Only one shoot is set in a place, and occasionally two. Spread out the roots and be sure the soil is well-firmed around the tips of the roots more so than around the crown of the plant.

No matter where or how you plant, in rows or in the formal garden, give them room. Do not crowd! Plants should be at least 18 inches apart, enough space for healthy development.

Spindly plants should be pinched out about an inch from the top when the shoots are about 6 inches long. This produces more shoots, which should also be pinched out after they have grown six or eight inches. Discontinue this pinching early in July as by that time the buds are forming on the earlier varieties.

Staking plants shouldn't be necessary. If your plants are healthy, they are vigorous and strong. If you should be fortunate enough to produce giant blossoms, stake only the main stem of the plant as the branches are brittle and break easily. Mammoth flowers can easily be attained by removing buds from the lateral branches, thereby forcing all the strength into the main bud.

Visitor: "To what do you attribute your great age and good health?"

Oldest Inhabitant: "Well, in the first place I got a good start on most people by being born afore these here germs wuz invented."

Garden Questions and Answers

Question: When should tulip bulbs de dug? Should they be stored over summer, or left in the ground?

Mav. 1944

Answer: Leave tulips until the leaves are brown and dry. They are best left right in the garden over summer. Deep planting, such as 8 inches in heavy soil, 10 in sandy soil, prevents splitting of bulbs and they will bloom longer without being dug up and separated.

Question: Should perennial phlox be divided in the spring?

Answer: Yes, perennial phlox should be divided every four or five years and spring is the best time. Even after shoots are up if the plant is divided so a clump of dirt remains on the root system they can be divided even now. Shoots from the outside of the clump are the youngest and most vigorous.

Question: What causes lower leaves of perennial phlox to turn dry?

Answer: In many cases it is because clump is too old, root system too crowded. During hot weather the roots are unable to supply moisture enough for the plants. Dividing every four or five years is the answer. Of course, there may be red spider or diseases on the leaves which would cause the same thing, so dusting with sulphur rotenone is necessary.

Question: The grass on our lawn is not as thick and heavy as many I see. Shall I scatter lawn seed over the lawn?

Answer: Unless there are definite bare spots, scattering seed will not do much good. It will be far better to fertilize with a high nitrogen fertilizer and mulch with peat moss to enable the grass to make a better stand. Keep well watered.

Question: What is the best way of killing dandelions on the lawn? Answer: The best way is to forget a bout them. Fertilize and care for the lawn well so that the seeds which are dropped this season will not have a chance to germinate and establish new plants which bloom next year.

Question: How can 1 control slugs in the garden?

Answer: Slugs multiply rapidly in damp or wet soil. Drainage may help. There are two baits which are satisfactory. One is Sterno which can be purchased at seed supply stores, and the other, recommended by our Entomology Department, is a bran bait. The formula is as follows:

1 pound bran

- 3 teaspoons Paris green
- 3 teaspoons salt

Mix the above together and then add a pint of water in which three tablespoons of molasses have been mixed. Spread this so animals and birds cannot get it, under mulch or boards.

Question: What kind of vegetable can I plant in my garden late in the season, and when should they be planted?

Answer: Late beets can be planted about July 1st, carrots June 20th, Chinese cabbage June 20th, turnips and rutabagas as late as July 20th, cabbage plants June 20th, radishes may be sown August 15th to September 1st, late planting of beans may be made June 20th, late sweet corn June 20th, pepper plants can be set June 1st.

MORE CABBAGE WILL BE GROWN THIS YEAR

WISCONSIN farmers expect to plant a larger cabbage acreage than was harvested last fall and the total acreage for all the early fall cabbage states may be a fourth larger than in 1943, according to the Crop Reporting Service of the Wisconsin and United States Departments of Agriculture.

THE CALIFORNIA TREE POPPY ROMNEYA COULTERI

Mrs. Arthur Jaeger, Milwaukee

TERY likely few Wisconsin gardeners know that the California Tree Poppy or Romneya Coulteri or Matilija will winter in Wisconsin, I have wintered mine the third winter. First I tried to raise Romneva from seed without any success. Then I bought a seedling which was planted in spring. Typical of the Poppy family it had a long top root and did not become established. Then one autumn I received a catalog which offered large dormant roots of Ronneya, 1 ordered it again and planted it in the autumn and covered it with a basket filled with leaves. When I removed the basket the following spring the young sprouts had started to grow. The leaves were removed and the basket replaced.

When it was warm during the day the basket was removed and replaced at night. In this way I have wintered it for three years and each year it is stronger.

Romneya should be planted in a hot, well drained spot. Mine grows about a yard high. The lovely white poppies are about four inches across with orange centers and they are fragrant.

ROTENONE TO BE AVAIL-ABLE IN SMALL AMOUNTS

THE insecticide rotenone, which has become such a popular material for flower and vegetable gardens, will be available this season for the control of insects in limited amounts. Victory gardeners and vegetable growers will be able to obtain it in small packages. Most of the rotenone came from the Malayan Peninsula, and now all of it must come from South America.

Pyrethrum will be available only for growers of cranberries, potatoes and certain vegetable seed crops. There is a very small amount of pyrethrum available.

May, 1944

.. GARDEN GOSSIP

SHADE REDUCES YIELD IN VEGETABLE GARDEN

TN South Dakota there has been a growing interest in frame gardens to provide shade for vegetables. The South Dakota Experiment Station conducted an experiment to study the effect of shade on yield of vegetables.

Lath shades were made, spaced to give 50 per cent shading.

The following report is given in the bulletin by the South Dakota Experiment Station, Brookings, entitled "Lengthening the Garden Season and Increasing Vegetable Yields."

"In all cases shading resulted in reduced yields. Vitamin analyses indicated that vitamin A was slightly higher in vegetables that were shaded while vitamin C was a little lower. Palatability studies indicated a lower quality for the vegetables grown under shade."

HOW WALNUTS ARE POLLENIZED

T has been found that all walnuts are self-fertile and will set a satisfactory crop of nuts either with their own pollen, or if pollenized by some other variety.

However, the male and female flowers are produced separately on the same tree. The pollen is distributed by the wind. The catkins grow f r o m overwintering buds, while the female flowers or tiny nuts are produced on new growth. Severe winters may kill the catkin buds. This is especially true on the Carpathian English walnuts.

Stamens and pistils on a tree mature at different times and so selfpollination usually cannot take place.

About all a planter can do to insure a good crop is to *plant several trees so that some pollen will be ready* at the right time to fertilize the flowers.



OUR GARDEN TOOLS

Mrs. Florence K. Tomlinson, Madison

HOW do you care for your tools? A good workman loves his tools, whether he be a wood engraver with his gravers or a carpenter with his saw.

Our hoe should shine like a mirror, be sharp and the handle should fit the grip. File the base of the hoe to keep it sharp. After a "workout" with the hoe, always clean it before putting it away. Scrape the clay and mud off first with a stick. A little scuffing with the sole of your shoe will put on a nice polish. A shiny hoe makes hoeing easy.

For winter oil it and hang it from a rafter. Otherwise it may be badly rusted as well as having a warped handle.

The handle should be just right for the grasp. If too large it tires the muscles of the hand. Trim it down with a piece of broken glass or sandpaper, until it feels right. It too should be oiled, as a smooth handle is less apt to cause blisters those first days out.

The man who does not care for and honor his tools is the same one that lets his door sag on its hinges.

GARDEN MIRACLES Debunking Some Plausible Notions

Alex Laurie, Ohio Exp. Sta.

PROGRESS in gardening as well as any other profession is made by detailed study and thorough experimentation and not by miraculous, spontaneous developments. So among the common notions which we encounter in our contacts with gardeners are some beliefs which have been inculcated on the public mind by sensational publicity backed by apparent plausibility. Despite attempts at debunking some of these modern miracles, there are still many who would rather be "suckers" than to be disabused of their notions.

The most glaring of these "errors of judgment" appeared in recent years.

(1) Water Culture. — This was given considerable attention in some of the most conservative publications but was found to be absolutely impractical in the average home. Yet despite that a recent book is attempting once more to "take in" the gullibles by asserting that every kind of a vegetable including corn, watermelons, etc., etc., could be grown satisfactorily in the living room of any home and provide the needed food and thus help the war effort.

(2) Worms in the Soil.—It was bad enough when California's exuberance publicized the need of worms in soil for better plant production. It's worse when sedate Ohio produces a similar advocate, who sells "domesticated" worms which do wonders. All you need to do is to introduce a small batch of these creatures into your garden and Utopia is around the corner.

(3) Bacterialized Humus.—This material under our persistent hammering seemed to have died a natural death, but all of a sudden it is : gain being foisted on the believMay, 1944

ing public, without even a change of name. If it were merely sold as black muck which does help soil structure, we would keep our mouths shut, but the inoculation with bacteria is an old "gag" which sounds highly intriguing but means nothing.

(4) Vitamin B_1 .—Again, in this case some of our most conservative magazines were taken in and despite overwhelming evidence to the contrary, Vitamin B_1 is sold as an aid to plant growth. Please remember that plants manufacture their own Vitamin B_1 and any organic matter in the soil as it decomposes provides additional supplies, so that time and money are wasted by further additions. True, in some exceptional cases and in extremely sandy soils without humus, a little help may be expected.

(5) Colchicine.—This potent drug was advertised as revolutionary in the development of new types of plants. For the average amateur its use will result in disappointment and besides if not used with exceeding care it is apt to produce abnormal growths on your skin which are difficult to eliminate. Incidentally, to date only one new variety has been produced with colchicine by a professional.

(6) Soil Testing Kits and Papers. —A flood of these "scientific" aids has suddenly been loosed on the public. The papers for determining acidity of soil are no better nor as good as litmus—the old-timer. They are difficult to read and are not accurate. The kits make extravagant claims and recommendations which do not jibe with the standard equipment of this character.

(7) Do Not Plow—Just Scratch. —That's not the title of the recent "world-shaking" book, but that's its basic recommendation. Read it if you will, but continue to prepare your soil deeply until such a time when better implements than spades and plows are developed. If you don't you'll have stubby carrots and beets like marbles and corn for fodder only.

Condensed from The Garden Path, April, May, June, 1944.

WAR PRISONER SENDS FLOWERS

FROM a prisoner of war in Germany to Foser's Flower Shop, Buffalo, N. Y., came an order for two boxes of roses, one to be sent to the soldier's mother, the other to his sweetheart. The soldier who sent the order is Pvt. Albert R. Zilliox, who was taken prisoner by the Germans shortly after he landed at Tunis in Africa. He has been in a prison camp in Germany for about a year.

The order was written on a regulation prisoner of war card, and the instructions said that the message to the boy's mother, should read "Happy Easter to a Soldier's Mother." The soldier took no chances, adding the note, "If card is late, Mother's day."

From April 20, 1944 Florists' Review.

THOUGHTS ON CONSERVATION R. G. Dawson, Franksville

WE hear a great deal about conservation, but does it protect the way it should?

The Mourning Dove is protected as a song bird in Wisconsin but shot as a game bird in the South; it is honored in the Bible and shot for target practice in a neighboring state last season.

I can remember the prairie chicken, woodcock, partridge, and quail, but to find them today you would have to go to many counties in the North. The Hoy bird collection in Racine is of great value, but only about one-half of the birds in this collection can be found in Racine County today. There a r e farm homes where a bird never sings but cats cover the door step, and dogs are licensed and the damage they did last year cost \$100,000. What was the damage done by cats to the bird life in Wisconsin?

I can remember when apples and potatoes had no insects to contend with. Now insects of all kinds are increasing rapidly.

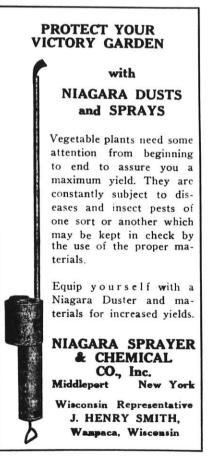
It is important for both city people and farmers to protect birds.

GLADIOLUS FOR FLORISTS

YEARS ago it was common to plant all gladiolus bulbs at one time to have them out of the way, and as a consequence, there were glut periods when great numbers were unsalable, and many growers, unless they had good home sales, could not obtain a new dollar for an old. At present plantings are much reduced. Usually the extremely early and late plantings bring the best prices.

With the earliest plantings it is better not to cover the bulbs more than four inches, while later in the season six inches is better. It will be better not to use mixtures of bulbs, but to plant the varieties customers are most likely to buy. Pink varieties like Picardy, which has no doubt been the greatest seller, will usually have the biggest call, but good scarlet, blue and pure white are in high favor, with yellow, orange and smoky in less demand.

From April 13, 1944 Florists' Review.



GOOD CLIMBING ROSES By Richard S. Wilcox

WE have received several inquiries regarding the hardiness of the Brownell climbers. Because Mr. Brownell's sub-zero hybrid tea roses, due to their strong infusion of wichuriana blood, are hardier than the regular hybrid teas, some have the impression that his climbers are also hardier than the common climbers like Paul's Scarlet. This is not true, for they are about the same parentage. The large-flowered climbers are all more tender than the Dorothy Perkins or small-flowered type, although there are some differences in the degree to which these popular climbers stand our winters.

Climbers

While on the subject of climbers 1 was pleased to see a letter in the February Flower Grower in which Lewis J. Cullen of New York paid tribute to the New Dawn. He says:

"New Dawn came through the winter in perfect condition and has bloomed continuously. It was the outstanding rose of '43. Frankly speaking after buying the best the market offers, if it were not for the grand New Dawn, my rose arbor would have been as bare as Old Mother Hubbard's cupboard."

New Dawn is certainly one of the greatest roses ever developed, even if it was pretty much an accident. It is especially suited for this climate and can be grown either as a climber, a low pillar or as a shrub rose. It is scarcely ever out of bloom.

Mr. Cullen also commends *Birdie Bly*, but call it more of a shrub than a climber. It grows about 7 feet high with me. It blooms more freely than New Dawn but hasn't as disease-resistant foliage, although lowa State College does classify it as resistant. The color of Birdie Bly is a deep magenta pink, while New Dawn is a light silver pink.

Both of them are certainly inv luable for us here but still we find that they are not frequently planted.

From February, 1944 The Minnesota Horticulturist.

SWISS CHARD TOPS GREENS IN BOTH WORLD WARS

SWISS chard is proved by seed sales to be the most popular greens in the Victory gardens of World War II, just as it was in World War I.

Although its great nutritive value as a source of vitamins A, B and C, was unknown in the first war, gardeners were then attracted to it by the huge yield which could be obtained from one row, cut constantly all through the summer, until the fall freeze-up.

Chard is a species of beet which can be sown as soon as the ground has been prepared, and in a month will be high enough to begin cutting. For the best quality, leaves should never be allowed to grow more than 10 inches tall. Leaves which reach this size should be cut, and smaller ones left to grow, providing a continuous harvest of young tender leaves throughout the season.

This summer-long harvest which is ideal for the home gardener, is not liked by the market grower, who finds such a crop costly to harvest. His best paying crop is one which can be reaped in a few trips through the field. Chard is therefore seldom found in markets and most of the seed is sold to amateurs.

When a plant becomes overgrown, all the leaves can be cut off close to the base, and soon a new crop of young leaves will develop. Few insects attack it, none seriously, and it is not subject to serious diseases. There are some varieties which are recommended for their heavy leaf stalks, which can be cooked and served like asparagus, but the most valuable and palatable 'contribution to the family diet are the vitamin-rich dark green leaves, which it produces abundantly.

A red variety of chard in addition to being nutritious has much decorative value and is sometimes grown as a border to ornamental plantings.

FAILURE TO THIN PLANTS CUTS DOWN GARDEN HARVEST

FAILURE to thin out plants in the Victory garden row, to give those remaining a mple room to grow, is a common fault which seriously reduces yield.

It is never safe to sow exactly the number of seeds that you wish to grow; because accidents or disease might destroy some plants, even were germination perfect. But when excess plants develop, the gardener never likes to pull them. It gives beginners an emotional shock to destroy them.

Experience soon proves that crowded plants suffer in quality, and the crop is seriously reduced. Only vigorous growth will produce good specimens of any vegetable.

Thinning in the home garden should be taken by degrees. Where plants are grown in drills, the first thinning should be done as soon as the plants are large enough to handle, and should make sure that each seedling stands by itself at least an inch from its neighbors. It is a mistake to discard all excess plants prematurely, since accidents, insects or disease may destroy many of those which are left. But as the plants grow they should be thinned until they stand at the optimum distance from each other.

When bare spaces occur in the row, excess plants may be transplanted to fill the gaps. Even tap rooted plants such as beets and carrots are often successfully transplanted by careful amateurs. It is possible to use the thinning from many crops, such as lettuce, endive, chard, beets and carrots; which is another reason why this operation may be performed by easy stages.

An Atlanta woman, riding home on a bus, suddenly realized she had left a "piggy bank" at the post office while mailing letters. She hurried back and found the bank on the counter, but noticed it had become heavier.

Generous Atlantans, thinking it was there for aiding some worthy cause, had put many coins in it.

WEEDLESS GARDEN EASY IF YOU NEVER LET THEM GROW

CULTIVATING the Victory garden should start as soon as the young plants begin to grow in the garden rows.

As long as weeds are killed in infancy, cultivation will be easy, but once they are allowed to begin substantial growth, not only do crops suffer, but work will increase, and the care of the garden may become a chore.

When tools are kept sharp and cultivation never neglected, it calls for no more physical exertion than wielding a broom. Modern advice is to take it easy and never stir the ground deeper than one inch. This is sufficient to kill young weeds, without disturbing the roots of the vegetable plants. It also breaks the soil crust, and allows air and water to penetrate readily.

Deep cultivation will dry out the soil, and may disturb the surface roots of your vegetable plants, which may do more harm than the cultivation does good.

Besides destroying weeds in the space between rows, those which grow in the row itself must be pulled when tiny. This requires hand work, and is always tedious, but if attended to promptly it takes little time, and once the vegetables have become well established, hand weeding will be unnecessary.

MAKING SOIL ACID

J. C. Ratsek of the Texas experiment station has concluded that, although sulphur is somewhat slower in action, one pound will acidify a given volume of soil to the same degree as seven or more pounds of aluminum sulphate. Sixteen-mesh sulphur is the best for use as a soil acidifier. The presence of an excess of nitrogen greatly hastens the rate of oxidation of sulphur in the soil. This is important information for persons who live in limestone regions but who wish to grow rhododendrons, azaleas or other acid-loving plants.

From April 15, 1944 Horticulture.



TOW you can control both insects and plant diseases at the same time. DU PONT PO-TATO DUST and DU PONT GARDEN DUST are combination insecticides and fungicides. These two new dusts were developed especially by Du Pont for home and farm gardeners. They can be used as either sprays or dusts, contain no lime or other harmful diluting ingredients and can be effectively applied at any time of the day-plants need not be wet. A 5-lb. bag will dust 5,000 square feet of garden or make 271/2 gallons of spray. Order your supply now. Ask for free literature!

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tion for persons who live in lime- E. I. du PONT de NEMOURS & CO. (Inc.),

1503 W. Canal St., Milwaukee, 2303 Hampden Ave., St. Paul

Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

OFFICERS

Mrs. H. W. Schaefer, Recording Secretary-Treasurer 4416 Taft Road, Kenosha

H. J. Rahmlow, Corresponding Secretary 424 University Farm Pl., Madison 6

PRESIDENT'S MESSAGE

Mrs. R. H. Sewell, President 957 No. 70th St., Wauwatosa 13

Mrs. F. E. Willard, 1st Vice-President Oakfield

Mrs. Walter Dakin, 2nd Vice-President 4110 Mandan Crescent, Madison 5

EVERY member, who heard the broadcast "Inauguration of Victory Gardens in the New England States," must have thrilled with patriotism. The ceremony was held on historic Boston Commons and the first furrow made with a pioneer's oxen-drawn plough.

History repeats itself! Here, in 1775, a rejoicing populace congregated to hear the Liberty Bell ring out the tidings of Victory; in 1944, this same Boston Commons is being transformed into demonstration gardens to help win the war and hasten the tidings of peace.

Our Aim Is Horticulture

Horticulture is the firm foundation of the Wisconsin Garden Club Federation. As it grew in membership and scope, other closely related projects became a part of the state's program and responsibility. However, whether any or every one of these projects is supported by the individual club depends upon their special interests, but the united aim is "HORTICULTURE."

During this year of varied wartime activities and limited transportation the Federation has not become dormant. This is verified by the addition of six clubs since December 1st of last year. In behalf of the Federation may I extend a hearty welcome to the following clubs: Garden Study Club of North Prairie, Manitowoc Garden Club, Lake Delavan Garden Club, Parklawn Garden Assn., Milwaukee, Two Rivers Garden Club, Garden



Dept. of Honey Creek Civic Club.

We trust you will derive benefit and pleasure from your affiliation and help to make the Federation a better and stronger organization because of your membership.

In closing, I wish to remind you that now is the time to start your "1944 Fact-Finding Project."

Sincerely,

Mrs. R. H. Sewell.

THE 15th ANNUAL MEETING NATIONAL COUNCIL STATE GARDEN CLUBS

DN the highway approaching historic Lookout Mountain, a sign reads "See 7 States From Rocky Top!" How grand it would be if in this report every member of the Wisconsin Garden Club Federation could hear and see all the important events of the Atlanta meeting of the National Council of State Garden Clubs. They would enjoy seeing the flower arrangements of 50 dozen dark, red roses, long branches of magnolias, pitcher plants combined with larch and huge callas and beautiful lilies donated by Mrs. Wiliford Leach of Florida.

Topics of paramount interest

DISTRICT PRESIDENTS

DISTRICT PRESIDENTS Mrs. F. J. Fitzgerald, 649 Broad St., Menasha: Fox River Valley District Mrs. H. R. English, 1722 Chadbourne Ave., Madison 5, Madison District Mrs. O. H. Burgermeister, 2127 S. 87th St., West Allis 14, Milwaukee District Mrs. John West, R. 2, Manitowoc Sheboygan District Mrs. Norm Robinson, Lake Geneva, South Central District

were discussed by Mr. Malcolm Henderson, British Consul in Atlanta; Miss Claudia Phelps; Dr. Thomas McHatton, head of College of Horticulture, University of Georgia; Dr. Ernest Runyon, Prof. of Botany, and Dr. Catherine Sims, Asst. Prof. of History in Agnes Scott College, and the final presentation of awards.

Dr. Runyon stated that the nutrition our gardens give is dependent on the elements of the soil. His introduction "Do something about the weather" was supplemented by the necessary use of organic matter in the soil. His listeners were made conscious that "plants are living creatures and demand the same foods and vitamins as humans." He disclosed how closely allied we are to plants, that our gardens are the homes of millions of living things. Dr. Runyon urged the use of leaves in compost for they (1) provide food for bacteria; (2) slowly make available the supply of nutrition; and (3) this supply will not be washed away by the rain. He advocated the use of ordinary fertilizers and warned against the over-use of micronutrients. In closing Dr. Runyon said, "A garden is a whole world! Make your garden well, for roses, turnips and all living things."

Dr. McHatton prefaced his address by saying, "I am talking to the United States at large." He talked on reconstruction after the war. He directed the development of a new landscape architecture specifically belonging to America. Dr. McHatton prophesied (1) A

nation of small houses; (2) City planning and beautification for parks, playgrounds, and all public gardens; (3) There will be national available resources for new homes. highway expansion, parks and monuments. He praised garden clubs for their cooperation and considers them the most educational factor in the United States. Dr. Mc-Hatton cited their accomplishments in conservation, abolishment of roadside signs and in flower show judging. We were reminded that flower arrangement is an art and said that "Rules crystalize Art."

Mr. Malcolm Henderson spoke about the British Aids to the Victory and Miss Claudia Phelps told of America's responsibility in winning the Peace. Dr. Sims gave economical and historical facts to be considered for making a World Peace. "Not Nation against Nation, but Nation with Nation" was the sentiment demanded.

Mrs. Joseph H. Brewer, past president and awards chairman presented the honors; the medal for civic achievement; 20 purple flower show ribbons; nine white ribbons for special achievements; 3 horticultural awards; 4 green conservation ribbons and the Fischer Junior award. Horticultural awards were given for Calla and Easter lily gardens in Florida, the publishing of a book "Herbs, How to Grow Them and Their Use," and for experimental work with roses.

The first award announced was the medal for civic achievement. The Kellogg Medal for Civic Achievement was presented to Mrs. Walter Dakin, Madison, Wis., for her leadership in planting and beautifying Truax Air Field. The Wisconsin Garden Club Federation is very proud and happy to have Mrs. Dakin receive this high honor and extend well earned congratulations to her for this outstanding recognition.

A new award of books has been offered by Mmes. Gross R. Scruggs and Margaret Scruggs Carruth for Memorial Plantings. Through the efforts of Mrs. Wiliford Leach delegates visited many of the beautiful homes and spacious well landscaped gardens filled with wisteria, azaleas, roses, and iris in bloom.

Wisconsin delegates, Mrs. G. E. Snell, Sheboygan; Mrs. John West, Manitowoc; Mrs. Walter Dakin, Madison, and Mrs. R. H. Sewell, Wauwatosa, are most grateful to Mrs. Thomas M. Brumby, the Georgia president and her assisting club members for their hospitality, floral decorations, gifts and the president's tea and tour which made our stay in Atlanta so delightful.

Congratulations to Mrs. E. Wesley Frost, National Council president, for the splendid registration of presidents and delegates, a fine program and a most successful 15th anniversary meeting of the National Council of Garden Clubs, Inc.

> Mrs. R. H. Sewell President Wisconsin Garden Club Federation.

RANDOM NOTES ON THE ATLANTA MEETING

Thirty-three state presidents were present, Voters totaled 102.

Close to 400 attended the Georgia dinner.

South Carolina's winning bird slogan is "Every Garden a Bird Sanctuary."

Alabama reports Junior Audubon groups.

Sixty-one clubs in Georgia have roadside chairmen.

It is suggested that we open our gardens to service men and women. Publicize through the U.S.O. In some cities, the Red Cross Motor Corps furnishes transportation.

Blind men love fragrant flowers. Chattanooga uses stickers on the windows of "V" gardeners. Each North Carolina Club is purchasing a War Bond.

The National Council will accept a \$100 War Bond for a life membership.

Georgia presented the National Council with a birthday gift of \$600 to be used as the nucleus of a scholarship fund for training in Horticulture.

Keep all roadside plantings in material native to the region and work for architectural beauty in gas stations and refreshment stands along the highways.

"Control the digestion of your Flower Show judges."

"Take a live interest in highways, soil, water table, roadsides, and wild life."

New Hampshire's Christmas favors for hospital trays included miniature birch logs with tiny candles, stockings filled with mints, and tiny wreaths.

Washington Clubs raised money for long distance calls used as prizes at soldiers' parties.

A southern club sent 1,000 red camellias to a hospital Valentine's Day.

New Jersey has broadcasts on gardening in Italian and Polish each Sunday.

Use living instead of granite memorials to our soldiers. Bird sanctuaries may serve.

Maine urges women over 18 to Join the W.E.F.S. (Women's Emergency Farm Service) for two weeks' service or longer in dairying, animal husbandry, gardening, or harvesting. The Governor's wife and daughter worked three weeks last summer. The service of 300 women was promised for 1944 before farmers would buy seeds. Wages are \$5-\$15 a day—"Go to Maine for your Vacation."

	—SAVE TREES—	
Cavity Treatment	General Landscoping Larg	e Tree Moving
	We are insured	Removals
Fertilizing	Lakeside 2907	Nellevels
Pruning	Wisconsin Tree Service	Spraying
	2335 N. Murray Ave. Milwaukee	

May, 1944

New York leads with 10,500 members. Next comes Texas with Massachusetts, Georgia, and Pennsylvania following.

Georgia has more affiliated clubs than any state.

Improvement in home grounds adds 15 to 18 per cent to property valuation. Gardeners have added billions to the value of United States real estate.

"Use more flowering trees. Benches and seats lend a feeling of hospitality."

"Make it embarrassing for anyone to destroy leaves."

Review each number of the Bulletin in your Club. Already 11 articles on the Fact Finding program have appeared.

A wartime suggestion: "Get away from bizarre and exotic flower arrangements-use simple materials."

"We can no more afford to have idle land than idle men."

"Garden clubs are the most potent factor in the United States. Public opinion generating in Garden Clubs will accomplish more than legislation."

> Genevieve C. Dakin (Mrs. Walter Dakin).

WAR SERVICE NEWS

An interesting and most entertaining program sponsored by the War Service Committee several weeks ago were the talks, illustrated with colored picture slides, presented by Mr. Anthony Wuchterl, Wauwatosa.

The program was enjoyed by the boys in the hospital at Truax Army Field, Madison, and on another occasion by the servicemen hospitalized at Camp McCoy, Sparta.

His subject: "A Romantic Adventure Into Early Wisconsin, via Architecture" was thoroughly en-joyed by his audiences. The Wisconsin Garden Club Federation is most grateful to Mr. Wuchterl for his time and services so generously given.

By Mrs. Chester Thomas, War Service Chairman. Milwaukee.

Wisconsin Accredited Judges

HE committee on accredited L judges with Mrs. Vicky Lee Hirsh chairman, and Mrs. Max Schmitt co-chairman, lists the following accredited judges for Wisconsin. All but six judges have filed their credentials and qualifications. At a committee meeting in Milwaukee in April it was decided to list only those who had filed their qualifications. Twelve clubs responded to the chairman's request to vote on a resolution to raise the standards of judges, and all voted in favor of doing so.

Mrs. Hirsh, the judging school chairman, makes the following statement :

"Inasmuch as Wisconsin did not use application blanks until 1938. all judges were asked to file credentials with the State Federation in October, 1943. The splendid cooperation of the judges has greatly simplified completing these records for the National as well as the State Federation, and will aid in improving our standards. May I at this time express my sincere apprciation for your assistance."

ACCREDITED JUDGES

Master Judges

Adami, Mrs. George, 2466 N. 46th St., Milwaukee, Wis.

Bostock, Mrs. H. S., 15 W. Main St., Madison, Wis.

Braman, Mrs. Chas., Box 147, Waupaca, Wis.

Durgin, Mrs. E. R., 1815 Park Ave., Racine, Wis.

Fitzgerald, Mrs. F. J., 649 Broad St., Menasha, Wis.

Freudenberg, Mrs. Henry, 1507 N. 68th St., Wauwatosa, Wis.

Harbort, Mrs. George, 3102 E. Washington Ave., Madison, Wis.

Jaeger, Mrs. Wm., Rose Terrace, Ripon, Wis.

- Kaufman, Miss Velma, Oakfield, Wis. Kartack, Mrs. R. E., 115-10th St.,
- Baraboo, Wis.

Longland, Miss Olive, Wychwood, Lake Geneva, Wis.

Morris, Miss Catherine, Rt. 4, Box 37, Oconomowoc, Wis.

Middleton, Mrs. F. C., Shorewood Hills, Madison, Wis.

Peterson, Mrs. T., 319 Harrison St., Waupaca, Wis.

Poepp, Mrs. Wm., Rt. 7, Box 196, Wauwatosa, Wis.

Roecker, Mrs. W. F., 3319 N. 14th St. Milwaukee, Wis.

- St. Clair, Mrs. E. A., 2418 N. 65th St. Wauwatosa, Wis.
- Schipper, Miss Emma, 510 Homer St. Milwaukee Wis.
- Schmitt, Mrs. Max, 1912 N. 84th St. Wauwatosa, Wis.
- Sewell, Mrs. Roy, 957 N. 70th St., Wauwatosa, Wis. Sonn, Mr. H. J. Oakfield, Wis.
- Sperling, Mrs. H. E., 1311 Maryland Ave., Sheboygan, Wis.
- Thomas, Mrs. Chester, 2579 N. Downer Ave., Milwaukee, Wis.
- Weart, Mrs. D. W., 20 So. Worthington, Oconomowoc, Wis.

White, Mr. E. L., Box 334, Ft. Atkin-son, Wis.

- Assistant Judges
- Armitage, Mrs. W. J., 190 N. 89th St., Wauwatosa, Wis.
- Boyce, Miss Celia, 563 Tayco, Me-
- nasha, Wis. Hirsh, Vicky Lee, 604 N. 119th St., Milwaukee, Wis.
- Kriz, Mrs. G. Alan, Rt. 5, Box 583, Waukesha, Wis.
- Namur, Mrs. Carl, 4611 Fifth Ave., Racine, Wis.
- Otto, Rev. A. H., 210 S. 7th Ave., West Bend, Wis.
- Salan, Mrs. A. J., 112 Harrison St., Waupaca, Wis.

Schaefer, Mrs. H. W., 4416 Taft Road. Kenosha, Wis.

Willard, Mrs. F. E., Oakfield, Wis.

Officers Greendale Garden Club

(Milwaukee District)

President : Mrs. Herman Lawonn, 6810 Northway

Vice-Pres.: Kurt Kindel, 5588 Azalea Ct.

Secretary: Mrs. Irene L. Smith. 6808 Northway

Treasurer: Donald Bengs, R. 4, Box 703, Milwaukee 14

Say the Word

A woman when launching her first ship was a little nervous. She turned to the shipyard manager, standing beside her, and asked: "How hard do I have to hit it to knock it into the water?"

When you are judging a man, try to average what his wife thinks of him with what his mother thinks of him.

Blue Bird Trails in Wisconsin

Mrs. R. A. Walker, State Bird Chairman

GARDEN clubs of Wisconsin are cooperating this year in establishing Blue Bird Trails along the main highways of the state. This splendid idea originated in Missouri in 1942, has spread rapidly throughout the Midwest. Briefly, the plan is as follows:

Erect Two Houses Per Mile

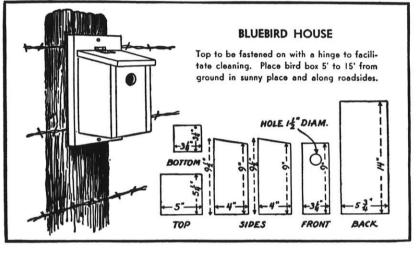
Garden clubs assume responsibility for erecting blue bird houses —two per mile—along the main highways. It is well to enlist the cooperation of highway officials, and secure permission from property owners, upon whose fences, trees or buildings the houses are to be erected. By cooperating with clubs from neighboring cities every mile of the highway can easily be provided with houses.

At present plans are being completed to include highway 41 from Oshkosh to Little Chute; highway 30 from Milwaukee to Madison; highway 57 from Green Bay to Milwaukee; and highway 18 from Madison to Prairie du Chien. These highways have been selected as Memorial Highways and will be planted with native crabs where suitable. We also hope to do highway 51 from the northern Illinois boundary of northern Wisconsin.

Many cities are extending the scheme to include additional houses in parks, preserves and private estates.

A Valuable Bird

The blue bird is one our most beautiful, cheerful, and useful visitors. He arrives early in the spring at approximately the same time as his cousin, the robin. His bright colors, his beautiful song, and his industrious domesticity attract the enthusiastic attention of all. When several thousand of these houses have been erected and occupied by happy blue bird families, they will bring untold pleasure to Wisconsin



Plan of Blue Bird House From Feb. Issue of Flower Grower

citizens and visitors, and valuable one assistance to gardeners and farmers.

The House

The construction and erection of these houses is simple and inexpensive. Local Boy Scout troops will surely cooperate if provided with plans and materials. The schools will gladly make available the facilities of their Industrial Arts Departments. The amateur woodworker, with a bench in his basement, will be glad to exhibit his skill in the construction of a half-dozen houses. Even the professional woodworking shops can build these houses for a small margin of profit, if guaranteed the sale of all they construct. Each garden club member should be responsible for two houses.

In order to secure pleasing uniformity it is desirable that the sketches and directions shown for constructing and erecting the houses be adhered to.

The lumber for these houses need not be expensive. Construction companies, cabinet makers, woodworking factories and carpenter shops usually have piles of short length lumber they will gladly contribute for such a worthy cause. Lumber one inch in thickness insures sturdy construction and insulation against heat and protection from rain.

Be sure the box has a hinged top for easy cleaning, since the blue bird insists on starting his new home in clean surroundings. Openings near the roof should be provided for cross ventilation. Holes should be bored in the floor of the house to insure immediate drainage of water blown in by rain storms. Paint the houses dark green or brown to harmonize with the landscape.

No Perch

Notice that the plans do *not* provide a perch below the entrance. The blue bird prefers to dart directly into the house, without the aid of a footrest. Moreover, a perch would tend to encourage sparrows.

Place the houses on posts, trees or buildings at a height of about five feet from the ground. If possible, face the entrance to the south for the blue bird loves the sunlight. Be sure that there is a clear space around the house as the birds like open places.

The scheme will undoubtedly be extended from the Atlantic to the Pacific and from Canada to Mexico. It is hoped that Wisconsin will make a good showing.

May, 1944

May, 1944

HONEY CREEK GARDEN CLUB

The Honey Creek Garden Club, Walworth County, joined the Wisconsin Garden Club Federation and the Wisconsin Horticultural Society in March.

The officers of both organizations wish to welcome the club to membership. Officers of the club are:

President: Mrs. Roy W. Cole.

Vice-Pres.: Mrs. C. R. McBride.

Secretary: Mrs. Arthur Goetsch.

Treasurer: Mrs. John Morton.

Cor. Secy.: Mrs. Alida J. Classon.

The Honey Creek Garden Club was organized in 1919 and undertook the landscaping and maintaining the Community grounds, and for the last 17 years has held a flower show. The 18th annual flower show will be held August 24th.

WAR SERVICE

A reminder to all garden club members:

Servicemen in the hospital at Wood, Wisconsin, are eagerly looking forward to receiving the scrap books to be made up in accordance with information and instructions summarized in the War Service program for the year. A copy was given your club president earlier this year.

The War Service Committee wishes to provide the 400 scrap books as planned, and sincerely trusts that the members will support the project by compiling and making at least four books per garden club.

Mail books as soon as finished and not later than June 1st, to Mrs. John Moss, Grey Ladies, Red Cross, Veterans' Administration Hospital, 53rd and W. National Avenue, Wood, Wisconsin, c/o Miss Metcalf, Chief Nurse.

A postcard, addressed to the War Service Chairman, Mrs. Chester Thomas, advising of the number of books made up and when mailed, is kindly requested for the records.

By. Mrs. Chester Thomas, War Service Chairman, Milwaukee.

BIRD SONG RECORDS AVAILABLE

A N album of records of 72 bird songs, recorded in the wild by the Albert R. Brand Bird Song Foundation are now available. They may be purchased from the Combstock Publishing Company, Ithaca, New York. Price for the album of six records is \$5.00.

Individual records may be purchased at \$1.00 each. Each record has six songs on each side. The birds are grouped geographically or by habitat as follows: Birds of the Northwoods; Birds of Northern Gardens and Shade Trees; Birds of Southern Woods and Gardens; Birds of the Fields and Prairies; North American Game Birds, and Birds of Western North America.

Besides being very interesting, the records are valuable as an aid in learning to recognize birds by their songs.

PROGRAM FOR A NEW GARDEN CLUB

A garden club whose members are at about the same stage in their knowledge of gardening can more often plan a program which will consistently hit the bull's-eye in usefulness than can a club of mixed experts and beginners. Theoretically we believe that all groups are enriched from contacts with various social and intellectual levels, but in a garden club which aims to be a serious study group, the lack of a common basis is often a bar to planning a satisfactory program.

For example, where the club is made up of members in various stages of horticultural knowledge, it often becomes the task of the more experienced to be instructors of the beginners and attend meetings below their knowledge level, with the result that the more experienced get little out of the club for their own improvement. A program committee faced with the problem of planning a year's work for a too-mixed group, may work hard but end by pleasing nobody. In such cases, it is often better to divide the club into groups, planning a program for each according to its interests, with monthly or bimonthly meetings on general topics to bring the groups together.

Condensed from The Home Garden, February, 1944. By Helen S. Hull.

WILL WE HAVE ENOUGH FOOD?

By Secretary of Agriculture Claude R. Wickard

WISH that I could say that the present comfortable food situation would continue indefinitely. I can't make any such prediction, because there are too many unpredictable factors of production and demand. That's one reason why we ought to, so far as practicable, maintain the largest possible reserves. I want to commend the people who manage our food supply for maintaining the reserves as they have. It is a sound policy, despite the comments made by those shortsighted individuals who would squander our current abundance i a spree of unrationed eating.

If we fail to meet our Victory garden goals this year it won't be because we don't have the materials or the experience or the leadership. It will be because we have failed to impress the public with the importance of Victory gardens. The need is urgent. So urgent, in fact. that President Roosevelt recently appealed to the citizens of the Nation "to do something toward backing up the boys at the front" by growing as many 1944 Victory gardens as possible. Surely, the cause is worthy. The opportunity is challenging.

From Address on April 11.

Thaw

Friend—"Ah sho thought youah Mose was froze to that job in the shipyard."

Mrs. Mose—"So did Mose, but 're get to loafin', and dey defrosted him."

Grass Substitutes That Will Grow

By Victor H. Ries, Ohio State University

Prepare Soil Well Before Planting. Water During Dry Weather

THE answer to the often asked question— "How can I grow grass beneath my shade tree?" or "How can I make grass grow on the bank in front of my house?" is "Why try when grass substitutes are usually so much more satisfactory?". Because of their ability to grow, they are often called Ground Cover plants.

However, we should not take the attitude that just because these plants grow under adverse conditions that we need do nothing to help them. The more effort put into proper preparation of the soil before we plant, the better the results. (1) Incorporate a layer of 1 to 2 inches of partially decayed organic matter, such as rotted leaves, peat moss, rotted manure, or even weathered sawdust with a top 6 to 8 inches of the soil; (2) at the time of mixing the organic matter with the soil, apply a complete commerial fertilizer at the rate of 3 to 4 younds per 100 square feet. This should be mixed with the soil; (3) after planting, mulch the surface of the ground if possible, with a half inch to one inch of the organic materials mentioned above; (4) during drouth periods, ground cover planting should be watered once every week to 10 days, applying enough water to soak the ground to a depth of 4 to 6 inches.

If you do these four things, then you can depend upon good results being obtained.

There are a great many different plants which may be used as grass substitutes. All of them will give satisfactory results, but some more so than others. One of the main reasons being that you do not insist on mowing them as you do grass, thereby allowing them to develop leaves, which in turn can manufacture food so that the plant can grow and thrive.

The Ten Most Satisfactory Grass Substitutes

1. Periwinkle (Vinca) most folks call it myrtle. Bowl's Variety is a slight improvement on the ordinary one.

2. English Ivy — this should be used only in shaded locations. There are many different varieties—Sylvanian Beauty, Baltic, Self-branching—besides these, there are many not named. (Not very hardy.)

3. Wintercreeper or Eunonymus —variety coloratus is the fastest growing. Fortunei and Fortunei radicans are both satisfactory.

4. Japanese Spurge or Pachysandra should be used in shade only. It is rather slow to get established, but otherwise a fine plant.

5. St. Johnswort (Hypericum calycinum).

6. Creeping Buttercup (Ranunculus repens and acris).

7. Hardy Verbena (Verbena canadense).

8. Bugle (Ajuga reptans).

9. Lily-of-the-Valley.

10 Maiden Pink (Dianthus deltoides).

Practically everyone will agree on the first four of this list, but after that, it is largely a matter of personal taste.

Terraces

Banks and terraces that are exposed to the hot sun are often difficult to keep in sod. This is particularly true if the soil is poor. More satisfactory results may be obtained by planting some grass substitute. These will often succeed where grass will not, because we do not insist on mowing them. Before planting, loosen and prepare the soil by spading in an inch layer of rotted leaves or peat moss. Plant Thyme, Sedum album, Sedum reflexum, Ajuga, or Periwinkle (Myrtle).

Shady Places

Grass has difficulty withstanding the shade, as well as the dry soil beneath overhanging branches of

evergreens, such as Pfitzer juniper, Japanese yew, and similar ones. On the other hand, certain grass substitutes not only withstand these conditions, but even thrive under them. Try Periwinkle (Myrtle), Japanese spurge (Pachysandra). This is also a good place to use English ivy, provided you keep it from climbing up into the evergreen.

Strips

Strips of grass, a foot to several feet in length, between a hedge and a sidewalk are a nuisance to mow. This is a good place to grow a collection of creeping rock plants. Why not use a collection of different varieties of Moss Pink (Phlox subulata) or the various Thymes. There are also a fascinating number of Sedums (Stone crops) that can be used.

THE VEGETABLE GARDEN— A SUGGESTED PLAN

A new special circular entitled "The Vegetable Garden-A Suggested Plan" by Prof. O. B. Combs has just been issued by the Wisconsin College of Agriculture. The circular contains a plan for an allyear vegetable supply, and a complete lay-out for a garden of 70 feet in length. A planning guide is also given. This has the names of the best varieties for Wisconsin, approximate planting dates, quantities of seed or plants required, depth to plant, spacing, and amounts to plant for a family of five or four adults.

All of our members should have a copy of this bulletin. It may be obtained by writing the Bulletin Mailing Department, College of Agriculture, Madison 6, or through the office of the county agent.

A dusky lady went into a drug store and asked for a penny's worth of insect powder.

"But that isn't enough to wrap up," objected the clerk.

"Man, I ain't asking you to wrap it up. Jes' blow it down my back."

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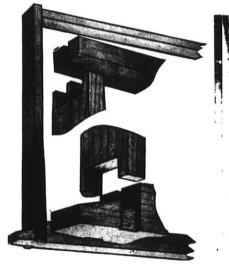


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ULLEGE OF AGRICULTURE



JUNE 1944

But It's True

A man's first finger is generally shorter than his third, and the reverse is true with women! But if you fail to meet the test, don't worry about it.

1,200 different languages are spoken in Africa!

Favored One

Daughter: "Bill writes that his Corporal thinks a lot of him." Mother: "How is that dear?"

"He says the Corporal won't let anyone else peel potatoes."

How's That Again?

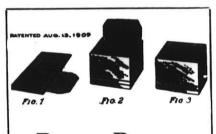
"When you asked her to dance, did she accept quickly?"

"Did she? Why she was on my feet in an instant."

No Change

"Do you act toward your wife as you did before you married her?"

"Exactly. I remember how I used to stand in front and look at her house almost afraid to go in. Now I do the same thing some nights."



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WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Horticultural Society

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Subscription to Wisconsin Horticulture is obtained by membership in the Wisconsin State Horticultural Society for which the annual dues are \$1 per year or \$1.50 for two years. Garden Clubs, Horticultural Societies, and other Horticultural Organizationare affiliated at a reduced membership rate. Fifty cents of the annual dues paid be each member is for a year's subscription to Wisconsin Horticulture.

Apple Maggot Still Our Worst Enemy

C. L. Fluke and Conrad Kuehner Recommend Control Measures

ALTHOUGH the apple maggot did not do as much damage in Wisconsin orchards in 1943 as it did the year before, it is still the No. 1 insect pest of apples in this state according to Dr. C. L. Fluke, entomologist of the University of Wisconsin.

Because it will probably take two or three years of careful management to "clean up" seriously-iniested orchards. Fluke recommends a two-fold program: (1) Spray with one pound lead arsenate in 50 gallons water, timing the sprays correctly for the season, and (2) pick up and destroy fallen apples once a week beginning August 1.

That picking up fallen apples will help control the apple maggot has not yet been proven experimentally, but the insect's life cycle is such that research workers are quite confident it will.

Apples infested with maggot searly always drop to the ground. Within a week to 10 days the maggots in these fruits mature and work their way out, going into the ground to pupate and emerge again the next year or two years later. If, therefore, all the fallen apples are destroyed at least once a weekthen after three years of careful drop-picking there should be few maggots left in the orchard.

Use Bait Traps

To determine when the flies are emerging, bait traps should be used, attaching them to low-hanging outside branches on the sunny side of trees.

Last year, in cooperation with Conrad Kuehner, extension horticulturist, and H. J. Rahmlow of the Wisconsin Horticultural Society. Fluke obtained results from bait traps at 17 collecting stations in southern and eastern counties.

Timing the Sprays

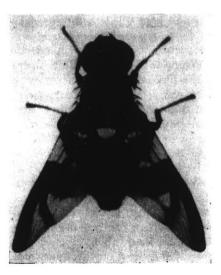
In his annual report Dr. Fluke writes as follows:

The best time to kill the adult -



Hang Bait Traps On Sunny Side of Tree.

flies is to spray the trees a week to ten days after the flies emerge from their pupa cases in the ground. The flies require ten days to two



THE FLY Note Letter F On Wing.

weeks for complete egg development and before egg laying begins. The spray is therefore put on the trees during this period, but often all the flies do not emerge at the same time. To determine this emergence we have adopted the simple measure of hanging bait pails in the trees which attract and trap some of the flies.

The gait used in the pails this past season consisted of two ounces of glycine and two ounces of sodium h y d r o x i d e dissolved in 6 quarts of water. This made enough solution for four 5-pound honey pails. The pails were hung to low hanging outside branches on the sunny side of the trees. They were placed in the trees about the 10th or 12th of July and were then examined daily, the flies counted and removed. The solution was kept to full capacity, almost to the lip, by adding water as needed.

Fly emergence studies this year show that there are very little if any variations in their appearance in all sections of the state. For instance, flies were emerging at Casco just as early as at Madison and egg punctures were found in the apples grown at Port Washington close to the shore of Lake Michigan at the same time they were discovered in Dane County. If this is a normal course and will follow in years to come it will greatly simplify timing of the maggot sprays. We have always felt that the lake influences would delay the flies similar to the retardations found for the codling moth and other insects. It will be necessary to repeat our trials for another year or two before drawing definite conclusions.

At Bayfield

Field observations at Bayfield also indicate that the flies appear very little if any later than in southern sections. The variations that were noted in some sections .ere very probably due to soil mois-

ture. After a rain there were always more flies caught than during a period of dry soil. At Madison it rained on the 16th of July and the first flies were taken July 17 (records from two separate orchards). If rain, therefore, is not general over the state during July there may be considerable differences in times of fly appearance. It is therefore important that each grower use the bait pails until such time that the maggot is under satisfactory control, or until our records are numerous enough to know what to expect from observations made at some central point.

Two Sprays Necessary

Experiences this y e a r indicate that two sprays are necessary to check the maggot, and to secure maximum results it will be necessary to repeat these sprays for two or three years before the insect is reduced to negligible numbers.

The influence of neighboring uncared for orchards presents a real problem to the careful grower. The flies will move from orchard to orchard, and even with three carefully timed sprays, control was difficult in those orchards bordered by unsprayed trees. Observations and counts on infestations indicate, however, that uncared for trees must be within 200 to 300 feet to have any decided influence on infestations in s p r a y e d orchards. Community action is therefore essential for perfect control.

The glycine and hydroxide solution gives off slowly ammonia fumes which attract the flies. The bait was improved somewhat by adding a teaspoon of household ammonia to each pail at the start and the effectiveness of the solution to entrap the flies was increased by adding a pinch of powdered soap such as Dreft.

A preliminary test was made with water and a tablespoon of household ammonia added every four or five days. This type of trap was very effective the first two days following the addition of the ammonia but it soon lost its strength. Such a trap is cheaper to prepare than the glycine trap but the latter has the advantage of being effective throughout the season and actually improves with age. For this reason they should be prepared six or seven weeks in advance.

How to Prepare and Use the Bait Traps

Mr. C. L. Kuehner in his Orchard News letter gave the following instructions for apple maggot control:

Bait formulas:

- No. 1 Dissolve,
- 2 oz. Glycine (Amino-Acetic Acid)
- 2 oz. Sodium Hydroxide
- ¹/₄ teaspoonful granulated soap such as "Dreft," in 7 quarts of water.
- No. 2 Dissolve,

2 oz. Urea

- 2 oz. Sodium Hydroxide
- ¹/₄ teaspoonful granulated soap such as "Dreft," in 7 quarts of water.

No. 3 Household Ammonia,

4 tablespoonfuls in 7 quarts of water and ¹/₄ tablespoonful of granulated soap such as "Dreft." (This bait needs to be renewed weekly.) The glucing bait is more effective

The glycine bait is more effective if it is made from 6 to 7 weeks ahead of the time when it is placed in the trees.

How to Use the Bait. Seven quarts of bait solution will be sufficient to fill four 5-pound honey pails or other similar container. Pails must be filled to the lip of the pail and kept filled to this level by adding water as evaporation lowers the surface.

When to Start the Bait Traps in the Orchard. The experimental work carried on last year shows that traps should be started no later than July 5 in all parts of the state except in the most northern tier of counties, where they should be started not later than July 15.

Where to Place Bait in Trees. Hang one pail of bait on the outer end of a large branch of each of four different large trees. Pails should be hung about 5 to 6 feet above the ground on the sunny side of the tree.

Keeping the Record. Examine the traps each day. Remove the maggot flies caught in the bait and count them. Record the total of the four pails on the calendar.. (A small piece of wire screening may be used as a dip screen to lift the flies from the surface of the bait.) If two or three members of a Spray Ring operate a set of these bait traps, their records will serve the rest of the community or Ring.

How to Recognize the Fly. Different kinds of flies may be caught, but count only the apple maggot flies. This fly differs from other flies in two respects. It has a round, white mark on the middle of its back, and the black markings on its gauzy wings resemble the letter F. A reading glass or hand lens is a help in determining these marks. Your County Agent will be able to show you a sample of the fly at his office.

When to Spray. If your bait traps catch just a few flies for a week and then suddenly catch considerably more, it is then time to apply the lead arsenate spray (1 lb. to 50 gal. of water). If practically no flies are caught, it may indicate that something else attracts them more than the bait. In this case, the spray should not be delayed more than ten days after the first catch.

Spray all apple trees, fruiting as well as non-fruiting; also spray any other apple or thorn apple trees which may be within a few rods of the orchards.

In most cases, it is advisable to follow the first maggot spray with a second application within 10 days. This spray, some seasons, may coincide with the August spray for the regular second brood of codling moth.

APPLE CROPS AND HARDINESS

Question: Does the size of the crop on an apple tree have any effect on tree hardiness the following winter?

Answer: Yes, a tree that carried a very heavy crop is more likely to show injury after a severe winter than one having a smaller cropother conditions being equal.

From April, 1944 Minnesota Horticulturist.

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Lester F. Tans, General Manager

What Does a Mulch Do? George D. Scarseth, Purdue University, Indiana

Where do you go to dig fish worms during a dry period?

As a boy, the only place we could find fish worms during the drier part of the summer was between two buildings. For a reason I did not understand then the soil was always moist between these buildings. I do remember that to my bare feet this soil was also cooler. I know now that it was the influence of the shading that kept this soil cool. Since this soil was cooler than the atmosphere it had continuously received a supply of water from the atmosphere into the soil. A continuous stream of water gas had been moving into the soil and condensing so that in spite of evaporation the soil would still remain moist.

The Case of Moist Ground Under Big Soybeans

Several years ago on a visit to the Wisconsin Experiment Station, Professor A. R. Whitson, of the Soils Department told about an interesting soybean experiment as affecting soil moisture. They were comparing the moisture content in the soil in a soybean plot and in a fallow plot of ground next to the soybeans. It was in August and they were obtaining some very confusing results. The soil moisture under the big soybeans was actually higher than in the plot where no crops were grown. This did not seem reasonable because we realized the soybeans were drawing heavily upon the ground water and were evaporating much water into the air. Yet the data showed a definite higher moisture content under the soybeans. This experiment took place before we in America were aware off the phenomenon I explained as taking place under the board.

Professor Whitson and I found our answer through a publication that came from Russia. A scientist by the name of Lebedeff had been working all his life in Russia studying the behavior of soil moisture. His work was unknown to the English speaking world until it was translated in 1927. Lebedeff showed how the water would move from the air into a soil under certain conditions. In certain parts of the Russian plains, when the soil was cooled during the night moisture would move into the soil from the air in the morning hours before the soil became as warm as the air. This condensation was as much in some cases as about a third of the rainfall in that area.

In Professor Whitson's experiment we found that shade of the heavy soybean growth was keeping the ground sufficiently cool to allow for moisture to move into the ground from the air and to condense. In the fallow soil there was no shading effect and the sun warmed the soil to such an extent that water did not move from the air into it.

We see an example of moisture conservation in our woodlands. Undoubtedly the shade of the trees helps to keep the soil cool and along with the natural forest mulch the soil is undoubtedly greatly protected from warming up in the hot summer day. Without doubt a great deal of moisture must enter the forest soils from the air above the ground and in such a manner tends to water the forest even when it does not rain.

There can be no question but the mulch helps to keep top soil cool during periods of summer heat. The mulch is a great conservator of water. Not only does it prevent evaporation but it does actually add water to the soil that does not come from the rain.

Condensed from 1943 Annual Report Michigan State Horticultural Society.

"Yes, I had a mortgage that kept me sweating for 20 years."

HOW IS THE HELP AROUND YOUR PLACE?

THE following article by an lowa nurseryman to the American Nurseryman magazine about describes the help situation in many places:

"Got a questionnaire from the A A. N. recently asking for dope on labor utilization to pacify the war manpower boys. Under the heading, 'Use of older and handicapped employees,' I wrote that we had gone the limit. We have one 78-year-old man with a stiff ankle who comes to work with a cane, leaves it in the office, does a surprisingly good days work for a man of his age, picks up his cane and goes home. I'll lose him for lawn-mowing later.

"You might start a contest of who has the oldest employee, the skinniest foreman, the worst handicapped physically, etc. Don't consider the employee most deserving of a 4-F classification above the ears, as this is sure to end in a draw. I think we had the fattest. The employment agency sent out a man last spring that we had to wedge into the truck. This was an ordeal, but getting him out was a real problem. I rather think that he would weigh about 350. All he knew about his feet was from memory or hearsay, as he had not seen them for years. They had to bathe him with a hose. I used him one day His name was Archie. Nice guy too."

NEW CHERRY IN MINNESOTA

We had another look this year at the new cherry (Minn. No. 58) that made such a hit with the committee before and it surely looks like Minnesota is going to have a true sour cherry at last. It is apparently hardy enough for most localities. There are also large numbers of Prunus tomentosa and P. japonica seedlings being grown and some very good varieties will be forthcoming soon.

By Fruit Breeding Committee April, 1944 Minnesota Horticulturist.

[&]quot;They say that paper can be used to keep a person warm."

Wisconsin Apple Institute News

THE design shown at the top of this column was drawn for the Wisconsin Apple Institute by Mr. Byron C. Jorns, College of Agriculture, Madison. Mr. Jorns submitted a number of designs. The Board of Directors selected the one shown above and it is now available to members for the following purposes:

(1) As a zinc for printing stationery;

(2) With the words added "member of" as a stamp for stamping containers of apples; and

(3) If local advertising is done this fall the design may be used as a part of the grower's ad.

There may be other uses. Members should write to the Wisconsin Horticultural Society if interested.

Mr. Wm. F. Connell, Menomonie vice-president of the Institute,



was selected by President Telfer to represent us at the meeting of the National Apple Institute in Washington June 16-19. A meeting of the Board of Directors will be held shortly after his return to hear his report and to lay plans for this fall.

Members of the Wisconsin Ap-

ple Institute are receiving regularly bulletins from the National Apple Institute, as well as the state office containing the latest information on apple growing problems, and governmental regulations.

The membership is still growing. The following joined the Wisconsin Apple Institute since our last issue went to press:

Ed. H. Stoeber, R. 2, Madi-

son 5 _____\$ 5.00 Thompson and Marken, R. 4,

Box 523, Kenosha _____ 25.00 Bayfield Peninsula Fruit As-

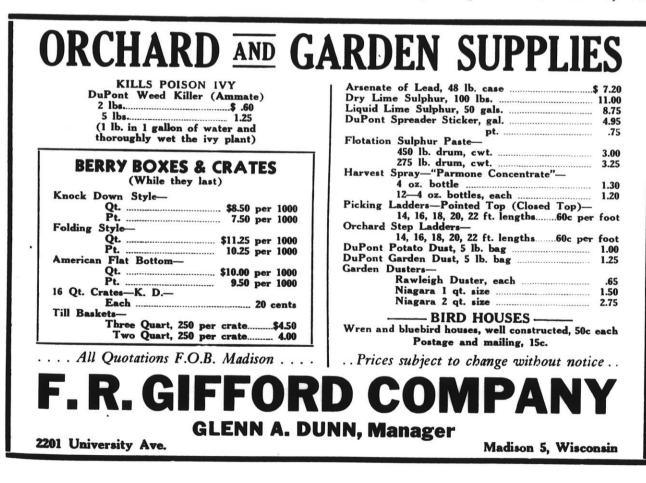
sociation. Bayfield _____ 10.00

Albert J. Theys, Luxemburg 7.25 The Old Homestead Or-

chards, Hall Enterprises,

Casco _____ 21.00 Oakwood Fruit Farm, Wm.

J. Louis, Richland Center_ 10.00 August Carlson, Ellison Bay 7.00



Better Spraying Necessary For Number One Apples

D^{WIGHT} Powell, Illinois Division of Plant Pathology gives the following important analysis of efficient spraying.

One good spray is worth two poor ones. It should be added that two poor ones are not worth applying. An orchardist had just as well go fishing as to attempt to control scab by poor coverage.

Survey shows faults. Inefficient operation is costly. In a recent visit to several orchardists who were having difficulty in growing good fruit, the following conditions were found:

1. There was a leak of about 1 gallon per minute around the agitator shaft.

2. Thirty - year - old trees were sprayed from one side with a straight stream from a single-nozzle gun at the rate of $1\frac{1}{2}$ gallons per tree.

3. Thirty-year-old trees were sprayed from the ground only.

4. On 18-year-old trees $2\frac{1}{2}$ gallons per tree were applied.

5. Spraying out a tank of 150 gallons required $1\frac{1}{2}$ hours.

6. Only 10 gallons of spray were discharged from two 3-nozzle brooms from a 35-gallon-per-minute pump.

7. Three men were putting on only three 400-gallon tanks in onehalf day with a 35-gallon-perminute outfit.

8. Spray material was ordered only as it was needed for each spray.

9. Poor grades of sulfur were used.

Suggestions for Improvement

Factors such as the above, observed in orchards of 15 to 100 acres, cause scabby and wormy fruit. Timeliness and thoroughness are necessary to good spraying. The following suggestions are made for improvement:

1. Use the full capacity of your outfit; a 20-gallon pump should dis-

charge 20 gallons per minute.

2. Measure the discharge per minute by placing the guns in a bucket. If the output is not up to capacity, (1) increase the aperture of the discs, or (2) use more nozzles on the broom. If the pump then does not discharge to capacity, it probably needs new suction cups, the gaskets or valves may be leaking, etc.

3. Examine the sprayed trees occasionally. If you can find a dry leaf, the spraying is not sufficiently thorough.

4. Continue spraying until the spray drips from the tree.

5. Use a *fog* spray to obtain good coverage. A tower is necessary for fog spraying in the tops.

6. Apply plenty of spray per tree. A simple rule is: For prepink, pink, calyx and succeeding sprays, divide the age of the tree by 4, 3, 2, and 1.5 respectively. For example, a 10-year-old tree should receive the following amounts:

Dormant and prepink

stages2.5	gals.
Pink stage3.3	gals.
Calyx stage5.0	gals.
Each succeeding spray6.7	gals.

Condensed from bulletin "Food For Victory With King Apple" by Dr. V. W. Kelley, Illinois Department of Horticulture.

EFFECT OF SOIL ON FRUIT FLAVOR

Question: Are strawberries that are grown in acid soil more acid than those grown in a soil that is not acid?

Answer: No, other conditions being equal. However, the amount of sunshine could make a great deal of difference regardless of kind of soil on which the plants are grown. I assume you refer to the taste of the berries rather than to a chemical analysis for acidity.

From April, 1944 Minnesota Horticulturist.

CHEMICALS FOR APPLE MAGGOT BAIT TRAPS

THE Southeastern Wisconsin Fruit Growers Association, 227 Cutler Street, Waukesha, and the Badger Pharmacy, 1357 University Avenue, Madison, are both equipped to send out glycine for bait traps for apple maggot control.

Prices from the Southeastern Association are:

2	oz.	glycine	65c
4	oz.	glycine	\$1.25

Prices at the Badger Pharmacy are:

2 oz. glycine ______\$5c 4 oz. glycine _____\$1.50 Prices postpaid.

(The above glycine is ameno acetic acid.)

It is difficult to mail or prepare sodium hydroxide for shipping. It should be purchased in your local drug store in flake or bead form. This material is inexpensive.

This bait trap material should be prepared at once and allowed to stand some weeks before using as it becomes more effective on aging.

THE HELP PROBLEM

Heard at the Michigan Horticultural Society Meeting

don't know that I need to say this to this group, but don't take the attitude that if somebody doesn't supply you with the help you need that you're going to stop production. The boy in the service doesn't simply lie down on the job. The man that carries the gun couldn't lie down on the job, and those of us who produce the food should not do it either. It is up to us to produce, and don't forget that everybody else right down the line is as short of help as you are. Think of your implement dealer, your grocer, or think of anybody you can, and if you can think of somebody that has all the help he needs, why I'm going to be surprised. Everybody is short of help.

From Annual Report Michigan Horticultural Society.

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Directory of Members Wisconsin Apple Institute

Adell Cherry Hill Fruit Farm, S. F. Herdrich, R. 1, Adell Antigo Grand View Orchard, James Cherf, Antigo Bancroft John Guth, Bancroft Baraboo L. B. Irish, Baraboo Ski-Hi Fruit Farm, A. K. Bassett, Baraboo Bayfield Brit Burtness, Bayfield Dawson Hauser, Bayfield, Superior View Farm Ed. Betzold, Bayfield O. G. Mills, Bayfield Olai Selfors, Bayfield Shuga & Torbick, Bayfield, R. 1 Brodhead Pine Bluff Fruit Farm, A. M. Ten Eyck, Brodhead Casco H. A. Dvorak, Casco The Old Homestead Orchards, Hall Enterprises, Casco Edw. Kassner, Route 1, Casco Cedarburg Mrs. Pauline Frenz, Cedarburg The Homestead Orchard, Walter D. Corrigan, R. 2, Cedarburg Fromm Orchards, Cedarburg Nieman Bros. Orchards, Cedarburg B. J. Otting, Route 2, Cedarburg Gust Strege, Cedarburg Martin H. Wiepking, R. 2, Cedarburg Chicago, Illinois J. Arthur Friedlund, 763-31 South Clark St., Chicago, Ill. M. B. Goff, c/o Employers Mutuals, 228 N. La Salle, Chicago, Ill. Chippewa Falls Val R. Connell, Chippewa Falls Geo. A. Gannon, Chippewa Falls Henry Kreutzfeldt, R. 5, Chippewa Falls John D. McIlquham, Chippewa Falls Geo. E. Wolfe, Chippewa Falls Dodgeville Virgil Fieldhouse, Dodgeville Durand M. A. Ward, Durand Egg Harbor Eames Orchards, Spencer Eames, Egg Harbor Horseshoe Bay Orchards, Egg Harbor Proctor Orchards, Dr. T. C. Proctor, Egg Harbor (Nov. to Apr. 159 S. 4th Ave., Sturgeon Bay) Ellison Bay

August Carlson, Ellison Bay

- Driftwood Farms, S. S. Telfer, Ellison Bay
 - W. C. Powers, Ellison Bay

Fond du Lac

Ledgewood Orchards, John P. Zahn, R. 4

Franksville

Dawson Bros., Franksville Charles Patterson, Route, 1, Fransville

Galesville

Fred Sacia, Galesville Young Brothers, Galesville

Gays Mills

- Dr. S. R. Boyce, Gays Mills, Sunrise Orchard
- Jas. P. Kegel, R. 2, Gays Mills Kickapoo Development Corp., Gays Mills
- J. C. Schubert, Gays Mills, Kickapoo Orchard Co.

Green Bay

The Larsen Company, Green Bay C. J. Telfer, 524 So. Ashland Ave.,

Green Bay Hales Corners

- Arthur Brunn, R. 1, Hales Corners Honadel's Orchard, Elroy O. Honadel, Hales Corners
- Alfred J. Meyer & Sons, Hales Corners

Herbster

Carl Erickson, Herbster

Kenosha

- Thompson & Marken, R. 4, Kenosha Kewaunee
- J. G. Walecka, Kewaunee
- Luxemburg
- Albert J. Theys, Luxemburg Madison
- R. W. Hartwell, 638 Sheldon St., Madison 5
- Dr. R. H. Roberts, Horticulture Bldg., Madison 6

Ed H. Stoeber, R. 2, Madison 5 Menomonie

- Wenomonie
- Wm. Connell, R. 1, Menomonie Milwaukee
- P. G. Hohlweck, 4734 W. Brown Deer Rd., Milwaukee 9
- H. S. Schnell, 2536 N. Summit Ave., Milwaukee

New Holstein

- Hipke Orchards, New Holstein
- Oshkosh
- Rasmussen's Fruit Farm and Nurscrics, R. 4, Oshkosh

Port Washington

- Guy S. Hales, Port Washington
- Richland Center
- Oakwood Fruit Farm, Wm. J. Louis, R. 2, Richland Center
- **Richmond**, Illinois
- Oriole Springs Orchards, A. C. Ellsworth, Richmond, Ill.

South Milwaukee

Haas Brothers, R. 1, Box 67, South Milwaukee

Sturgeon Bay

- D. E. Bingham, Sturgeon Bay Brown Bros. Orchard, L. P. Brown.
- Sturgeon Bay
- Fruit Growers Co-operative, Sturgeon Bay
 - Sam Goldman, Sturgeon Bay
 - Goff Orchard, Sturgeon Bay
- N. C. Jacobs, Sturgeon Bay
- Don Reynolds, Sturgeon Bay-Reynolds Company

Thiensville

Lone Elm Farm, Martin H. Wetzel, Route 1, Thiensville

Waldo

- Waldo Orchards, Arno Meyer, Waldo Waukesha
- Gygax Bros., R. 2, Box 170, Wauke-sha
- Swartz Orchards, R. 4, Waukesha
- Tansdale Orchard, Lester F. Tans,
- R. 2, Box 367, Waukesha
- West Allis

Oscar Conrad, R. 4, West Allis West Bend

- Jos. L. Morawetz, R. 4, West Bend Wyocena
 - Francis Allegar, Wyocena

MEMBER ORGANIZATIONS

Bayfield Fruit Growers Assn. Manager, Roy Smith, Bayfield

- Door Co. Fruit Growers Co-operative Manager, K. Stock, Sturgeon Bay
- Jefferson Co. Fruit Assn.
- Secy. Carroll Krippner, R. #1, Ft. Atkinson
- Manitowoc Co. Fruit Growers Assn. Secy. Ervin Tuma, R. #1, Cato
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- Secy. E. E. Skaliskey, P. O. Bldg., West Bend
- Waukesha Co. Fruit Growers Assn. Secy. Wm. Basse, R. #3, Box 225, Waukesha

Finally, an 'A'

It happened during the rush for gasoline ration coupons, and the scene was an American high school. The white-haired teacher at the table looked up and grinned at the man standing before her, application in hand.

"Well," she said, "after all these years, I'm finally able to give you an 'A'!"

Berry Picking and Handling

PICKERS must be carefully instructed and supervised to do a good job. Sometimes it is better to train new pickers than attempt to change those with incorrect picking habits. Replace pickers not doing good work by the third day, but do not expect new pickers to keep up with experienced ones. Until used to the work, pickers usually cannot do good work for more than 4 to 5 hours per day.

A strawberry crop yielding up to 50 24-quart crates per acre per day requires from 12 to 20 pickers per acre during heaviest picking. A raspberry crop yielding 25 to 30 24-pint crates per acre per day requires 10 to 12 pickers per acre. Too few pickers may result in poor work because pickers do a much poorer job when tired. Pickers usually are paid by the box or crate.

Pick Berries Frequently

Pick berries frequently enough to insure the delivery of fruit of uniform ripeness. During most of the season, pick the entire planting every day, especially in hot or damp weather. During the first few days of the season, picking will be necessary only every other day. Boxes containing overripe and underripe fruit do not ship well and bring lower prices. Overripe berries usually serve as infection centers for the spread of mold.

The degree of maturity at which strawberries should be picked for shipment depends upon variety, the distance the berries will travel, and the weather in transit. In general, berries three-quarters red are suitable for 24-hour shipment and those with full color but firm for 12-hour shipment. For longer shipments, "half-ripe" berries showing 25 to 50 per cent of the surface white and the remainder pink usually are required. Do not pick strawberries that are green on the under side. The fruit may be picked riper in cool weather than in warm. Do not pick berries for immediate use or for freezing until fully ripe.

By J. D. Winter, Minnesota



Pick raspberries for shipping "pink-ripe" as soon as the berries can be pulled easily from the "core." In dry seasons, some varieties do not loosen easily until too ripe for shipping. In this event, shallow cultivation immediately following each picking will be helpful. A "dead ripe" berry is too ripe for tomorrow's market.

Start Picking Early

Berries picked early in the day remain cooler and keep longer than those picked later. For each rise of about 15 degrees F. the berry's marketable life, other things being equal, is decreased one-half. As the heat of the day increases, berries become softer and the skin is more easily punctured. Rhizopus rot, the principal cause of "whiskers" on berries, does not readily penetrate unbroken skin b ut easily infects fruit with broken outer covering.

Wet Berries.—Allow raspberries wet with rain, dew, or fog to dry on the bush before picking. Wet raspberries cannot be shipped successfully.

Strawberries may be picked as soon as it is dry enough to work even though the dew is not completely off the berries, provided the fruit is allowed to dry off before packing boxes into the crate. It is better to start picking strawberries early when the berries are wet with dew and to get through early than to start late and end late. However, strawberries picked in warm weather at the "tail end" of the season usually do not keep well even when picked under dry conditions, and when picked wet they deteriorate very quickly.

Berries picked after prolonged rain will not keep well and cannot be shipped successfully no matter how dry when picked. Berries from the second picking after rain usually are the most difficult to handle. Hold such fruit for local distribution or short hauls, canning, or freezing.

Separate Culls While Picking

Never sort or rehandle berries after they are placed in the box. Merely emptying the fruit on a table and then replacing it in the box may greatly increase decay and softening. Have pickers sort good fruit from the poor when picking. Reserve one box in each carrier for cull or overripe fruit.

All cull fruit should be picked and paid for at the same rate as for the good fruit. Overripe and rotted strawberries left on the plants promote the decay of other berries. Growing strawberries in rows not more than 18 to 24 inches wide and growing raspberries in hills facilitates "clean" picking.

Cull fruit includes green, muddy. insect - damaged, sun - scalded, decayed, moldy, bruised, undersized. and misshapen berries.

Fill the Boxes Properly

Place, not drop, berries in the box. Holding a number of berries in the hand before they are placed in the box will bruise the fruit. Do not allow pickers to put all the smaller berries in the bottom of the box and top them with large berries.

Never heap berries on top of a carrier of full boxes and then remove the extra berries to other boxes at the berry shed.

Never allow filled carriers to stand in the sun.

Provide Good Berry Sheds

A good berry shed provides maximum air circulation and protects the fruit from direct sunshine and sudden rain storms. Good air circuJune, 1944

lation will cool fruit to slightly below the prevailing air temperature in a short time and will help retard mold or decay. Berries in a closed or partly closed shed or room cool very slowly. A damp cellar is a poor place to hold berries.

Sometimes a canvas over a frame will serve as a temporary berry shed, or a table under the shelter of a large tree will suffice. A shed consisting of a roof with a few boards on the sunny side usually will provide necessary protection.

On days when the air is extremely hot and dry, exposure of the rruit to rapid air movement for more than two or three hours may result in loss of brightness and excessive shrinkage. When necessary, the berries must be protected from dust.

Condensed from Bulletin by Minnesota College of Agriculture.

PLANT SPACING INCREASES STRAWBERRY YIELDS

PLAN'IS of Blakemore, Catskill, Cuiver, Fairfax and Premier spaced eight inches apart outyielded mose growing in matted rows in tests conducted by W. H. Childs, of the West Virginia Agricultural Experiment Station. The spacing of plants of Gandy resulted in a decrease in yield in these tests.

The yield increases by variety were as follows: Premier, 25%; Blakemore, 46%; Catskill, 29%; Fairfax, 47%, and Culver, 41%. The yield of Gandy was reduced 32% by the spacing.

The mother plants were set 18 inches apart in rows that were three and one-half feet apart. All rows were allowed to develop to a width of 24 inches. In the spaced rows, each parent plant was allowed to form nine runner plants and these were evenly distributed through a 24-inch row to give an average of three and one-third plants per square foot, or an average spacing of approximately eight inches between plants. In this test the runners were accurately placed so that the spacing was uniform and a full stand was obtained by late July. After that time all other runners

were removed at frequent intervals.

In spacing demonstrations in commercial plantings of Aroma and Premier in southern Indiana, the yield of strawberries has been increased an average of about onefifth. Some Indiana growers use a spike-tooth harrow in September or early October to thin out the late formed plants after a good row of early plants has been formed and these plants have become well rooted. Where yield records have been kept in plantings so treated, yield increases have been obtained by the treatment.

The harrowing must be done after the earlier formed plants are deeply enough rooted and the soil is sufficiently dry that these plants will not be pulled up by the harrowing.

Condensed from Hoosier Horticulture.

HOW TO MAKE POPCORN POP

POPCORN is distinctive because of the violent explosion resulting when its flinty kernels are heated. Some hard flinty field corn varieties also pop when heated. This popping or exploding is thought to be due to the sudden release of pressure in the kernel by the steam confined within it. The moisture in the kernel produces the steam on heating. Softer kernelled types of corn allow the steam to escape gradually and hence do not develop an explosive force.

Popcorn varieties differ considerably in popping expansion. Tom Thumb, Pinkie and Japanese Hulless are very satisfactory in this regard.

Popcorn should have a moisture content of 12 to 13 per cent for complete popping. If it is too dry it pops feebly, partly splits open and is easily scorched. If too moist the popping is loud but the pops are small, rough and tough. In the home or in the store a metal container is essential for storing popcorn properly. In case the popcorn is dried below 12 per cent it can be improved by sprinkling lightly with water 2 hours before it is popped.

In the field, popcorn cross-pollinates readily with field or sweet corn. Such crossed corn is unsuitable for seed. However, for popping purposes it is quite satisfactory.

Condensed from Weekly Letter-Dominion Experimental Station, Morden, Manitoba. 19. W. A. Leslie.

DO NOT PLANT PLUMS WITH APPLES

In our opinion, plums should not be grown in a commercial apple orchard as interplanted trees or otherwise. We have seen too much trouble in controlling the plum curculio on the apples to make this advisable, not to mention the difficulties in spraying because of the differences in blooming time. Home orchards must get along as best they can with mixed plantings of apple and plums, but commercial growers will save themselves much grief if these fruits are planted separately.

From May issue Minnesota Fruit Grower.

Adm. Halsey tells of arriving late at a football game, and to get to his seat stepped on a sailor's foot. Sailor, without looking up, yelled. "Get off my foot, you big lug." Then, recognizing the admiral said, "Oh, my goodness—beg pardon, sir. Here's my other foot go ahead—step on it, please!"



Sheboygan, Wisconsin



OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPER'S ASSOCIATION OFFICERS

Walter Lishnelt, Menomonee Falls, President Corneluis Meyer, Appleton, Vice-president

H. J. Rahmlow, Madison, Cor. Secy. Mrs. Louise Brueggeman, Box. 60, Menomonee Falls, Recording Secretary-Treasurer DISTRICT CHAIRMEN Robt. Knutson, Ladysmith Newton Boggs, Viroqua C. C. Meyer, Appleton Ivan Whiting, Rockford

Questions and Answers About Summer Beekeeping

Question: Will small or weak colonies swarm during the honey flow? Can it be controlled by reversing brood chambers?

Answer: Yes, weak colonies may swarm during the honey flow. They will store the honey around the **brood and become crowded in spite** of the fact that there aren't many bees present. Reversing brood chambers or adding an empty hive body on top may not work because the queen may not go up into it. It is therefore necessary to remove frames of brood and honey and place into another hive body above in order to break up the crowded brood nest.

Extracting in July

Question: Can we start extracting in July if the combs are more than half sealed over, or will the honey still be unripe at that time?

Answer: Most large beekeepers start extracting right after the 4th of July. During hot, dry weather it takes only about two weeks for a strong colony to ripen or evaporate the moisture from honey so it will keep well. Weak colonies or those with small entrances may not ripen it well at all.

Thin Honey

Question: I have heard that if a comb is well sealed over with cappings, that the honey must then be ripe. Is that true?

Answer: No. it is not true. We have seen nany combs, even sections of comb honey, well sealed over ir which the honey fermented. The reason is it either absorbed moisture so the honey became thin enough to ferment, or the colony may have swarmed during the honey flow and been unable to evaporate enough moisture from the nectar to fully ripen it.

Size of Entrance in Summer

Question: Is it a good thing to provide extra openings between supers during the honey flow to help ripen the honey?

Answer: Yes, it will help a great deal in ripening honey if additional openings are given during the heavy honey flow. A good way is to simply place a small stick about the size of a lead pencil between the top supers. Experiments have shown that if this is done honey will ripen much faster than if there is only a bottom entrance.

The Honey Pump

Question: Will a honey pump handle cold honey? I have heard that the honey pump is not a good thing to use because it pumps air into the honey. Is that true?

Answer: It is difficult to get a honey pump that will handle cold honey. It it best to warm honey to about 100 degrees before pumping it. A honey pump operating at low speed is now standard equipment with honey producers. It saves an enormous amount of work. Eventually we think that all beekeepers with more than 25 colonies will have a pump. Why lift tons of honey from the floor to the top of a honey tank when a small motor and pump can do it more efficiently? Remember the days when we pumped water for a herd of cattle by hand? Not many farmers do it now.

PLAN TO TRAP POLLEN THIS SUMMER

MORE and more Wisconsin beekeepers are trapping pollen for spring feeding. Mr. Geo. De-Koeyer, 815 West Street, Baraboo, has very fortunately been able to obtain priorities to purchase screen wire and is making a limited number of traps which he is selling at a very reasonable price.

In using these traps during hot weather it is well to use a shallow super underneath the brood chamber. The super should be without frames and should have holes cut on each side, covered with screen wire, to provide ventilation and allow the bees to cluster underneath the brood chamber.

The pollen should be collected at the end of each day and spread out thinly in an airy place to dry.

When thoroughly dry, the pollen should be stored in a dry room until next March when it can be mixed with soybean flour and fed.

George Bernard Shaw said it: "Caricatures are never like me. One day when I went into a friends' flat I saw a caricature of me that seemed to be good—cruel of course. still what a caricature should be Then it moved and I saw it was a mirror." lune. 1944

SUMMER MEETINGS WISCONSIN BEEKEEPERS ASSOCIATION

HONEY ACRES, MENOMONEE FALLS, JULY 25

EAU CLAIRE LAKE PARK, AUGUSTA, JULY 27

Principal speakers, Dr. Jas. I. Hambleton, Chief, Division of Bee Culture, U. S. Department of Agriculture, Washington ,D. C., and Mr. E. R. Root, Medina, Ohio.

Forenoon Programs

July 25. 10:30 A.M. Assemble at Honey Acres, home of Mr. and Mrs. Walter Diehnelt, east of Menomonee Falls, on highway 166. A.M. Demonstration of extracting equipment and beekeeping methods used at Honey Acres. Chairman of meeting, Mr. Walter Diehnelt, president State Association.

July 27. 10:30 A.M. Assemble Eau Claire Lake Park on Hy. 27, five miles north of Augusta. A.M. program, demonstration of equipment, pollen traps and how to use them. Chairman, Mr. Robert Knutson, Ladysmith, chairman Northwestern District.

Noon Luncheon

12:00 M. Pot luck luncheon. Every family is asked to bring a dish, the amount in proportion to the number of members in the family. Suggestions: cake, pie, baked beans, potato salad, sandwiches, and similar dishes.

Coffee and lemonade will be furnished free by the state and district associations, each person to bring plates, knives, forks, spoons and glass or cup. We will all eat together, cafeteria style.

Luncheon tickets at 50c each may be obtained by those unable to bring food.

Afternoon Program

1:30 P.M. How to create a peace-time market for honey. Mrs. Harriett Grace, Madison, American Honey Institute.

2:00 P.M. Information hour. Practical questions answered by practical beekeepers.

2:45 P.M. Beekeeping research and how we can use it. Dr. Jas. I. Hambleton. Division of Bee Culture, Beltsville, Maryland.

3:30 P.M. Timely observations about the honey industry. E. R. Root. Medina, Ohio.

Woman's Auxiliary Meeting

11 A.M.-12 M. Preparation of luncheon.

12 M. Pot luck luncheon. Help committee in serving.

1:30 P.M. Attend beekeepers program.

2:45 P.M. Special meeting for women. Talk by Mrs. Harriett Grace, Madison.

Officers of the Woman's Auxiliary will preside:

Mrs. Wm. Michaelson, Arkansaw, state president Woman's Auxiliary. at the Eau Claire Lakes meeting.

Mrs. Cornelius Meyer, Appleton, vice-president Woman's Auxiliary. at the Menomonee Falls meeting.

Dinner Committee for Eau Claire Lakes meeting: Mrs. Wm. Michaelson, Arkansaw, Chairman; Mrs. S. P. Elliott, Menomonie; Mrs. Robert Knutson, Ladysmith; Mrs. Milton Lundgren, Amery; Mrs. E. H. Hanselman, Augusta; and Mrs. Herman Rodeske, Fountain City.

LADYSMITH BEEKEEPER HAS GOOD RESULTS FROM FEEDING SOYBEAN FLOUR POLLEN MIXTURE

M^R. Robert Knutson of Ladysmith, president of the Northwestern District of the Wisconsin Beekeepers Association, reported at the annual meeting at Barron on May 3rd that he had trapped some pollen last summer, mixed it with soybean flour in March, and fed it to his outdoor wintered colonies. Results were beyond his expectations. The colonies were very strong by May 1st. In fact, he contemplated making some increase during May.

He stated that the bees had used considerable stores in early brood rearing. It is interesting to observe that bees can be wintered outdoors successfully at Ladysmith, and can be built up into strong colonies early in the season in that rather severe climate. Temperatures in northern Wisconsin often fall from 30 to 40 below zero.

Since the honey flow is largely from white and alsike clover which comes in mid-June, a much bigger crop can be produced if colonies are strong before the flow. That has been the one big draw-back in Wisconsin beekeeping—weak colonies in June, which *built up on* the flow rather than storing it. By mid-July all colonies are usually strong, but by that time it is too late for the main crop.

This new method of beekeeping is taking hold in Wisconsin. We predict that within the next five years there will be radical changes. However, we wish to warn those who try this method of building strong colonies early that they must provide more stores. Where they probably have been getting along on 30 pounds surplus in the fall, they will now need 50 to 60 pounds and that means a different type of beekeeping.

Defined

A hick is a person who looks both ways before crossing a oneway street. A city man is one who doesn't look at all.

BEES VERY ACTIVE IN POLLENIZING RED CLOVER Visit 6,180 Corollas Per Hour PENNSYLVANIA'S entomologists, E. J. Anderson and Merrill Woods, give some interesting facts on the value of honey bees in red clover pollination, reported in the May issue of American Bee Journal.

They found that bees gathering pollen visited from 96 to 117 corollas per minute, or an average of 6.180 per hour. Bees gathering pollen did not spend much time on each corolla since they visited about three times as many as did those gathering nectar.

Bees gathering nectar visited from 30 to 40 corollas per minute, or 2,160 per hour. Many bees gathered both nectar and pollen.

The investigators found certain strains of red clover were more attractive to bees than others. A strain called Coral attracted several times as many bees as any others. The Coral variety produced considerably more nectar than the other varieties which is no doubt the reason why the bees preferred it.

Bees Can Reach Nectar

We have been told the reason bees do not work red clover as well as alsike is that the corolla tubes are too long-their tongues cannot reach the nectar. The Pennsylvania investigators reported that "it was also observed that some bees pushed their heads into the older corollas with so much force that they caused the walls to fold up, permitting the bees to reach the bottom of the flower and gather all the nectar." Perhaps one reason why bees do not visit red clover is because many strains do not have enough nectar to attract them.

Agronomists are working on this problem. The solution may be development of strains which will produce more nectar so bees will work the flowers.

No Future

"Your fiance is a charming man. He has a certain something."

"Yes, but I would rather he had something certain."

NOT NOSEMA, BUT STARVATION

MR. John Long, Deputy Apiary Inspector, reports visiting a bee yard in early May in which many bees were dying. The owner complained it was Nosema. The bees appeared listless and many were unable to fly. On the ground in front of the hives and at some distance were many dead bees. It looked like a case of Nosema, but Mr. Long decided to inspect the colony more carefully. He found absolutely no honey or food in the hive and that it was obviously a case of starvation.

At meetings this spring we asked beekeepers if they had inspected their colonies. To our surprise we found far too many of them had not looked into their colonies even by the first week in May. That is a serious situation. It is often impossible to tell if there is enough food to keep them from starving just by hefting the colony. We must get over the notion that it is bad for bees to open the hive and examine them. Not only must we know what is in the hive, but we must learn by observation how colonies look and act in the spring. We must know if there is pollen present; if there is none, to feed it in the form of soybean flour and pollen mixture.

HONEY RATIONING

At the beekeepers' convention in Winnipeg many complaints were voiced against rationing which sums up to the opinion that it has practically killed consumer s a les in Canada. According to L. T. Floyd, provincial apiarist, retail sales in Winnipeg in the last six months are only 20 per cent of normal. Many beekeepers packed their honey in jars in small containers under rationing for the first time without previous experience in packing, which resulted in a large percentage of spoilage.

From March, 1944 American Bee Journal.

SAVE ALL SLUMGUM SCRAP. INGS AND BEESWAX REFUSE

A LL old slumgum, scrapings and beeswax refuse should be saved and rendered because it is badly needed, and brings a good price.

A letter from Dadant and Sons. Illinois, states that their records show that on several hundred shipments of old slumgum and old beeswax, recovery of wax averaged 22 per cent of the weight of the material. Not a single shipment but what paid at least for the cost of rendering.

They recommend getting together at least 100 pounds to be sent in by freight. The rate on "beeswax refuse" is quite low, but of course all freight rates are based on 100 pounds minimum.

Many beekeepers are throwing away their old beeswax refuse. All members of the Wisconsin Beekeepers Association should urge beekeepers to save such refuse. place it in burlay bags, and send it in for rendering. We believe that such refuse can best be handled by commercial operators because with their improved equipment for rendering, they can obtain so much more beeswax that the beekeeper will be ahead not to render it himself, unless he is well equipped.

NOW IT'S DOCTOR E. R. ROOT OHIO State University has conferred the honorary degree of Doctor of Laws on E. R. Root of Medina, Ohio, at the exercises on June 3rd. Less than 40 such honors have been given in the history of the college.

The honor was conferred on Mr. Root for his work in the field of beekeeping and as the author of ABC and XYZ in Bee Culture, regarded as the world's foremost authority on beekeeping.

All Wisconsin beekeepers know E. R. Root because of his cooperation with us at our summer meetings

We understand that if you are in doubt as to whether to call him "doctor" from now on, don't do it

We congratulate Dr. Root.

THOSE WEAK COLONIES

TEAK colonies cannot take advantage of a honey flow. What a big difference there was between the amount of honey produced by colonies during the dandelion and fruit bloom period. Some colonies produced as much as 20 pounds of honey during that time while others produced nothing. The reason - some had more field bees than others. Those colonies which did not build up well during March and April did not have the population of field bees to bring in the nectar. We will see this repeated in the white and alsike clover flow. Strong colonies will bring in the honey; those with small populations will not.

The big change coming in Wisconsin beekeeping is that we will feed our colonies pollen or pollen supplement during March and April and see that they have plenty of honey so they can build up before the flow.

Beekeepers who were happy in the spring because colonies did not consume much honey during winter are usually sad in late summer because they didn't get much of a crop because they had weak colonies. Honey and pollen fed to bees to raise brood early is a good investment.

A FLOOR PRICE FOR HONEY

TFFORTS are being made by the beekeeping industry to induce the Commodity Credit Corporation to place a floor price under honey. The American Bee Journal for October puts it clearly and emphatically when it says, "The Commodity Credit Corporation has been known to suggest that farmers be paid when bees are placed on their land for the purpose of pollinating legume seed crops-just as farmers are now paid to lime their land. *** Is it asking too much that a floor of 9 cents per pound until two years after the peace, be given him to encourage him to go ahead to expand perhaps, at a time when all agriculture needs more bees for the pollination of food, forage and seed crops.

"The Honey Food Industry Advisory Committee as a whole were of the opinion that a floor for the price of honey was most important at this time."

MINNESOTA BEEKEEPERS TO MEET JULY 28

Mr. A. G. Ruggles, University Farm, St. Paul, secretary of the Minnesota Beekeepers Association, announces that the summer meeting of the Association will be held at University Farm on Friday, July 28.

Speakers from the Wisconsin meeting will appear on this program.

POLLEN TRAPS

Pollen traps made from specifications by Central States Bee Laboratory. Sizes, 8 frame, 10 frame, and Modified Dadant. Price \$2.50 postpaid. George De-Koeyer, 815 West Street, Baraboo, Wis.

BEES FOR SALE

Four complete hives with bees and equipment. Extractor, frames and combs, supers, 40 lbs. foundation, unused frames. Otto K. Baber, R. 1, Box 82, Thiensville, Wis.

FOR SALE

Root four - frame automatic reversible extractor for hand or power, also some 8 and 10 frame comb honey supers.

H. C. Braithwaite, 117 B. Middle Ave., Beloit, Wisconsin.



HONEY WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company, Oconomowoc, Wisconsin.

HONEY CANS

We can give you immediate delivery on 60# cans.

Order your glass supply for the new crop now, as it takes from 3 to 6 months to receive same from the factory. We now have a good supply of 5#, 2#, 1# and ½# on hand, and can make immediate shipment.

To insure prompt service, erder your Association labels now for your new crop of honey.

Write for Complete Price List.

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Complete stock ready for immediate shipment.

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Glass Containers 60 lb. cans

Write for our 1944 catalog.

August Lotz Company Manufacturers of Bee Supplies Boyd, Wisconsin



OUR COVER PICTURE

UR cover picture this month is by Florence K. Tomlinson of Madison. She has been doing many of the covers and decorative drawings for Wisconsin Horticulture and has had her prints exhibited by the National Academy of Design and the Buffalo Print Club's National Exhibition. She is represented in the current National Print Exhibition in the Library of Congress, Washington, D. C. She has won prizes in the Madison and vicinity shows. This year the Milwaukee Art Institute gave her a Purchase Award and the Art Guild of Madison gave her a first prize and honorable mention in graphics.

Other leading magazines have used her work.

We asked Mrs. Tomlinson to tell us how she produces the wood blocks such as used on our cover. Her answer follows:

How to Make Wood Engravings

Wood engravings and lino-prints interest me because the inky black and the white paper embodies all color. When I start a design I see it quite clearly on my block. In wood engraving one has more use of grey values or fine tones for modeling than in lino-cutting. The tools are much like little chisels.

I work quickly, dashing after the final effect but with concentration; a slip of the knife might mean a ruined design or block. Very little sketching is done on the block preliminary to cutting, gouging or engraving. The selection of treatment is determined by my reaction to the subject matter and what I want to express. Working on the block directly is a stimulation. After the design is completely cut the block is then inked with a brayer (small hand roller for spreading ink). On this wet surface the paper is placed,



the back is then rubbed with a spoon thus transferring the design to paper.

This old and respected form of printing is full of charm and fascination.

The covers and small blocks done for Wisconsin Horticulture were printed directly from the cut blocks, therefore are not reduced but actual size.

COMMENTS ON CRATH CARPATHIAN ENGLISH WALNUTS

N May 19th Prof. C. J. Chapman of the Soils Department, Wisconsin College of Agriculture, telephoned us and said, "I was very much pleased this morning to find that my two Carpathian English walnut trees have both catkins and the pistillate flowers, so I hope we have English walnuts this year."

The large Carpathian walnut tree in the editor's back yard was also covered with catkins and pistillate flowers. It bore catkins for the first time. Our opinion has therefore been correct—that the catkins, growing from overwintering buds, will not withstand our usual low temperatures. Consequently, during the past five or six years that the tree has been large enough to bear, the winters have been too cold. This winter the minimum temperature at Madison was about —8 degrees. Consequently the catkin buds sur-

vived.

In sections where peaches can be grown, the Carpathian English walnuts will no doubt do well. Peach flower buds are killed at around —15 degrees F. However, we are not sorry that we planted the English walnut tree in our back yard. It is an ornamental tree and has matured some walnuts each year from hand pollination with black walnut pollen.

Unfortunately the pollen does not mature at the same time as the pistillate flowers on the same tree. That applies to black walnuts and other varieties as well. To get a crop of nuts, therefore, it is necessary to plant several trees in the same area so that pollination by the wind may take place from one tree to another.

NO MAGAZINE IN JULY

There will not be a July issue of Wisconsin Horticulture. This custom was established a number of years ago. Our next issue will be the July-August issue and will reach you early in August.

NEW BULLETIN ON IDENTI-FICATION OF SPRING WILD FLOWERS

The Morton Arboretum at Lisle. Illinois, has just issued a new bulletin entitled "Spring Wild Flowers of the Forest Floor. A key to identification and glossary of terms used in this key."

It is a splendid bulletin—one of the best we have seen to enable the amateur to identify spring wild flowers. It contains many drawings so that identification is made easy. It is also an excellent teacher of botany in that it explains the terms used in describing the flowers.

We congratulate the Morton Arboretum staff on this excellent bulletin.

Farmers Can Help Prevent Inflation

By Asher Hobson

Chairman, Dept. of Agricultural Economics, University of Wisconsin

FARMERS remember the "Silk Shirt" era of the last war. That era was marked by 75 cent butterfat, 20 dollar hogs, and 100, 200 and in some states 300 dollars an acre for farm land. Farmers also remember the "no shirt" era of the Thirties—25 cent butterfat, 5 dollar hogs, and land so low the mortgage took it. One way of keeping one's shirt after this war is not to buy too many silk shirts now, so to speak.

There is an old saying to the effect that he who sleeps on the floor never falls out of bed. None of us want to sleep on the floor, but we should see to it that our beds are not so high as to cause serious injury in case of a fall. Unduly high prices are likely to be followed by unduly low prices.

Inflation is another term for unhealthy high prices. Inflation has a younger brother. He is a bad actor. His name is deflation. He has a habit of following his brother inflation. Deflation often means serious unemployment, lower property values, more tax delinquency, and mounting foreclosures. Add these together and the sum is farm relief. That is not the answer farmers want.

The forces causing prices to go up may be summarized in the statement that there is more money available for spending than there are goods and services to be bought. This is another way of saying that the demand for goods and services exceeds the available supply. Let us be specific. At the end of 1943 it was estimated that there were 42 billion dollars of spendable income in this country in excess of goods and services to be bought at the then existing prices. A year earlier the excess was 33 billion dollars. If prices are to be held in line this excess purchasing power must be brought down to the level of the supply of goods and services, or the supply of goods and services must be boosted in keeping with purchasing power.

Farmers are doing their utmost to increase the supply of \cdot agricultural products. In this way they are helping to prevent inflation. The other way in which they may help is to buy less.

The greater the voluntary savings the less the need for more taxes. Let us do it the voluntary way by buying more WAR BONDS and holding those Bonds until manpower, plant capacity, and raw materials are available for increasing the supply of consumer goods.

Condensed from article for U. S. Treasury Department.

IRIS SOCIETY HOLDS EXCELLENT SHOW

The Wisconsin Iris Society held a very beautiful iris show at the Knickerbocker Hotel, Milwaukee, Sunday, June 4. There were a large number of beautiful artistic arrangements with iris, and many of the newest and best iris were shown in perfection of bloom classes.

The editor was presented with a beautiful certificate of recognition and life membership for his services in organizing the Wisconsin Iris Society, which was deeply appreciated. The certificate was signed by the president, Mrs. A. Jaeger, Milwaukee; vice-president, C. D. Adams, Wauwatosa; and the secretary, Mrs. R. Baumgartner, Milwaukee.

We congratulate the Wisconsin Iris Society on its efforts to popularize and promote their favorite flower.

Dot—Never mind. It serves your old dog right. He's often eaten the baby's food.

NATIONAL PEONY SHOW Milwaukee, June 24-25

THE American Peony Society's National Peony Show will be held in the Milwaukee Gas Light Company Building, 626 East Wisconsin Avenue, June 24 and 25. Some of the largest commercial growers of the country will make large exhibits and the show promises to be one of the largest and most successful that has ever been held, Mr. Lyman Glascock of Elwood, Illinois, has promised to have a large exhibit of Hybrid Peonies, the Cottage Gardens of Lansing, Michigan, will make a showing of Tree Peonies, and the Milwaukee Garden Clubs are cooperating and will show ten tables of other flowers. Exhibits have been promised from New York to the state of Washington.

The peony is the ruler of the garden by sheer virtue of its majestic grandeur and beauty. Through century upon century the peony has claimed its heritage unchallenged.

New feature of the show will be talks every afternoon and evening by recognized authorities upon different classes of peonies, illustrated by moving pictures and slides. This will give visitors an opportunity to relax and obtain information on the different classes of peonies. Among those who will talk is Elmer A. Claar of Elmwood, Illinois, who has a national reputation as a color photographer and lecturer.

The peony gardens at Whitnall Park attract more than 10,000 visitors a day and we anticipate an unusually large attendance at this national show. There will be no admission charge and liberal prizes will be offered in the various classes. Members of the State Horticultural Society are urged to exhibit and attend.

> Charles E. Hammersley, General Chairman, 714 Majestic Bldg., Milwaukee, Wis.

Shopper—It's so hard to find just what you want!

Weary Clerk — Yes, especially when you don't know what it is.

Jim—Goshamighty, the baby's eaten a lot of that dog food I just bought.



OFFICERS David Janes, Whitewater, President David Puerner, Milwaukee, Vice-President H. J. Rahmlow, Madison, Cor. Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Illinois Ave., Sheborgan

By the WISCONSIN GLADIOLU'S SOCIETY

DIRECTORS Frank Blood, Stevens Point Dr. F. Graff, Freeport, III. Fred Hagedorn, Sheboygan J. R. Hopkins, Deerfield, III. Walter C. Krueger, Oconomowoc

Gladiolus Thrips Control

What Our Gladiolus Growers Are Using This Year Emma C. Schipper, Milwaukee

MEMBERS of the Board of Directors of the Wisconsin Gladiolus Society have been getting good results in gladiolus thrips control. The following methods are being used by some of the members:

Uses Tartar Emetic

Leland C. Shaw of Milton writes, "The most effective spray I have ever used consisted of 2 level tablespoons of tartar emetic; $\frac{1}{3}$ cup of brown sugar to every 3 gallons of spray solution. I'll use it this summer as long as I can get sugar. Failing that, I'll use honey which was quite effective two years ago, or light syrup. Dark syrup used last year was less satisfactory and I didn't like molasses either."

President Harold Janes, Whitewater, writes, "My experience over a two-year period convinces me that tartar emetic is the perfect spray control for thrips. Because I had very few thrips last season I will experiment with a thrips spray that also has fungicidal control-Delbetar spray used on both bulbs and bulblets, unless thrips show up at blooming time. I dusted all bulbs as I cleaned them with Ferticide and soaked them in New Ceresan, one ounce to three gallons of water. Bulbs, 20 minutes; bulblets, 30 minutes."

Mr. Walter Miller of Sun Prairie writes, "At planting time I use Lysol or Crysol at the rate of 3 ounces for 5 gallons of water, soaking the bulbs over night, or about 12 hours.

"For control of thrips in the field

l use Rotenone dust after the glads are up about a foot, dusting every four days.

"At harvest time we use Rotenone dust in our bulb trays, and again when we clean them in the fall and winter."

Mr. Frank Blood of 'Stevens Point says that he used tartar emetic spray last year with good results. He reports a lack of snow this winter and the ground freezing very deeply.

Walter Krueger of Oconomowoc writes, "Having had such good success with Lysol as a spring dip both as a thrips deterrent and as a fungicide, I have used it again this year. I am experimenting with Delbetar and the new improved Ceresan.

"My summer spray will be tartar emetic, for experiment, Delbetar and Bordeaux."

Mr. Paul E. Hoppe of Madison says that he found Lysol ineffective in the control of fusarium hard rot. He treats his bulbs with bichloride of mercury, but is not sure of its effect on bulb increase.

He used the following formula for thrips control last year with success:

- 1 oz. tartar emetic
- 2 oz. honey
- 3 gallons water

He started spraying just before the first spikes appeared and sprayed at least twice a week over a three-week period. Had very few thrips. E. A. Lins, Spring Green Walter F. Miller, Sun Prairie Dr. Geo. Scheer, Sheboygan Leland Shaw, Milton Noel Thompson, Madison

WHAT'S IN STORE FOR 1944 Harold E. Janes, Whitewater

THIS is an age of prediction. Experts predict everything from who will win the World's Series, to when the present World War will end. It is, however, with a feeling of trepedation that I venture to predict the ten best gladiolus releases of 1944. I have seen but two of these. No previous year has brought out so many ace releases as the prsent season—varieties that will be in popular favor and demand, as soon as they become known.

The Best Five

My nomination for the first five of the Big Ten are: P39, Hawkeye Red, Connecticut Yankee, Rose O'Day and Heavenly White.

P39 is no stranger to those who attended the 1943 show at Sheboygan. It may surpass even the great record of its predecessor by only two years, Leading Lady. Both are white sports of Picardy.

Hawkeye Red should be the answer to the grower's prayer for a commercial red. Possessing all good qualities of the old Vagabond, it is a likely contender for top honors in this class.

Connecticut Yankee, a blotched pink, did not arrive unheralded as it has been shown at major Eastern shows for the past two years.

Rose O'Day is Noweta's answer to a scarcity of good rose-pinks. Lastly, do not overlook Heavenly White. Being early, as is its parent Rosa Von Lima, it does not compete with other leading new whites. It may be noted that three out of the above five varieties are not from crosses, but sports.

The Second Group

In the second group I would list Spotlight, Ophir, Minstrel, Bonny Jeanne, and Mystery. The first two should bolster up the still weak yellow section, though both Spotlight and Ophir have a touch of red in the throat. The form is such as to make each distinctive. Minstrel, while probably classifying as a lavender, has a touch of pink in the color. It can be grown to immense size. Bonny Jeanne has been shown widely at our past two shows, and is fully up to the standards of earlier Krueger releases.

Mystery may well be the dark horse of the list. A rose-pink of which I have nothing to judge from save the originator's description. It comes from Canada.

An Alternate

Were I to select just one alternate for honors in the Big Ten, my choice would be *Tinted Twilight*. My good friend L. E. May rates this highly. By way of the grapevine telegraph, I already hear rumors of at least three stellar releases for 1945, but whether they prove of the caliber of the above remains to be seen. I hope to be able to exhibit some of the above list at our 1944 state show.

COMMITTEE FOR 1944 STATE GLADIOLUS SHOW, MILWAUKEE STATE FAIR,

AUGUST 19-20-21

The following committee has been appointed by Pres. Harold Janes to supervise this year's show:

Show Manager: H. J. Rahmlow Supervisor of Judges: E. A. Lins Premium Schedule: W. C. Krueger Finance: Otto Kapschitzke, Sr.

Executive Committee: Otto Kapschitzke, David Puerner, Harold E. Janes, W. C. Krueger, Walter Miller

Classification: Dr. F. X. Graff, Dr. Geo. H. Scheer, J. R. Hopkins, L. E. May, Leland C. Shaw

Tabulation of Points: Frank M.

Bayer, to select assistants

Banquet: David Puerner.

Substitutes For Tartar Emetic and Brown Sugar In the Control of the Gladiolus Thrips

A very thorough test of a number of materials for the control of gladiolus thrips is reported by Floyd F. Smith, U.S.D.A. in the Journal of Economic Entomology for June, 1943.

We can report only a brief portion of the results and conclusions. Of interest first, is a table showing the control of gladiolus thrips with various materials as follows: Summary: In greenhouse and field experiments to control the gladiolus thrips during 1942, tartar emetic (2 lbs.) with brown sugar (4 lbs.) was equal in effectiveness to other combinations with corn sirup, cane molasses, or blackstrap molasses diluted to give similar sugar contents in the finished spray.

One quart of 40 per cent nicotine sulfate in combination with 3 gal-

Material In 100 Gallons of Spray

r, 4 lbs._____ 68.6 molasses 3 gals 20 7

Tartar emetic, 2 los., brown sugar, 4 los.	06.0
Nicotine sulfate, 1 qt.; blackstrap molasses, 3 gals	20.7
Nicotine sulfate, 1 gt.; corn sirup, 3 gals	81.3
Nicotine sulfate, 1 qt.; cane sirup, 3 gals	788
Nicotine sulfate, 1 qt.; honey, 3 gals	71.7
Nicotine sulfate, 1 qt.; corn molasses, 3 gals	61.9
Paris green, 0.4 lb.; corn sirup, 3 gals	75.0
Paris green, 0.4 lb.; corn sirup, 3 gals.; hydrated lime, 0.4 lb.	27.6

Discussion: The effectiveness of tartar emetic with corn sirup and other sirups and molasses appears equal to that of the standard tartar emetic-brown sugar spray, and the substitute sugars may be used as long as this poison is available.

Nicotine Spray Gives Good Results

In the present investigations of possible substitutes for tartar emetic and brown sugar the most interesting finding was the greater effectiveness of nicotine sulfate when combined with corn sirup, cane sirup, or honey than when combined with blackstrap molasses, which was selected by previous workers because of its low cost. While applying sprays containing nicotine and table molasses or blackstrap molasses the operators were made very uncomfortable because of the strong nicotine odors; which were not in evidence with the other sirup or honey combinations.

The tests with lead arsenate in various combinations appeared to offer no substitute equal to the thripicidal action and safety to plants offered by the nicotine or antimony compounds. lons of corn sirup or cane sirup per 100 gallons of spray on a thripssusceptible variety of gladiolus was more effective than tartar emetic. while 3 quarts of corn sirup with nicotine appeared adequate to protect a moderately resistant variety. Honey was also highly effective. Minimum effective concentrations for all sirups have not been established. Nicotine sulfate combined with blackstrap molasses or corn molasses gave poor control. The sprays containing blackstrap molasses or cane molasses apparently caused rapid evolution of nicotine fumes, which loss possibly decreased the residual action of the nicotine.

Lead Arsenate Sprays Not Good

Combinations of lead arsenate with brown sugar, sirups, and molasses were less effective than tartar emetic or nicotine sulfate. In addition they injured the foliage and flower petals showing color, as well as causing variable injury to the foliage and reduction in normal increase of corms.

Paris green (0.4 lb.) combined with 3 gallons of corn sirup or 2 quarts of blackstrap molasses was highly effective and caused less injury than did combinations with larger quantities of molasses. The *addition of hydrated lime* or of magnesium hydroxide to Paris green sprays reduced foliage injury but *also the effectiveness against the thrips*.

Black sooty fungus developed on foliage sprayed with combinations of nicotine sulfate or tartar emetic and blackstrap molasses.

WISCONSIN GLADIOLUS SHOW STATE FAIR PARK AUGUST 19-21

EVERYWHERE in Wisconsin this year gladiolus bulb planting was late—delayed because of cool wet weather. However, State Fair dates are also somewhat late and by August 19th there should be plenty of flowers.

The Wisconsin Gladiolus Society has undertaken to have the state show at the State Fair Park. The management of the Fair has been more than generous. Every member of the Wisconsin Gladiolus Society will receive a free ticket good for the three-day period which will include admission for automobile.

No entry fee will be charged individual exhibitors, the Society paying the entry fee for all.

The Fair will give the Society \$200 for staging the show, to buy premiums and ribbons.

Members of the Society may enter the enclosure where the flowers are displayed.

Saturday and Sunday, August 19-20, will be Gladiolus Society days in the Horticultural Building. It is where you will meet friends, see all the latest varieties on exhibit, decide what to buy for next year, and talk things over with growers who know.

It's up to us to make good at this show.

They tell of a local woman who is hopping mad at her doctor, because when she told him she was tired he asked to see her tongue.

Now is the Time to Plant Iris

JUST as soon as iris have blossomed they may be divided and transplanted. The best time to order iris is during the blooming season. Perhaps you visited a friend or nursery where you saw some varieties you liked especially well. That's the kind to buy—the kind you like.

I like the iris in my garden because I chose them from hundreds of varieties I saw in other gardens. Their color, form and size appeal to me. Having selected them myself they have become like children and I enjoy watching their growth and progress.

Cover Rhizomes With Soil in Planting

The earlier we plant iris the better because they have a chance then of becoming established and making a good growth during the first season and many will bloom next vear. Cover the rhizomes with at least one inch of soil. That helps protect them from winter cold. I remember a number of years ago gardeners saying that many of the new varieties were not hardy in Wisconsin. Later they were able to grow these varieties after they had covered the rhizomes. Previously they had planted the rhizomes on top of the soil like a duck floating on water. That exposes them too much before they are well established. In fact, we have had better results and better blooms when we covered the iris in the fall with a mulch of straw or hay. They were more vigorous and bloomed better the next year than when we did not cover.

If we wait until July or August to plant iris it usually becomes so hot and dry that there is a set-back.

Do No Cut Off Iris Tops

Cutting off the leaves after the plants have finished blooming is a practice which has come down through the years as the result of a misunderstanding about the growth of iris. No doubt it all started when iris leaf spot killed back the upper third or half of the leaves, turning them brown. Gardeners thought that the leaves were becoming dormant and of course were so unsightly that they cut them back.

The blooms grow in part from food stored in the rhizomes. This food is produced in the leaves of the plant and is produced after the blooming season. So it is during the summer and early fall months that the leaves have an important function—producing food to build large rhizomes to produce large flowers the next spring. If we cut off the leaves we reduce the size of the food factory of the plant. Only a reduction in flowering can result.

Iris Leaf Spot

Do you find brown spot on the leaves of the plants, and do the tips die back? If they do, you have iris leaf spot, a fungus disease which increases when we increase our iris planting. The spores overwinter on the old dead leaves. It can be controlled by destroying diseased leaves and dusting frequently in spring and early summer with sulphur dust. If the sulphur dust comes mixed with rotenone or some other insecticide, so much the better. There is good evidence to show that the iris borer may be controlled by very early dusting with an insecticide-when it first hatches from the egg.

GLADIOLUS SHOW DATES

August 11-12. Sheboygan County Gladiolus Show.

Sunday, August 13. Wausau Gladiolus Show at Marathon County Fair.

August 16-20. Manitowoc Gladiolus Show at Manitowoc County Fair.

August 21-22. Madison Gladiolus Chapter Show, First National Bank, Madison.

Little Girl: "I know something I won't tell."

Daddy: "Never mind, child. You will get over that when you are a little older." DU PONT

GARDENERS

FARM AND HOME

June, 1944

WATCH OUT FOR ROSE BLACK SPOT

B^E sure to continue dusting all the roses—hybrid teas, hybrid perpetuals, as well as the polyanthus and floribundas with sulphur dust during June and any time during the summer or fall when there is rainy weather or heavy dew. Black spot will get you if you don't watch out.

The sulphur dust can be purchased, mixed with rotenone or other insecticide for the control of insects and it will be just as effective for black spot. It isn't so much how much you put on, but *how often* you put it on. The leaves should be covered during any wet, rainy period so that when the spores fall on the leaves they cannot grow.

Many roses died this spring even though it was a mild winter simply because they were weakened last summer and fall by black spot. If the leaves drop off early in the season the plants fail to become dormant or winter hardy, and may die in spite of anything we may do.

CHICKENS KILL CRAB GRASS

W^E won't vouch for the success of this method of killing crab grass, but at least it is interesting. Mr. P. Hall of Philadelphia writes in Horticulture Ill'ustrated (Boston) that he fenced off part of a large lawn last year and put chickens in the enclosure. The chickens ate all the crab grass seed and the next year there was no crab grass on this section.

Just as soon as the chickens had stopped eating the crab grass seed and that there is no more seed present they are taken off the lawn. Mr. Hall also says the chickens eat bugs of all kinds in addition to the seed. Question is, will chickens eat the seeds while still immature enough so those that drop will not grow?

Who wants to try it?

Teacher: "Who can tell me what agriculture is?"

Thomas: "Well, it's just about the same as farming, only in farming you really do it."

U PONT Garden Dust and Du Pont Potato Dust control both insects and plant diseases at the same time. These new combination insecticides and fungicides. developed by Du Pont especially for farm and home gardeners, have many other advantages. They require no complicated mixing; can be sprayed or dusted; contain no harmful diluting ingredients and can be applied effectively at any time of day. Plants don't need to be wet. A 5-lb. bag will dust 5,000 square feet of garden or make 271/2 gallons of spray. Order your supply now. Ask for free literature.

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Dry and Liquid Lime Sulfur Black Leaf "40" and "155" Flotation Sulfur Paste "Sulforon" Wettable Sulfur Summer Oil Bordeaux Mixture Lead Arsenate—"Grasselli" and "NuRexform" "Parmone" Hormone Spray "Ammate" Weed Killer

E. I. du PONT de NEMOURS & CO. (Inc.),

1503 W. Canal St., Milwaukee, 2303 Hampden Ave., St. Paul

.. GARDEN QUESTIONS ..

PROPAGATING SAGE. I find my sage plants do not live many years. Is there something I can do? How can I propagate sage?

Old sage plants will degenerate after a few years and young plants should be set out to take their place. Mound up soil around the branches of the sage plants which will induce them to root. Later cut the branches as separate plants with roots and set them out.

LATE TABLE BEETS. Can I sow table beet seed this summer for both greens and beets for storage?

Yes, it would ge a good idea to sow more beets this summer. The variety Extra Early Egyptian matures from 50 to 55 days and Early Wonder 55 to 60 days. Sow them so they will mature before frost for either purpose.

SUMMER AND FALL VEG-ETABLES. Which vegetables are suitable for planting in summer and fall, especially after early vegetables have been taken out of the garden?

Some vegetables can be planted as late as August 1st. The following vegetables are suitable for summer planting. Plant early enough so that they will mature before frost. We give the number of days required for maturity.

BEANS, Bountiful, 48-50 days; Plentiful, 51-52; Unrivalled Wax, 52-53, Stringless Green Pod, 50-53; Beets, Extra Early Egyptian, 50-55; Early Wonder, 55-60.

CARROTS, Early Scarlet Horn, 65-70 days.

KOHLRABI, 60-65.

LETTUCE (leaf), Simpson or Early-Curled Simpson, 40-45; Prize-head (head). May King, 60-65; Cos, 65-70.

PEAS, Laxtonian, Laxton's Progress, 60-65.

RADISH, globe shaped varieties, 25-30.

SPINACH, Bloomsdale, 40-45; King of Denmark, 45-50.

TURNIPS, Purple Top White

Globe, 55-60.

TO PRUNE OR NOT TO PRUNE TOMATOES. I have been told that it is best to prune tomatoes and stake them. Will I get better results if I do so?

Gardeners will probably never agree on whether or not it is best to prune or stake tomatoes. It is a subject that has been debated for years. The advantages of staking are: Cleaner fruit; easier to pick; freedom from injury from snails and wire worms; the quality of the fruit may be better in size and color and may ripen earlier.

The disadvantages are a reduced yield per plant; high cost of labor and stakes; fewer tomatoes per plant.

MULCHING TOMATOES. I mulched my tomatoes last year with a few lawn clippings. It didn't seem to do much good. The weeds came up through anyhow. I hear mulching is valuable. How should it be done?

Mulching is very valuable for tomatoes in a dry season because it conserves the moisture in the soil, prevents evaporation and in that way reduces blossom end rot. It must be put on heavily all over the ground between the tomatoes, at least three inches thick. Any type of material such as dried lawn clippings, hay or straw may be used.

DO NOT DIG DAFFODILS. Shall I dig my daffodil bulbs after they are through blooming and when the leaves have turned yellow?

It is much better not to dig the daffodil bulbs unless there is something wrong with them. If they are planted deeply they will do much better if left alone. They may, however, be dug up and replanted when the leaves have turned yellow.

MOWING THE LAWN. Is it best to mow the lawn often, or allow the grass to grow to some length before mowing?

It is best to let the grass grow

to about three inches high, and then cut so that it is only about two inches long. Clipping too close and too often injures the root system and weakens the stand.

CUTTING DELPHINIUM. Must the delphinium stalks be cut off as soon as they are through blooming?

Yes, as soon as the new shoots of the second crop have started well, cut off the old stock and give the new growth an opportunity to grow.

POISON IVY. We are so susceptible to poisoning from poison ivy that we do not like to either dig it or cut it down. How can we get rid of it?

Fortunately there is a very easy and practical way of destroying poison ivy now. Du Pont Weed Killer, made of ammonium sulfamate (ammate) will do the job. Dissolve it in water as directed and spray it on the leaves in warm weather. (See ad of F. R. Gifford Company in this issue.)

IVY POISONING BY CON-TACT ONLY. We have heard that one may become poisoned by poison ivy without touching it, the fumes being spread through the air. We have also heard that one may become immune to it. Is that correct!

Only the juice of poison ivv is poisonous to the skin. It may be from the leaves, the stem, or roots Also, a person may become allergic to the poison and more susceptible to it after having suffered a severe case. Even after the plant is dead, stems and roots may be poisonous if handled. There is evidence that objects which have been in contact with the plants may be poisonous for a long time. Shoes, for instance. which were contaminated and then put away for a year were poisonous to the skin when handled. Now that a spray is available, campaigns to eradicate this pest are very desirable.

May, 1944

An Arrangement of Hydrangeas

Emma C. Schipper, Milwaukee

HYDRANGEAS are long lasting flowers. Even during the hottest weather they will hold up in arrangements for at least five days, provided you give them a little extra attention. The regular soaking in water for two hours is necessary be fore arranging, and after arranging give them a fine spraying with water. Do this every day after changing the water and at night put the arrangement in a cool place. Sounds like a lot of extra work, but it is well worth it!

Although hydrangeas, because of their natural habit of growth, seem to suggest that we arrange them en masse, the massed arrangement pictured here was really inspired by the container. Its circular form and color, a tint of yellow-green, is closely related to the form and color of the flower itself, giving us an excellent example of "harmony" between flower and container.

This similarity of color between container, flowers and leaves made it possible to carry out a one-hue or mono-chromatic color harmony in tints and shades of yellow-green, ranging from the almost white of the full blown flowers to the dark yellow-green of the leaves and the green painted wooden disc used under the arrangement.

Hydrangeas do combine well with other flowers and should be used more often that way. For instance, have you ever tried to combine spirca sorbifolia with hydrangens? Arrange them pyramidal fashion in a rather shallow dish or low bowl. You will find this lovely for a church or hall decoration where tall massed arrangements are in order.

Another combination, which I have tried and found successful, is figer lilies, hydrangeas in early stages of development (deep tint of yellow-green) and prunus foliere. This combination of material



was arranged in a large, rather shallow brown pottery, turquoise lined bowl, and then to complete the ensemble it was placed on a heavy brown jute mat. The whole effect was very pleasing and a delight to behold.

A SNOWBALL BUSH WITH BERRIES

Rena Bauer, Colby, Wis.

MISS Rena Bauer of Colby, Wisconsin, writes: "Snowball bush that has always bloomed with sterile flowers has the past two years produced highbush cranberries on many. of its branches. It would seem the bush is reverting to the original highbush cranberry, from which the Snowball sprang as a sport twig."

This is odd indeed, and we wonder if anyone else has ever observed this to happen.

The common Snowball, no longer being grown because it is subject to attacks of plant lice which cause the leaves to curl, is the sterile form of the European cranberry bush, or highbush cranberry, Viburnum opulus. The scarlet berries of the European highbush cranberry are too sour to be eaten by birds. That is why the American cranberry bush is more often grown. It too is more resistant to aphids.

It is an interesting observation

that the Snowball is more subject to aphid injury than the European cranberry bush from which it came.

Diner—"You charged me twice as much for this steak as you used to."

Proprietor—"I have to. The price of steak has gone up."

Diner—"But the steak is smaller than it used to be, too."

Proprietor-"Of course. The scarcity of beef, you know."

Protect Your Victory Garden

with NIAGARA DUSTS and SPRAYS

Vegetable plants need some attention from beginning to end to assure you a maximum yield. They are constantly subject to diseases and insect pests of one sort or another which may be kept in check by the use of the proper materials.

Equip yourself with a Niagara Duster and materials for increased yields.

NIAGARA SPRAYER & CHEMICAL CO., Inc. Middleport New York Wisconsin Representative J. HENRY SMITH, Waupaca, Wisconsin

Time of Harvest of Vegetables Has Small Effect on Food Value

No Need to Gather Crops in Evening—What Is Important Is to Take Them From the Garden to the Cooking-Pot With the Lease Delay

By Hans Platenius, New York Experiment Station

C HIEF credit for bringing about the rapid increase in the eating of vegetables since the first World War belongs to the dietitian. He convinced the public that vegetables, because of their high mineral and vitamin content, deserve to have an essential part of the daily diet.

Since the outbreak of the present war, attention has been shifted to improving the food value of vegetables and toward retaining the nutrients until the vegetables appear on the dinner table.

It has been shown repeatedly that vegetables grown in the greenhouse during the winter are decidedly lower in vitamins A and C than those raised outdoors in the summer. The amount of sunlight they receive during the growing period appears to be related to the vitamin content.

Effect of Sunlight

Just how much sunlight is a factor in producing vitamin C in vegetables was the subject of a study made last summer. Attention to this question was called by articles in the daily press and popular magazines advising home gardeners to gather their vegetables in the evening. This suggestion was based on the claim that the vitamin C content of vegetables increases from a low level at sunrise to a maximum in the late afternoon. The statement was also made that vegetables are higher in this particular vitamin after a series of clear days than after days of cloudy weather.

Going to the source of this information, it appeared that these claims were based on several experiments carried out in the greenhouse. To test whether this relationship holds true under field conditions, experiments we're made with six different vegetables, most of which are known to be excellent sources of vitamin C. The vegetables, grown in a home garden, were harvested late in the afternoon at 5 or 6 o'clock and the following morning at 7 or 8 o'clock. Samples were taken consecutively for a period of 5 or 6 days to observe the influence of changing weather conditions.

On the basis of these experiments the time of harvest has no material effect on the food value of vegetables, at least as far as vitamin C is concerned. Commercial growers may continue to harvest their crops at a time best suited to their marketing schedule and the housewife does not have to stay up L.te at night to do the home canning. What does remain important is to get vegetables from the garden to the cooking pot with the least delay.

A later experiment showed that kale, after a period of 6 days of cloudy weather, has as much vitamin C as it did after a week of bright sunshine. Even over an entire season changes in vitamin C are small. Kale leaves harvested the middle of November had only 15 per cent less vitamin C than leaves from the same plants harvested in July.

Condensed from January, 1944 Farm Research, Experiment Station, Geneva, N. Y.

COMMENTS ON PHLOX VARIETIES

TF you grow phlox try Salmon Beauty. It is one of the loveliest in my garden and has brought pleasure to many. It is only 18 inches to two feet tall, of sturdy growth, good foliage, and not too susceptible to mildew. The florets are large, producing a good head. clear pink in color with a white eye. There are one or two varieties of similar coloring but I prefer Samon Beauty.

A few years ago I ordered a phlox called Miss Kenosha from a grower in Wisconsin. It has proven to be a very satisfactory, robust grower, and with River Forest coming into bloom about the same time makes a nice combination, Miss Kenosha being the taller variety. Colorado and Frau Von Mautner are somewhat similar, very striking in color, which Ridgeway describes as scarlet red. Phlox need to be well fed and thrive best on sandy soil, although they will grow almost anywhere. Plan to try a few of the newer phlox this spring. They will add much to your garden.

By Mrs. Verl E. Nicholson, Duluth, in April, 1944 The Minnesota Horticulturist.

MILD WINTER VERY FAVORABLE FOR PLANTS

THE past winter was very mild in Wisconsin. Semi-hardy plants came through well. At Madison the lowest temperature was about -7 degrees. Further north it was a little colder.

If temperatures never went lower than in southern Wisconsin we could grow peaches. Forsythia bloomed wonderfully this spring Hybrid tea and Floribunda roses came through with minimum covering.

The weather man is unpredictable. Next winter he may crack down on us. Low temperature is the principal reason for winter injury. Many gardeners said in late winter: "We have had so much alternate freezing and thawing that plants may not come through." But they did. Reason—it was not excessively cold following any warm spell.

When plants are covered they are not only protected from thawing, but also from low temperatures which may follow.

"I just heard him say he was in close touch with the heads of several big organizations!"

"Yes, he's a barber.'

June, 1944

The Peony

W. A. Sisson, Rosendale

THE National Peony Society will hold its 1944 Show at Milwaukee June 24-25. This is the first time the National Show has been held in Wisconsin and the first time there will be no admission charge. All growers are invited to make an exhibit.

This is a good time for anyone wishing to select new varieties for their garden, to attend this big show and select the ones that appeal to you. But if you do not know peonies you should consult some grower you have confidence in, to advise you as to the history of those you have selected if free bloomers and of good growing habits.

I have never introduced a peony because the idea has never appealed to me but I buy all that I think are good and many on trial so that today I have some fifteen hundred different varieties in my gardens. When visitors will let me, I advise against varieties that I know they cannot afford to grow.

Peonies are like people. If you meet a person for the first time, how can you possibly judge if you could get on together until you have known each other for years? Just so the peony, you must live with it for years before you know its habits. A peony which has proper care will outlive its owner. The first year you may have flowers, but not until five years has it grown enough roots to support show flowers and in ten years it will be at its best and continue so during your life.

I have spent nearly a half century growing peonies and so have learned about them through patience and understanding. I start with a small root well cut back, for if you do not cut back the roots they are liable to lie dormant in the ground. Where you cut, there new roots will spring forth.

To you who do not know the peony and would like to buy some, will name a few standard sorts.

Good Varieties

The first to bloom outside of some-fern like peonies that you better not have, is *Anomala*, red single with gold center and cut leaf foliage. A hedge is a welcome sight so early in the season. Then get the Grandmother's Garden sort— *Officinalis Rubra*, double red, low plant. It's very popular. There is also a pink and white in this collection but they are not worth while.

Now for the main sorts—Double white—LeCygne is head and shoulders above any white that has been introduced, I do declare. Early midseason, rather slow but sure grower. Add to this Avalanche or Frances Willard, excellent later white.

Pinks — Edulus Superba, early very common but lovely, and Martha Bulloch midseason to late.

Reds — Cherry Hill is popular early midseason and Philippe Rivoire, later, is one of the very best.

Then you need singles. The Bride, early white, and Darkness, later red. Japs—Isani Gidui, top white, Mikado, landscape red.

Out of hundreds of good ones it is very hard to make a selection of just the above few. However, anyone that knows peonies will agree with me that LeCygne, Isani Giduiand Philippe (Rivoire) have not been beaten.

Peonies cannot stand hot weather. They prefer a short cool summer and cold winters with the ground well covered with snow. Alaska is the place to grow prize winning peonies. Most of our peony growers live farther south than we do and so they cannot grow some varieties well, for instance LeCygne. It is a sad fact that these growers largely dominate the ratings of all peonies and then too, most every person that has a peony, sends in their rating vote. For myself I have never voted on any peony because I do not feel competent to do so.

VEGETABLES USED IN ARMY

TO illustrate how often vegetables are used in army rations, let me quote from a letter written by a Lieutenant in Iceland to the editor of an Indiana newspaper:

"To appreciate the great importance of tomatoes in our ration, one must consider the following comparisons: Over a period of ten days peas appear five times on the menu; tomatoes four; corn, spinach, beets and carrots twice each: lima beans and sauerkraut once each. It would appear from these comparisons that tomatoes are just a fair second. but over this same ten-day period tomatoes forge far ahead of all other vegetables by virtue of the fact that tomato juice and tomato cocktail (a dehydrated and concentrated tomato stock) each appear twice in addition to canned whole tomatoes and twice each month tomato catsup is issued as a condiment. The magnitude of the demand for tomatoes may readily be seen when one considers that 100 men over a ten-day period here in Iceland will consume 12 No. 10 cans of whole tomatoes, 14 No. 10 cans of tomato juice, two No. 10 cans of tomato cocktail and three and one-third No. 10 cans of tomato catsup."

By Harry A. Graves, Fargo, N. D., in May, 1944 North and South Dakota Horticulture.

Inciting class hatred does not further the brotherhood of man.

No Fool

Mrs. X, who has two sons in the Marines, was visiting a farm when she came upon a youth of draft age milking a cow.

"Young man," she asked, sternly, "why aren't you at the front?"

"Cause there ain't any milk at that end, missus," was the calm reply.

A cynical angel remarks that there are two periods when the fishing is good — before you get there, and after you leave.

Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

Mrs. R. H. Sewell, President 957 No. 70th St., Wauwatosa 13 Mrs. F. E. Willard, 1st Vice-President Oakfield

Mrs. Walter Dakin, 2nd Vice-President 4110 Mandan Crescent, Madison 5

PRESIDENT'S MESSAGE

C KIES filled with blossoming fruit trees; deep rose Hopa's; white Sargenti's and in Lake Geneva, wisteria colored Redbuds; the wrens, warblers and migrating waxwings darting from blossom to blossom prove that Wisconsin in May is a state filled with beautiful landscapes.

When you view the pictured ruins of London and Sevastopol, you appreciate safety and security. A soldier recently returned from North Africa was proud to relate that as soon as his squadron landed they knelt and kissed the beloved soil of their homeland—their America!

In contrast to the se patriots, there are worshippers of gold who would sell our country's beauty for profit. According to Tom Wallace, editor of the Louisville Times and a member of the executive board of the Isaac Walton League, "There is danger of destruction of the Great Falls of the Potomac River. An engineer's plan is under consideration for the location of a power plant which would "obliterate" the cataract. Great Falls is located within eighteen miles of the capital city of Washington.

Mr. Wallace declared. "There is no great country in the world which possesses at the outskirts of its capital, a natural scene comparable to Great Falls. It is a national asset in which you should feel a sense of pride and of proprietorship. Shermon's march to the sea did no last-

OFFICERS

Mrs. H. W. Schaefer, Recording Secretary-Treasurer 4416 Taft Road, Kenosha

H. J. Rahmlow, Corresponding Secretary 424 University Farm Pl., Madison 6



ing damage comparable to the everlasting damage that will be done to Washington, our national capital, by some crazy engineers, unless you and others take notice of their plan."

Are you sincere when you sing "I love thy rocks and rills, thy woods and templed hills?" If so, will you as members of the Wisconsin Garden Club Federation write your Congressmen and urge the support of legislation which will save the Great Falls and permanently protect waterways from peril?

> Sincerely yours. Mrs. Roy H. Sewell.

Even the woodpecker owes his success to the fact that he uses his head.

"I want to know how long girls should be courted."

"The same as short ones."

When the other fellow is set in his ways, he's obstinate; when you are, it's firmness.

DISTRICT PRESIDENTS

Mrs. F. J. Fitzgerald, 649 Broad St., Menasha, Fox River Valley District Mrs. H. R. English, 1722 Chadbourne Au, Madison 5, Madison District Mrs. O. H. Burgermeister, 2127 S. 87th St. West Allis 14, Milwaukee District Mrs. John West, R. 2, Manitowoc Sheboygan District Mrs. Norma Robinson, Lake Geneva, South Central District

SPRING COMES TO TRUAX FIELD

FORTY prunus trilobas in two groups in the flag pole plantings gave the first spring color with lilacs, flowering crabs, spireas, and philadelphus following. Effective too, were the tulips at the base of the pole, 300 of them in crimson.

Peonies and iris in the long borders will be followed by annuals in the national colors, as will the tulip beds.

Trees destroyed by the fire in the early winter have been replaced along with other necessary replantings at the flag pole.

The three chapels are greath improved by the addition of evergreens. In all, 105 evergreens went into these plantings designed by Mr. George Simmons, landscape architect for the State Planning Board, and executed under the chairman's supervision by the servicemen regularly detailed to the chapels.

Thirty-five red dogwoods and spirea entered into foundation plantings at the "Non Com Club." Red dogwoods have proved especially effective against the black walls of many buildings.

Servicemen in the various sections (formerly termed squadrons) are busy in their respective areas. Evergreens appear over night with trellises and flower beds promising colorful pictures.

The hospital planting program is heing financed by the Badger Committee of the Red Cross. Danc June, 1944

County's Camp and Hospital Committee is cooperating by furnishing tools for edging and cultivating the gardens, and other necessary equipment.

Trees and shrub groups have been added where needed, and a large cutting garden fills a 75'x50' space near the Red Cross Recreation Center.

Perhaps the most intriguing project has been the patio garden. Lt. Col. Higley saw the possibility of utilizing an enclosed area for an outdoor living room for convaleseents by cutting a doorway into an adjoining corridor.

One hundred ten shrubs and five flower beds enter into the plans drawn by Mr. Simmons and executed by the medical detachment men working with the project chairman. Three hickory trees are ideally situated in opposite corners of the 91'x60' area. They tower above the one story walls of the buildings and furnish shade and shadows. Suitable outdoor furniture will complete the setting.

A detail worked day after day planting maple trees along streets and between barracks.

May we again express our gratitude for the gifts of money and material which have made the work possible and especially to Mr. Simmons for his generous cooperation.

Genevieve C. Dakin, Chairman, Truax Project.

WELCOME DELAVAN CITY GARDEN CLUB

The Delavan City Garden Club of 46 members joined the Wisconsin Garden Club Federation and Horticultural Society recently. The officers of both organizations wish to extend a hearty welcome to the members of this club. Officers of the club are as follows:

Officers

President: Mrs. O. C. Sehnert, Delavan Lake

Vice-Pres.: Mrs. A. K. Spooner, Route 2

Secretary: Miss Virginia Spurling, 122 North 4th.

BLUE BIRD TRAIL ESTAB-LISHED BY MANITOWOC A.A.U.W. GARDEN CLUB

THE blue birds in Manitowoc County could have celebrated May Day in twenty new homes if they had chosen to do so.

Preparation for the "blue bird trail houses" began immediately after the Regional Meeting. Miss Anita Muth, bird chairman of the Manitowoc A.A.U.W. Garden Club said, "I enlisted the aid of our Manual Arts Department in the Woodrow Wilson Junior High School and the instructor promised to make a project of it at once. There was no expense connected with this project, except the cost of one pound of nails, as we used apple and orange crates and odds and ends from the Manual Arts Department. The twenty blue bird houses were placed on Highway 141 from Brown County line to the Sheboygan County line at intervals of about two miles. We were more interested in choosing a desirable place for a home than in the distance between houses. The Junior High boys who worked hard on the project accompanied me on the trip and were most enthusiastic in climbing trees and step ladders to place the houses out of reach of destructive stray cats. We found all farmers most cooperative. The boys were rewarded with a chicken dinner when the work was completed.

What more friendly good neighbor policy could we adopt than for each club to meet their closest neighbor club with a "blue bird trail?"

> Mrs. Leland Dietsch, Sheboygan District Bird Chairman.

Men are like steel—of little value when they lose their temper.

FOR YOUR GARDEN CLUB YEAR BOOKS

WISCONSIN garden clubs have sent in some very attractive year books, with programs that certainly should gain the interest of gardeners.

It might make the year books even more interesting if a short history of the club were published occasionally, and a brief review given of last year's program, mentioning those that attracted the interest of the members, or those that were just wash-outs. A word about speakers who gave the club a real treat might be mentioned. We don't know if clubs would care to mention those you'd never wish to hear again, but such information would help those who make future programs.

Another suggestion is to hand out the year books without any cover design—just a plain cover, and then offer a prize to the member who designs the best cover for her book.

We will welcome other suggestions along this line, and especially suggestions as to programs that have been especially interesting and topics that other clubs might wish to use.

VITAMIN C HIGH IN BERRIES

According to the United States Department of Agriculture, bush fruits carry a very high content of vitamin C. A common serving of fresh raspberries—from half cup to a cup—will supply one-third to onehalf of the daily requirement of vitamin C for an adult. Red currants and gooseberries are also excellent sources of this vitamin.

From May, 1944 North and South Dakota Horticulture, by Harry A. Graves.

Cavity Treatment	General Landscaping Large	Tree Moving
Fertilizing	We are insured	735 (3)
	Lakeside 2907	Removals
Pruning	Wisconsin Tree Service	Spraying
	2335 N. Murray Ave. Milwaukee	

Memorial Highways and Memorial Plantings In Wisconsin

T^N 1942 the Wisconsin Garden Club Federation at the suggestion of its president, Mrs. H. S. Bostock, undertook the planning of Memorial Highways for Wisconsin, acting as a leader in the work which it is hoped every state organization and community will help to promote.

The plan was approved by the Wisconsin Roadside Development Council whose membership includes the American Legion, the American Legion Auxiliary, the Wisconsin Federation of Women's Clubs, Business and Professional Women's Clubs, Friends of Our Native Landscape, and the Wisconsin Garden Club Federation.

Plan Wisely

Before we made any plans for real work and to be sure that we would plan wisely and practically we conferred with the State Highway Commission to learn which of our state highways were suitable for plantings of a memorial nature. We wished our efforts to be permanent and the work accomplished with no setback because of improper selection of roadside.

The result of that conference was the selection of highway number 51 which bisects the state from the southern boundary to the north almost through the center of the state, and highway number 30 from Milwaukee to Madison continuing over 12 and 18 to Prairie du Chien as very representative highways and a good beginning for our project.

Highway 51 is modern for a great deal of its length and will be completely modernized in due time.

New Highway

The new number 30 from Milwaukee to Madison will, when completed, be a most modern and beautiful highway. Its right of way is wide and the road bed planned to carry two extra traffic lanes should the demands of traffic call for it.

Mrs. C. L. Dean

The right of way has been beautifully graded, and slopes have been seeded to prevent erosion, and everything possible from the engineering standpoint has been done to make it a safe means for traffic both for passenger and freight use.

At the Fox River Valley district Regional meeting that group of 26 garden clubs moved to plant the new highway By-Pass # 41 from Oshkosh to near Little Chute as far as the right of way is ready for planting. This plan is now ready for the planting designs to be made and the planting supervised by the State Landscape Engineer in our State Highway Department.

There is much that can be done now in preparation for the real work. The highway should be cleared of refuse, junk yards and dumps removed or properly screened, zoning laws applied and enforced to govern and control all outdoor advertising and the location of undesirable business centers.

This year under the leadership of our prsident, Mrs. Roy Sewell, we are continuing our work and interest is growing steadily in the project which we hope to have well and definitely planned when once the real work of planting can be undertaken.

We are planning to use only native trees and shrubs in those Memorial groups and will feature our beautiful wild crab apple wherever it is advisable to do so. Others of our flowering shrubs will be used wherever adaptable to the area being planted.

More Wayside Parks

We recommend that many more roadside parks and waysides as we call them here in Wisconsin be developed for the use of the traveling public. If you consult your road map you will find that Wisconsin has many of these little parks and waysides, the sites of which are chosen because of some outstanding feature of terrain or because of a bit of shade and easy access to them from the highway. Tables and fireplaces are provided in many of them and they are used by many people during the summer months

Our natural forest is being moved farther and farther from our centers of population and we must bring back to our people the beauty which belongs to our land, not only because of its beauty but because of its educational and spiritual values as well.

Each community can do much to enhance the beauty of its surroundings by improving the appearance of the highway entrances to the town, clearing out the refuse and making small plantings at its gates. All of this work should be done with the cooperation and under the supervision of the officials so that all work will conform to the best safety rules and be placed in such manner that the material planted will in no way hinder the operation of machinery used in the general work of maintenance, summer or winter.

Let us make a real business of planting these Memorials and in a few years we will be able to extend to the Nation an invitation to come to Wisconsin to view the auple blossoms we have dedicated to our representatives in the armed forces.

Apricot Conserve

 $1\frac{1}{2}$ cups dried apricots 2 cups honey

3/4 to 1 cup chopped walnut meats Rinse apricots in hot water, drain and put through food chopper, using a fine knife. Bring honey to boiling point, remove from heat, add apricots and nuts, and stir to blend. Pour into sterilized glasses; seal with paraffin. Let stand 2 weeks before using. Makes approximately 2 pints.

Civic Projects of Lake Geneva Town and Country Garden Club By Mrs. Genevieve C. Dakin

THOSE who attended the South L Central District meeting at Lake Geneva May 19 and saw the oriental crabs in full bloom along the lake shore recognize the vision of the Town and Country Club. At no far distant day this planting, which is augmented annually, may well rival the famous Cherries of Washington. In addition, under the leadership of Mrs. Harry Macdonald, civic chairman, the Athletic Field is being attractively planted. Its margins contain groups of flowering trees and shrubs with a hedge outlining the circular track.

June. 1944

A trip to Wychwood where redbuds and crabs were breath-taking in loveliness, and woods were carpeted in trillium and mertensia completed the May get-to-gether.

THOUGHTS ON CITY PLANNING

IN an illustrated lecture sponsored by the Town and Country Garden Club at Lake Geneva May 19, Mr. Charles Gibbs Adams, landscape architect and president of the California Federation of Garden Clubs told us that city planning includes city comfort.

"When we talk of cities we think of boulevards and parks—not finance. Chicago has the finest park system of any city in the world."

He reminded us that Los Angeles is famous for its wild gardens in Griffith Park, Phoenix for its cactus gardens, San Francisco has its Golden Gate Park, and Denver built a park to view the mountains more than twenty miles away. Boston drained malarial swamps to make its miles of fenways. Mobile has its azalea trail and Rochester, New York's lilacs draw 300,000 visitors on Sundays.

Mr. Adams cited the need for wise zoning laws. "Taste and fitness for the enjoyment of all are more important than business gains for a few." Beverly Hills he told us, is the most beautifully planned city in California with its curving streets, each street planted with trees in uniform varieties. No one may touch a tree.

Eighty surveys were made before a highway near Santa Barabara was cut. The aim was to save the most oaks and sycamores.

In Germany a law provides that any man who cuts down a tree shall plant two.

Trees in Business Section

Many famous cities of Europe were wise enough not to destroy trees in business sections. Trees shading stores add beauty and comfort.

Foreign countries when widening roads simply put a new road alongside the old, thereby saving the trees and making three instead of two rows of planting for beautification.

"Why not adopt some flowering tree for your town or city?" Encourage residents to incorporate it into their home landscaping. Vacant lots planted with wild flowers are an asset.

"Mark your streets and number your houses."

"Remember that paint preserves houses and fences and is an investment."

Genevieve C. Dakin, Madison.

Barber: "Was your tie red when you came in?"

Customer: "No!"

Barber : "Gosh !"

Prof.: "What books have helped you most?"

Student: "Mother's cook book and father's check book."

June: "Weren't you nervous when he gave you all those beautiful presents?"

Donna: "No. I just kept calm and collected."

RADIO PROGRAM MILWAUKEE COUNTY VICTORY GARDEN COMMITTEE SERIES WTMJ SATURDAYS, 11:15 a.m. GARDEN SCHOOL OF THE AIR

June 24. Vegetable Diseases and Insect Pests. Clifford Jaquith.

July 8. Summer Care of the Garden. E. C. Thompson, County Farm Manager.

July 22. Canning and Preserving Vegetables. Miss Nellie McCannon, County Home Agent.

August 5. Late Crops. Rudolph Lohmann, Milwaukee County Park Commission.

August 19. The Victory Garden in August. Ben Peacock, Wauwatosa High School.

September 2. Practical Methods of Keeping Vegetables. George Dehnert, Assistant County Agent.

September 16. Fall Care of the

Garden. J. H. Stillman, Milwaukee Vocational School.

WISN FRIDAYS, 4:00 p.m. GARDEN INTERVIEWS

June 16. John Jonstone, Lincoln High School.

June 30. Clifford Jaquith.

July 14. E. C. Thompson.

July 28. Miss Nellie McCannon.

Aug. 11. Rudolph Lohmann.

Aug. 25. Ben Peacock.

Sept. 8. George Dehnert.

Sept. 22. J. H. Stillman.

WISCONSIN GARDEN CLUB FEDERATION SERIES

WTMJ SATURDAYS, 11:15 a.m.

June 17. Color in the Border. Mrs. H. J. Anderson, Racine Garden Club.

July 1. Garden Drama. Ken Greaves, Landscape Architect.

July 15. Gardens of Australia. Mrs. N. Rulison Knox, Green Tree Garden Club, Milwaukee.

July 29. Principle of Small Property Garden Design. Anthony Wuchterl, Wauwatosa Garden Club.

Aug. 12. Daylilies. Charles E. Hammersley, Milwaukee.

Aug. 26. Garden and Hobby Show. Mrs. Chester Thomas, Milwaukee, War Service Chairman.

Sept. 9. A Talk by the President of the Wisconsin Garden Club Federation, Mrs. R. H. Sewell, Wauwatosa.

Garden Bird Sanctuaries

Mrs. R. A. Walker, State Bird Chairman

GARDEN enthusiasts who happen at the same time to be bird lovers, have cause for deep satisfaction in the increased attention being given to birds in garden publications and at garden club conventions and meetings. Emphasis is being laid on the practical contributions of b i r d s as guardians against destructive insect life, and attention given to their aesthetic value, color, motion and joyous songs.

Make a Bird Bath

Why not make your own garden and vard a bird sanctuary? Little space is needed-little effort is required-to make it a haven. Birds need water, food and shelter. Perhaps your garden already has a pool. If not, a simple bird bath can be quickly provided by lining a shallow pan-shaped depression scooped out of the ground, with a mixture of three parts of gravel, one of cement, and enough water to moisten. Let this basin harden a couple of days, lift it and place it on a post or pedestal. Keep it filled with fresh water. You will not wait long for feathered visitors eager for a drink and a bath.

Feeding trays suct holders, selfgrain feeders are inexpensive, easy to construct. They add much to the decorative effect of one's garden. In the winter a path in the snow can be swept clean and provided with bread crumbs, meat scraps or grain. Almost instantly the birds will find this.

Shrubs for Birds

But the trees, shrubs, vines and flowers in your garden will do more than anything else to attract bird visitors. They provide shelter, nesting factilities, and if properly selected, food as well. See that your landscaping includes such items as the highbush cranberry, dogwoods, viburnums, mountain ash or barberry.

Birds, particularly robins and wrens, react readily to your invita-

tion to nest. Robins like plain shelves or boards on which to build. Since the robin is a mason, be sure that a supply of mud is available, either at your pool, or in a special pan or puddle, kept moist.

Wren Houses

Wren houses are inexpensive to buy or easy to construct. Provide several in your yard and garden erected about six or eight feet above the ground. Suit yourself about painting the wren housesthe birds do not care. The noisy little male comes first. He will discover the houses and proceed to fill several with coarse sticks often too large to be successfully handled. Then will come the more critical female to make a careful tour of inspection and selection. She will proceed to line the home of her choice with softer materials. and settle down to her domestic duties. Then the unused bird houses can be emptied of their sticks and made ready for the second mating and brood raising later in the season. Not infrequently the fickle male will select a different female for the second brood.

The Oriole

Sometimes the brilliant colore l oriole can' be encouraged to tailor bis nest on the tip of a drooping birb, if a supply of short lengths of string or yarn is scattered over the shrubbery.

Goldfinches are attracted by sunflowers and milkweed, as well as by the seeds of such flowers as asters, ainnias and coneflowers. They build their nests low in some shaded spot late in the summer after most of the other 'birds are through with their nesting. They will appreciate bits of cotton as building material. Wild columbine and petunias will certainly prove a magnet for the humming bird; which also appreciates a supply of sweetened water in an upright test tube.

The brown thrasher sometimes

nest in a brush heap. The various thrushes and the oven-birds are hkely to be fond of exploring your compost heap.

The writer recently counted 48 different species of birds in her garden on a single day.

Whether your garden attracts homemakers, part-time tenants, or casual visitors, any small effort on your part to attract birds will pay handsome dividends.

BLUE BIRD TRAIL REPORT WANTED

D^{ID} your garden club erect blue bird houses this year and carry on the blue bird trail project? It so, we would like to report the success of the project in our next issue.

Please write to Mrs. R. A. Walker. 2222 Chamberlain Ave., Madison 5. Wisconsin, State Bird Chairman, by July 1st, reporting how many houses were erected by your club, and the number that were occupied by blue birds.

The blue birds will likely change their nest and occupy a new house for the second brood some time during the last half of June. Even though you did not have the house occupied this spring, don't lose hope.

HOME GARDENERS SPONSOR LARGE JUNIOR GARDEN CLUB

THE Home Gardeners of West Allis and Wauwatosa report that their junior garden club promises to be very successful. So many youngsters have joined that it is difficult to get enough junior chairmen and helpers.

Every member of the Home Gardeners Club has a victory garden. The club program was designed along practical lines to provide information for the members on both vegetable and flower gardening topics. It includes a trip to Grant Park in June, and a harvest festival and show in September.

By Eleanor Lawonn, President, and Irene Smith, Secretary

CVERY resident of Greendale, a community of 2,600, automatically becomes a member of the Greendale Garden Club. Our club is made up of "honorary" members and "active" members; the latter are those who belong to the Federation.

There are $18\frac{3}{4}$ acres under cultivation, divided into six different rardens located on the outskirts of our township. These gardens, measrring 50 x 50 feet, are plowed and fertilized, staked, and rented for he s e a s o n at \$1.25. Altogether here are 325 plots, and the work s done by our club members.

Last year, through a questionraire sent out by the village mangement, it was discovered how imortant these gardens were towards he war effort. The produce from hese gardens, plus back-yard gartens, produced a yield with a rebil value of \$75.000.00. It might he interesting to cite a bit of the information obtained in this questionnaire. For instance, 23780 tomato plants produced 475,000 pounds and had a cash value of \$11,900.00. There were 196,183 cabbage plants, producing 980,000 pounds with a retail value of \$24,-500.00.

Junior Club Work

Not only adults, but also the youngsters of Greendale evince an interest in gardening. The 4-H lays and girls are working five plots, each one having a fourth of a plot of 20 x 25 feet. The Girl Scouts also rented a garden plot. This plot is to be divided into four sections, each section to be tended by two girls. All flowers and vegetables grown will be donated to some charitable institution.

After our gardens are planted we will celebrate the occasion with a barn dance. Everyone who attends comes attired in gardening clothes. Old time d nees are held, refreshments are served, and everyone has a gay time.

Annual Fair

The greatest event of the year is the Greendale Fair sponsored by our club. This year it will be held on August 31st and September 1st. Ribbons are given to the best entries in fruits, vegetables, flowers, artistic arrangements, shadow boxes, table settings, canning. baking, needlework, hobbies, livestock, and recreation activities.

THE UNPREDICTABLE TOMATO

INVESTIGATORS who have conducted tomato variety yield tests over a period of years, using the same group of varieties, have observed that a variety ranking first one year will perhaps be outranked the following year by another variety of the group. No one variety has yet been developed that has wide enough adaptability to produce the highest yields at all times under varying conditions.

Shed Blossoms Under High Nitrogen

Gardeners occasionally cause unexpected conditions by making excessive applications of chicken manure or other highly concentrated manure. These conditions cause vigorously growing varieties to shed their blossoms and to produce excessively large vines. Marglobe and similar varieties produce inferior vields under these conditions. The Illinois Agricultural Experiment Station developed Prairiana and Early Baltimore for use on the highly fertile prairie soils. However, these varieties do not usually produce sufficient vine growth on soils of average fertility, and consequently yield less than varieties such as Illinois Pride and Marglobe on such soils. Rutgers is strikingly like its Marglobe parent.

In Maryland and other eastern states, Marglobe, Rutgers and other vigorously growing varieties often do not set the first clusters of fruit when cool and wet weather conditions are unfavorable for fertilization of the flowers. On the other hand, the earlier, less vigorous varieties such as Victor and Bounty, set plenty of early fruit under these unfavorable conditions. Victor and Bounty are short-lived, however, and when they have ripened an abundant early crop of fruit, they usually collapse and die in midsummer, while Marglobe and similar sorts continue to produce good yields all summer.

Bounty In Part Shade

The small, early variety, Bounty, was developed for the North Dakota climate. However, it set fruit successively all summer when planted at Washington, D. C., in a partially shaded garden surrounded on three sides by trees and houses, reducing direct sunlight to five or six hours per day. These shaded plants set less fruit at a time than those planted in full sunlight, but they continued to grow and set some fruit until late summer. Their total yield for the season, at Washington, was greater in partial shade than that of the larger, stronger growing varieties, Marglobe and Rutgers. When planted in full sunlight, however, Bounty produced a heavy, carly crop quickly and then withered.

Marglobe and Rutgers, even when planted in full sunlight, shed their blossoms, because of cool and damp weather, early in the season of 1943. They set practically no fruit until the third and fourth flower clusters became fertilized as the weather became warmer and dryer. These varieties then continued to bear successively until the end of summer. From Horticulture, May 1, 1944.

For whosoever exalteth himself shall be humbled; and he that humbleth himself shall be exalted. --St. Luke, 14:11

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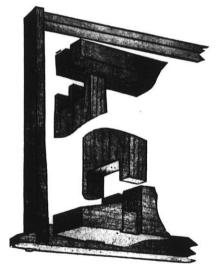


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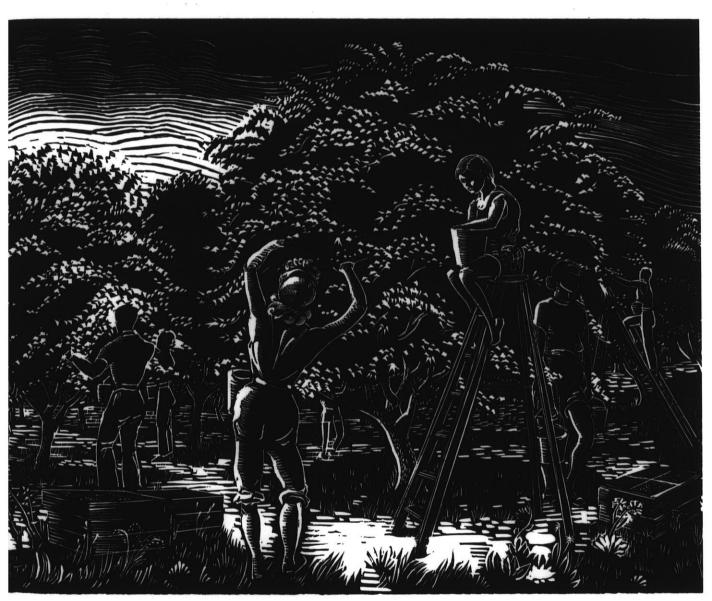
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Door County Cherry Pickers Woodcut by Florence Tomlinson, Madison, Wis.

JULY - AUGUST 1944

LAWN CLIPPINGS - LET THEM LIE DURING NORMAL WEATHER

During the summer months when the weather is relatively dry, lawn clippings should not be removed. They dry up quickly and furnish a mulch which is beneficial because they reduce evaporation and keep the soil cooler and more moist. During wet weather when the lawn makes a rank growth it is sometimes necessary to remove them.

During the summer months do not cut the lawn too short. One and one-half to two inches is best.

THE PEACH CROP

Production of peaches in 1944 is indicated to be 67,427,000 bushels -60 per cent above that of 1943, 2 per cent above the large crop in 1942 and 17 per cent above the 10year (1933-42) average. A crop of this size would be the third largest crop on record being exceeded only by the 74,905,000 bushel crop in 1941 and the 77,846,000 crop in 1931.

FIG 1 **Berry Boxes** Crates, Bushel Boxes and Climax Baskets As You Like Them We manufacture the Ewald Patent Fold-ing Berry Boxes of wood veneer that materials in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blue-berries. No wder too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A iarge discount for early orders. A patal brings our price list. We manufacture the Ewald Patent Fold-CUMBERLAND FRUIT

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WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Horticultural So

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Subscription to Wisconsin Horticulture is obtained by membership in the Wisconsin State Horticultural Society for which the annual dues are \$1 per year or \$1.50 for two years. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Fifty cents of the annual dues paid he each member is for a year's subscription to Wisconsin Horticulture.

Orchard News

WISCONSIN APPLE INSTITUTE HIGHLIGHTS A Wisconsin Apple Slogan

Contest Sponsored

THE Wisconsin Apple Institute in cooperation with the Wisconsin Agriculturist and Farmer and the Wisconsin State Fair is sponsoring a Wisconsin Apple Slogan contest. The purpose is to create a greater interest in Wisconsin apples and to promote their use. The contest rules are given elsewhere in this issue.

The Institute will cooperate with the Wisconsin Department of Agriculture, to feature Wisconsin apple pie and cheese on 300 billboards throughout the state immediately following the State Fair. The Institute will pay the cost of the signs, the Department of Agriculture the balance.

An apple recipe contest will be held this year. Object: to find the best recipes which will be published in newspapers and given over radio stations this year, with the intent of issuing a recipe booklet next year.

The Institute will spend more than \$750 this year on the apple promotion project.

Heard by Wm. F. Connell, Menomonie, at the National Apple Institute Meeting

CLICK magazine will publish a lengthy article and color pictures of various varieties of apples and their uses.

Cigarette manufacturers will continue use of apple honey after the war.

The government estimates that an additional 7,000,000 bushels of apples will be used for processing over the 1943 figure of 29,000,000.

Senator Harry Byrd was the banquet speaker. He is the largest apple orchard owner in the world, with 6,000 acres, and an estimated 1944 crop of 900,000 bushels. He



urged growers not to accept government subsidy or price support. It means more government control, he says.

New Institute Members

The following fruit growers joined the Wisconsin Apple Institute since our last issue went to press:

Aug. Spitzer, Luxemburg____\$7.00 Chas. D. Rosa, Rosa Or-

chards, Gays Mills _____ 5.00 (Pledged \$25.00 more)

COST OF PRODUCING APPLES IN ILLINOIS IN 1943

By R. A. Kelly, Asssociate,

Department of Agricultural Economics

A CCORDING to data supplied the Agricultural Experiment Station at the University of Illinois by 52 apple orchardists, the average cost of producing apples in Illinois in 1943 was \$1.69 per bushel for all apples produced by these growers. However, if costs are placed on a per packed bushel basis, the average cost per bushel is \$1.87.

The average costs per bushel of individual growers varied considerably. The lowest average cost reported was \$0.91 per bushel and the highest was \$18.24. The variation in per bushel cost is caused largely by differences in yield; yields varying from 3 to 441 bushels per acre, with an average yield of 110 bushels.

The costs of twenty-five growers

were above the average of \$1.69 per bushel. Of these 25 growers, 15 had yields less than average. Of the 27 growers whose costs per bushel were less than average 20 of them had yields above average.

Distributing the costs per bushel between growing and harvesting and picking, the cost of growing is \$1.12, with packing and harvesting costing \$0.57 per bushel. Labor is the largest single item of cost, 68 cents per bushel. Thus, the labor cost was 40 per cent of the total cost of production in 1943.

Uniform rates were applied for depreciation and interest on investment. These two items cost 24 cents and 15 cents per bushel respectively.

The average investment was \$374.68 per acre. The average investment in bearing apple orchard being the largest item, approximately \$248 an acre. Expenses per acre averaged \$185.23 and ranged from \$27.99 to \$585.06. Operating expenses averaged \$168.72, and interest on investment \$16.51 per acre. There was a wide variation in the costs of growing and spray materials. Although the average cost of growing materials was \$6.10 per acre and spray materials was \$22.89, the range was from 0 to \$39.89 and from \$3.11 to \$58.88 respectively.

Expenses per orchard vary according to size of orchard as well as yield. Therefore, average expenses per orchard for bearing apple trees is not as satisfactory a measure of costs of production as average costs per bushel or average costs per acre. The average cost of production for all orchards was \$9,960.

From May News Letter, Illinois State Horticultural Society.

Nature means well but doesn't understand farming, and because of her erratic management of the weather, no man is really fitted for farming until he reaches that condition of tranquil despair when nothing else matters.—W. W. Reynolds.

The New Speedsprayer

By Sam Goldman, Sturgeon Bay

THE SPEEDSPRAYER, the first one to be introduced in Wisconsin, was tried out at our orchards in June. I believe fruit growers throughout the state will be greatly interested in it.

The Speedsprayer, so-called because of the speed with which it operates, eliminates the human element from spraying, and is operated through a set of controls by the man at the tractor. This requires only one man, whereas with ordinary type sprayers three men are needed to operate one rig. No special tractor is needed.

Good Work in High Wind

This new type sprayer does not depend for its operation upon high pressures. The spray comes out from a large number of small nozzles from which it is caught by an airplane type propeller and blown in a blast over the trees. The propeller, which is 48 inches in diameter is operated by a 75 H.P. gasoline engine. Even with high winds no difficulty was experienced in hitting the tops of trees, whereas with the ordinary type sprayer, spraying under similar conditions would be very impractical.

The Speedsprayer is equipped with a 500 gallon tank which empties its load in from 12 to 15 minutes of operation. In a 10-hour working day, it is estimated that the outfit will cover from 35-40 acres of trees. It was developed by Mr. George Daugherty of the Speed Sprayer Division of the John Bean Mfg. Co. It has been used quite extensively in the Citrus Belt of Florida as well as in the apple orchards of Senator Townsend in Maryland and of Senator Byrd in Virginia. This year it was used for the first time in Indiana and Illinois, and now extended into Wisconsin. A second grower, E. W. Stephenson of Sawyer, who has a large cherry arreage in Door County, has ordered a Speedsprayer, and shipment has been promised for

next month.

Local orchardists, as well as others from different parts of the state, examined the rig in operation at our orchards, and were very enthusiastic.

THE DELICIOUS APPLE WILL MATURE FRUIT ONLY FROM LARGE BUDS

M. A. Blake, New Jersey Exp. Sta.

THE Delicious apple, although widely grown, is one of the most particular and sensitive to environment that is known. It is unlikely to produce well or consistently on dense soils. It is also quite sensitive to a deficiency of calcium in the soil.

In contrast to such varieties as McIntosh or Stayman, buds of a No. 3 size may bloom and set fruit but most of the latter will drop not later than June. In other words, No. 3 Delicious buds in New Jersey are unlikely to mature fruits.

No. 3 buds upon Delicious will never really mature into a crop of fruit no matter what the cultural or fertilization practice may be the spring that blooming occurs. Buds as small as No. 3 upon such varieties as McIntosh, Stayman or Wealthy will often develop fruits of marketable size, if the trees are properly fertilized and managed the year the crop is produced, but that is most unlikely with Delicious.

What Is the Growth Status?

If your Delicious apple trees bloomed during the spring of 1944 but most of the spurs failed to set fruit, it is not too early to begin to diagnose the reason. It should not be difficult to determine whether the spurs were below medium in vigor.

Not many commercial Delicious apple orchards in New Jersey are deficient in nitrogen from lack of fertilization and care. If the trees are unfruitful it is more likely to be a problem of unsuitable environment, deficiency of calcium, potash or phosphorus, or even an excessive growth where light conditions are not too favorable. Delicious may not develop thick, leathery leaves if the trees are too closely planted upon strong soil. Sometimes trees are planted where they receive shade from adjoining woodlands in early morning or in the afternoon, and thus do not receive a full day of sunlight. This is sometimes sufficient to cause Delicious to be overvegetative and unfruitful. Some orchard sites, particularly in hilly country, are located where fog prevails rather frequently. This, of course, reduces the intensity of the sunlight and the ability of the leaves to manufacture carbohydrates as efficiently as is necessary for success with Delicious.

The Delicious apple unless planted in an environment to which it happens to be exceptionally well adapted, requires special attention from the environment and nutritional standpoint and special cultural practices (if it is to be at all dependable in production).

Condensed from May, 1944 Horticultural News, published by the New Jersey State Horticultural Society.

OATS BAIT FOR ORCHARD MOUSE CONTROL AVAILABLE

Arrangements h a v e been made with the U. S. Department of Interior to supply us with oats bait for orchard mouse control.

Mr. G. C. Oderkirk, Lafayette, Indiana, in charge of the rodent control program, advises us that the price of the bait has gone up and our prices this year will be as follows:

10-lb. bag oats bait____\$1.35

25-lb. bag oats bait____ 3.25

We are trying to make arrangements this year to have several fruit associations stock a supply of the bait for local growers. We hope to announce in our next issue who they will be, because it will save express charges. The above prices are f.o.b. Madison. Poisons must be sent by express, collect.

Orchard and Garden Supplies

Buy co-operatively and save dollars by participating in the earning. Everyone receives a patron's refund at the end of the season. We are the largest co-operative of its kind in the state. If you are producing fruit or vegetables and need supplies, give us a try.

SPRAY MATERIALS

Lead Arsenate Calcium Arsenate Rotene Dusts Special Potato Sprays Copper Sulphate Kolofog Mike Sulphur Apple Stick Sulforon Parmone

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In The Orchard

SAWDUST AS A MULCH

Usually Available, It Is Easy to Handle, Is Relatively Cheap, and Has No Harmful Effect on the Soil

By R. C. Collison, Geneva

SAWDUST might well be used more generally as a mulching material by gardeners and fruit growers. While sawdust does not smother grass and weeds quite as well as some other mulching materials, it has many advantages, including ease of handling, low cost, and general availability.

Examples can be cited where sawdust has been used successfully in orchards for years, while it has proved especially effective in blueberry plantings. By conserving soil moisture and lowering soil temperatures, it should also be valuable for mulching raspberries.

Probably the main reason why mulch is not used more widely is the cost and scarcity of materials suitable for the purpose. The more common ones used include straw, hay, and peat moss. Sawdust, a rather common and comparatively cheap material in many localities, has never been used extensively, probably because it is very generally considered injurious to soil. Many people seem to think that it makes soil very "sour."

There is an effect of sawdust and similar materials when mixed with soil which may cause some temporary trouble, however. When the soil organisms are breaking down organic materials, so much of the available soil nitrogen may be used up that the growing plants will become starved for nitrogen until the process is completed. The remedy, obviously, is to apply more nitrogen to the soil in the form of manure or fertilizers. But sawdust is no more troublesome in this respect than many other organic materials that may be mixed with the soil.

From Farm Research, New York Experiment Station.

PROTEST AGAINST INJURY TO FRUIT BY ROBINS

iver OU should have been here the

past week to see what a terrible pest robins can be," writes Virgil Fieldhouse, Dodgeville. "With the very short crop of fruit this year it is apparent that the robins or we will have to give in. Our loss to strawberry beds was approximately \$125 this year in spite of hours spent in chasing the birds and firing a gun many times each day. We planted mulberry trees and that does not satisfy them. We turned one of our two strawberry beds over to them a week ago, but they won't stay in it.

"I don't think they eat any harmful insects, and they must be so full of 45c per quart berries that there isn't any room for insects."

Mr. Fieldhouse has written the Conservation Commission for help.

Does Not Use Lime Sulphur On Haralson Apple

Mr. Fieldhouse further writes that they are careful not to use lime sulphur on Haralson apple trees. They use instead a mild type of sulphur — sulfuron. The Haralson apple russets in southern Wisconsin and therefore is not popular here. However, Mr. Fieldhouse has good results with the use of a mild application of sulphur.

Robins Are Protected by Federal Statute

The letter by Mr. Fieldhouse was forwarded to Mr. E. T. Carter, U. S. Game Management Agent, Oshkosh.

THE CONTAINER SHORTAGE THE War Food Administration informs us that the supply of new containers will fall 25% below the anticipated grower needs even though the 1944 crop should only equal that of 1943.

We know fruit yields this year are expected to exceed those of 1943.

Growers are advised to line up their supply of containers long before the harvest season, and that will not be easy either. They are advised to contact used container dealers in the large marketing areas who are cooperating with the Federal government in the salvage of shipping containers. Special freight rates have been put into effect for shipping salvaged containers from consuming to producing areas.

Have you got your containers lined up?

MAKING MOVEMENT COUNT IN PICKING TOMATOES

TN these days of labor shortage, work done at Purdue University by the Farm Work Simplification Laboratory becomes of special value.

A bulletin has just been issued by Purdue University, Lafayette, Indiana, entitled "Making Movements Count in Picking Tomatoes."

Four Simple Rules

Here are four important rules for making movements count in picking tomatoes, as listed in the bulletin:

Rule 1. Use a handle on the hamper.

Rule 2. Pick with both hands.

Rule 3. Pick as many tomatoes as possible in each hand before moving the hand to the hamper.

Rule 4. Pick two rows across the field keeping the hamper in front of you.

Instructions for picking (illustrated by pictures), are as follows:

(1) Use a wire handle with a comfortable handpiece. The wire should be stiff, about one-fifth inch in diameter.

(2) Don't move the hamper by gripping the edge of it with the fingers. It's much easier to grasp and move forward with a handle.

(3) Move the hamper forward with an easy movement of one hand.

(4) Carry the hamper, keeping the arm and back straight. Lift with the strong leg muscles.

(5) Don't carry the hamper to road with the arms bent and the hamper held out in front of you. (6) Pick with both hands close together, standing with the knees slightly bent.

(7) Or pick with both hands close together and squat.

(8) Don't pick with your hands far apart. When they are separated, you can't see what both are doing.

(9) Don't pick with one hand while the other only holds the hamper. If you do this, you can pick only 83 hampers in the time in which you should pick 100.

(10) Don't let one elbow rest on your knee while the hand only holds tomatoes. If you do this, you can pick only 86 hampers in the time in which you should pick 100.

(11) First, pick one tomato in each hand.

(12) Then shift the tomatoes back into the palms of the hands.(13) Then pick a second tomato

in each hand.

(14) And then move the full hands to the hamper.

(15) Don't move the hands to the hamper with only one tomato in each hand. If you do this, you can pick only 90 hampers in the time in which you should pick 100.

(16) Set the hamper in front of you between the rows. Keep it within easy reach.

(17) Don't set the hamper so far ahead that you have to stretch your body or throw the tomatoes.

(18) Don't get in front of the hamper so that you have to turn your body.

RETURNING SOLDIERS MAY BE INTERESTED IN FRUIT GROWING

M^{EN} in the armed forces have plenty of time to think and talk about their future. Many of them will change their ideas. They will be mature when they return. That is illustrated by the note in the letter from Mr. Virgil Fieldhouse, Dodgeville, who states: "My 20-year-old boy is in the Air Force in New Guinea. He did not particularly like to work at fruit growing. However, the other day he wrote: 'When I get back I won't spend any of my summers in a factory. I want to be home as much as I can while I am going to school. I have talked to many other boys who helped in iruit growing, and I believe it can be very interesting'."

The editor's son, who is a commando and went to France on "D-Day," recently wrote as follows: "What do you think about the opportunities in Alaska? I have been talking to some of the boys here and they think Alaska is the place to go after the war."

Who can predict what the future has in store for us?

CIDER PRESS FOR SALE

For Sale: 100 gallon capacity copper bottom screw type cider press. Harry Schiferl, Jefferson, Wis.

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See Us First For All Supplies and Equipment. Our Prices Are Right!

HARVESTING SUPPLIES

Pointed top ladders-60c per foot. 14-16-18-20 and 22 ft. Orchard Step (special) 80c per ft. 6-8-10 ft. Wenantchee Picking Bags. No. 7-\$2.40 each. Hiatt Packing Forms. \$6.75 each.

SPRAY MATERIALS — ALL KINDS

Harvest Spray

"Parmone Concentrate"

4-04 DOLLIE	4-oz	bottle	\$1.30
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- 12 4oz. bottles, each 1.20
 - 4-oz. used in 100 gals. of water

Authorized sales and service for all

models of Bean Sprayers

Rotenone	Dust, 5	lbs			51.25
Du Pont	Potato	Dust,	5	lbs	1.00
				case	

When through with your sprayer send it to us for a complete overhauling. We have been in the business for 20 years.

Power Sprayers for Sale

1 50-gal. sprayer—Bean Simplicity on two wheel trailer with tires. Ideal for small orchard. (Write for particulars.)

Still have 3 Hudson wheel barrow sprayers for sale. Equipped with gasoline engine. 18 gal. tank, 20 ft. 3% inch hose, and spray gun. \$130 complete.

1 2-cylinder hand pump with 30 gal. barrel. Complete with spray rod and hose. \$30. Develops 200 lbs. pressure. Could be equipped with motor.

Grafting Tape. Just received another shipment. Roll-

F. R. GIFFORD COMPANY GLENN A. DUNN, Manager

2201 University Ave.

Madison 5, Wisconsin

STRAWBERRIES AT WARRENS

H. H. Harris

OUR strawberry crop around Warrens was all picked and marketed soon after July 4th. It was of fair yield and quality. The Association sold around 1,400 16quart cases.

Our acreage was small due to shortage of labor, but the crop was good, especially Catskill, Premier, Dr. R. L. Roberts' No. 537, and Beaver. The Red Star had some extra nice berries, but small yield on large and bright vines.

We did not set any new beds for fruiting—just a few of each variety we cared to keep to raise plants for next year's setting. We could not get help to take care of them.

The crop for next year will probably not be any more than this year.

Editor's Note: Mr. Harris is now 93 years old and writes a very interesting letter. He states, however, that he had some difficulty in writing. He worked with his strawberries this season and can still handle the hoe.

GROWING STRAWBERRIES IN MINNESOTA New Bulletin Just Out

PROF. E. M. Hunt, extension horticulturist, with the Minnesota College of Agriculture, University Farm, St. Paul, has just issued a bulletin entitled "Growing Strawberries in Minnesota."

The bulletin is up - to - date and very practical. It doesn't beat around the bush but goes straight to the core of several important problems such as the use of commercial fertilizer not being as good as manure unless certain food elements are found to be lacking by soil tests.

Relative to applying mulch in the fall Prof. Hunt states: "Recent experimental work has shown that soil surface temperatures of 23 degrees F. may cause injury." Allowing the soil to freeze before applying the mulch therefore is not safe, since considerable injury may already have occurred.

BLACK RASPBERRY CANES SHOULD BE TOPPED WHEN 24 INCHES HIGH

A N experiment to determine if there was any loss in yield and vigor of plants if black raspberry canes were not topped at the usual recommended height of 18-24 inches was carried on by the West Virginia Experiment Station.

The result was published in the proceedings of the American Society for Horticultural Science, and states that a 4-year-old Plum Farmer planting was used. Each plant was limited to four first-year canes. One of these was permitted the height of 20-24 inches before topping; the second 30-34 inches; the third 40-44 inches; and the fourth 50-54 inches. All were topped back to 18 inches in height.

Decreased Lateral Growth When Not Topped at Right Time

There was a significant decrease in lateral growth when the firstyear canes were not topped as soon as they reached the 20-24 inch height, according to the report of the experiment. The decrease was greater the longer the canes were permitted to grow before they were topped.

Yields were decreased approximately 20% when topping was delayed 10-14 days and more than 40% were delayed 20-24 days, and 67% were delayed 30-34 days.

THE STRAWBERRY SEASON AT ALMA CENTER

Alma Center is one of the important strawberry shipping sections of Wisconsin. A letter from Earl Randles, president of the Alma Center Strawberry Growers Association states that the crop this year was poor. The Beaver, Premier and Catskill were the leading varieties.

New plantings for this year are just fair.

No trouble was experienced from strawberry weevil, but leaf-rollers did some damage.

Some growers had good yields this year, but the average from both old and new beds was only about 100 cases per acre.

EARLY HISTORY OF RASPBERRIES

R^{ED} raspberries were found native in America and wild berries in the early days supplied the demand. As the population increased, however, the need for improvement arose. European varieties were introduced. They were also used in crossing with native varieties.

The Cuthbert variety, still popular, was discovered in 1855. Marlboro was introduced in 1884.

Black Raspberries

More than 100 years ago, in 1832 the first named American black raspberry, Ohio Everbearing, appeared. Until 1850 growers tried to propagate it without success. In that year the tip-layering method was discovered and it was a noteworthy contribution.

The Cumberland variety, still popular, was introduced in 1896.

The Purple Raspberry

The purple raspberry is a hybrid of black and red raspberries. The variety Philadelphia was found in 1840 and was the leading variety until 1880. Columbian was originated in 1888. Introduced in 1891 it still ranks high.





Our Summer Meeting

THE annual summer meeting of the Wisconsin Beekeepers Association at Honey Acres, Menomonee Falls, July 25th, was one of the most pleasant and well attended meetings ever held. This magazine goes to press the day before the meeting at Eau Claire Lakes so we cannot report on that until the next issue. We feel confident it will be as successful as the one in the eastern part of the state.

The forenoon was spent in visiting and inspecting the well equipped honey plant which Mr. Diehnelt and Son operate. The Woman's Auxiliary, under the direction of Mrs. Cornelius Meyer, Appleton, president, prepared the pot luck dinner and with plenty of extra food provided by the Diehnelts, it proved abundant and delicious. The honey sweetened lemonade was especially appreciated.

Mrs. Harriett Grace of the American Honey Institute started off the program by telling of the many ways in which honey is becoming recognized throughout the nation. The Institute is doing a fine job.

Information Hour

The information hour was one of the features of the program. Experts who answered the questions were: Mr. L. G. Figge of Milwaukee; Edward Hassinger, Greenville; Mr. A. I. Bennett of Medina; Cornelius Meyer, Appleton; Mr. Michels of Plain; Joe Mills of Schultz Honey Farms, Ripon; and Mr. Chas. Zellner of Green Bay.

The first question was, "How is the honey crop in your section?" From the answers, Wisconsin will not have a normal crop this year. From only two sections was a normal crop of 100 lb. average or above reported. The other averages were from 25 to 50 lbs. above winter requirements.

A scale colony in the Diehnelt Apiary had gained less than 30 lbs. during the month of July.

A source of complaint was the poor results from packages this year. A showing of hands by those in attendance indicated that about half of the beekeepers receiving packages had poor luck, due to supersedure and generally poor quality stock, while the other half was satisfied.

There was some difference of opinion on the subject of requeening. Some of the "experts" advocated killing all poor queens now and allowing the colony to requeen itself. Others felt that it would be better to buy a good queen if such could be obtained, introduce it to a nucleus, and then requeen the colony after the new queen is laying, using the spray method.

Cellar wintering versus outdoor wintering was discussed. Some had wintered in the cellar but have changed to outdoors, and liked it better. Opinions differed on the subject.

Drifting is a problem to be dealt with when moving bees. If one moves to a new yard and sets the colonies in a straight row, many drift to the end colonies, so the opinion was that the colonies should be scattered.

The discussion of extractors indicated the radial extractor is meeting with considerable approval, though some were still satisfied with the four-frame reversible, operated by a motor.

On the question, "Shall I confine my queen to one hive body now in order to limit brood rearing so there will not be a large colony to eat up honey this fall and winter?" the answer was "No." The experts brought out the fact that we need a large colony of young bees for successful wintering, and that anyhow a vigorous queen might fill one hive body and still produce a normal colony.

Dr. Farrar Speaks On New Findings

Dr. C. L. Farrar gave an excellent talk on the work of the Central States Bee Laboratory. He pointed out the need for pollen for spring brood rearing and that when pollen was not available, brood rearing slowed down or ceased. To avoid this a mixture of pollen and soybean flour fed to the bees successfully keeps up brood rearing.

Nosema is being studied intensively, and the experiments prove conclusively that not only do the bees die at an early age from the disease, but that queens when they become infected, live only a short time.

Dr. Root Speaks

Everyone was pleased to again see Mr. E. R. Root who received the honorary degree of "Doctor" from Ohio University this spring. He mentioned that a new issue of ABC and XYZ in Beekeeping will come off the press this fall.

The meeting adjourned with a rising vote of thanks to the Diehnelts for their hospitality and the food provided.

DO NOT PRODUCE THIN HONEY

HIN honey may ferment either before or after granulation. Every beekeeper is concerned about thin honey being put on the market because it injures the reputation of all honey in the mind of the consumer. It is the duty of every beekeeper to counsel with his neighbor who may produce thin honey and help him solve the problem of why his honey is thin.

Reasons for Thin Honey

Some reasons for honey being thin are:

(1) Hive entrance may be too small. Bees must evaporate moisture from the honey, and to do this they must be able to get plenty of air. A colony with only winter entrance may never be able to ripen its honey.

(2) A weak colony may not be able to fully ripen supers of honey. If a strong colony should produce one or more supers of honey and then swarm, the remaining bees might neglect the honey and never ripen it. If a colony with honey is suddenly weakened it may be best to place the honey on strong colonies.

(3) Never allow honey to stand in a damp place unprotected. Honey absorbs moisture rapidly. Honey allowed to stand uncovered in a damp honey house may absorb enough moisture to become thin.

What causes have you found for thin honey? If you have had any experience or observed other reasons, write this magazine. Every beekeeper is affected by thin honey being put on the market, so let's all join together to solve the problem.

A consultant is a man who knows less about your business than you do and gets paid more for telling you how to run it than you could possibly make out of it even if you ran it right instead of the way he told you to.

EXTRACTOR FOR SALE 40-frame Simplicity Extractor for sale. Also hive bodies. Write Howard Hicks, Phillips, Wis.

NOSEMA IN JULY

HERE and there beekeepers report crawling bees in front of or near the hives in July. Dr. C. L. Farrar, Central States Bee Laboratory, observed this condition in some vards, and upon examination found the bees loaded with Nosema spores

We have observed too that altogether too high a percentage of colonies in some vards, have a smaller population than the amount of brood they had a month or more ago would warrant.

That condition indicates the adult bees must have died off faster than the young bees emerged. Most bekeepers are observing this condition. In fact, it has often been present, though we haven't always observed it.

There are many things we don't know about Nosema, but the important thing is that we now have our scientists going after the problem. We now believe that Nosema causes the most serious loss in honev production of any disease. What we really need is one or more men devoting their entire time to solving the problem. It is really that important.

SUGAR FOR FEEDING BEES TO BE HANDLED BY DIS-TRICT OFFICE OF OPA

HENCEFORTH your request for sugar for feeding your bees must be sent to your district office of the OPA.

There are three district offices in Wisconsin-at 161 W. Wisconsin Avenue, Milwaukee; at La Crosse; and at Green Bay.

We have been informed that all the files formerly in the county office have been sent to the district office having jurisdiction of that county.

Sugar permits will now have to be handled largely by correspondence. If you do not know the address of your district office or in what district you are located, write your county OPA office for information. Then contact your district office in plenty of time.

OBSERVATIONS AMONG WISCONSIN BEES

John F. Long

PACKAGE bees shipped in Wisconsin this year are again proving very disappointing. Many beekeepers declare that they are through with packages, and looking for ways of wintering nuclei, Here are a few examples. See if you can blame them. 200 packages were installed in March and about 16 colonies were left by June 20th. Another 200 were placed on combs in April and 77 were capable of producing honey by July 10th. 25 packages were placed on combs in April and 18 AFB was found by June 20th. 18 packages were placed in an outyard in April and by July 1st, 18 AFB was found. Old colonies in these vards showed little if any AFB infection.

Examination of dead bees in cages where packaged bees have proved to be failures have shown heavy nosema infection. Perhaps this may be the cause of most of our package trouble.

Certain lines of package stock, however, are showing up better than ever this year. It will pay any beekeeper to find out who the producers of this package stock are, and order queens and packages early. Wisconsin needs more of this kind of stock.

Very little swarming has been reported or observed so far this year. The honey crop seems to be very spotted, with large yards showing just as good a crop as the smaller ones. One large yard of over 250 colonies had a fair to good crop of honey; another of 97 colonies had at least 10,000 pounds in the yard. Other yards, only a short distance away, seem to have very little, if any, honey.

Never were the beekeepers more uncertain as to what had produced the honey. In yards reporting a good basswood flow, there was little taste of basswood honey. Examination of yellow clover shows quite a heavy seed production, alfalfa a very heavy seed production, and white sweet clover, white or Dutch, and alsike almost devoid of seed.

HONEY PRICE CEILINGS REMAIN THE SAME

Producer's Price Ceiling on Packaged Honey

THERE has been no change in the price ceiling producers may charge for their honey during this year.

The wholesale price of bulk honey in 60 lb. cans is still 12 cents per pound. This is the price which may be paid by packers or large users.

The producer may sell to a consumer direct at a price of 15 cents per pound for bulk honey in 60 lb. cans. Bulk honey is any container of more than 15 lbs.

Producer's Ceiling on Packaged Honey

Size container	Price per case of 12 To retail store	Price per container Retail to consumer
8 oz.	\$1.64	.15
16 oz.	2.93	.28
2 lbs.	5.43	.52
3 lbs.	7.81	.75
5 lbs.	Price per case of 6 \$ 5.80	Price Each \$1.11
10 lbs.	10.99	2.12

IF YOU RESELL HONEY N extracted honey in 60 pound cans which a beekeeper buys and resells in 60 pounds cans, the following maximum prices, f.o.b. his local shipping point apply. These ceiling prices do not apply to honey which he has produced. QUANTITY PRICES OF SALE: IN CENTS 12,000 pounds or over _____121/2 Less than 12,000 pounds but pot heas than 1 500 pounds 131/2

not less than 1,500 pounds__13¹/₂ Less than 1,500 pounds but

not less than 300 pounds____14 $\frac{1}{2}$ Less than 300 pounds _____15 $\frac{1}{2}$

To the above prices can be added ^{1/2} cent per pound if the can is furnished; the freight charges from the producer's local shipping point to him providing the invoice states the charge and the producer's local shipping point and not to exceed 1 cent per pound if liquefied, strained and repacked in a new or thoroughly cleaned 60 pound can providing there is stated on the invoice "Heated and strained and repacked in the United States" and providing there is marked on the container "Repacked in the United States."

OUR MOST NORTHERN BEEKEEPERS ASSOCIATION ONE of the strongest beekeepers associations in Wisconsin is also the farthest north. The Douglas County Beekeepers Association has a membership of 48. The organization holds regular meetings and the members are enthusiastic about the possibilities of beekeeping in the white clover region of northern Wisconsin.

The editor recently met with the organization in Superior with an attendance of more than 50. This was followed the next day by a field meeting at the Strand Apiary in Poplar. The Strand farm adjoins the home farm of Major Bong, famous aviator.

Officers of the Association are: president, N. R. Chamberlin, Poplar; vice-president, Elvin M. Braman, Superior; secretary-treasurer, Carl Peak,Poplar.

POLLEN TRAPS

Pollen traps made from specifications by Central States Bee Laboratory. Sizes, 8 frame, 10 frame, and Modified Dadant. Price \$2.50 postpaid. George De-Koeyer, 815 West Street, Baraboo, Wis.



HONEY WANTED

Cash paid for cars and less than cars comb and extracted honey. Mail sample and best price. C. W. Aeppler Company, Oconomowoc, Wisconsin.

HONEY CANS

We can give you immediate delivery on 60# cans.

Order your glass supply for the new crop now, as it takes from 3 to 6 months to receive same from the factory. We now have a good supply of 5#, 2#, 1# and ½# on hand, and can make immediate shipment.

To insure prompt service, order your Association labels now for your new crop of honey.

Write for Complete Price List.

Order Through Your State Beekeepers Association

HONEY ACRES Menomonee Falls, Wis.

BUY YOUR CONTAINERS from **OUR COMPLETE STOCK Utility Glass Jars:** Made according to government specifications of clear flint glass with white coated metal caps. 10# jars—case of 4..... 45c 5# jars—case of 6..... 42c 2# jars—case of 12..... 42c 1# jars-case of 12_____ 38c 1/2 # jars-case of 48____\$1.28 Sixty Pound Cans: Well seamed and soldered, equipped with 2-1/2" wax board lined caps. Box of two 60# cans____\$1.00 60# cans in bulk, each_____ .32 60# cans per carton of 24__ 7.44 **Comb Honey Containers:** Comb honey shipping cases, window cartons and cellophane bag and flat style wrappers for all size sections. Write for prices. Label samples and prices mailed on request. We still have a complete line of sections, foundation and wooden beeware. August Lotz Company Boyd, Wisconsin



HORTICULTURE AT THE STATE FAIR

THE Wisconsin State Fair, held this year August 19-27, will have considerable interest for visiting horticulturists and beekeepers.

The farm crops and fruit exhibits are being combined in one large exhibit this year. The entire Horticulture building, approximately 20,000 square feet, will be devoted to exhibits showing what is being done in horticulture and agronomy in Wisconsin.

Superintendent E. L. Chambers announces that the regular exhibit of apples will be held. The Wisconsin apple display has always been one of the largest of any Fair in the country.

The Wisconsin Gladiolus Society will stage its 15th annual show in the Horticulture building, August 19-21. There will be two succeeding gladiolus shows with exhibits every day of the Fair.

The Wisconsin Dahlia Society will cooperate in staging a beautiful dahlia show.

Special arrangements have been made with the Wisconsin Garden Club Federation to show artistic arrangements and amateur flower exhibits.

Bee and Honey Exhibit

Superintendent James Gwin announces that all the space in the Bee and Honey building has been taken by exhibitors. We have never seen at any state fair we have visited a showing equal to the bee and honey exhibit at the Wisconsin State Fair.

Inventor-This new machine of mine will do the work of 10 men.

Friend (after helping with the spring house cleaning) — My wife ought to have married it.



WE THANK YOU

Just a note to congratulate you upon the last issue of the Wisconsin Horticulture. I enjoyed reading it from cover to cover. I marvel at the amount of stuff you find to publish in the Wisconsin Horticulture, all of which is good.

A. F. Vierheller, Secretary Maryland State Horticultural Society

WISCONSIN APPLE RECIPE CONTEST

Sponsored by State Radio Stations WHA-WLBL and Wisconsin Apple Institute.

Limited to Wisconsin residents.

News of the contest will be given daily on the Homemakers' Hour, WHA (970 kc) and WLBL (930 kc).

Contest begins Wednesday, September 6, closes Saturday, September 16 (midnight).

The contest is open to everyone in the state of Wisconsin.

65 Money Prizes

First prize in each class—\$25.00 War Bond.

Second prize in each class— \$10.00 in War Stamps.

Third prize in each class—\$5.00 in War Stamps.

50 prizes of \$1.00 each for the 50 next best recipes, in the opinion of the judges.

Rules of the Contest

1. Type or write in ink on only one side of paper.

2. Type or print on the back of the paper, your name, address and county. Indicate by **number the** class you are entering (see bottom of page).

3. The classes are as follows: (A contestant can compete in any or all five classes but can win a prize in only one.)

Classes

(Submit recipe, and, if possible, kind of Wisconsin apple used.)

Class 1 Apple pie.

Class 2. Apple jellies, preserves and marmalades.

Class 3. Apple desserts, other than pie.

Class 4. Salad containing apples.

Class 5. Miscellaneous apple recipes.

Judging

In judging, originality and appeal will be stressed.

Send your entry to the Wisconsin Apple Recipe Contest, WHA Radio Station, Madison, Wis., and WLBL, Stevens Point, Wis.

HICANS ARE SHY BEARERS AND SUITABLE FOR ORNA-MENTAL TREES ONLY

HICANS, a cross between hickory nuts and pecans, are shy bearers as are the Butterick pecan and not suitable for nut production, according to Mr. C. A. Reed, Nut Expert of the U. S. Department of Agriculture, Washington.

Mr. Reed has advised nut nurseries to this effect, and many of them are now listing them only as trees for ornamental use.

The Thomas black walnut is going over very well, according to nut nurseries, and outsells all others ten to one. It is hardy and a dependable source of high quality black walnuts.

APPLE SLOGAN CONTEST

Sponsored by Wisconsin Apple Institute, Wisconsin Agriculturist and Farmer, and the Wisconsin State Fair

A Wisconsin apple slogan contest to stimulate interest in Wisconsin apples and promote their use will be conducted as a joint project between the Wisconsin Apple Institute, the Wisconsin Agriculturist and Farmer, and the Wisconsin State Fair. You are eligible to take part.

Prizes, supplied by the Wisconsin Apple Institute, are: 1st prize, a \$50 war bond. Two additional \$25 war bonds for the next two winners as honorable mention.

Contest Rules

(1) Time of contest. To conclude August 23 at the State Fair. Contest winners to be announced and introduced in front of the grandstand, August 27.

(2) No age limits; open to young and old alike.

(3) Length of slogan not to exceed eight words and must include the two words, Wisconsin apples.

(4) Number of slogans. Each contestant is entitled to submit only one slogan.

(5) Slogan should be accompanied by contestant's name, address, and age if under 21.

(6) Winners to receive: (a) war bond from the Apple Institute, (b) transportation to the fair from the Wisconsin Agriculturist and Farmer, (c) entertainment at fair by Wisconsin State Fair.

(7) Decisions of judges shall be final.

(8) Slogans shall be judged by a committee of three. One representative each from Wisconsin Agricultuist and Farmer, Apple Institute and Wisconsin State Fair.

Sample Slogans

"Wisconsin apples taste better." "Wisconsin apples have flavor."

Send slogans either to Wisconsin Agriculturist and Farmer, Racine, Wis., or to this office.

HARDINESS IN PLANT FAMILIES

F. L. Skinner, Dropmore, Manitoba

HARDINESS in plants is one of those things that is rather hard to define—there being so many factors that determine the amount of cold a plant can stand without injury.

In some plant families the plant must start the winter with a good supply of moisture at the roots if it is to survive severe cold. In others again, dry conditions in autumn are essential if the plant is to survive the winter.

At one time it was thought that plants from the more northerly latitudes were the likeliest to survive our severe winters; but experiments show that this is not an infallible rule.

Here at Dropmore, just north of latitude 51, two of our hardiest shrubs are Lilacs that were grown from seed collected by E. H. Wilson on the Diamond Mountains of Korea, which lie in latitude 38, or about the same latitude as the southernmost part of Italy.

As a rule plants from near the sea are not hardy with us, but pears grown from seed collected by Wilson at Pukchin, Korea, which is on the sea coast, at latitude 40, are hardy and bearing fruit with us, while those grown from seed collected on the mountains at the north end of the main island of Japan have always killed to the snow line and finally were discarded.

It seems, therefore, that no hard and fast rule can be laid down whereby one can definitely say that a plant will be hardy in a given location until it has been through a thorough trial by actually planting specimens secured from various geographical locations in which the plant is native.

From North and South Dakota Horticulture.

SPRAY FOR POISON IVY NOW

POISON ivy is a very serious pest. It is far too abundant in Wisconsin. It is found in many orchards and parks.

The DuPont Weed Killer does an effective job of controlling poison ivy. It has been listed in the advertising of the F. R. Gifford Company, Madison, in this magazine. It should be sprayed onto the leaves of the poison ivy during warm weather, so now is a good time. Orchardists should not take a chance on having their help poisoned during harvest and other operations.

On a recent visit to a state park we saw many patches of poison ivy in places where it would be easy for children to become severely poisoned. In one park we saw a large group of young people holding a picnic in a picnic area. Between this open area and the highway was a large patch of poison ivy. If these young people had walked through the ivy their shoes would have become contaminated and have been poisonous for some time afterwards.

> THE 15th ANNUAL WISCONSIN GLADIOLUS SHOW Auspices WISCONSIN GLADIOLUS SOCIETY at the WISCONSIN

STATE FAIR Horticulture Building

AUGUST 19-20-21

All members of the Wisconsin Gladiolus Society will be admitted to the Fair Free.

He Knew

Hotel Guest: "Is there an Encyclopedia Britannica in the hotel?"

Clerk (with polite attention and regret): "There is not, sir, but what is it you wish to know?"



OFFICERS Harold Janes, Whitewater, President David Puerner, Milwaukee, Vice-President H. J. Rahmlow, Madison, Cor. Secretary Otto Kapschitzke, Rec. Sec.-Treas. 1710 Illinois Ave., Sheboygan

1944 GLADIOLUS SHOW AND BANQUET

By Harold Janes, President

A LL indications are that we will have one of the most successful and best attended gladiolus shows ever staged by the Wisconsin Gladiolus Society. Our annual banquet and get-together will be held at the Medford Hotel on Saturday, August 19, at 7:15 p.m.

As it seemed a good thing to make the Medford the headquarters of the Society during the show, I contacted some fifteen out-of-state prospective exhibitors and visitors. I already have requests for hotel reservations from seven. Then six from Waukegan, Illinois, and four from Menominee, Michigan, requested banquet reservations. It is estimated that there will be from 40 to 50 at the banquet.

Mr. David Puerner, 811 Majestic Bldg., Milwaukee, is chairman of the banquet committee. All members who wish to attend are requested to notify him at once so we can give the hotel an estimate of guests. The menu is as follows:

> Shrimp Cocktail, Tomato Juice or Soup Relish, Rolls and Butter Roast Beef Parsley Boiled Potatoes Vegetable Salad Coffee Dessert Price \$1.50

Bring Your Glads

Every member is especially urged to bring an exhibit if only a few spikes. The seedling class this year should indeed be a battle royal.

Let's put our Society on the map at Milwaukee, August 19-20-21. DIRECTORS Frank Blood, Stevens Point Dr. F. Graff, Freeport, III. Fred Hagedorn, Sheboygan J. R. Hopkins, Deerfield, III. Walter C. Krueger, Oconomowoc

GLAD OBSERVATIONS

REPORTS from gladiolus growers indicate that this is an excellent year for growing gladiolus. While the season was late, weather conditions were favorable during June and July and the blooming season was normal.

Walter Krueger reports cutting his first flowers on Friday, July 14.

Paul Hoppe of Madison cut his first glads on July 2nd. He has a seedling that bloomed this year in 44 days from the time of planting.

Root Rot Prevalent

Mr. Hoppe reports that in the Madison area where there was considerable rain this spring, much root rot has been found. The plants turn yellow very rapidly and on pulling them up the roots are found to be rotted. The causative organism is not yet known, but may be fusarium or other rot organism. High moisture is no doubt the contributing factor. Of course the only thing to do is to pull up and destroy the plants,

Mr. Hoppe also reports that thrips became numerous during early July and spraying was necessary. It is certainly a mystery where these thrips come from. The bulbs were treated and obviously clean when planted.

Treatment With Ceresan Satisfactory

Mr. Roger Russell, Madison gladiolus grower, reports that he soaked his bulbs this spring for onehalf hour in new improved Ceresan. A few of the bulbs were stored, awaiting planting, for a period of three weeks. In spite of this the germination was still good. E. A. Lins, Spring Green Walter F. Miller, Sun Prairie Dr. Geo. Scheer, Sheboygan Leland Shaw, Milton Noel Thompson, Madison

Mr. Russell says he planted his bulbs this year two weeks later than last year, but that his first blooms were five days earlier. He cut his first flowers this year on July 16th. Growth is excellent due to plenty of rain. He made the observation that if we have *plenty of water* we can grow good glads.

Mr. Russell is using a 5-horse power Shaw tractor for his one acre of gladiolus. He says he'll never garden again without a tractor. We heartily agree.

The first bulb to bloom for Mr. Russell last year was Mount Index. The first to bloom this year was General MacArthur, a new ruffled pink variety.

Madison Bank to Publish Gladiolus Bulletin

The Madison Gladiolus Society will again hold its show in the First National Bank, Madison, on August 7-8. The bank has agreed to publish a bulletin to be entitled "Gladiolus—Their C are and Culture." These bulletins will be passed out to visitors. This is excellent cooperation between growers and the bank.

Glads Stand Rough Treatment

From the 1944 year book of the Calgary Gladiolus Society we read that one of their growers inadvertently left a spike of Greta Garbo in the shade between two rows of glads. The spike was cut at 5 p.m., but was not discovered until 2 p.m. the following day. Spike of florets were limp, but revived when placed in cold water. This spike was entered in the Calgary show and took first place in its color class. Evidently Greta Garbo can take it.

Glads Planted Between **Rows of Beans**

In the same bulletin we read of an experiment in which 100 bulbs were planted in the center of a number of rows of other glads; another lot between two rows of dwarf garden peas and another between two rows of bush beans.

The bulbs planted between the rows of beans grew taller, and the bulbs were larger when dug. The conclusion was that the nitrogen activity of the beans made the difference

Check rows were planted between rows of other gladiolus. The bulbs in the check rows were larger than the bulbs grown between the peas, indicating that the peas were detrimental to the gladiolus. The glads between the bean rows were larger than either the check or the pea rows. Since peas are also legumes. this is difficult to understand. Perhaps the moisture conditions were different. We feel that there is something here that has not been explained. It is being tested again this year and we will watch for the results with interest.

GLADIOLUS SHOWS

August 12-13, Northern Regional Illinois Gladiolus Society, Garfield Park Conservatory, Chicago, Illinois.

August 17-19. Illinois Gladiolus Society State Show, Momence Gladiolus Festival, Momence, Illinois.

August 19-20. Ohio State Gladiolus Society (State Show), M. O'Neil Co. Auditorium, Akron, Ohio

August 20-21. Minnesota Gladiolus Society, First National Bank Building, St. Paul, Minn.

MADISON CHAPTER **GLADIOLUS SHOW AUGUST 14-15**

The annual show of the Madison Chapter of the Wisconsin Gladiolus Society will be held in the lobby of the First National Bank on the square at Madison, on August 14-15. This show has been outstanding for its artistic arrangements of gladiolus, as well as excellent perfection of bloom classes.

WAUSAU GLADIOLUS SHOW

Mr. Archie Spatz of Wausau reports that a gladiolus show will be held at the Marathon County Fair in Wausau beginning Sunday, August 13. There will be special classes for novice, artistic arrangements and for professionals. Open classes will include all the leading colors in three sizes similar to the premium schedule adopted by the state society. Premiums in open classes are 1st, \$1; 2nd, 50c; 3rd, ribbon.

Judging begins at 12:30 p. m. August 13th. Members of the Wisconsin Gladiolus Society are invited to exhibit.

SHEBOYGAN CHAPTER **GLADIOLUS SHOW** · Kohler Recreational Hall **AUGUST 12-13**

The Sheboygan Chapter of the Wisconsin Gladiolus Society will hold its annual show in the Kohler Recreational Hall in the Village of Kohler on August 12-13. An excellent show is in prospect as the season is early and there should be a great many blooms at that time. This will be one of the outstanding shows.

Walter Miller, Sun Prairie, and E. A. Lins, Spring Green, will be the judges.

COMBATING **GLADIOLUS DISEASE Harold Janes**

THE greatest problem confront-I ing gladiolus growers today is that of disease. A few years ago thrips threatened the industry. Now by systematic use of tartar emetic they at least can be controlled. Hard rot and other fungus diseases are making inroads in stocks of growers and already Picardy is on the way out. In the past we have simply considered bulb disease as a necessary evil but if we are to keep the gladiolus in its rightful place in the floral world, we must adopt two courses, and quickly.

I am convinced that both bulbs and bulblets, but particularly the spray program to combat fungus growth. We can no longer be satisfied with dips only. Delbetar has not been recommended. I am trying it out as it is claimed to be a control for thrips. However, at this time my first choice is Bordeaux mixture. Some may hesitate to use it on account of burning foliage but I have found the standard mixture of 4 lbs. Bluestone, 4 lbs. lime (well slaked) and 50 gals. water if used after sunset, will not injure even bulblet leaves. The State Department of Agriculture Bulletin on Diseases of Plants and Shrubs gives full directions for its use, as well as a treatise on bulb diseases, written by our former member, the late Noel Thompson.

Secondly, the hybridizer has a responsibility here also, for it is a proven fact that certain varieties are disease resistant and the careful selection of these for use in crossing will do much to insure a healthy strain of gladiolus in the future.

CLASS FOR AMATEURS AT GLAD SHOW

The 1944 Wisconsin Gladiolus Society will have one section of color classes for amateurs, as an experiment, for the coming show at the State Fair Park. If this section is supported by amateurs and not a bused by professionals attempting to obtain amateur status it should be an interesting section.

WISCONSIN GLADIOLUS SEEDLING SHOW Walter Miller's Gardens Sun Prairie SUNDAY, AUGUST 27

All gladiolus growers are invited to attend the Wisconsin Gladiolus Society's seedling show at the Walter Miller Gardens, Sun Prairie, Sunday, August 27th. Bring your luncheon. Coffee will be served. New introductions may also be shown. The meeting is for the purpose of judging and rating new seedlings in bloom at that time and to observe new introductions. It will be in the nature of a picnic.

There will be many flowers in latter, should have a systematicbloom in Mr. Miller's gardens.

GARDEN GLEANINGS .

FALL IS THE BEST TIME TO MAKE NEW LAWNS

Six Pointers to Success By The Master Gardener

A beautiful lawn isn't a matter of luck but largely one of getting a good start and proper care.

Fall is the best time to make new lawns for during the moderate fall weather, grass seed germinates quickly and makes vigorous growth when supplied with sufficient plant food. Then, too, few weed seeds germinate in the fall, thus permitting the lawn to become established without their interference.

Follow these six steps in making a new lawn:

1. Spade or plow the area. Thoroughly pulverize.

2. Apply by hand or with a plant food spreader, four pounds of complete balanced plant food per 100 square feet of soil surface.

3. Work the plant food into the top few inches of soil.

4. Sow good grass seed, at the rate of 4 to 5 lbs. per 1,000 square feet. To secure even distribution, apply one-half of the seed cross-wise, the other half lengthwise.

5. Roll the lawn to imbed seed in the soil. If a roller is not available, use a tamper or wide board, on a small area.

6. Water thoroughly, using a fine spray. Keep moist by daily sprinklings until grass is established; then soak to a depth of five or six inches once or twice weekly.

TRANSPLANT ORIENTAL POPPIES NOW

The dormant period for Ornamental poppies is in midsummer when they disappear for a month or two. Now is a good time to transplant them or divide them.

A new batch may be started now from root cuttings. Dig up the largest root and cut into two inch lengths. Set them right side up and cover with about one inch of light soil. Mark the spot well so they won't be hoed out before they show up.

CRAB GRASS

MANY methods for eradicating crab grass from the lawn have been advocated. Most of them have failed. The only one that has survived is the practical one of keeping the crab grass clipped so that it will not produce seed for next year's crop. Crab grass is an annual. The old plants die anyhow in the fall. There will surely be another crop next year if seeds have been produced this year.

If we can prevent seeding year after year we can lick this troublesome lawn pest. Then, too, we must fertilize and water our lawn well so that the grass will grow at its best and crowd out the crab grass. Weeds are most often the *result* of a poor lawn rather than the cause of it.

HOME-MADE DUSTERS WON'T DO THE JOB

WE HAVE consistently recommended the duster for the control of diseases and insects of flowers and vegetables for crops which do not grow taller than a person so the job can be done thoroughly. Fruit growers find it necessary to so thoroughly cover the leaves of fruit trees with fungicides and insecticides that not a particle of leaf is left uncovered. Otherwise the spores of diseases will still find an opportunity to grow and insects are not always killed. Then, too, aphids are usually found on the lower side of the leaf so the dust must be applied so as to cover the lower side as well as the upper.

For these reasons a home-made duster, whether it is a cheesecloth bag or a can with holes punched in the bottom simply won't do the job. To shake dust on a plant will not provide thorough coverage and then of course the lower sides of the leaves are not covered at all.

Buy a good hand duster. They do not wear out quickly; in fact, will last for many years. It is a good investment.

GARDEN QUESTIONS Boysenberries

Question: I would like to grow the Boysenberry. Will it do well in Wisconsin?

Answer: We have seen them tried by quite a few gardeners, but never with success. Even though the plants were well covered with straw or hay in the fall the canes, which often grow 8 ft. long, were injured during the winter and did not produce well the next summer.

Hardy Pecan

Question: I would like to grow a hardy pecan tree. What variety will do well in Wisconsin?

Answer: Pecans can be grown well only in states south of Wisconsin. Those varieties which are considered hardy do not have the quality of southern varieties and we would not like to recommend any variety for this state. That applies also to crosses between pecans and hardy nuts such as hickory nuts. One of these called hican is being grown, but it does not bear nuts well as is often the case with hybrids.

Canker Worms

Question: Our shade trees were covered with green worms this spring. They ate the leaves and often when we walked under them they dropped down on us. The trees are too tall for us to spray. What can we do?

Answer: This is the canker worm and certainly was numerous in Wisconsin this spring. Remember that there will be another crop this fall. The adult is a wingless moth and will crawl up the trunks of the trees so it is advisable to apply a band of tanglefoot to catch these moths before they lay their eggs in the tops of the trees. It should be done the first part of August.

Jimmie: "Yes, why?"

Dorothy: "I told daddy he was wrong. He said he had looked you up in Bradstreet."

Dorothy: "Jimmie, your office is in State Street, isn't it, dear?"

Gardening For the Gullibles

In June two garden magazines came to our desk—both good garden magazines-but containing articles showing a wide difference of opinion. In one was an article by a gardener enthusiastic about earth worms, advocated raising them as pets because it could be proven that they are of great value to the soil. Another article in the same magazine tells of a woman who appeared before her ration board for an increased allowance of sugar because she said that her earth worms must he fed. She gave them 12 lbs. of corn meal, 12 lbs. of suet, and 12 lbs. of sugar per month. The Board granted her 9 lbs. of sugar per month for the worms.

This magazine also tells of the new bio-dynamic preparations. The experts who make these preparations are surrounded with mystery. For example, two preparations, Nos. 500 and 501 are used as sprays, but only after treating the soil with especially prepared humus. One is a specially produced and treated cow-dung concentrate which aids germination and increases root growth. It is sprayed on the soil and used as a bath.

Can You Beat This?

Another consists of powdered rock crystal which has been "activated." It is sprayed on the developing plant before it blossoms and promotes leaf and stem growth. These cannot be used, however, unless the composts have first been used. To produce the spray of cowdung it must be stirred with a willow switch until a funnel forms, then reversed and stirred in the opposite direction until a funnel forms. Do this for exactly one hour.

Fortunately, the author makes this statement which an experienced farmer said, "Oh shucks, if your ground is rich you'll have earth worms. If it's poor you won't."

Be On Guard

In the other magazine we find an article on mulching by a horticul-

turist of the New York Botanical Garden, T. H. Everett. "Just as straws show which way the wind blows, so present indicators point to a renewed interest in the practice of mulching. Indeed, it seems possible that we are to be offered mulches as the newest cure-all for our gardening troubles. They may even be propagandized until they form the basis for a new 'system' of horticulture or agriculture which will succeed soilless gardening, earth-worm farming and the recommendations of 'Plowman's Folly' as the stock-in-trade of promoters who fatten on the gullible and of the crack-pot theorists who are forever dreaming up new ways of gardening without work."

ON PLANTING IRIS

Cover Rhizomes With Soil

CONTRARY to popular notion, never set the rhizomes of iris on top of the soil like so many ducks on a pond," is the advice in an article in the bulletin of the American Iris Society for May, 1944.

That is good advice. In our cold climates if the rhizomes are exposed there is often much winter injury. The notion to plant rhizomes on top of the soil probably came from the idea that it would prevent root rot which it doesn't. The soil is, after all, a wonderful protector against cold.

Many varieties thought tender can be grown here if the rhizomes are covered with soil — one inch is enough.

Now is the time to get rid of some of those old varieties that no longer look attractive as they did years ago when they were the best. With some of the finest varieties selling at from 15 to 25 cents, a beautiful iris garden is now possible for any garden lover.

Transplanting or dividing should be done as early as possible in the season, but the month of August is still timely. If root rot has devel-

oped the clump should be dug up, the rotten portions cut away, and the good rhizome replanted. Overcrowded clumps should also be dug up and only the largest rhizomes set back about six inches apart. Varieties should not be planted closer than three feet as they will soon develop into large clumps which fill in the space.

COMMENTS ON ROSES

I am told that roses suffered badly inland last winter, but I have never seen finer roses than those grown in gardens along the Atlantic coast this season. In my own garden, the Brownell roses came into their own this year. I have never seen anything lovelier than *Copper Gold* or *Elegance*, both climbers, when they were fully open. *Anne Vanderbilt* has done itself proud this season and was among the most exquisite blooms in the Boston show.

Lily Pons, with which I have not always been satisfied, has been on its best behavior this spring, and *Pink Princess* is proving itself one of the most satisfactory of hybrid teas. The buds of this rose are just the right size for wearing in the buttonhole and its full blown flowers are charming, even though they may not equal some of the other new kinds in size or form. This variety is extremely prolific, a great point in its favor,

From Rambling Observations of a Roving Gardener in July, 1944 Horticulture (Boston).

PLACE A BAG OVER GRAPES

Question: We have only a few grape plants, and last year we had some nice clusters. However, birds picked holes in most of the grapes. Would it be practical to put a bag over the cluster?

Answer: Yes, that may be done and it is a good way to protect the fruit from insect and disease troubles as well as to keep the birds away. Ordinary paper bags may be used. Place over the cluster and pin at the two upper corners. Where you have only a few plants this would be quite advisable.

Garden Club News

By the

WISCONSIN GARDEN CLUB FEDERATION

Mrs. R. H. Sewell, President 957 No. 70th St., Wauwatosa 13

Mrs. F. E. Willard, 1st Vice-President Oakfield

Mrs. Walter Dakin, 2nd Vice-President 4110 Mandan Crescent, Madison 5

PRESIDENT'S MESSAGE

Recently a news service dispatch from London relates the return of the ballet and opera to Convent Garden. New management will reestablish the 86-year-old Royal Opera House as a center "worthy of its traditions."

It has been traditional for the Wisconsin Garden Club Federation to hold a fall convention closing with a lecture and banquet. This convention has three objectives: (1) election of officers and final reports of the year's accomplishments (2) to present an educational program (3) to close the meeting with a speaker and banquet which creates good will and a closer relationship of members, and strengthens the ambitions and morale of the organization.

The Executive Board voted to hold a convention October 6th, at the Astor Hotel in Milwaukee.

According to the Constitution, every club of 50 members or less is entitled to one delegate and if over 51, to two delegates. These delegates are elected by each club and shall present credentials signed by their local club president and secretary. They compose the Board of Managers and elect the officers for the coming year and govern the policies of the organization.

Elect your delegates! Mark the date on your calendar! Plan your means of transportation and be sure to read the entire program which

OFFICERS

Mrs. H. W. Schaefer, Recording Secretary-Treasurer 4416 Taft Road, Kenosha

H. J. Rahmlow, Corresponding Secretary 424 University Farm Pl., Madison 6



will be published in the next issue of Wisconsin Horticulture! You will want to attend!

> Sincerely, Mrs. R. H. Sewell.

LAST CALL FOR YEAR BOOKS

Mrs. H. J. Anderson, 317 West Blvd., Racine, State Program Chairman for the Federation, announces that it will soon be time to judge vear books. She has not as yet received copies of year books from all clubs. Club officers should send copies in immediately if they have not vet been sent.

The Federation Board voted last December to sponsor awards for year books. The books will be judged by the merit system. All books receiving a rating of excellent will be given ribbons and the names of the winning clubs will be cb shed in this magazine.

DISTRICT PRESIDENTS

Mrs. F. J. Fitzgerald, 649 Broad St., Menasha: Fox River Valley District Mrs. H. R. English, 1722 Chadbourne Ave., Madison 5, Madison District Mrs. O. H. Burgermeister, 2127 S. 87th St., Weat Allis 14, Milwaukee District Mrs. John West, R. 2, Manitowoc Sheboygan District Mrs. Norma Robinson, Lake Geneva, South Central District

FEDERATION BOARD MEETS IN MILWAUKEE

THE Board of Directors of the Wisconsin Garden Club Federation met in Milwaukee on July 19. It was an interesting meeting. Plans were made for the annual convention, and Mrs. C. L. Dean, Madison, presented a report of plans for highway beautification and memorial highways.

It was decided to hold the convention in the beautiful Astor Hotel, 924 E. Juneau Avenue, near Lake Michigan. It is in a quiet location and the rooms are adequate and well furnished.

The date was chosen to coincide with the district meeting of the Milwaukee District. Our meeting will be held on Friday, October 6, with a banquet and speaker in the evening. Saturday morning we may hear the reports of the work done in the Milwaukee District. In the afternoon a speaker of national reputation, Mr. Bert Howard, Berkeley, California, will give an illustrated lecture on the life of birds.

Mrs. O. H. Burgermeister, Milwaukee, is chairman of the program committee. Plans discussed include having speakers give short talks between reports of officers and committee chairmen.

Only a few rooms are available at the Astor Hotel so write early. The Knickerbocker Hotel is in the s me block and there is bus service d wntown.

WAR SERVICE 1944 CHRISTMAS PROJECT

L AST year's War Service Christmas project was a most successful undertaking. Not only did the garden clubs provide more than 6,000 glasses of jellies and jams for the servicemen in the camp hospitals at Truax Field and Camp McCoy, but several letters received and the various comments that came to our attention are proof indeed that the garden clubs did a splendid job, highly appreciated by all the boys.

It was therefore decided to again this year sponsor a "jelly and jam project" at Christmas time and a postcard was addressed to all club presidents some weeks ago advising of our plan.

Knowing the pleasure and the joy that even a small glass of jelly brought to the boys who are doing so much for all of us, your chairman is sure that each and every garden member can and will arrange to furnish at least six small 3 oz. or 4 oz. glasses or containers of jellies and jams which can easily be done as a part of this year's canning and preserving task.

Definite instructions for shipping or mailing will be furnished you at the time, but thought and planning can be given now to the matter of small glasses and containers and to the pretty and attractive wrapping and tying of each glass which meant so much to the value and effectiveness of our gift.

We did a fine job last Christmas time and knowing now how genuinely appreciative all the boys and the hospital staff were, it should be a real pleasure for each one of us to plan and participate so that this year's project will be as worthy and successful.

Mrs. Chester Thomas, Milwaukee, Chairman.

"How many people work in your packing shed?"

"With the Boss, seven."

"Six without the Boss?"

"No, without the Boss, none of 'em work."

MILWAUKEE DISTRICT MEETING, OCT. 7

Mrs. O. H. Burgermeister, president of the Milwaukee District of the Wisconsin Garden Club Federation, cordially invites all members to attend the fall meeting of the Milwaukee District on October 7th in the Astor Hotel. The session will last from 10 a.m. to 4

p.m. Luncheon will be available.

The morning will be devoted to a business meeting. After the luncheon, members will have the privilege of hearing Mr. Bert Howard of the National Audubon Society of Berkeley, California. An illustrated lecture in color of the life of the birds will be accompanied by Mr. Howard on the piano correlating the songs of the birds with music and imitations.

Each club president is asked to notify Mrs. Burgermeister of the approximate attendance of members so that proper arrangements may be made.

Mrs. Fred C. Marquardt, Publicity Chairman, Milwaukee District.

TELLING ALL ABOUT IT

Passed by the censor: "After leaving where we were before we left for here not knowing we were coming here, we couldn't tell if we would arrive here or not. Nevertheless we are here and not there. The weather here is just as it is this season, but of course, quite unlike the weather where we were before we came here. After leaving by what we came by, we had a good trip. The people here are just like they look, but don't look to be like they were where we came from."

From the Manhattan, Kas., *Mercury*.

NOMINATING COMMITTEE APPOINTED

Mrs. Roy H. Sewell has appointed the following committee for the nomination of officers for the annual convention:

Mrs. Irving Miller, 6831 Cedar St., Wauwatosa, Chairman.

Mrs. Erwin J. Wells, Oakfield, Fox River Valley District.

Mrs. O. S. Rundell, 2227 Van Hise Ave., Madison 5, Madison District.

Mrs. Herbert Peters, Port Washington, Sheboygan District.

Mrs. H. Elliot, 102 Case Street, Whitewater, South Central District.

Mrs. O. J. Reuss, 2131 N. 62nd St., Wauwatosa, Milwaukee District.

CAMBRIDGE GARDEN CLUB TO HAVE MONTHLY FLOWER EXHIBIT

SAYS the Cambridge News of June 16th: "Color came to Cambridge June 10 when the Garden club, in one of its most beautiful gestures, presented a floral exhibit in the building formerly occupied as a meat market.

"Main street, ordinarily a highway of hurry and bustle on Saturdays, stopped, looked and praised the women who arranged the beautiful array of flowers. Roses, peonies, lilies, painted daisies, iris, oriental poppy, columbine and many others were tastefully arranged to attract the eye of the passer-by.

"The exhibit will be made monthly and was decided on as a substitute for an annual flower show, Miss Mary Potter, president of the club said."

An excellent idea! Exhibit your flowers where many people can see them. It takes their minds off the many worries of today. We know of nothing needed more.

	—SAVE TREES—		
Cavity Treatment	General Landscaping	Argo	Tree Moving
Fertilizing	We are insured Lakeside 2907		Removal
Pruning	Wisconsin Tree Service		Spraying
8	2335 N. Murray Ave. Milwaukee	(

WAR SERVICE SCRAP BOOKS GREATLY APPRECIATED

T was most gratifying to hear from Mrs. John Moss, head of the Red Cross Grey Ladies at the Veterans' Hospital. Wood, Wisconsin, advising that over 200 scrap books had been received.

She commented highly on the very excellent work that had been done and stated that the books filled a great need for interesting and entertaining reading and pastime to the men in the various hospital wards.

Mrs. Moss stated that even a thousand scrap books would be none too many and asked that we keep up this good work because more patients are coming into the hospital every day.

To know that our scrap books are so well thought of and put to such good use is indeed the only reward necessary for the time and effort to make and compile them.

To all garden clubs, therefore, and to every member, let's keep up this good work and continue as an organization to supply to the hospital at Wood, Wisconsin, for the remainder of the year, all the scrap books that we can turn out.

Make use of the same select material and subject matter in accordance with instructions given in the 1944 War Service program, a copy of which was furnished each club president.

Advise when books are sent, as you have in the past, so that your chairman can keep records as accurately as possible to cover this project.

Your continued help and support in this good work is a very important part of the Federation's War Service program.

Thank you.

Mrs. Chester Thomas, Milwaukee, War Service Chairman.



War Service Planting at Camp McCoy

TN the fall of 1942 the Green Tree Garden Club adopted as its project the planting of the hospital area at Camp McCoy, Sparta, Wis.

On a cold day in December our committee took the 200 mile train trip to Sparta and arrived at the Camp in a heavy snow storm.

Colonel Robeson, the Commanding Officer, suggested two areas for planting which we looked over, ploughing through snow nearly up to our knees. The two areas selected were around the Station Hospital Headquarters building and the Red Cross building. Although the weather was unkind to us, we were able to get the lay of the land and to take the necessary measurements so that one of our members. who is a landscape architect, might draw the plans during the winter.

Many camps have been built in barren areas, but at Camp McCoy we were pleased to find numerous Jack pines and scrub oaks which in the summer months would afford patches of shade. We realized that the white hospital buildings would make a splendid background for flowering trees and shrubs. We were told, however, that the soil consisted mainly of fine sand which meant that plenty of good top soil would be needed for everything planted. This top soil and the labor for planting were generously supplied by the Camp.

In the spring of 1943 we shipped to the Camp over 350 trees and shrubs including: Elms, Maples, Willows, Ash, Flowering Crabapples, High-bush Cranberry, Lilacs, ' Honeysuckle, Mockorange. Spiraea, Caragana and others suitable for the climate and soil. Some of these we planted in the vicinity of the Headquarters building and the rest in the large enclosures on either side of the Red Cross Recreation building. Among the trees on one side of the Red Cross building we set out hammocks and chairs, a number of which were purchased

with the money donated by the Wisconsin Garden Club Federation. On the other side we planned for a recreational area and supplied such games as badminton, croquet, tetherball and horseshoe pitching.

In the fall we made another trip to the Camp to plant perennials and were delighted to find that the shrubs were growing nicely, having been well cared for during the unusually dry summer.

This spring we shipped up 300 shrubs, adding among others Rugosa roses, Hydrangeas, Ninebark and Viburnums. These were planted around the Nurses' Recreation building, the Officers' Club, the Non Coms.' Club, along the Parkway at the east entrance and by the entrance to nearly every ward, all of which are in the hospital area.

It was too early in the spring for the leaves to be out, but the tracery of the trees and shrubs, the color of the stems of the red dogwood, the yellow willows, and pale green caragana against the white walls was cheerful, while the swelling buds gave promise of future blossoms.

We have been pleased to receive many letters of appreciation and we hope that the plantings will continue to grow and flourish and gladden the hearts of those who see them.

Lois Page Cottrell.

MASTER JUDGE

The name of Mrs. Harry Wilson, 1423 West 6th Street, Racine, Wisconsin, should have been included in the list of master judges published in our May issue.

The name was omitted through an unintentional error in printing for which we are sorry.

Buy More War Bonds

EDGERTON GARDEN CLUB FLOWER SHOW

August 26-27

THE Edgerton Garden Club is planning an ambitious flower show to be held in their High School Gymnasium. The main decorative scheme will have a South American note, with gay colored awning and potted geraniums in a patio.

Members are making aprons, decorated flower pots, Ramona strings, garden gloves, and pomander balls which will be sold.

The premium schedule calls for shadow boxes, miniatures, table arrangements, special display, fruit and vegetable arrangements, artistic arrangements, decorative units, and specimen bloom. There is a special section for juniors. Writes Mrs. Eric Martin: "Sounds very ambitious doesn't it! Now if we only have flowers all will be well."

BOIL YOUR JAR RUBBERS

LTERE is a new angle on the use of present day jar rubbers. These rubbers are now made from reclaimed and synthetic rubber. Late last year complaints began to come in that they made off flavors in the products. Tests conducted by the U.S.D.A. and the State College at Amherst, Mass., indicate that pre-boiling is necessary if housewives are to avoid this rubber flavor. Here is the procedure: Scrub rubber rings in hot soapy water. Then boil 10 minutes in water and baking soda. Allow one tablespoon of baking soda to each quart of water and have one quart of water for each dozen rings. Rinse well after boiling. Be sure to start with fresh water and soda for each lot of rings.

From May 15, 1944 Horticulture-Illustrated.

This is a funny world, its wonders never cease; all "civilized" people are at war, all savages at peace.

Are You In The Know?

Yes, gardeners are in the know these days and no doubt you will score 100% on these questions. In fact, you should. Anyhow, try them out. Make an X after the correct answer and then turn to page 287 and see what your score is.

(1) My roses are covered with black spots and some leaves are beginning to turn yellow. It could have been controlled by dusting early with rotenone____ sulphur____ arsenate of lead____.

(2) My soil turns hard when dry, cracks badly, and does not grow root crops well. I should add: lots of lime____ commercial fertilizers____ manure or other organic matter____.

(3) Little green aphids cover my cabbage and broccoli plants. I can control them by dusting with sulphur____ arsenate of lead____ ro-tenone____.

(4) My tomatoes were affected with blossom end rot last summer during the hot, dry spell. I could have controlled this rot by spraying with bordeaux mixture_____ rotenone____ watering regularly and mulching____.

(5) Green worms are eating up the leaves of several plants in my garden. They could be controlled by dusting with sulphur____ bordeaux mixture____ arsenate of lead____.

(6) Soil tests show that my garden soil is somewhat high in lime. The right fertilizer to use is: wood ashes____ bone meal____ a victory garden fertilizer____.

(7) High bush blueberries will do well in Wisconsin...... Will not grow because they are not hardy and require a very acid soil......

(8) When pansies have bloomed for a month or two they become leggy. Cut them back severely and they will branch freely and bloom again____. Do not cut them because pruning will injure them____.

(9) I have a light, sandy soil which dries out quickly. I do not find any earth worms. Earth worms should be introduced to provide humus for better plant growth____.

What Is Your Score?

Manure or other organic matter should be plowed under____.

(10) My apples contain brown streaks and the skin was covered with pin holes last year. I was told it was due to the apple maggot or railroad worm. The trees should have been sprayed with lime sulphur in May and June____. They should have been sprayed with arsenate of lead in July and August____.

PLANT PESTS SEEKING TO INVADE U. S. TURN INCREAS-INGLY TO PLANE TRAVEL Condensed From A.I.F. News

A IRPLANES not only spread insecticides and fungicides over massed acreages in the endless fight against plant pests; they are becoming a major factor in the introduction of such pests.

This two-way role is revealed in the annual report of the U. S. Bureau of Entomology and Plant Quarantine. Under the routine of inspection, it lists the checking of 13,093 airplanes arriving at 23 ports of entry last year from foreign countries. (WPB reports that planes brought in critical imports last year worth nearly 6 per cent as much as the total of ocean-borne imports.)

Of the 13,093 planes, 3,219 or about 25 per cent were found to be carrying prohibited plant material, much of it from places where it is known to be the host of injurious pests. There were 681 actual interceptions of insects and plant diseases. Most of these were in plant material, carried in baggage, cargo, mail and stores. The disease organisms included sweet orange scab, which disfigures South American citrus fruits. The insects included citrus blackfly, Mexican fruitfly, West Indian fruitfly, Mediterranean fruitfly, pink bollworm and a whitefly.

In the fight against Japanese beetles alone, patrols examined 88,643 trucks. Checking those which were returning south empty or with empty crates and baskets, they found 4,779 live beetles which had come aboard in infested areas and were hitch-hiking southward.

Besides the agricultural plant pests listed here, the airplane inspections also intercepted "mosquitoes and other stowaways that might menace public health."

YOUNG FOLKS PREFER OWN BUSINESS

THE rising generation prefers an independent occupation or business career to working for someone else, according to a recent poll conducted among more than 100,000 high school students.

Sixty per cent of the boys and fifty-eight per cent of the girls desire independent occupations in preference to working for someone else, according to a poll conducted under the auspices of the Scholastic Institute of Student Opinion, which is sponsored by 1.320 high school newspapers. Put to 51,599 boys and to 61,115 girls, the following question was answered according to the percentages indicated:

If you could begin your career in any of the following, and obtain the same income at the start, which would you choose?

1. Government or public service: Boys, 16.6 per cent. Girls, 13 per cent.

2. Working for a large business or industrial corporation: Boys, 16.9 per cent. Girls, 19 per cent.

3. Working for a small business or industry: Boys, 6.5 per cent. Girls, 10 per cent.

4. Owning or managing their own business: Boys, 26.2 per cent. Girls, 11 per cent.

5. A profession, such as medicine, law, teaching or nursing: Boys, 21.7 per cent. Girls, 45 per cent.

6. Farming or some branch of agriculture: Boys, 12.1 per cent. Girls, 2 per cent.

Condensed from May 15 American Nurseryman.

COMMENTS ON IRIS VARIETIES

TN THE May issue of the bulletin of the American Iris Society, Kenneth D. Smith publishes the "unofficial iris symposium" for 1944. There were 105 judges participating. The results will be of interest here because it shows the trend in variety popularity.

The numbers following the names indicate first, the year of introduction, and second, their ranking in the 1943 symposium. Note that there is considerable change in popularity. Some of this year's most popular varieties were ranked quite low last year as in the case of Elmohr which was in 79th place last year, but in 7th place this year.

While 100 varieties were listed, we give here only the first 25:

1. Great Lakes '38 (1)

- 2. Prairie Sunset '39 (3)
- 3. Spun Gold '40 (7)
- 4. Wabash '36 (2) 5. Daybreak '41 (38)
- 6. Ola Kala '43 (-)
- 7. Elmohr '42 (79)
- 8. Deep Velvet '39 (5)
- 9. Golden Majesty '38 (4)
- 10. Sable '38 (9)
- 11. Golden Fleece '40 (7)
- 12. Lord Dongan '40 (-)
- 13. Amigo '34 (12)
- 14. Fair Elaine '38 (11)
- 15. The Red Douglas '37 (6)
- 16. Caroline Burr '40 (22)
- 17. City of Lincoln '37 (10)
- 19. Blue Shimmer '42 (69)
- 20. Brown Thrasher '41 (-)
- 21. Tishomingo '42 (—)
- 22. Indiana Night '41 (75)
- 23. Old Parchment '39 (16)
- 24. Violet Symphony '40 (52)
- 25. Captain Wells '41 (35)

Comments on Varieties

One's personal taste often has a big influence on the varieties one wishes to grow. The editor, for example, is very fond of the varieties Tiffany and Siegfried because of their unusual color. We also think that Gudrun, Sierra Blue, Shining Waters, Missouri, Black Wings, Depute Nomblot, The Red Douglas, and Jean Cayeux, to be varieties we would not like to be without.

WINNERS GARDEN CLUB SECTION NATIONAL PEONY SHOW Milwaukee, June 24-25, 1944

Tables

Fifth (wood) Wedding Anniversary: Exhibited by Wauwatosa Garden Club by Mrs. Roy H. Sewell. Blue ribbon (first).

Terrace Luncheon: Exhibited by Hawthorn Garden Cub of Hales Corners, by Mmes. Charles Eisenberg, H. G. Harries and Karl Hinrichs. Red ribbon (second).

Terrace Tea: Exhibited by the Home Gardeners Club of West Allis, by Mrs. A. B. Suttinger. Red ribbon (second).

Terrace Buffet: Exhibited by Green Tree Garden Club of Milwaukee by Mrs. Ludington Patton. Red ribbon (second).

Oriental Table (luncheon): Exhibited by Ravenswood Garden Club of Wauwatosa by Mrs. Roy A. Brendel. Red ribbon (second).

Crystal Wedding: Exhibited by Brookdale Garden Club by Mrs. Harry Gulbrandsen and Mrs. Anthony Bernhardt. Red ribbon (second).

Graduation Dinner: Exhibited by Wauwatosa Garden Club by Mrs. E. A. St.Clair. White ribbon (third).

Military Wedding: Exhibited by Art Institute Garden Club by Mrs. Oscar Fleischer. White ribbon.

Basket arrangement of mixed flowers by Mrs. E. A. St.Clair of Wauwatosa Garden Club, red ribbon (second).

Corsages for Special Occasions

"First Prom" entered by Mrs. F. C. Marquardt for the Hawthorn Garden Club of Hales Corners. Blue ribbon (first).

"Dinner Date" entered by Mrs. F. C. Marquardt for the Whitnall Park Garden Club of Hales Corners. Red ribbon (second).

"Sweet Girl Graduate" entered by Mrs. F. C. Marquardt for the Whitnall Park Garden Club, White ribbon (third).

By Mrs. F. C. Marquardt, Publicity Chairman, Milwaukee District.

.HE EUROPEAN CORN BORER IN WISCONSIN GARDENS

By J. H. Lilly

THE European corn borer, discovered in Wisconsin in 1931, became known to many gardeners during the past two years. This is an important pest of all kinds of corn and certain precautions should be taken to help keep it in check. Its presence here does **not** mean that corn production is doomed or that home gardeners should quit planting sweet corn.

Corn borer damage is first indicated by t in y irregularly - placed feeding holes on the leaves, where the newly hatched borers do their first feeding. They later go to the tassel or upper part of the stalk, where their presence is indicated by broken tassels and masses of fine sawdust-like droppings pushed out of their feeding tunnels. Still later they attack the lower portions of the stalks and also the ears.

There are two other corn insects in this state that are often confused with the corn borer by untrained observers. One is the corn earworm, a large, dark-colored worm that feeds on the tips of the ears. The other is the common stalk borer, a large, yellowish form with a broad, dark-colored band on the front half of the body. It makes a large tunnel in the lower part of the stalk.

Corn borer control by the use of chemicals is expensive and only partially effective. In fact it is not being generally recommended in Wisconsin, and is used to only a limited extent elsewhere. Rotenonebearing dusts containing not less than 0.75 per cent rotenone are commonly used. A fixed nicotine such as Black Leaf 155, mixed with an equal quantity of talc or flour, should be equally satisfactory for victory gardens. Three to five applications of dust are made to the upper parts of the plants at fiveday intervals, beginning at the time the very first leaf injury is present.

Destroy Corn Stalks

It is important that all infested

crop residues be properly disposed of in order to prevent reinfestations. Damaged ears should be fed to poultry or stock or otherwise disposed of so as to kill the borers in them. If possible, feed up the fodder as promptly as possible after harvest. All crop residues should be plowed under cleanly before May 15 of the following year. Any stalks or stubbles left on top after plowing should be picked up and burned.

The corn borer is the subject of intensive investigation in Wisconsin and various other states. One phase of this work involves the collection of certain insect parasites which destroy the corn borer, and their introduction into new areas in which they may survive and serve as a means of natural control. The College of Agriculture, the Wisconsin Department of Agriculture, and the U.S. Department of Agriculture have cooperated in introducing some of these parasites into seven eastern and southern counties this year.

WHAT IS YOUR SCORE ON GARDENING QUESTIONS?

THE following are the correct answers to the questions found on page 285 under the title "Are you in the know?"

(1) Black spot of roses can be controlled by dusting with sulphur.

(2) Add manure or other organic matter to the hard soil.

(3) Aphids can be controlled by dusting with rotenone.

(4) Blossom end rot of tomatoes is controlled by watering regularly and mulching.

(5) Worms which eat up the leaves of plants can be controlled by dusting with arsenate of lead or other insect poison.

(6) A soil high in lime should not be given wood ashes or bone meal because they contain lime. A complete victory garden fertilizer should be used.

(7) High bush blueberries will not do well in Wisconsin because they are not hardy and require a very acid soil.

(8) Pansies become leggy and should be cut back severely so they will branch freely and bloom again.

(9) Earth worms live only where there is plenty of humus in the soil. Manure and other organic matter should be plowed under to provide good conditions for plant growth. Earth worms do not provide humus. They feed upon it.

(10) Apple trees should be sprayed with arsenate of lead in July and early August to control the apple maggot.

FLORIBUNDA ROSES

SINCE the advent of the Floribunda class of roses, a much wider use has been found for our most popular flower. Sometimes growing conditions do not permit the planting of the Hybrid Teas but Floribundas dare to tread in various and strange places.

With many of the readily available garden beds turned towards food production, the much neglected shrub borders are gaining attention and here added life and color are gained by use of Floribunda roses. Groups of three, five or more are easily placed and give a sure touch of color throughout the whole year. They follow in bloom soon after the last of the spring flowering shrubs are over and then continue indefinitely.

The different varieties of Floribundas give a wide selection in size and color. For tall needs, the Priors, Donald, red and Betty, pink, are excellent and for medium heights, Smiles, Pinocchio, Rose Elfe and Cheer give ample selection in pink while A. Grille and World's Fair do for the reds. Summer Snow and Snowbank are both grand whites.

Even difficult spots, which seem to have too much shade for normal growth, will support the Aachens, pink or white, and edging for walks and enclosures for the vegetable garden also give great opportunity for the use of these versatile roses.

By E. S. Boerner in Jackson and Perkins Rose Letter.



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