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WISCONSIN



Tuberous - rooted Begonia

September 1948

A TRIBUTE TO YOUR NURSERYMAN

During late July I made a tour through the Mid-West and visited several great nurseries and talked with several horticulturists. I wonder if there is any business a man can undertake which is so rewarding?

Not many nurserymen make considerable amounts of money. In fact. for the time and labor and worry invested, the average return is very small. They would do better working in a factory or at selling the factory's product. Yet, I imagine, that not a single nurseryman would give up his work for another job no matter how financially rewarding. They find life on a whole a rich and rewarding thing. To grow plants and to sell them so that other people may have the grace of flowers about their homes—that is a way of existence that pays off in better things than dollars. You see this clearly when you walk with them over their acres and when you talk with them later over the table. They have a calmness, a sanity, and optimism and a faith that is to be envied. After all, money is a very recent invention, comparatively, and there are those who think it is a necessary evil.

From Rambling Observations of a Roving Gardener In Horticulture

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Keep honey in a dry place. Freezing does not injure the color or flavor. Avoid damp places for storage because honey has the property of absorbing and retaining moisture. Do not put honey in the refrigerator.

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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. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Seventy-five cents of the annual dues paid by each member is for a year's subscription to Wisconsin Horticulture.

Wisconsin Apple Institute Plans Program

Will Tell Wisconsin Consumers About Our Apples

The Board of Directors of the Wisconsin Apple Institute met at Fond du Lac on July 29 and planned an apple promotion program to be managed by the Gittins Advertising Agency of Milwaukee.

About \$1500 will be spent in newspaper advertising covering the largest population centers of the State. Object of the program is to increase the over-all use of Wisconsin apples - not just one growers apples. The Board realized apple growers are faced with a decline in consumer interest in apples due to heavy competition from other fruits. In spite of a decreasing tree population in the United States, a much smaller crop than was produced 25 years ago and a larger population, we are still faced with a surplus crop whenever growing conditions are favorable.

In addition to an advertising program, the Board voted to hire a journalism student from the Department of Journalism, Wisconsin College of Agriculture with some experience in publicity writing to work in the office of the Wisconsin Horticultural Society in sending out publicity materials to newspapers and radio.

A new edition of 20,000 copies of the very popular cook book, "36 Ways To Use Wisconsin Apples" has been printed by the Institute at a cost of almost \$1000 and is available for distribution. County Agents and Home Agents will be given copies free. Institute members may buy them at \(\frac{1}{2} \) cost price.



All apple growers in Wisconsin will benefit by the program. More should contribute and join.

OBSERVATION IN PREVENTING PRE-HARVEST DROP OF APPLES

J. D. Van Geluwe, Ithaca, New York

The use of Napthalene Acetic Acid to prevent pre-harvest drop of apples was first used experimentally in New York State by Dr. M. B. Hoffman in the fall of 1939.

Fortunately for the McIntosh industry in this state, much of this work was conducted in Orange County which appears to be about the southern-most area for growing this variety. Records over a period of years indicate that more often this McIntosh crop matures during a period of higher temperatures and consistantly gives more of a drop problem.

We do not know of any one thing that can spell the difference between success or failure with hormone sprays than foliage injured by European Red Mite, and more recently in the Hudson Valley, the two spotted mite. From grower experiences, we have observed it seems almost useless to try to control pre-harvest drop in orchards where the leaves have been injured by these two insects.

The nitrogen level is, of course, important in any one orchard, and most growers are now well aware what a high nitrogen level means to his Mc-Intosh.

Nearly every grower goes through the same experience in timing, for example, a pre-harvest spray on his McIntosh. First he may clean up the apples under a few representative trees in the orchards, watching the apples that drop over a 24 hour period. Next he would shake a few limbs on other trees to see how easily good, sound apples would drop, and last, but not least, he would begin to wonder if he should spray them that day or wait.

All of these are good, sound practices, and are necessary to properly time a hormone spray. An accurate forecast of weather conditions at this time can be especially important. If the weather is to remain cool for a few days, thus slowing up maturity, and there has been little drop up until this point, one can well delay the application if high winds are not forecasted. This will then prolong the period of effectiveness of the material. On the other hand, if hot weather is predicted, it may be necessary to apply the material immediately.

A few words relative to concentrations. During the early days of hormone sprays, 10 P. P.M. was more or less established as the concentration to use. This means putting in one can

or bottle as made up and recommended by the manufacturer. More recently, due to experiments conducted, some growers have found it advantageous to increase concentrations to prolong the period of effectiveness. This is particularly true on Mc-Intosh during periods of hot weather during harvest.

-From The New York State Horticultural Society Annual Report.

COMMENTS ON CONSUMER PACKAGING

Does a consumer package pay and can you get more money for your apples than in the old type package? How much does it cost? Can you sell apples faster that way?

We are not yet ready to answer these questions. People are price conscious and want to get their money's worth. The consumer packages will not take the place of bulk packages rapidly.

The objective of consumer packaging is to get fruit to the housewife in better condition than before. If a good consumer package accomplishes that end, it has a big future. Package must afford more protection for the fruit than the type of box now being used. It has to protect the fruit from handling and damage that has taken place in the selfservice stores. It is a type of business that requires a lot of expense and an entirely new method of merchandising. We must use selected fruit. It must be free from defects and of fine quality in other respects.—From the Forum, N. Y. Horticultural Society Annual Report.

A man said: "One-half of the world does not know how the other half lives." He was never on a rural telephone line.

-Oregon Observer.

Picking Date for Apples

Apples prematurely picked are more susceptible to storage scald and other troubles, such as Jonathan Spot, Bitter Pit, and excessive shriveling. The flavor of a prematurely picked apple is substandard.

Apples picked after the optimum range of maturity are much more easily bruised, often show a higher percentage of water core, break down more rapidly, and are more susceptible to mealiness. In the Delicious variety, this is particularly important. One study found that overmature apples also are much more susceptible to lenticel decay.

There is no infallible index to determine the proper maturity of apples for picking. The season, the soils, vigor of the trees and the size of the crop on the treesall these factors have a definite bearing on whether the fruit will mature early or late. However, fairly satisfactory results on determining picking dates may be learned by studying the number of days from full bloom to harvest, especially when used with other ways of judging maturity. The United States Department of Agriculture gives the following range of days from first petal fall to probably optimum picking maturity:

The other ways of determining the proper picking date and judging the accuracy of the span from tull bloom to harvest are to judge the ease of separation of the apples from the tree, the color of the seeds, lack of a prominent starchy taste, the rate of

softening, and the ground color. When the ground color or underside of the apple turns from dark to original green, or when it turns from green to a light or yellowish green, the variety is usually ready to pick. Red strains ordinarily should be picked at about the same time as the parent strain of the variety; that is, Red Delicious apples should be picked at approximately the same time as Common Delicious. After Delicious apples have reached maturity for picking, they should be taken off the trees within ten days for test quality fruit.

Large Apples Ripen First

Large sized apples may be riper than small apples on the same tree and usually will not keep as long; it is also generally known that apples mature earlier on trees with a light load of apples and on young trees. Again, apples on the south and west sides of the tree ordinarily ripen earlier and develop more water core than those which do not have as much exposure to sunlight. When selective picking is possible, these factors should be kept in mind.

--From Research Department, Washington State Apple Commisson.

BLEND SEVERAL VARIETIES FOR BEST APPLE JUICE

When the juice of 4 or 5 stan dard varieties, especially the late maturing kind, are blended together the best apple juice is produced. Almost any combination of 4 or 5 commercial varieties available after early October are satisfactory providing they are fully ripened.

Who Causes Bruises?

The most important question in the apple industry is who causes the bruises.

The Bureau of Plant Industry in Wenatchee, Washington carried out a research project last fall to find out if growers and shippers can get together and reduce bruising.

The problem was studied in four different orchards.

It was found in some orchards pickers damage an unbelievable number of apples—averaging as high as four or five bruises per apple. The poorest picker observed had 497 bruises on 100 apples, the best picker only 17.

The poorest picker in one orchard was better than the good picker in another orchard. Here is how it averaged up:

Orchard No. 1. Good picker—407 bruises; medium picker—289 bruises; poor picker—497 bruises.

Orchard No. 2. Good picker—27 bruises; medium picker—174 bruises; poor picker—202 bruises.

Orchard No. 3. Good picker—17 bruises; medium picker—103 bruises; poor picker—84 bruises.

Orchard No. 4. Good picker—17 bruises; medium picker—40 bruises; poor picker—52 bruises.

The cost of keeping a poor picker was estimated as very high under such conditions.

Bruises Caused By Grading

In this study, bruise-free apples were dumped in routine operations in the packing house. Here is what happened to them.

One packing house caused 2,903 bruises on 100 apples. Packing house No. 2 only 195; packing house No. 3—1,866 and No. 4 only 65 bruises per 100 apples. That is a tremendous difference.

In studying this problem it was found that the greatest part of the difference must be attributed to the cleaning equipment. The short rag wiper inflicted far less bruises than the long washers. It was suspected that some of the old type of equipment is very rough on fruit.

Condensed from Apple Research Digest

Fruit Growers Supplies

PLACE YOUR ORDERS NOW FOR PACKING HOUSE EQUIPMENT

Packing House Equipment

BUSHEL BASKETS

BUSHEL BASKETS

BECK BASKETS

PECK BASKETS

PICKING LADDERS
PICKING BAGS
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BASKET BOTTOM PADS

DECORATIVE FRINGE SHREDDED OIL PAPER APPLE WRAPS

PLACE YOUR NOW for Ammonia Nitrate Fertilizer for acceptance at any time our supply arrives. Suppliers will not guarantee delivery of material for Spring orders.

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Lester F. Tans

Tel. 4107

A Future for Apple Production

E. A. Meyers, Administrator of the Research and Marketing Act, Speaks Before National Apple Institute Meeting.

Mr. E. A. Meyer, Administrator of the Research and Marketing Act made the following remarks before the National Apple Institute Meeting at Harrisburg, Pa. speaking on the subject, "What Is The Future For Apples." Mr. Meyer's talk was quite long and we can print only a few paragraphs of the highlights.

We might as well accept the fact that improved plants and animals, better equipment and more of it, and continuous improvement in farming methods will increase efficiency of production. It may be advisable if not necessary to encourage more production on some items and less on others to prevent wasteful surpluses, but we do not think we should try to limit total production. If we can prevent underconsumption we may not need to worry too much about over-production.

Price Supports

"One way to help farmers adjust production would be a flexible but permanent system of price supports-one that would encourage production of commodities we need, and protect but not encourage farmers to produce commodities that would only further burden a glutted market. Experience has proven rather conclusively the need for flexibility in price support so that adjustments can be made as the supply and demand relationship between commodities changes. It would be good if we did not need to support prices but the authority to do so should be available for use when needed.

Gospel of Healthful Diet

"A desirable counterpart of price supports would be some effective means of keeping a floor under consumption of farm products. Most of us remember vividly what happens when large segments of the consuming public are unable to buy all the things they need. That is when price difficulties begin, living standards start downward, producers are forced to mine their soil, and abundance becomes waste. Full employment, of course, is the best way to stabilize markets but programs to maintain consumption can add stability to our markets and at the same time be used to spread the gospel of healthful diets.

School Lunch Program

"The best example of this perhaps is the school lunch program which is now generally considered as one of the most desirable means of using food commodities that are purchased under the Department's price support operations. In 1941, for instance, more than 450 million pounds of foods were used in school lunches, at a cost of about 20 million dollars. For the current fiscal year, with approximately six million children participating, it is estimated that school lunch purchases will total about 140 million dollars. You may be interested to know that 20 million pounds of fresh and two and a half million pounds of dried apples were used this last year in the school lunch program and of all products involved were exceeded only by Irish potatoes and canned tomatoes.

What People Eat

"What people eat at any time depends to a large extent on three things; what they like, what is available, and what they can afford. The relative importance of these factors, however, is not always the same. Too many people probably put too much emphasis on what they like rather than on what is good for them. Perhaps we are prejudiced but if shoppers bought more of what was good for them we would find more apples in the family market basket!

"As you no doubt know, apple production for the last couple of years has been about the same as the average from 1935 to 1939. But annual per capita consumption of fresh apples among civilians has gone down from the 1935-39 average of 30 pounds to 25 pounds last year. Per capita consumption of canned apples and apple sauce has moved up only about one-third of a pound. It seems as though we are at the cross-roads as to where we go from here.

APPLES FOR CANNING WANTED

Mr. Gilbert Hipke of A. T. Hipke & Sons, New Holstein, Wis., writes that they will can solid pack apples this year and are interested in purchasing apples from growers for canning. N. W. Greenings and similar varieties 2½ inch and over are wanted.

IMPORTANCE OF APPLE EXPORT MARKET

The export of apples from the United States has at times taken more than 20,000,000 bushels of the U. S. crop. The volume exported increased somewhat steadily until the late 1920s when the impact of trade restrictions and a British policy, giving preference to their colonies as sources of supply, squeezed us out of our traditional export markets. Just prior to the war, we were still exporting six to twelve million bushels annually. Under wartime conditions our exports of course, were very low. Last year they rose to a little better than five million bushels, but the current season will not approach this volume.

The loss of our export market in the late 30s is one of the principal reasons for the bankruptcy of hundreds of growers. During the five-year period from 1935-39 our exports averaged at least 4.6 million bushels per year less than the two previous five-year periods. This loss of exports volume forced additional quantities of fruit on to the domestic market, which was in no position to absorb the increased supplies at a reasonable price.

It is, of course, likely that the growth of population will enable our domestic market to replace our exports to some extent. From Apple Research Digest by the Washington Apple Commission.

Doctor: The best thing for you to do is to give up drinking and smoking, get up early every morning and go to bed early every night.

Patient: Somehow, Doctor, I don't deserve the best. What's second best?

COVER CROPS DECREASE RATE AT WHICH ORGANIC MATTER IS LOST FROM ORCHARD SOIL

Workers at Michigan State College reporting on a 5 year study of cover crops and fertilizers in an orchard on sandy loam soil have come to these conclusions:

Results showed that the use of cover crops at first sometimes depressed tree growth, due, possibly, to competition with the trees for moisture. The depressive effect, however, was soon lost, and an improvement in tree growth was finally noted. The rate of recovery seemed related to the speed with which cover crop residues decomposed and to the total quantity of residue produced.

Although the cover crops used did not generally increase the organic matter content of the soil, they did decrease the rate at which organic matter is lost from the soil. This, the specialists say,

is significant and important because of its influence upon tree growth through its direct effect on the availability of nutrients in the soil.

With clean cultivation alone. the organic content decreased at an average rate of 6.5 per cent each year. At this rate of loss the organic content would be reduced approximately 50 per cent in 10 years. Since the ability of the soil to retain essential nutrients is proportional to the organic content of the soil, this loss resulting from clean cultivation would result in less tree growth and production. For example, the use of fertilizers without cover crops increased the available potassium approximately 185 per cent in five years, while the use of cover crops resulted in an increase of 280 per cent.

The value of the cover crop in supplying organic matter is in addition to its value in reducing

SPEAKING OF RECIPES—

Have you served fried apples, Southern style? You'll be enthusiastic about this recipe from a Virginian.

Fry out bacon, about two slices. Use two tablespoons of bacon fat. Slice two or three garden apples, unskinned, and core slices. Place in hot fat, turn over in one minute. Add ½ cup hot water. Pour honey over apples. sprinkle with cinnamon and a grating of nutmeg. Turn heat low and place cover on frying pan. Turn slices in two minutes, replace cover, and steam until aples bubble tender. Liquid should be almost gone. Apples will be tender and only a tiny bit 'squashy.'

Yum, yum! Aromas will fill the house and bring everybody on the run to the kitchen to find out when dinner is ready.

soil erosion and in conserving the soil.

HARVEST SUPPLIES---

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Liners

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Apple Pickers

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- POISONED OATS Bait for Mice -

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Madison 5, Wisconsin

Formerly F. R. Gifford Company



Picking time will again show why so many men who grow fruit as a business rely on General Chemical spray materials. With these growers the one thing that counts is consistently good results ... maximum harvests of "money grades."

A spray material that helps get such results can-



not be merely "put together." First, it must be carefully developed through sound research and thorough field investigations, embracing all phases of its formulation—toxicants, diluents, conditioning

agents. Then it must be made in production facilities where quality control is always maintained at the highest, most advanced level.

All of these are requisites for every General Chemical spray material. They result in the inherent product qualities which prove so convincingly at picking time that—General Chemical Spray Materials give *Performance—Plus* in the orchard proving ground.

GENERAL CHEMICAL DIVISION

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September, 1948

Peter Gideon and the Wealthy Apple

The vast amount of patience and the ability to overcome trying obstacles needed in propagating new varieties, so well known to those who work in this field, is well illustrated in the story of Peter Gideon and the Wealthy apple. With practically all his money lost in earlier unsuccessful attempts. Peter Gideon refused to be discouraged and spent the last of his family's small sum of money for the seed and scions to be used in one more attempt to develop new varieties. The success of this last attempt is a milestone in American fruit breeding progress. For Peter Gideon's faith was rewarded with the Wealthu apple which stands as a monument to his memory for all time.

Son of American pioneers, Peter Gideon was born near Woodstock, Ohio, February 9, 1820, three years after his family had emigrated to Ohio from Virginia.

During his boyhood the family left the homestead and moved to a farm without fruit trees. At the age of 11 young Peter planted apples, peaches, cherries and currants and again began to furnish the family with a profusion of fruit.

Moves to Minnesota

With this background in fruit growing it was only natural that the boy, now grown to manhood, should continue to have a keen interest in orcharding when he and his wife, the former Wealthy Hull of Illinois, and their two daughters moved to Minnesota. Here in 1858 the family took up a claim of 160 acres on Gideon's Bay, Lake Minnetonka, and for the next forty-one years he carried on his fight against the climate to develop a fruit for Minnesota growers.

The first year he set out 500 trees, including apple, pear, plum, cherry and quince, and planted one bushel of apple and a peck of peach seeds. For eleven years he made annual additions to the orchard and planted enough southern and eastern apple seeds to grow a thousand trees each year.

Time and again, killing frosts destroyed his work, but with indomitable spirit he always began again, putting to use experience gained from his failures.

Winterkilling

Gideon himself tells, in his reports made in 1885, how, at the end of ten years, a hard winter killed all his trees, and with that, all hope of apple culture in Minnesota. Discouraged, he resolved to leave the state, but decided to try just once again.

With a large family to support, and with one cow and a few chickens as his only asset in the long winter months ahead. Mr. Gideon nevertheless took the last eight dollars which the family possessed to send to Maine for seeds and scions. He himself, in sore need of clothing for the winter, sewed together two old vests and by reinforcing patches succeeded in making for himself a winter suit, "more odd than ornamental." By such personal sacrifices Gideon added millions to horticultural wealth in the cold Northwest.

Siberian Crab Seed Produces Wealthy

From the scions which he got from Albert Emerson of Maine, he developed the Oldenburg, Blue Pearmain and the Cherry Crab. But the full sized apple which he developed from the seed of a Siberian crab was destined to become the most famous of all his species. It was the Wealthy, named in honor of his wife. These four varieties and a seedling crab brought from Boston by Alexander Buchanan, were the foundation of Minnesota apple culture.

The introduction of the Wealthy proved a boon to the Northwest and marked an epoch in American apple growing. The first published notice of the Wealthy appeared in the Western Farmer in 1869. Although it is not ironclad in cold endurance and consequently not successful in the coldest portions of the Old Northwest, it was far superior in quality to the Russian varieties which were being introduced in the North at about the same time. Dependably productive and attractive in appearance throughout a wide climatic range, the Wealthy had too delicate a skin to be a "long keeper."

For several years Gideon was in charge of the state experimental fruit farm established in 1878 on a tract adjoining his own. During this time, he distributed many thousands of seedlings throughout the state.

Even before he became associated with the state experiment station he had been interested in the Minnesota state horticultural society. His name first appeared on the membership roll in 1868. In 1883, by unanimous vote, he was chosen an honorary life member. A regular attendant at the meetings, he always took a prominent part, and attended the annual meeting in 1898, a year before his death.

Today a monument, erected to Peter Gideon and the Wealthy apple, stands in Gideon Memorial Park, established on the old Gideon homestead. Erected in 1912 by the Native Sons of Minnesota, the monument is a short distance from the place where the first Wealthy apple tree stood.

—Condensed From The American Fruit Grower, January, 1947.

SMALLER CROP GIVES INDUSTRY

A CHANCE

The Government report that the U. S. apple crops will be some millions of bushel less than last year will in the opinion of leaders in the industry give the growers a chance to get established on a sound, solid foundation of cooperative effort to serve expectant apple eaters.

Writes E. Stuart Hubbard, of the New York and New England Apple Institute in the organizations monthly bulletin: "There is evidence that growers everywhere realize that a sound. solvent apple industry can be developed only by giving those, who may choose apples rather than other foods, varieties, sizes, grades, and packs they want and at fair prices. This is shown by demands on our government officials for enforcement of existing apple grading and marketing laws. Such demands have been made by representatives of the several regional tors of the New York State Horticultural Society.

"Better packages for fruit protection and consumer convenience are in production for the coming season.

"Chain store merchants and their buyers are planning with growers and dealers for attractive, reliable apples with which to tempt their shoppers.

"The Institute plans to expand its personnel so as to work with retailers to increase apple appeal and movement in their stores."

IN THE BERRY PATCH

STRAWBERRY VARIETIES AT KENOSHA

A visit to two neighboring fruit growers the Thompson-Marken Orchards and the J. F. Swartz Nursery near Kenosha—in the Chicago trade area gave us some interesting information on strawberry varieties.

Thompson and Marken have a large apple and cherry orchard and also grow 5 acres of commercial strawberries. "Premier does best of any variety we have grown," said Mr. R. L. Marken. However, Mr. J. F. Swartz said that their 10 acres of strawberries are largely of Thomas and Robinson varieties which do best on their soil. The two farms are only a short distance apart but the soil is different. This illustrates the difference in performance of varieties under different soils and conditions.

Speaking of the Thomas variety Mr. Swartz said it is the best of any he has grown. It has large leaves which cover the soil so densely that they have less trouble in keeping down weeds than with other varieties. It is about 10 days later than Premier. Being about 1 mile from Lake Michigan, Mr. Swartz was still picking a few crates on July 16 from this late variey. (Its origin is somewhat obscure.)

It came from the fields of the late Mr. Wm. Thomas of Kenosha but its origin is uncertain.

Mr. Swartz also likes the Robinson but Premier, he says, does not produce enough plants and consequently not enough berries on his soil.

He believes in cleaning up a first year bed by mowing, raking and then cultivating between the rows with a rototiller. He also rips out the old plants. He plans to spray with 2-4D after cultivating to kill weeds. He said he has no trouble in getting a patch clean by this method and it costs about ½ as much to rejuvinate an old bed as to raise a new one. In early November he applies a heavy straw mulch for winter protection.

COMMENTS ON STRAWBERRY VARIETIES

Wisconsin growers have tested hundreds of varieties of strawberries but in the past few years have settled down to three leading kinds — Premier, Beaver and Senator Dunlap. Perhaps we should continue to test new varieties with more vigor because there may be some that will get better results than these.

In this connection we wish to publish comments from our own growers as well as those from States having somewhat similar climatic conditions as Wisconsin, about varieties which are doing well.

The Catskill

In the July 17 issue of the Rural New-Yorker a large grower makes this statement about Catskill. "The general use of new and improved varieties has been a big help. Premier, a prime favorite for a quarter of a century but highly subject to rot in a wet season, is largely displaced by Catskill which is more resistant. A second important reason is that Catskill better meets the modern requirements for freezing. To the small grower catering to a local market the wise choice of varieties is of even more importance than to the large shipper who is not faced with the problem of constantly giving satisfaction to the same individual housewife. In caring for a local trade the

grower must plan to meet the full limits of the berry season. The shipper may wish to concentrate his production into the season offered by a single favorite variety."

This grower also mentions Maytime as the earliest variety he grows and one much appreciated by local consumers. He uses Maytime to open the season and attract customers and then Midland, which ripens 3 or 4 days earlier, also a favorite.

BERRIES AT CLINTONVILLE

By E. A. Rosenberg

We harvested a fine strawberry crop this year. Senator Dunlap did very well up to the last picking. Were fortunate in having rains at the right time. We had one of the finest crops of raspberries in years. Picked as high as 14 quarts from one row 165 feet long at one picking. We observed winter injury in a number of patches of raspberries around this area. Latham held up the best of any variety.

There has been much trouble from white grubs. They cleaned out many new strawberry patches and caused serious injury in old beds too. There is also a new problem. People are asking, "Why don't my berry plants make runners this year." I have found nice big healthy plants not making any runners, Premier being especially bad.

We will have 17 vareties of strawberries on trial next year mostly from the East: Fairpeak, Fairland, Midland, etc.

Our everbearing strawberries are doing well, Gem out-yielding the rest.

SMALL FRUIT IN DOOR COUNTY

By Charles F. Swingle, Branch Experiment Station, Sturgeon Bay

Strawberries did well in Door County in spite of the drought which was one of the most prolonged the County ever had. Growers who were able to water, got more and larger berries than those who could not.

Many cases of delayed winter injury were reported. Beds suddenly appeared ruined just as they had set the first berries. Examination showed no new roots, and some crown injury, but no bona fide Redstele. Properly mulched beds with relatively wide alleys and narrow plantrows showed very little of this winter injury.

In a few cases leaf rollers caused slight damage, but these were controlled satisfactorily when necessary with DDT. Spittlebug was not as bad as in some previous years although it worried many growers. Chlordane, both as dust and liquid was commonly used to combat it, with good results when applied early enough—as soon as the spit masses were seen. Objection to this material is that it cannot be safely used for several weeks before harvest.

Strawberry Varieties

Beaver is the most popular variety in the county—making up about 50% of the crop. Catskill, Dresden, Dunlap, and Premier are also planted. Some Robinson were planted this year.

It was estimated the 1949 producing acreage will be about the same as this year.

Raspberries

Red raspberries suffered from drought also from picking competition with the biggest cherry crop in history. Most plantings are on a small scale and picking not too difficult. There just wasn't enough rainfall for satisfactory raspberries and weeds too—crop was light, season short unless given excellent care in cultivation, heavy mulch or irrigation.

There seems to be no serious competitor for Latham, though small plantings of other varieties are under test. Blackcaps withstood the severe winter surprisingly well and gave good yield though there are very few plantings in the county.

BERRY GROWERS MEETING

The Wisconsin State Horticultural Society Board of Directors has invited the Central Wisconsin Vegetable and Berry Growers Association to hold its annual meeting and program for berry growers at the Retlaw Hotel, Fond du Lac, during the time of the Society's convention.

The annual convention of the Society will be held on November 16-17. On one of those days the association will present an interesting program for berry growers of the State. Watch for program details.

STRAWBERRIES AND RASPBERRIES AT BAYFIELD

By Olaf Selfors

Strawberry crop here was cut short by the severe dry spell lasting nearly a month. There were a few exceptions where humus was abundant and where irrigation was used.

Strawberry beds were renovated mostly by cross dragging the fields with springtooth harrow and then reestablishing the rows by cultivation. Foliage was not removed where there was no disease.

The raspberry crop was short—about 6% of normal. Some varieties as Latham were little better. The canes showed loose bark this spring from the ground up to 8 or 10 inches which the Inspector Mr. Haliday identified as frost injury last fall.

My choice of strawberries are first Robinson, second Premier and third Catskil. Robinson is not the heaviest yielder but brings the best price to the last picking.

It looks as though the new strawberry beds will be very good by the end of the growing season despite the bad dry spell.

HOW APPLES WERE MARKETED 55 YEARS AGO

In 1893, Mr. A. L. Hatch of Uthaca, one of the States leading fruit growers who frequently appeared on programs at Conventions of the Wisconsin Horticultural Society and an officer for many years, told of his method of marketing apples. His paper was given on June 29, 1892, in the Court House at Baraboo during the summer meeting.

"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 directly to those who use them; that is, directly 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. We shipped to Chicago and were astonished to find that Wisconsin apples had a market value that was above Ohio and some other states."

Wisconsin Beekeeping

OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPERS ASSOCIATION - OFFICERS

Walter Diehnelt, Menomonee Falls, President Robt. Knutson, I Vice-President Ladysmith,

H. J. Rahmlow, Madison, Cor. 8 Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer

DISTRICT CHAIRMEN

S. C. Fox, Pewaukee Robt. Knutson, Ladysmith Newton Boggs, Viroqua Guy Sherman, Seymour E. Schroeder, Marshfield Ivan Whiting, Rockford

OUR SUMMER MEETINGS

Watertown and Superior Meetings of State Beekeepers Associations Draw

Large Attendance

An excellent program was given at summer meetings of the State Beekeepers Association at Watertown and Superior. The Watertown meeting attracted about 175 people. Credit is due to the G. B. Lewis Company of Watertown for their cooperation in making arrangements for the park and facilities and furnishing refreshments. The Women's Auxiliary Committees deserve a great deal of credit for their work of making the cafeteria style luncheons so successful.

The forenoon session consisted of official hearings on changing the honey grades. The discussion proved very interesting and from the statements made, the State Department of Agriculture will be guided in revising the grade regula tions. Discussion of the honey crop ard prices indicated the crop at that time looked as spotted as the rainfall throughout the state. Where rain fell during May, June and July there were good crop prospects but in dry areas there were not. A majority at the Watertown meeting voted in favor of a retail price of \$1.20 for a 5 pound pail.

The Afternoon Program

Visitors from out-of-state gave us an excellent afternoon program. It was full of interest and we had the oportunity to meet those whose names we see in the beekeeping magazines but seldom have a chance to hear.

Miss McNaughton of the American Home Institute discussed the work being done by the Institute and showed samples of many items in newspapers mentioning honey. This, of course, is most valuable publicity and the cost is very low. Many requests for information on honey were received from physicians, dieticians and nurses from advertising in professional magazines. Material is being sent them free.

Discussions followed by Mr. E. C. Bes-



American Honey Institute representa-tives tell about plans to popularize

Left, Miss Phyllis Rasmusson,
Home Economist with the Institute
who succeeded Mrs. T. E. Williams,
(nee McNaughton) now living at (nee McNaughton) now Wausau. Both girls made presentations.

sonet, Queen breeder and President of the Southern Queen Breeders Association, Donaldsonville, La.; Mr. Paul Cutts, President Florida Beekeepers Association, Chipley, Florida; Mr. Walter J. Kelly, Editor of Modern Beekeeping, Paducah, Kentucky; Mr. Glen Jones, Secretary National Federation of Beekeepers Associations; Dr. C. L. Farrar, Central States Bee Laboratory, Madison; Mr. Steve Parks, President of the G. B. Lewis Co., Watertown; Mr. Walter and R. H. Dadant of Dadant & Sons. Hamilton, Ill. and M. J. Deyell, A. Q. Root Co. Medina. Ohio. Officers of the State Association and members also took

Queen Auction Nets Large Sum For Honey Institute

Mr. E. C. Bessonet announced that he would donate 25 queens to be auctioned, proceeds to be given to the American Honey Institute. Mrs. Walter Kelly then announced the Kelly's would give 25 queens and Mrs. I. M. Cutts of Chipley, Florida announced they would give 50 queens. Mr. Walter Diehnelt acted as auctioneer at the Watertown meeting and 52 queens were sold for \$98.00. Members who did not need queens donated \$27.00 more making a total of \$125.00 netted for the Institute. The auction may be continued at some of the County Beekeepers Association meetings during coming months. An additional \$15.00 was netted at Superior.

Vice-President Robert Knutson, Ladysmith who is President of the Northwest District had an unfortunate auto accident and was unable to be present. With Mrs. Knutson he was looking for a fireweed location in Ashland County when the car rolled over. Mr. Knutson suffered a crushed vertebra and will be in a cast for some time. A resolution expressing hope for speedy recovery was voted at the Superior meeting. Mrs. Knutson was also injured but to a lesser degree.

ANNUAL CONVENTION WISCONSIN BEEKEEPERS ASSOCIATION

Retlaw Hotel, Fond du Lac, Wis. Wednesday & Thursday, Oct. 27-28

The Wisconsin Beekeepers Association will hold its annual convention at the Retlaw Hotel. Fond du Lac during honey week. Wednesday and Thursday, October 27-28.

The location was decided at the convention last fall and the Board of Directors voted to hold it on those days.

Mark your calendar now. Complete program will appear in the October issue. The Wisconsin convention program and attendance are recognized as among the best in the nation.

September in the Apiary

The amount of brood reared in colonies during September determines the number of young bees which will make up the winter cluster and to a large extent the condition in which colonies will come through the winter.

Colonies which are low in population now and have a poor queen might as well be de-queened and when all the brood has emerged, the bees killed and combs of honey and pollen saved for packages next spring. Such colonies will probably not survive the winter anyhow or if they do, be unprofitable next year—not worth as much as the honey and pollen one saves by not wintering them.

Several leading beekeepers have made the statement, "We take our winter loss in the fall."

Will September Feeding Pay

The question has been raised, "Will it pay to feed colonies sugar syrup and soybean flour cakes during September in case drought or other conditions create a shortage of pollen and honey?" It seems logical that if bees cannot get honey and pollen during this month, brood rearing will slow down, colonies will be short of young bees and also pollen for winter. By feeding under such conditions, we might stimulate brood rearing, have more young bees for the winter cluster and increase their chances of surviving a cold winter.

We should mark colonies in October if they do not have pollen in brood combs which the bees can reach during January and February. Such colonies would not raise brood during those months or even later, resulting in a high percentage of old bees by spring. In such colonies nosema might cause much spring dwindling. Colonies short of pollen should be fed a soybean flour pollen mixture beginning in March.

The Problem of Late Honey

Beekeepers in the northern part of the State have the problem of bees gathering late honey from Asters and other flowers. Often such honey is not ripened during cool damp weather. The result is granulation, fermentation and poor wintering. Only strong colonies will be able to evaporate the moisture from late honey sufficiently to make it good food. Weak colonies are very likely not to ripen the honey and will suffer most. The answer is to make every effort not to have weak colonies. If you do have some, it may be best to kill them in fall.

When To Re-Queen

Brood rearing will slow down in late September and cease in October. During that period new queens can be introduced quite easily. A queen that is failing in an otherwise good colony should be replaced. If the queen fails completly or dies during winter the colony is hopelessly weakened.

SULFATHIAZOLE TESTED FOR F. A. B. CONTROL IN MICHIGAN

A new bulletin entitled "Experimental Feeding of Sulfathiazole Syrup To Colonies of Bees Infected With the American Foulbrood Disease," by R. H. Kelty has just been released by Michigan State College at East Lansing.

In the bulletin Mr. Kelty tells of the methods used in testing sulfathiazole. In his summary, he gives these points.

In 1945, 25 experimental colonies were fed. Sixteen were apparently cured, in 5 the disease reappeared.

In 1946, 51 colonies were fed with sulfathiazole and 51 apparently cured.

In 1947, 63 package colonies were fed, 22 were apparently cured and in 41 the disease reappeared. He ends with this conclusion:

"From the experiment it appears that the feeding of sulfathiazole syrup to strong colonies affected with American foulbrood may enable the colonies to remove visible evidence of the disease, provided the colonies are fed the sulfathiazole syrup continuously while bees are in the brood stage. It seems that the evidence of the disease may reapear if the feeding of the sulfathiazole syrup is discontinued, particularly if there is a reserve supply of diseased food in the hive."

A MOVIE ABOUT BEES AVAILABLE

THE STORY OF BEES, is a 2 reel, 16 mm sound film. Rental price \$3.00. Can be secured from United World Films, Inc., 445 Park Avenue, New York 22, N. Y.

The complete life cycle of the bee is shown in microphotography from the laying of the egg through the development of the larva and the emerging of the mature insect. Amazing shots include the life of the queen, and scenes from gathering and storing of nectar and pollen.

SOME BEEKEEPING HISTORY Wintering Problems Of 70 Years Ago Were the Same As Today

Attention To Fall Management Stressed At Early Meetings

One of the principal topics at the early conventions of the Wisconsin Beekeepers Ass'n, 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

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 was also discussed.

Heavy Winter Losses: History Repeats Itself

On May 4, 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 principle 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 years, 1942-43 and 1947-48.

BEES AND EQUIPMENT

FOR SALE

A 30 frame radial extractor, 70 colonies and equipment, 200-8-10 frame supers with drawn comb, some comb honey equipment.

Mrs. George Schmidt, 9532 W. Capitol Dr., Milwaukee 13, Wisconsin.

MID-SUMMER HONEY CROP DEPENDS UPON AMOUNT OF RAINFALL

Wisconsin will probably have a small crop of honey this year due to lack of mid-summer rainfall. The drought started in May and in some sections continued during June and July.

It is only when the soil is relatively moist and the air dry and warm that clovers produce nectar at their best. Prof. H. F. Wilson once made the statement relative to honey flow from alfalfa that "it must have wet feet and dry top." Observations by many beekeepers have verified the truth of this statement.

During June and July this year, the rainfall was largely in the form of showers which are quite apt to be local. One small section may have a heavy rain and another nothing at all.

A few sections in Wisconsin did have enough rainfall to enable plants to produce nectar. In those sections the bees gathered a crop of honey but most of the state will be short of honey.

This is another year when strong overwinter colonies saved the day. In dry areas only colonies which had populations of field bees by mid-June succeeded in getting a crop of clover honey. Most package colonies were not strong enough to get a crop during the short time when there was a honey flow.

U.S.D.A. PURCHASED HONEY FOR SCHOOL LUNCH PROGRAM

The U. S. Department of Agriculture, early in June, decided to purchase up to 12 million pounds of good table grade honey of the 1947 crop for use in the school lunch and institutional feeding program. Beekeepers, associations of beekeepers, and processors were invited to submit offers to sell honey to the U. S. Department of Agriculture. Purchases were confined to honey, meeting the requirements of U. S. Grade A and were on a bid basis.

This purchase of honey by the Department of Agriculture means more to beekeepers than we may realize. If the honey is of good quality, the kind children will like, it is a wonderful opportunity to build new and future customers for honey. Far too often we find people do not use honey because they have never become acquainted with it or accustomed to using it on the table.

ROCK COUNTY BEEKEEPERS

The Rock County Beekeepers Association passed a resolution at their July meeting requesting the State Beekeepers Association "go on record as favoring the establishment by the U. S. Government of parity prices for the various grades of comb honey, extracted honey and beeswax and thus to place these products on the same basis as other farm crops necessary to the welfare of our country."

More Research Needed

"That the Wisconsin Beekeepers association urge the U. S. Department of Agriculture to make available assistance in research and promotion of the sale of honey, and thus to assist in the stabilization of prices at a reasonably profitable level."

The resolution was unanimously adopted at the meeting of the State Beekeepers Association at Watertown, on July 20. It was referred to the National Federation of Eeekeepers Associations with the request that they make every effort to obtain the objectives.

ASSOCIATION ASKS PARITY PRICE ON HONEY

At the July meeting of the Rusk-Sawyer Beekeepers Association at Ojibwa State Park, members unanimously voted to ask the U. S. D. A. to place honey on a parity price basis with other agricultural commodities. The committee consisting of Robert Knutson, Ladysmith, W. E. Chadwick and Sherman W. Weiss signed the resolution. Other organizations may wish to take similar action.

H. F. WILSON RETIRES

Very quietly Prof. H. F. Wilson, Chief of the Dept. of Entomology at the University of Wisconsin for many years has retired. He has been a familiar figure at beekeepers meetings throughout the country, especially in Wisconsin and Secretary of the Wisconsin Beekeepers Association for many years. However, his retirement was without fanfare and perhaps Prof. Wilson wanted it so. On his 65th birthday, April 14, 1948, he said goodbye to Wisconsin and went West. He is now Director of Research for the firm of Pickett & Eckel Inc. at Alhambra, California. He is no doubt working harder than ever, but he is retired from his old job. We all wish him well.

NEW HONEY GRADES ESTABLISHED BY WISCONSIN DEPARTMENT OF AGRICULTURE

As a result of informal hearings at District meetings of the Wisconsin Beekeepers Association last spring and formal legal hearings at the two summer meetings at Watertown and Superior, the Wisconsin Department of Agriculture will establish new honey grading regulations.

There will be three colors instead of two as formerly: white, golden and dark. The Division of Bees and Honey will furnish color guides for determining the color of your honey.

In extracted honey a new grade will be established called Wisconsin Fancy White to be used by anyone who may wish to do so. There will be Wisconsin No. 1 honey in the three colors, white, golden and dark, also Wisconsin No. 2.

Other Changes

Only new containers may be used in sizes under 50 pounds for sale at retail.

The flavor of the honey such as "clover, buckwheat, etc." may be declared but only one flavor shall be so stated.

A producer may mark his honey "not graded" if he does not grade any of his crop.

Each container or section of comb honey shall be labeled with the grade, the net weight and the name and address of the producer or packer.

If my nephew Bill keeps postponing his marriage until times are normal he'll die a bachelor. Times have been abnormal for 61 years, to my personal knowledge.—Uncle Levi Zink.

HONEY EXTRACTING EQUIPMENT FOR SALE

Extractors, clarifiers, filters and tanks. All available in stainless steel.

THE NEISES CO., Box 249. Marshfield. Wis.

WAX MOTH CONTROL

Beekeepers who stack their extracted supers in a building immediately afer extracting and when the weather is quite warm as it was during September and October of last year may have considerable trouble with wax moth. In a building, the use of cyanide is dangerous because it is a very poisonous gas. The use of carbondisulfide may be dangerous because it is very inflammable. Paradichlorobenzene is no doubt the best material to use in a building.

Some beekeepers have found a safe way is to return the extracted supers to the colonies from which they were taken. The bees then clean out the honey, which is of considerable value, and there is no danger of spreading foul brood. The bees also take care of the moths. When cold weather comes bees leave the supers; they are taking off, stacked near the colony and are ready for spring. During cold winter months in Wisconsin the wax moth eggs are destroyed if out of doors.

First Meeting Wisconsin State Beekeepers Association—1885

The Wisconsin State Beekeepers Association was organized in the State Capital, Madison, February 6, 1885. The first officers were: C. A. Hatch, Richland Center, president; George Grimm, Jefferson, first vice-president; Dr. J. W. Vance, Madison, secretary.

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, Ill.

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.

THAT DARK HONEY

This past year we were plagued with a surplus of dark honey. We finally sent 12,000,000 pounds of it to Europe because folks here would not buy it. No amount of logic will disprove this fact—consumers in northern states just will not buy any large quantities of dark honey. One way we can get rid

of a lot of it, is to leave it on the hives in fall. With the price of dark honey no more than the price of sugar, it will be profitable. If the honey is well ripened do not worry about its effect on the bees. They have wintered well even on well ripened honey dew.

Teacher: "Is there any boy in this class who would not wish to be President of the United States?"

Boy: "I wouldn't teacher."

Teacher: "Why not?"

Boy: "Because Dad says it is best to have a steady job."

BEE SUPPLIES ANNOUNCEMENT

We are now authorized

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G. B. LEWIS COMPANY

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We have a complete line of:

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HONEY CONTAINERS

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

WRITE FOR COMPLETE PRICE LIST

Order through your State Beekeepers Association.

HONEY ACRES

Menomonee Falls, Wisconsin

wt. 25-lbs. — \$4.26
10-lb. pails — carton of 50 — \$6.20
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Carloads and less than carloads.

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From the Editor's Desk

CHESTNUTS IN WISCONSIN

Grove of 75 Year Old Trees Near Galesville Provides Seed For Trial

A visit with Mr. Fred Sacia of Galesville to orchards in that section and to the farm of Mr. Orrie Beardsley, was an interesting experience.

At Beardsley's we found a 5 acre block of Chestnut, Black Walnut and Butter Nut. There was also a row of Sweet Chestnut trees along one side of the yard. The trees are tall and stately and the wood excellent in quality.

These trees are more than 75 years old. Mr. Beardsley who is 70 years, said his father located there in 1852 and planted the grove shortly afterwards from seed obtained from the East.

Chestnut trees can be grown from seed. The seed should not be allowed to dry out before planting. We suggest planting in drills in fall on well drained loam soil. If there is any danger of damage by rodents such as squirrels, plant them inside a small tin can. Remove one end. of the can and in the other end cut a hole the size of a quarter. Plant the seed several inches below this hole and then place the can small hole up, in the soil about 1 inch below the surface. The nut will sprout, grow through the hole and the tin will rust away. This method can be used with other kinds of nuts.

Nuts may also be placed in damp sand until spring and held



Mr. Fred Sacia, Galesville, holding a branch of the American Chestnut from a grove near Galesville. Mr. Sacia has been a fruit grower for many years, is keenly interested in new varieties and practices.

in a cool place—about 15°F is good.

If planted in rows at about 2 feet apart, the trees should be transplanted to their permanent location at the end of 1 year of growth.

The Chestnut is an ornamental tree and can be used on the home grounds and as a roadside tree. The nuts are very good to eat. There is only one danger—Chestnut Blight. It may or may not effect isolated trees.

We do not know how hardy these trees are so can recommend them for testing only in locations where apples of medium hardiness such as McIntosh do well. They should be tested on a small scale only.

Cost of Seeds

With the approval of our Board of Directors we have made arrangements to obtain some of the nuts from the grower for members of the Wisconsin Horticultural Society to test in various parts of the State. Will send up to 25 seeds to any one member at 1c each for trial purposes. Send order and money to the Wisconsin Horticultural Society, 424 University Farm Place, Madison, Wis.

OUR COVER PICTURE

Our cover picture this month is from a photograph taken by Mr. John Rahmlow, Port Washington, of a Tuberous-rooted Begonia plant in the Editor's garden.

What a beautiful flowering plant this Begonia is when well grown. It must have constant but light shade, plenty of water and a porous soil.

ANNUAL CONVENTION WISCONSIN HORTICULTURAL SOCIETY Retlaw Hotel, Fond du Lac, Nov. 16-17

The Board of Directors of the Society voted to hold the annual convention at the Retlaw Hotel, Fond du Lac, November 16-17 and invited the Wisconsin Apple Institute and the Central Wisconsin Berry and Vegetable Growers Association to hold their annual meetings in conjunction with the convention.

The Women's Auxiliary of the Society will also hold their annual meeting at this time.

Fruit Show

An apple show of plates of standard and new varieties and also seedlings will be held as in past years. Plan to save samples for this exhibit.

FRUIT GROWERS MEETING WINONA, MINNESOTA NOVEMBER 8-9

Plans are being completed for another meeting of Minnesota and western Wisconsin fruit growers. Last year the meeting was held at La Crosse, Wisconsin with an attendance of nearly 100 persons. This year the meeting will be held on November 8 and 9 at Winona, Minnesota, with headquarters at Hotel Winona. Last year was the first time these two groups cooperated in such a meeting, and growers voted unanimously for another to be held this year.

Meetings of this type give everyone an oportunity to get acquainted with other growers in the region on both sides of the Mississippi, and to discuss problems of mutual interest. These meetings are sponsored jointly by the Wisconsin State Horticultural Society and the Minnesota Fruit growers Association.

I hope that all Wisconsin fruit growers will accept this notice as an invitation to attend. We should like to see you there.

J. D. Winter, Secretary Minnesota Fruit Growers Association.

Note: Complete program will be published in the October issue.

COMING EVENTS

October 27-28. Annual convention Wisconsin Beekeepers Association, Retlaw Hotel, Fond du Lac.

November 8-9. Joint fruit growers meeting. Minnesota Fruit Growers Association-Wisconsin State Horticultural Society, Winona Hotel, Winona, Minn.

November 16-17. Annual convention, Wisconsin State Horticultural Society. Retlaw Hotel, Fond du Lac.

WANTED-HARDY

ENGLISH WALNUT SEED

Letters are coming to the Office of the Wisconsin State Horticultural Society asking for hardy Crath Carpathian English Walnut seed. Also seed of Black Walnut and Filberts of good quality.

We will be glad to hear from anyone having seed for sale.

To grow trees from nut seeds, the nuts should be planted in the fall in such a way that squirrels or rodents can not get them; or they may be buried in sand in a root cellar so they will not dry out by spring.

Those with hard shells, like Black Walnuts and Butternuts should be planted in the soil where the frost can crack the shells. Place over them a tin can, with a small hole for the sprout to grow thru in spring. Plant in the regular way, with the nut about 2 inches deep. The tin can will rust away in a year or two, but in the meantime will protect the nut from rodents.

SCHOOL CHILDREN

PREFER SUGAR MAPLE AS WISCONSIN'S STATE TREE

The Wisconsin Conservation Department recently conducted a program among 279,874 school children in our elementary and high schools in rural and urban communities to determine their preferance as to a State tree for Wisconsin.

Seven native trees were suggested. Illustrations and descriptions were sent out with the ballots. The sugar maple was the most popular and received 87,-253 votes.

The school children will present a resolution to the state legislature next year requesting that the sugar maple be designated as Wisconsin's official state tree.

NOMINATING COMMITTEE REPORT

The nominating committee for nomination of officers of the Wisconsin Horticultural Society whose terms expire in November, consisting of Mr. Dawson Hauser, Bayfield; Mr. Alfred Meyer, Hales Corners; Mr. Carl Reynolds, Sturgeon Bay have nominated the following:

President: Mr. G. J. Hipke, New Holstein.

Vice Pres.: Mr. Arnold Nieman, Cedarburg.

For member of the Board of Directors to succeed Mr. Dawson Hauser: Mr. John Torbick Bayfield; Mr. W. H. Ward, Durand.

For member to succeed Mr. Alfred Meyer: Mr. Arthur Brunn, Hales Corners; Mr. Oscar Conrad, West Allis.

For member to succeed Mr. Carl Reynolds: Mr. Spencer Eames, Egg Harbor; Mr. P. S. Peterson, Sawyer; Mr. W. J. Thenell, Sturgeon Bay.

A ballot will be printed in the October issue of Wisconsin Horticulture so that members may vote by mail. Voting can also be done at the Annual Convention.

Complete program and premium schedule will appear in our next issue.





Perfect weeding tool or combination. Bolts to back of your garden hoe as shown. Light, strong, balanced perfectly. Send \$1.00 money order or cash to

Russell M. Huber, Winnebago, Minn.

Holland Tulips

Daffodil, Hyacinth, and Crocus bulbs for fall planting. Write for catalogue in colors.

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WALTER KRUEGER Vice-Pres. Oconomowec MRS. A. E. PIEPKORN

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Theo. Woods, Madison

The 19th Annual Gladiolus Show Outstanding

"One of the most outstanding high quality shows ever held," was the opinion of those who attended the Annual Wisconsin Gladiolus Show at Kohler. The Sheboygan Chapter, its' committees and show manager, Mr. Conrad Holzman of Kohler, deserve much credit and our thanks for their fine work. Members estimated there were 3,000 beautiful blooms shown.

Point Winners

Plummer Gardens, Columbus. Ohio were first in points—196; Gordon Shepeck, Green Bay second with 74; Dr. L. C. Dietsch third; Emil Jaschinski fourth; next in order were Dr. R. H. Juers; Arnold Sartorius; Willis Miller and Walter Axel. Small Growers (Most Points) Val White and second Conrad Holzman.

Grand Awards

Champion Spike — Large size, Harry Pierce, Sheboygan on Leading Lady.

Champion Spike — Medium size,, A. Sartorius, Porterfield on Caribou.

Champion Spike — Small size, Dr. Dietsch, Plymouth on Ophir.

Best Illinois Introduction shown, J. H. Torrie, Madison on Silver Wings.

Grand Champion Spike of Show, A. Sartorius on Caribou.

Reserve Champion, J. J. Flad, Madison on Connie G. Champion Recent Introduction, J. J. Flad on Connie G.

Longest Flower Head, A. Sartorius on Mountain Gem. Largest Floret, Mrs. L. E. Wightman, Plymouth on California.

Most Open Florets, R. H. Juers, Wausau on Spitsire.

Most Ruffled Bloom, August Bogen, Sheboygan on Burma.

Most Beautiful Spike in Show, Val White, Wausau on Elizabeth the Queen.

Best Basket, Mrs. Len Wightman on Harmau.

Second Best Basket, Shirley Jaschinski, Sheboygan on Picardy.

Twenty Spike Table, Shirley Jaschinski, Sheboygan on Picardy.

Twenty Spike Table, Emil Jaschinski, Sheboygan.

Best Seedling Basket and American Home Achievement Award, Ted Woods, Madison, on 7-10-43.

Seedling Awards

The Seedling Show was one of the largest and best we have ever seen. Out-of-State visitors remarked Wisconsin is taking the lead in production of high quality seedling Gladiolus.

All seedlings scoring between 93 and 100, in the opinion of the judges, were given a rating of "excellent" and a blue ribbon.

Awards went to the following:

Mr. A. Bogen, Sheboygan on his seedling which was also Reserve Champion.

Mr. Ted Woods, Madison was given an Excellent ribbon on 11 new seedlings.

Cosmopolitan Glad Gardens. Milwaukee received awards on 3 seedlings.

Walter Axel won an Excellent ribbon on 3, also Grand Champion Spike of Show on his seedling.

J. J. Flad on 3 seedlings; Gordon Shepeck on 2 seedlings.

Also receiving blue ribbons were Plummer Gardens, James Torrie, Conrad Holzman and H. Van Boren, Hartland.

Three Spike Section

In the 3 Spike Section Mr. Paul Machmueller, Schofield won the Division Champion on King William. Mrs. L. E. Wightman, Plymouth in (400 size) on Myrna; (300 size) Dr. L. C. Dietsch on Ophir; (200 size) Plummer Gardens on Bluet.

Commercial Exhibits

Special award ribbons on Commercial Exhibits were given to H. Janes, Whitewater, W. Krueger, Cosmopolitan Glad Gardens, Dave Puerner and Theo. Woods.

There were five 20 spike tables. First prize to Emil Jas-

chinski, second to Gordon Shepeck.

There were two 25 spike tables. First to Gordon Shepeck and second to Plummer Gardens.

A beautiful dutch mill with Gladiolus planting was designed and built by Emil Jaschinski as a central feature.

Baskets

There were 12 beautiful baskets. First prize went to Mrs. Len Wightman on Harmau; second to Shirley Jaschinski on Picardy.

Annual Banquet

On Saturday evening members and exhibitors were guests of the Kohler Company at a wonderful banquet. This was appreciated very much by everyone present. Dr. Geo. Scheer was Chairman of the banquet committee and Dr. L. C. Dietsch acted as toastmaster. H. I. Rahmlow. Madison reminded members of the shows which were so successfully staged in Kohler beginning in 1932. Four State shows have been held in Kohler-in addition to a number of Sheboygan Chapter Shows and several State Garden Club Federation Flower Shows.

WINNERS AT WISCONSIN SEEDLING SHOW, WALTER MILLER'S GARDENS, SUN PRAIRIE

The Seedling Show at Walter Miller's Gardens, Sun Prairie, Wis., on Aug. 1, brought out some beautiful spikes of seedlings and recent introductions. The quality was excellent throughout and the attendance very good. Noticeable was the way visitors blocked the aisles in the show room watching the judging and examining the many entries.

Much credit is due to Mr. Walter Miller for his cooperation in providing the show room and the beautiful picnic grounds.

The Winners

Grand Champion Spike of Show— Mr. James Torrie, Madison on Mid-America.

Reserve Champion—Mr. J. J. Flad, Madison, on 27-45-2. Champion Three Spike Seedling—Mr. James Torrie, Madison.

Champion Single Spike Seedling— Mr. J. J. Flad, Madison.

Champion Seedling Basket — Mr. Harold Janes, Whitewater.

Those receiving a rating of excellent on three spike and single spike seedlings were: Mr. G. Shepeck, Green Bay; Mr. J. J. Flad, Madison, on 6 entries, Mr. J. H. Torrie, Madison, on 5 entries and Mr. W. C. Krueger, Oconomowoc.

Recent Introductions

The Champion Basket was Tralee by Mr. Walter Krueger. Other basket winners were Spic and Span by Mr. David Puerner and Color Marvel by Mr. D. L. Sleezer.

Section Champions were Petral by Mr. H. L. Wood of Richland Center; Mid-America by James Torrie.

Donors of trophies were: Mr. Dave Puerner, Milwaukee; Dr. F. H. Graff, Freeport, Ill.; Mr. Theo. Woods, Madison; Mr. Harold Janes, Whitewater; Mr. Walter Krueger, Oconomowoc, and the Wisconsin Gladiolus Society.

JOIN THE WISCONSIN AND NATIONAL GLADIOLUS SOCIETIES

Invite your friends who are interested in gladiolus to join the Wisconsin Gladoilus Society or a combination of the Wisconsin and National Organization.

Membershp dues are as follows: Annual membership dues in the

Wisconsin Gladiolus Society.....\$1.25

Wives of members and members of the Wisconsin State Horticultural Society

Men are forbidden to work in the village of Tenganan, Dutch East Indies, on penalty of a public thrashing administered by women.

MADISON CHAPTER SHOW WAS BEAUTIFUL

Mr. Paul E. Hoppe took first honors at the Madison Chapter show, August 9-10, winning the Grand Championship on Elizabeth the Queen. Mr. Theodore Woods, Madison, won top honors in the Seedling Section with a Ruffled White and in the Seedling Three Spike Section. He also won in the yellow, deep pink, red and lavender seedling classes. Dr. James Torrie won in the cream and smokey classes. Mr. Roger Russell with a buff; Mr. J. D. Flad with a deep pink and Mr. Walter Krueger, Oconomowoc, with a lavender.

More than 8,000 persons passed through the First National Bank in one day to see the show. In quality of Artistic Arrangements of Gladiolus the Madison show is one of the outstanding shows in America. Competitors in this class included Mrs. F. C. Middleton, Mrs. H. S. Bostock, Mrs. Fay Wisniewski and Mrs. R. A. Walker.

GLADIOLUS SOCIETY BOARD OF DIRECTORS MEET

Plans Made For Annual Meeting
The Board of Directors met during
the show at Walter Miller's Gardens
on August 1st and voted to hold the
annual meeting of the Wisconsin
Gladiolus Society at the Medford Hotel, Milwaukee, on Sunday, October
31, beginning at 1 p. m. It was voted
to invite a prominent out-of-state specialist to talk to growers. Directors
will meet at 10 a. m.

The following program committee was appointed: Dr. L. C. Dietsch, Plymouth, Mr. Walter Krueger, Oconomowoc, Mr. H. J. Rahmlow, Madison.

A nominating committee was appointed consisting of: Mr. Walter Krueger, Oconomowoc, Mr. Frank Bayer, Milwaukee, and Mr. D. L. Sleezer, Lake Geneva. This committee met and nominated 10 candidates for membership on the Board of Directors. Five vacancies on the Board will occur. Those nominated are as follows: Dr. Geo. Scheer, Sheboygan, Mr. Leonard Wightman, Plymouth, Mr. Walter Axel, Sheboygan, Mr. Val White, Wausau, Mr. Otto schitzke, Sheboygan, Mr. John Flad, Madison, Mr. Lloyd Pateman, Dousman, Mr. Everett Van Ness, Clinton, Dr. James Torrie, Madison, and Mr. Gordon Shepeck, Green Bay.

Garden Gleanings

TESTS FOR CONTROL OF BLACKSPOT ON ROSES

Fermate rose dust, sulphur dust and phygon rose dust were tested in experiments for the control of blackspot on roses at the Arkansas Experiment Station.

In the summary of the article published in the American Rose Magazine for May-June, the workers state, "There appeared to be little difference in the control of blackspot by the use of fermate, sulphur or phygon dust mixture." Phygon was said to be toxic when used as a 2% dust mixture combined with sulphur and DDT and therefore should not be used in that way.

In the table of the defoliation of rose plants under the various treatments, the following was given as the amount of defoliation by August on treated and untreated plants of Edith Nellie Perkins.

Type of	Average number
treatment	of leaflets
	per plant
Fermate Rose Dust	273
Sulphur Dust	278
Phygon Rose Dust .	
Untreated (checks)	
mm .:	

The time of application—having the material on the leaves during a wet period—is most important.

MARIGOLDS NOT HOT WEATHER PLANTS

Experiments with marigolds by Dr. L. W. Went of California Institute of Technology have resulted in some useful information for flower growers, according to a report in Sunset. Irrespective of the type of soil, the same responses to temperature and light may be expected. In general, marigolds should not be grown in shade. They need full sunlight. Also, they do best in a fairly cool climate with day temperatures of not much over 70° and about 50° at night. However, they can stand higher temperatures in the mid-Summer than in early Spring or Fall and the night temperature is more important than the day.

High temperatures result in fast growth, small flowers and early exhaustion.—From Garden Digest, in Horticulture.



FLOWER ARRANGING FOR THE AMERICAN HOME

New Book on Flower Arrangement Available

Flower Arranging for the American Home by Gladys Tabe and Ruth Kistner has just been released. (Macrae-Smith-Company, 225 15th Street, Philadelphia 2, Pa. Price \$2.75.)

The book contains many excellent illustrations, some in color, of flower arrangements. Chapters cover design; color; texture; containers; table-setting; dried arrangements; fruits and vegetables arrangements; miniatures; planning the garden; decorating the church; the home wedding; etc.

The book opens with this interesting paragraph: "In the little town in which I grew up, nearly everyone has a garden. Women were always exchanging slips and seeds, and there was much lugging of iris roots when "the border needs separating." Baskets of flowers went with the bowls of chicken soup and wine jelly for sick folk, the church was filled with Mrs. Johnson's delphinium on summer Sundays, and for weddings, all the neighbors cut their very best blossoms. Usually brides set the wedding date with a wary eye to the flowers; peony time and rose time and delphinium time were favored.

"If you got married in church, you also had the elegance of palms from the greenhouse and possibly a wedding bouquet from Milwaukee, but home flowers were the stand-by.

Editors Note: We are curious to know in what Wisconsin town near Milwaukee the author lived. FERTILIZER IN SOLUTION VS
APPLIED DIRECT TO THE SOIL

An Answer To An Important

Ouestion

QUESTION: Is it best to dissolve fertilizer in water and then apply it to the soil around our plants or is it just as well to mix the fertilzer with the soil and then water.

ANSWER: In order to get quick or immediate results, gardeners and others sometimes dissolve fertilizer plant food in water and then apply to the soil around the plants. This method is somewhat more effective with some fertilizers than application of the fertilizer at the surface of the soil followed by watering because it makes possible keeping the fertilizer in contact with a large volume of water as long as is desired so as to insure more complete solution. It will thus facilitate more rapid penetration of the fertilizer into the soil in the region of the plants' feeding roots. This does not mean that good results cannot be obtained when fertilizers are applied in solid form at or near the soil surface followed by liberal watering

In applying fertilizer in solution one should be careful not to make the solution too strong. An ounce (one to two tablespoons) of fertilizer per gallon of water is about as strong as one should go, and the solution should not be applied directly to the leaves or stems but to the soil around the plants. Direct application on the plants may cause burning. To insure against this, application of some water itself directly on the plants with a sprinkling can after application of fertilizer solution is sometimes advisable.

The ordinary complete fertilizer will usually dissolve sufficiently for application in solution or with water. Addition of the fertilizer to the water should be followed by vigorous stirring at intervals of periods of 10 to 30 minutes to insure more complete solution. Usually not all of the fertilizer material will dissolve, but this should cause no worry since what does not dissolve will be left at the surface of the soil where it will eventually be acted upon and brought into solution.

Answered by Prof. E. Truog, Chairman, Dept. of Soils, University of Wisconsin.

AMERICAN IRIS SOCIETY AWARDS

Honors For 1948 Announced by Committee

The American Iris Society, 444 Chestnut St., Nashville 10, Tennessee, has just announced the 1948 award by a special committee as follows:

Dykes Medal—OLA KALA

Runner-Up for Dykes — BRYCE CANYON. Award of Merit (Tall Bearded): Helen McGregor, Amandine, New Snow, Lady Boscawen, Dreamcastle, Black Forest, Chamois, Pink Cameo.

Other than Tall Bearded: Ruby Glow (Intermediate), Orchid Sprite (Douglasiana).

Honorable Mention (Tall Bearded):
Spanish Peaks, Pretty Quadroon, Argus Pheasant, Pierre Menard, Augusta, Radiation, Red Majesty, Admiral Nimitz, Tournament, Orange Gem, Greig Lapham, Carousel, Deep Night, Lovelace, Peg Dabagh, Rose Splendor, Staten Island, Arcadia, Buttercup, Mirrol Lake, Orelio, Pagan Princess, San Antone, Bronze Brodale, Danube Waves, Fairy Foam, Oriental Bazaar, Pathfinder, Gold Ruffles, St. Regis, Sylvan Belle, Blue Glow, Lilac Lane. Other than Tall Bearded: Baltis

GOURDS WILL KEEP ONLY IF MATURED

Yarcand

Fairy Light (Spuria), Little Elsa

(Oncobred).

(Oncobred).

(Dwarf Bearded).

QUESTION: How can I prepare gourds so that they will not decay. I have varnished them and followed all kinds of suggestions but they still develop soft spots and decay.

ANSWER: Gourds will not keep unless they are fully matured before being picked. Perhaps you planted them too late or your soil is heavy and cold and they did not mature before frost. It may be necessary to start them indoors in spring. The surface of gourds should be hard when picked so that when scratched with the finger nail, it is too hard to penetrate. Hardshelled varieties are usually not

ready to harvest before frost but should be picked before a freeze.

The gourds may be dipped in a weak solution of formaldehyde or alcohol to sterilize them when dried and then either waxed or coated with shellac or varnish.

WHERE DID THESE HARDY FLOWERS COME FROM ORIGINALLY?

Look these up in your books and catalogs and see what you can find out about each one.

- 1. Bleeding Heart
- 2. Delphinium
- 3. Shasta Daisy (Chrysanthemum maximum)
- 4. Pyrethrum (Chrysanthemum coccineum)
 - 5. Chrysanthemum
 - 6. Phlox
 - 7. Columbine
 - 8. Hens and Chickens
 - 9. Peony
 - 10. Hollyhock

ANSWERS

- 1. Japan
- 2. Europe to Asia
- 3. Pyrenees
- 4. Caucasus, Persia
- 5. Japan and China
- 6. Penn. to Florida to Louis-
- 7. U. S., Europe, Siberia, depending on species
 - 8. European Mountains
- 9. Mostly Asiatic, 1 species in Wyoming

S. Europe to W. Asia
 From Country Gardeners
 Program Service.

CHILDREN brought up in Sunday School are seldom brought up in court. — Wesley News.

WANTED - NURSERYMAN

Wanted to contact young man interested in the nursery and landscape business. Elderly proprietor wishes to retire. Fine opportunity, ideal location and established business.

J. A. Harley, 1909 Vilas Ave., Madison, Wisconsin

SHALL WE CUT BACK IRIS FOLIAGE

Question: Under normal conditions and with the plants in apparent good health, should the foliage of tall beared iris be cut back in the fall?

Answer: Late in fall, after foliage has stopped growing, it would not matter if it were cut back. During prolonged rainy spells it is sometimes advantageous to remove part of the foliage so that sunlight may reach the rhizomes to prevent mustard seed fungus from attacking the roots.

It should be remembered that when a plant is in normal growth, the chlorophyl in the leaves transforms water and carbon dioxide from the air into starches and sugars which are stored in the plant as food to be further transformed into cell tissues. Removal of the leaves at any time during the growing season stops this process.

—From Bulletin of the American Iris Society.

THE HEALTHY WEST — Tourist—"Isn't this the river that floods the valley ever so often and drowns all the cattle and ruins the crops?"

BULBS

WILD TULIPS — Delightful early spring bloom — plant this fall. Leading varieties including Clusiana, Eichleri, Dasystemon, Sylvestris, Praestans, Red Emperor and others. Write for list. Selected Collection, 25 for \$2.50.

Mammoth Red Emperor - brilliant scarlet and the largest of all Tulips, Top Size bulbs 12 for \$1.80.

Regale Lily, jumbo bulbs, 3 for \$1.10. Mixed Darwin Tulips, large bulbs, 100 for \$6.95 Dutch Hyacinths, mixed colors, 12 for \$2.50.

HAROLD LYKE
Box 272 R. D. 2, GIBSONIA
PA.

Let's Start a Compost Pile

Condensed From Radio Talk By Prof. O. B. Combs, Dept. of Horticulture

There are two very good reasons for having a compost pile. First of all, it provides a place for mis cellaneous plant materials, leaves, weeds, cabbage leaves, pea vines, etc., which must be disposed of in some way. Secondly, a good compost pile will provide considerable amounts of the such needed organic matter for the maintenance and improvement of the garden soil.

QUESTION: Is a compost pile just as important to the farm gardener as it is to the city gardener?

ANSWER: No, it isn't because organic matter is available in the form of barnyard manures on the average farm; and, of course, most waste materials can be fed to animals. The average city gardener must depend on some other source. It is largely the city gardener, then, who needs a compost pile as a source of organic matter for the garden.

QUESTION: Just where should the compost pile be located?

ANSWER: Place the compost pile on a level spot and well away from the house. It might well be screened from view by shrubbery, trees or a fence.

QUESTION: Is there any best time to start a compost pile?

ANSWER: We do not know that there is any best time. Everything considered, it seems to us that any time now or perhaps a little earlier than this would be a good time.

QUESTION: Just how does one go about starting a compost pile?

ANSWER: In its simplest terms, all we need to do is start piling plant materials in the desired spot. A good compost pile, generally, will be enclosed on all four sides or at least on two sides or perhaps three. The material used for the enclousure may be fencing wire, boards, perhaps even concrete if a permanent structure is desired. The enclosure should not be larger than 4 to 6 feet square.

QUESTION: Do you add anything to this compost pile other than the plant materials.

ANSWER: Actually, except for water, nothing else is needed. Some gardeners add an occasional layer of good garden soil. That is not necessary and it involves considerable ex-

NEW VERSION OF AN OLD SONG

"Thank God for a garden "

tra work. Moderate amounts of commercial fertilizer and perhaps a little lime will prove helpful. In addition as we just indicated, water is essential, and the whole compost pile as it is being built should be thoroughly wet down occasionally.

QUESTION: If soil is added, just how thick should the soil layer be?

ANSWER: The soil layer may be as thin as two or three inches, or it may be up to four tr six inches if desired.

QUESTION: How often would soil be added under these conditions?

ANSWER: A fairly good rule calls for about three or four inches of soil on each foot or so of plant material.

QUESTION: Now what about some of those other materials you spoke about, lime, for example?

ANSWER: A small amount of lime will hasten decay of the plant materials and also help to avoid odors. A sprinkling of perhaps one pound or so over each layer of plant materials would be sufficient. Too much lime, of course, should be avoided because most garden soils in Wisconsin are already sweet enough and therefore do not need lime as such.

QUESTION: Now what about that commercial fertilizer you mentioned? Just what kind and how much of that would you suggest?

ANSWER: Commercial fertilizer is suggested largely for two reasons: To hasten the decomposition of the plant materials and to increase and balance the total fertilizer value of the compost. All plant materials and especially very coarse plant materials decompose more rapidly when there is ample nitrogen present. The bacteria which aid in this rotting process feed largely on nitrates, so that added commercial nitrogen helps them to

work faster. Additional phosphate will be very helpful in balancing the total fertilizer value of the compost, and potash will also add to the total fertilizer present when the compost is placed on the garden. Many gardeners find it effective and convenient to use a three to four pound application of complete fertilizer to each layer. A common 3-12-12 mixture would be all right for this purpose.

QUESTION: What about the water. How would you suggest that it be handled?

ANSWER: Water is necessary because the pile must be kept moist for rapid decomposition. That means that the pile should be wet down once a week or so unless rains are reasonably frequent. It also means that for greatest efficiency the pile should always have a top which is lower in the center so that the water will soak into the pile rather than run off.

WHERE DID THESE FRUITS COME FROM ORIGINALLY?

- 1. Apple
- 2. Peach
- 3. Plum
- 4. Cherry
- 5. Pear
- 6. Apricot 7. Currant
- 8. Strawberry
- 9. Raspberry
- Blackberry
 Grape
- 12. Blueberry

ANSWERS

- 1. Europe and Western Asia
- 2. China
- 3. Eurasia, China, and U. S., depending on the variety.
- 4. Eurasia.
- 5. Europe and Western Asia.
- 6. China and Western Asia.
- 7. Europe and Asia.
- 8. Alaska to Patagonia.
- 9. Eurasia, North America, and Eastern Asia.
- 10. North America.
- 11. Hardy varieties from U. S.
- 12. U. S. and Canada.

By Victor Ries in County Gardeners Program Service.

Lilacs Should be Planted in Fall

Canadian Experiment Station at Morden Recommends Varieties For Colder Regions

Mr. W. R. Leslie, Supt. of the Morden Station, in his July newsletter, states that lilacs have surpassed other popular ornamental shrubs in improvement resulting from plant breeding. Lilacs were especially beautiful at Morden during May and June Since the Experiment Station is near Winnipeg, varieties which will do well there should do well anywhere in Wisconsin. Mr. Leslie's comments on growing lilacs will be of interest to our members.

Prefers Plants On Own Roots

"Growing Vulgaris lilacs involves several important considerations. The plants should be on their own rootsspecimen grafted on common lilac are an endless nuisance through the heavy production of suckers from the roots. Moreover, the stocks, if neglected, may soon outgrow the named variety. Flower stalks should be clipped off as quickly as the flowers fade so that plant energy be not used up in seed production. After flowering two or three of the oldest stems are cut off at ground level and an equal number of well-placed new shots allowed to arise as replacements. To secure large trusses of flowers, feed the plants with top-dressing of barn manure and remove surplus and weak stems. Lilacs enjoy good feeding. Two common causes for disappointment are planting in the shade of trees or planting too deeply. Many lilacs die because set too deeply. Death may be several years in coming. The lower bark of the trunk becomes soft and spongy by soil contact, gradually decaying and arresting the upward flow of sap. Transplants should be placed not more than two inches deeper than the collar or the point where the stem becomes root.

Good Varieties

Vulgaris hybrids showing outstanding excellence in 1948 include-Mme. F. Morel, President Loubet, Leon Gambetta, Stadtgartner Rothpletz, Thunberg, Victor Lemoine, Montaigne, Mme. Antoine Buchner, Katharine Havemayer, Lucie Baltet, Vestale, Edith Cavell, Ellen Willmott, President Pioncaire, Saussure, Paul Thirion, Emile Gentil, Massena, President Fallieres, Gilbert, Le Notre, Pascal, Henri Martin, Mrs. Edward Harding, Ludwig Spaeth, Pocahontas and Violetta.

Tastes differ in flowers as in other subjects. One choice of a select dozen aristocrats is, White single-Vestale; White double-Edith Cavell and Ellen Willmott: Pink single-Lucie Baltet; Pink double-Mme. Antoine Buchner and Montaigne; Pink to Lilac double-Leon Gambetta; Mauve double-Victor Lemoine; Reddish doubles-Paul Thirion and President Loubet; Blue double - Emile Gentil; Purple single-Ludwig Spaeth.

Plant in Fall

Wisconsin Nurserymen recommend lilacs be planted in the fall.

Prof. William Longenecker of the Dept. of Horticulture, University of Wisconsin who has charge of the University Arboretum in which the fine lilac planting sponsored by the Madison Garden Club may be seen, says: "We have found fall planting much better than spring planting for lilacs. Fall planted lilacs will usually bloom a year ahead of those planted the previous spring."

He thinks the varieties listed above are all right for Wisconsin.

Write for

Vew

Colored Folder

ON

HOLLAND'S FINEST BULBS

ORIENTAL POPPIES

PEONIES

IRIS

PHLOX, etc.

Gartman's Gardens

Fond Du Lac. Wis.

Visit our nursery this fall and see large display of hardy Mums.

Nature grows TREES

- Foliage and Dormant Spraying
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- Fertilizing and Root Treatment
- Tree Removal
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THE PRAYER OF THE TREE

"I am the heat of your hearth on cold winter nights, the friendly shade screening you from the summer sun, and my fruits are refreshing draughts quenching your thirst as you journey on: I am the beam that holds your home, the board of your table, the bed on which you lie and the timber that builds your boat. I am the handle of your hoe, the door of your homestead, the wood of your cradle and the shell of your coffin; I am the bread of kindness and the flower of beauty: Ye who pass by, listen to my prayer, harm me not."

From the Portuguese

OUR TREES How to Know Them By I. EMERSON ARTHUR I. clarence M. WEED, D. Sc.

One of the handsomest nature books offered for the delight of the forest rambler.

school. I hope you can attend.

State Chairmen and District Presidents, I should like to remind you to write reports on your activities and bring them to the Convention. Reports do not need to be long to be complete and helpful to other mem-

And also: It is not too late to send your scholarship contribution to Mrs. Kieckhefer.

I am anticipating the pleasure of seeing every club represented at our Convention. Please make your reservation early.

Sincerely Mrs. F. J. Fitzgerald

State Committee Chairmen Membership: Mrs. Gilbert St 414 Erie St., Sheboygan Program: Mrs. Charles Bran Program: Mrs. Charles Braman, Waupaca Birds: Mrs. R. A. Walker 2222 Chamberlain Ave., Madison Conservation: Mrs. Malvin Schneider, Hales Corners Horticulture and Visiting Gardens: Miss Olive Longland Wychwood, Lake Geneva Flower Show: Mrs. Chester Thomas 2579 Downer Ave., Milwaukee Roadside Development: Mrs. Charles Schuele, 247 Woodland Lane, Oconomowoc Schuele, 247 Woodland Lane, Oconomowoc Historian: Miss Bessie Pease R. D. No. 1, Box 35, Oshkosh Junior Gardens: Mrs. Leland Dietsch, Fairview Drive, Plymouth Nominating: Mrs. E. A. St. Claire 2418 N. 65th. St., Wauwatosa Garden Centers: Mrs. L. Snapp, 2319 Midway Blvd., Wausau Parlimentarian: Mr. William Steker 119 Monona Ave., Madison Program Awards. Mrs. Harry Harries, Hales Corners Publicity: Mrs. Wm. Curtiss Plymouth, Rt. 1, Judging Schools: Mrs. Clarence H. Fiebrantz, 3006 N. Downer Ave., Milwaukee, Wis. Conservation Scholarship: Mrs. Alfred Kieckhefer, 1250 West Dean Road, Milwaukee 9, Wis. Oconomowoc

Braman.

WAUSAU To Have Fall Judging School Oct. 19 - 21

Sponsored by the Wausau Federated Garden Club assisted by Valley Garden Club, Good Earth Club and the Wausau Home club, the Wisconsin Federation's third Judging School, following up the second National Council Garden Club course held in Milwaukee, in May, will be held in the Wausau Hotel October 19.20,21 (instead of in September).

Mrs. Clifford Cyphers will again lecture on Design, Color and Flower Show Practices. The Horticulture Teacher will be Mrs. Bertha L. Downes, Downers Grove, Illinois, Editor of Garden Glories.

Tickets for the three day course will be \$4.50 for federation members and \$5.00 for non-members. Single lecture-\$1.50. The Handbook of Flower Show Judging will be on sale for \$1.50.

We hope Wisconsin garden club members will make every effort to come to Wausau for this meeting. Those of you who have previously attended know the high quality of the program which will await you. As for your stay in Wausau, the clubs sponsoring the event are doing everything possible to make the meeting enjoyable and comfortable for you as well as very worth while. We hope you will come.

Send reservations to Ada Portman, State Judging School Chairman, 308 12th St., Wausau, Wisconsin.

FROM OUR PRESIDENT

Dear Garden Club Members:

As the annual meeting of the Wisconsin Garden Club Federation will be held October 7-8, the convention program and other details are being carried in this issue.

I urge every garden club member who can possibly arrange to be present to do so and to make a reservation early. Every club should have adequate representation and a voice in the shaping of our policies. Clubs should find the Convention an opportunity for giving valuable information and helpful suggestions to our Federation.

A group of women accustomed to working together can accomplish wonders. The best way for clubs to work together is to meet and talk over their problems together. In this way members receive inspiration and return to their clubs with renewed enthusiasm. It seems to me this is a wonderful opportunity for an exchange of viewpoints.

Mrs. Thomas, Flower Show Chairman plans to have a lovely show at the Convention, so do not forget to visit it and see the attractive arrangements and tables. I hope you will all enjoy our speakers, the banquet, tours and tea. And please keep in mind that we are Hostesses this year to the Central Region, which represents five states. We should do everything we can to make their visit to Wisconsin a pleasant one.

In this issue you will find another announcement of our third judging

WISCONSIN GARDEN CLUB FEDERATION

21ST ANNUAL CONVENTION HOTEL PFISTER, MILWAUKEE, OCTOBER 7th and 8th, 1948

RULES OF CONVENTION 1948 Admission

Admission to the Convention shall require presentation of credentials and payment of registration fee.

Conduct of Meeting

- 1. The chair shall have the authority to make such rules as may from time to time be necessary to facilitate the conduct of the meeting.
- 2. Sessions shall begin as scheduled. Speakers, officers, committee chairmen who appear on the program must be seated on the platform fifteen minutes before scheduled time for their appearance.
- 3. Robert's Rules of Order shall govern conduct of the meeting.

Voting

- 1. Election of officers shall be by written ballot.
- 2. Only official delegates or, in their absence, their alternates shall be entitled to vote.
- 3. When addressing the chair the speaker shall first state his name, club, and credentials.

Motions. Resolutions and Notices

- 1. The Recording Secretary shall have the right to demand that motions be in writing, signed and delivered to the secretary.
- 2. Resolutions must be in writing, signed, and presented to the Resolutions Committee.
- 3. Only notices pertaining to Federation business shall be read from the platform.

Adjournment

The Convention shall stay in session until declared adjourned by the chair.

> William E. Sieker Parliamentarian

Program

Thursday,	7th of October—		
9:30	Registration —	Fee	\$1.00

- 10:00 Business (according to order of Constitution) 12:15
- Luncheon Beauty Luncheon Hotel Pfister Lecture "The Beauties of Modern Cities." Dr. Bedford 1:30
 - Business meeting resumed 2:30 4:00 Adjourn (Flower Show)
 - 7:00 Annual Banquet — Honoring Central Regional Banquet Hall, Hotel Pfister

Friday, 8th of October-

- Regional Business meeting conducted by Mrs. Delarue, Central 9:30 Regional Director
- Luncheon, Hotel Pfister 12:15
- 1:30 Garden Tour
- 3:30 Tea Adjourn

Registrations should be made early.

Mrs. Clarence Schultz, Convention Chairman.

CANDIDATES FOR ELECTION

The Nominating Committee composed of Mrs. Fred Distelhorst, Mrs. E. M. Atkinson, Mrs. Rufus Erickson, Mrs. L. C. Dietsch, and Mrs. Charles Schuele, Chairman has nominated the following list of candidates to be voted upon at the annual meeting, October 7-8:

PresidentMrs. F. J. Fitzgerald, Mrs. Charles Dean 1st Vice PresidentMrs. Clarence Schultz, Mrs. John C. Stevens Corresponding-Recording Secretary...., Miss Merle Rasmussen, Mrs. George Harbort

A Reminder.

As Chairman of the Constitution and By-Laws Committee I wish to ask that any amendments to be submitted to this committee be sent to me before October 1st, so they may be duly considered prior to the convention.

Wm. E. Sieker, Chairman Mrs. Wm. Melchert Mrs. Charles Jahr, Sr. Mrs. J. Livingston Mrs. O. S. Rundell Mrs. F. Wilkerson.

CLUBS, ATTENTION PLEASE!

It is not too late to make your contribution to our Scholarship fund. Mrs. Alfred J. Kieckhefer, Scholarship Chairman, 1250 Dean Road, Milwaukee, will be glad to receive your donations.

IMPORTANT NOTICE

Lack of time and expense involved make it impossible to send out additional schedules for our Fall Convention Flower Show. Therefore, please save and use the schedule printed in last month's magazine in making

HOW MANY DELEGATES MAY WE HAVE?

Article 9, Section 2; (Constitution and By-laws of the Wisconsin Garden Club Federation.)

This legislative body shall be known as the Board of Managers and shall include the Executive Board, Board of Directors, other delegates-at-large and official delegates from each affiliated club or society. Each affiliated group shall be entitled to one delegate and one alternate for each fifty members or less, or two delegates and two alternates for each additional fifty members, or major fraction thereof. Each delegate must present proper credentials signed by the local president or secretary. The credentials committee shall be the final judge of qualifications of delegates.

your plans to exhibit.

If you have not already done so, kindly send in your reservations at once to our Entry Chairman: Mrs. Carl Hofstetter, 136 N. 88th St. Milwaukee 13, Wisconsin.

Mrs. Chester Thomas, Chrm.

GROW WILD FLOWERS IN YOUR BIRD SANCTUARY Mrs. R. A. Walker

Every bird-enthusiast-gardener will have trees and shrubs especially planted for food and cover for birds.

In the May issue of Wisconsin Horticulture I furnished a list of desirable trees and shrubs for this purpose. This planting creates both a problem and an opportunity.... a problem of proper ground planting under or near the shrubs... an opportunity to bring into the garden a great many of the beautiful native wild flowers and ferns that thrive in shaded spots.

The fall of the year is the ideal time to start this wild flower garden. Nursery stock may be purchased from nurseries specializing in native plants. This stock is superior to the plants collected from the wild and is much easier to establish in the garden. Our wild spots are being rapidly denuded of wild flowers, and our gardens are about the only sanctuaries for the preservation of these native beauties.

All early spring flowering plants, such as spring beauty, blood root, hepaticas, Dutchman's breeches and trillium should be ordered at once, so that they may be set out while there is still time for their root system to develop before winter starts. The fall of the year is the best time to divide and reset wild flowers which may already be established and overcrowded.

Given shade and good soil, Myrtensia or Virginia Blue Bell will provide a profusion of beautiful blue in the early spring. The plant quickly dies down and disappears after blossoming, and so may be planted among ferns or hosta lilies or more slowly developing plants. Easily established in shade or semishade is the native blue phlox, which provides early blue blossoms in profusion, as well as desirable ground cover all during spring and summer.

Not so easy to grow, but most attractive and interesting is the native orchid or lady slipper. This demands shade and a deep liberal supply of loose soil and leaf mold. Shooting stars and bellwort also do well in shade and in rich leaf mold. Another spring bloomer is the baneberry with a white feathery blossom followed by white or red berries in the summer.

Jack-in-the pulpit is a welcome spring sight but even more showy in the fall with its large red fruits. Wild ginger makes a good ground cover.

But a must in every wild flower garden are the ferns . . . beautiful, grace-

BIRD NOTES

Mrs. R. A. Walker



AUDUBON NOTES AND CARDS FOR SALE

Wisconsin Garden Club members will again be able to secure the Audubon Bird Notes and Audubon Bird Cards, as well as the Flower Notes and Cards which were so popular during the past year. In addition a line of beautiful bird and flower prints will be introduced. These are of a size popular for mounting or framing. All of these will be available at the State Convention in Milwaukee, October 7th and 8th.

ful, dignified, yet friendly. Most ferns prefer a diffused light, some do well in deep shade. Some ferns are practically evergreen the year around. Some are valuable for attracting birds because of the wooly substance which clothes the uncoiling fronds and is much prized as nesting material.

Lady fern is pretty in the spring. but becomes unsightly toward the end of summer. The Florist fern is similar and is perhaps a better choice. Marginal Shield is my favorite fern. It has dark blue-green fronds of leathery texture, growing in a circle and remaining green all winter. Christmas fern is also evergreen and easily grown. Maidenhair is one of the best of all ferns. It's dark, shiny, bare stems are topped with a nearly horizontal circular frame of branching fronds. It is a distinctive fern, the essence of grace. It must have shade. Cinnamon fern with its tall "fiddle heads" and the Ostrich fern, both large varieties, are useful as space fillers.

The Interrupted fern, whose spore areas "interrupt" the fronds is effective, interesting and easily grown. Perhaps it is the best fern for a dry situation. Sensitive fern is another hardy fern. It is called sensitive because it is the first to succumb to frost. Bulbet fern is a beauty, with long, flowing fronds and tiny bulbets on the underside, which fall off and start new plants.

Ferns are easily grown. Given shade, soil rich in leaf mold and a reasonable amount of moisture, they will thrive and reproduce generously.

Anyone who has never grown wild flowers in the garden will be most pleased at a trial. Beautiful as they are in the field or forest, they cannot compare with the wild flower in the garden.

AMERICAN BIRD SONGS

Recorded in Native Wilds by the Albert R. Brand Bird Foundation, Laboratory of Ornithology, Cornell University. Price for the Series \$8.50. Comstock Publishing Co., Inc., 124 Roberts Place, Cornell Heights, Ithaca, New York.

From One Gardener To Another

Genevieve C. Dakin

Combining a vacation period with a business conference made possible several weeks' stay in the west in June and July. Will you join me in a gardener's travelogue?

The jacaranda trees were in full bloom in California—their blue flowers a beautiful sight. In every cottage garden climbing roses or vivid magenta bougainvillea scaled trellis or pillar. Sweet peas eight or ten feet tall covered wire fences. Calla lilies and geraniums spread luxuriantly. Real Californians spurn the humble geranium, I was told. They prefer to cultivate the more discriminating pelargonium or Stork's bill geranium. As one drives through residential sections one glimpses masses of pansies, tall snapdragons, delphiniums, blue lilies and gorgeous roses in tree and shrub forms. Azaleas, camellias, pittospermum and eugenia are used in foundation plantings with a fuchsia tucked in here and there for texture and color. Fuchsias planted in wire hanging baskets pendent from the branches of old walnut trees were charming in one garden. On previous visits to California I saw large collections of fuchsias growing under lath. Tall evergreens and eucalyptus trees make bold silhouettes against the sky. Creeping geraniums, lavender lantana and mesembryanthemums are used as ground covers on banks. We know that humming birds are frequent visitors in gardens. To our surprise we learned they are not always quite welcome as they nibble on leaves of flowering plants.

As our train crossed into Oregon, roses greeted us from each railroad, station and home garden. Apparently tree forms thrive anywhere with a minimum of care.

In Seattle one may revel in rhododendrons and enjoy the low wall gardens filled with flowering shrubs and rock plants which frequently edge front yards. Time did not permit a visit to the University Arboretum but I learned that since my visit a few years ago some unusual specimens had been acquired. To insure safety of many rare plants, during the war England sent a collection to Seattle. No doubt its mild climate with plenty of moisture approximates that of Kew Gardens.

We visited the garden of Mr. and Mrs. Carl English. Their grounds are perfectly adapted for the growing of rhododendrons and other acid lovers. Mr. English is in charge of the gardens at the government locks. As an avocation he raises thousands of rare plants from Europe, Asia and the Aleutians. His wife, also an ardent gardener, hybridizes iris and collects species primula and iris. With our host we enjoyed a trip to the locks and through its gardens, one of the city's beauty spots.

One sees broom in Seattle but somehow its yellow seems cheerier and gayer under the blue of Vancouver Island's sky as it welcomes us to Victoria.

A visit to this English city is never complete without a trip to famous Butchart Gardens, covering sixteen acres fifteen miles from the city. They were conceived by Mrs. Butchart to cover areas left after quarrying required in cement manufacture. Winding woodland paths lead one to the margin of the famed sunken gardens. One may cross velvet lawns to the Italian Garden where a setting of pools and flowers delights the eye. Another objective may be the English rose gardens. In the greenhouse exquisite varieties of begonias were on exhibition.

A gardener friend arranged for me to visit several private gardens. Alpine plants, collections of rare ferns and other native flora, stands of mecanopsis the color of the sky, a flowering tree fully in bloom, styrax Japonica, graceful Japanese maples and hollies are but a few of the pictures I like to recall. It is not hard to realize why Victoria is called the Garden City. Every home has a garden of sorts. Where tall foxgloves, huge canterbury bells, masses of low campanulas, combine in gay groupings. White dianthus makes a charming edging. A drive in the clumps of dianthus, lavender aubrietia and pale vellow alvssum combine in country showed delicate brodiaeas nodding from rock crevices with native alliums in white and yellow in clumps along the road.

Back in Washington our train took us through mountains where stands of naturalized foxgloves brought color among the white flowering mountain ceonothus. In the Wenatchee valley bing cherry trees were red with fruit and apple orchards showed promise for fall harvest. Here, as in valleys traversed in Canada later, we appreciated what irrigation meant to a one-time desert but fertile land.

Near Wenatchee we visited the Ohme Rock Garden. A natural outcropping of rock high above orchards in the valley is the site of this garden open for a fee. Here a bold, colorful effect is obtained by repeated broad patches of common sedums, creeping phlox, and thymes. It offers a suggestion for a bank treatment or for a fool-proof planting among large rocks.

You may know that Idaho's State Flower is the "syringa" or mock orange. Literally covered with bloom it grows on every hill or mountain side. A companion is the creamy ceonothus with liliac like blooms. In the cliffs grow tiny ferns, sedums, heuchera, harebells and mitella. Penstemons with magenta phlox add color. Oregon holly grows along the roads in the mountains and in one woods I found delicate white mariposas. Ground covers are like those in our north woods.

Along highways acres of yellow daisies, yellow and white sweet clover contrasted with huge patches of clear blue vetch and lupines. Blue cornflowers had naturalized in great stands. In the distance were tall firs silhouetted against the mountains and, high above, fleecy clouds traveled across an azure sky.

Motoring in the Canadian Rockies brings real thrills. One may drive miles along the Columbia river through deep forests of virgin timber where cedars five and ten feet in diameter rise majestically, looking toward the sky. At every turn falls send rapid water to augment the already angry river. Moose and deer, unafraid, stand near the road feeding as we drive by.

Over mountain passes we finally emerge on Lake Louise lying blue and quiet at the foot of Victoria Glacier. The traditional poppies contrasting yellow against the blue of the lake bring a gay note to the grounds of the Chateau. Siberian iris and delphiniums were just in bud.

With vivid pictures in our minds of the sunset glow on the mountains and glaciers as we viewed them from our hotel at Waterton Lakes we drove next morning across the international boundary into Montana's Glacier Park. Fully 900 species of flowering plants and ferns grow here. In the high altitudes the growing season is so short that every day's growth is

Concluded Page 30 Col. 3

Spring Blooming Shrubs for Arrangements

Mrs. Stephen M. Cushman

Many of us look forward to the blossoming of spring flowering shrubs as much as we do to the spring flowers themselves. To one who arranges flowers they offer endless possibilities. Some of them are so fragrant and exquisite they seem to bring the essence of spring into a room with them. Arranging them is sheer delight. Most of the shrubs are versatile. They can be used in flat or tall containers, in large or small compositions, either alone or with spring flowers. Also they lend themselves to massed or line arrangement.

Some shrubs such as the Japanese Quince, Forsythia, Plum, Flowering Almond, Flowering Crab, etc., seem especially suited to line arrangement. If used in a flat container an interesting rock or piece of driftwood at the base of the stems is often a nice addition. When used in this way, a few branches will suffice, therefore care should be taken to choose those with character and interesting lines. Often pruning the branch as you arrange it will help.

Lilac, Mockorange, Beauty Bush, Bridal Wreath, are well adapted to mass arrangement. Stripping the leaves from the branches of Lilac or Mockorange will give a solid color effect that is desirable for some occasions.

It would be a heroic task to list all the shrubs and varieties that make interesting arrangements. From the many I have tried to choose the most beautiful as well as the most usable. Almost all the varieties of some shrubs lend themselves to arrangement, Lilac, Mockorange and Flowering Crabs fall into this class. However from the standpoint of flower arrangement, many varieties of Viburnum and Spirea do not have much to offer. Following is a list of spring and summer flowering shrubs hardy in this region. I would like to add Magnolia Soulangeana and Magnolia Stellata, but they are not hardy unless given a great deal of winter protection.

Flowering Quince (Chaenomeles) Forsythia

Flowering Almond (Prunus japonica)

Honeysuckle (Lonicera)
Flowering Crab (in variety)
(Malus)

Lilacs in variety (Syringa)

Mockorange, in variety (Philadelphus)

Plum (Prunus triloba)

Spiraea (Van houtti) (Anthony Waterer) (Billiardi) and others Deutzia (Lemoinei)

Weigelia (Floribunda) (Candida) Viburnum (Carlesi) (tomentosum) Golden Currant (Ribes aureum) Beauty bush (Kolwitzia amabilis) Shadblow (Amelanchier) in variety Hawthorn (Cratagus) in variety Shrub roses

Shrubs interesting for colored foliage Red Leaved Japanese barberry, Japanese Maples, Golden Privet, Russian Olive, Varigated Wiegela, Purple-leaf Plum.

Shrub branches for forcing Forsythia Pussy Willow, Flowering

Forsythia, Pussy Willow, Flowering Quince, Wild Plum.

(From "Symposium on Shrubs")

ARE YOU BUYING SHRUBS?

As fall planting time will soon be here, garden club members who intend to add new shrubs to their borders this fall will do well to secure a copy of the "Symposium on Shrubs" put out by the Milwaukee District under the direction of Mrs. Ervin Kulow, Program Chairman.

Publication of this excellent little booklet is quite an achievement and its sponsors should be congratulated on the success of their undertaking.

With their permission we are reprinting, in our September and October issues, chapters which we think especially valuable to garden club members who intend to plant shrubs but first wish some advice.

Copies of Symposium on Shrubs are still available at 55 cents per copy and may be secured by writing to Mrs. F. C. Marquardt, R 1, Box 63, Hales Corners, Wisconsin.

"Plants & Gardens"

Published quarterly by the Brooklyn Botanic Garden for the gardener who wants something different. It is not for the absolute beginner, but is written in language you can understand. Rates: \$2.00 for one year, \$3.50 for two years. For complimentary copy, write to Dr. George S. Avery, Jr. Director, The Brooklyn Botanic Garden, Brooklyn N. Y.

PYRACANTHA (FIRETHORN)

As autumn advances and a scarcity of bloom becomes noticeable in the flower garden our interest turns again to the shrub border no longer fragrant with bloom but peppered with gay little berries. If we have chosen our shrubs wisely we need not grieve over the passing of summer. A carefully planned shrub-border can bring beauty to our gardens at all times of the year.

One of the most beautiful and heavily fruited of all evergreen hardy or half-hardy, ornamental shrubs is Pyracantha or Firethorn, a species of thorn with flame-colored berries, native to Southern Europe. Thriving best in a sunny sheltered location in the shrub border, Pyracantha (which has a small white flower in spring) may be trained to climb against a high wall or the side of a house. It is also attractive in the border of a rock garden where its clusters of yellow, orange or scarlet berries form a pleasing contrast to the grays and dull greens of the garden. When backed by tall evergreens the effect is very fine.

The culture of Pyracantha is not difficult. It should be planted September to October or April to May, in ordinary loamy soil and pruned into desired shape very early in the spring.

For indoor decoration in autumn branches of Firethorn laden with berries make beautiful line arrangements.

LECTURE BUREAU NEWS Flowers In Action

A Movie Lecture

Now available for lectures, Mr. John Nash Ott, Jr., noted botanical motion picture photographer, presents his new all-color time-lapse sound films. These pictures were produced especially for garden clubs and nature study enthusiasts but are so startling that they hold all types of audiences spellbound.

For further information, phone or write Midwest Lecture Bureau 730 Elm Street, Winnetka, Illinois Phone Winnetka 580.

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BOOK REVIEWS

Dagny Borge

Plants, A Guide To Hobbies, By Herbert S. Zim.

This book by an amateur botanist is intended mainly for young people. In the first three chapters he discusses the identification and classification of plants. The bulk of the volume is devoted to collecting and collections of preserved material and living plants from seed to fossils. There are also three chapters on experiments with plants, and one on plant regions. The last chapter lists plant localities worth visiting. For Wisconsin the list comprises the Chequamegon National Forest, Interstate Park, Northern Highland State Park, Terry Andre State Park, Wisconsin Dells, the greenhouses in Mitchell Park in Milwaukee, the U.S. Forest Products Laboratory in Madison, and the cherry orchards near Sturgeon Bay.

Canadian Spring, by Florence Page Jaques, illustrated by Francis

Lee Jaques.

A day by day account of a journey through western Canada, during which the illustrator, who is artist for the American Museum of Natural History, sketches, while his wife merely enjoys the scenery. Their particular interest is in wild ducks. Not as spontaneously delightful as earlier volumes by this talented pair.

Armchair Gardening; Some of the Spirit, Philosophy, and Psychology of the Art of Gardening, by Thomas Hubbard McHatton.

In the opening chapter, the author, who is Head of the Department of Horticulture and Director of the Garden School of the University of Georgia, sketches briefly the beginnings of garden clubs, the first of which was founded in Athens, Georgia, in 1891. A later chapter is devoted to the history of horticulture in America. Other chapters treat of sight and color in gardening, and garden music and odors.

An article on "Magnolias in the North," by Henry F. Leweling, is contained in the July 15, 1948, issue of The American Nurseryman. Since the author is a Wisconsin resident a description of varieties suitable for Wisconsin together with their care and propagation, constitutes the bulk of the article. Mr. Leweling was recently on the staff of the Horti-

culture Department of the University, and is now with the Alumni Research Foundation.

"100 Best Books for the Gardener's Library," is a 16 page pamphlet listing books recommended by the editor of The Flower Grower, Paul F. Frese. and approved by E. L. D. Seymour, Horticultural Editor of The American Home, and Elizabeth C. Hall, Librarian of the New York Botanical Garden. The list contains only books currently available, and omits most nature books as not needed by the average gardener. The compilers claim that this is the first time that such an upto-date list has been made. It may be secured from Holliston Mills, Inc., Norwood, Massachusetts, at 15 cents per copy.

With the June, 1948, issue of The Home Garden, a page is devoted each month to "The Gardener's Kitchen," edited by Ruth Matson. She has not only been a gardener for many years, but is also a renowned cook, specializing in dishes from several foreign countries in which she has lived from time to time. One recipe each month now appears on her page, that for June being peapod soup, for July blueberry pudding, and for August sour cream cucumbers.

In the last chapter, on garden treks, pilgrimages to the East, South, and West are suggested, but none to midwestern gardens.

Guardians of the Forest, by Stacy Klingersmith.

The hobby of this author is nature study, Because of this she became nature adviser to Campfire Girls and Girl and Boy Scouts. In this connection a Tree Club was formed, each member of which "adopts" a tree. This book relates in diary form what has taken place on club walks in the woods, month by month, in a Michigan locality. Somewhat pedantic and monotonous in style, but should be used for leaders of junior garden clubs.

GARDEN CLUB PRESENTS FOUNTAIN

Wisconsin garden club members who have participated in the Year Book Contest conducted each year by Horticulture, official magazine of the Massachusetts Horticultural Society, will read with interest the news of a recent gift made to the city of Winter Park, Florida, by its Garden Club. A drinking fountain of native stone set among a mass of azaleas now greets visitors to Kraft Azalea Park in that city. On a bronze plate attached to the fountain is the following inscription:

"The Winter Park Garden Club invites you to drink of the water of life from this fountain. Erected in honor of its Year Book first national award in Horticulture contest."

ANNOUNCEMENT!

The Sheboygan District will hold it's annual meeting at Manitowoc on Thursday September 16th. Following a dinner at the St. James Episcopal Guild Hall Mrs. Irwin L. Burger and Mrs. Jacobs will talk on Flower Arrangements and Table Settings.

AN INVITATION

The Badger State Dahlia Society, Inc., staged its annual dahlia and flower show at the Recreation Center, 16 E Doty Street, Madison, on September 5th and 6th. The Society cordially invited garden club members and those interested in flower culture to participate in the show by exhibiting their choice blooms and artistic arrangements.

GARDEN EXCHANGE MAGAZINE

Just what the name implies, Features exchange of ideas, suggestions and garden knowledge, as well as seed and plant material.

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WISCONSIN TREE SERVICE

"1860 THANKSGIVING KITCHEN" FEATURE OF CENTENNIAL EXPOSITION

Furniture and other equipment placed in the "1860 Thanksgiving Kitchen" quaintly displayed at the Womans Building at the Wisconsin Centennial Exposition has been graciously loaned by antique shops, garden club members, and by women from many of Wisconsin's farms.

To mention a few of the items in the room, there are cupboards, an old pine sink, tables, spinning wheel, rag and hooked rug; utensils and dishes on the stove; iron maple-sugar mold, iron bread stick pans, Wooden bowls, and copperware, Benington, Majolica and Lustreware in the cupboards.

The dinner table covered with a handwoven cloth and napkins is set with ironstone Moss Rose pattern and old glassware. The decor selected for the table includes an old castor set in the center, an ironstone bowl filled with old Duchess apples and grapes on one end and a bowl of black walnuts at the other end. Fruits and vegetables in an old chopping bowl placed beneath the work table duplicate those available in 1860; herbs hanging up to dry are dill, sage and sayory.

Old fashioned red geraniums and ivies on small tables and potted parsley on the sink complete the floral decorations.

Three manikins realistically placed, including a granny at the spinning wheel, mother at the cupboard, and daughter at the door represent three generations. The room also boasts an 1860 Almanac, a Bening cuspidor and even a lazy old kitten sleeping under the kitchen stove.

Garden clubs which assisted in furnishing fruit, vegetables, dried herbs and plants are: Hawthorn, Tess Corners and Whitnall Park clubs.

Mrs. Fred C. Marquardt

CENTENNIAL EXPOSITION 1848 -1948

It was gratifying to be called on by the Womens Committee of the Wisconsin Centennial, asking our Federation Garden Clubs to provide certain furnishings and treatment needed in the Historical Rooms of the Women's Building. These rooms were correctly and authentically done to portray particular periods in Wisconsin's history and important details in this respect called for certain styles

Portage Takes a Bow



PORTAGE GARDEN CLUB MEMBERS

At Summer District Meeting

Left to Right, Back Row-

Mrs. E. P. Andrews, Mrs. H. V. Tennant, Mrs. E. J. Blass, Mrs. B. W. Older, Mrs. T. H. Sanderson, Mrs. J. C. McCartan, Mrs. George Turner, Mrs. C. J. Funk, Miss Myrtle Clark, Miss Antionette Fordman.

Front Row:-

Mrs. A. J. Henkel, Mrs. C. M. Payne, Mrs. G. H. Barker, Mrs. D. Bogue, president, Mrs. R. O. Klenert, Mrs. Wm. Klenert.

in flower arrangements and potted plants.

Our members did excellent work and credit is to be given the following clubs and members:

1917 MISSION PARLOR

By Mrs. George C. Johnson and Mrs. L. G. Stewart of the Home Gardeners Garden Club, Mrs. O. H. Burgermeister of the Hillcrest Garden Club and Mrs. Henry Moody of the West Allis Garden Club.

1874 EARLY OFFICE

Mrs. Gene Muensberg, Elm Grove Garden Club and Mrs. John Nyle, Brookfield Garden Club.

1864 VETERANS AID SOCIETY WORK ROOM

Mrs. Walter Patitz, Ravenswood Garden Club, Mrs. Amanda Watzek and Mrs. Lloyd Wolf of the Spring City Garden Club, Waukesha. Mrs. Frank Thompson of the Waukesha Town and Country Garden Club.

1860 EARLY KITCHEN

Mrs. Wm. R. Holz and Mrs. Fred Marquardt, Hawthorne Garden Club. Mrs. J. E. Voight, Whitnall Garden Club, and Mrs. Herman Imme of the Tess Corners Garden Club.

Signed: Mrs. Chester Thomas, Chrm.

One Gardener To Another (Cont.) vital to perfect fruit. That accounts for the impression that all seem to burst into flower at once. As snow banks retard growth many species usually associated with spring do not bloom until late summer. This explains why alpine meadows are continually in flower.

Rounding Garden Wall mountain one is intrigued with alpines in the rock crevices. Long drifts of bur forgetmenots cover slopes. On the crest of Logan Pass large stands of yellow glacier lilies are in bloom. Penstemons, blue and lavender, cling to rocky hillsides.

Some other summer we hope to return to Glacier. We want to follow the trails and linger among the lupines, eryngium, gaillardia, arnica and other lovely flowers that fill the alpine meadows.

Genevieve C. Dakin

DISTRICT MAIL BOX

ART INSTITUTE GARDEN CLUB SPONSORS LECTURE

The Milwaukee Art Institute Garden Club will sponsor an illustrated lecture on "Christmas Decorations" by Miss Anne B. Wertsner, Field Secretary of the Pennsylvania Horticultural Society at the Milwaukee Art Institute, 772 N. Jefferson St., Milwaukee, Wis. on November 19, at 2:15 p.m.

Aside from lecturing, Miss Wertsner is a writer and experienced flower show judge. She stages all the flower shows for the Society and its section of the great Philadelphia Flower Show, and she is author of the Practical, well illustrated little book, "Make your Own Merry Christmas."

Tickets will be on sale after October 1st at \$1.00 plus 20c tax. As the seating capacity of the Art Institute is only 250 there will not be more than 150 tickets available to persons outside of the Art Institute Garden Club. So if you wish to hear Miss Wertsner, you should write soon to Miss Emma C. Schipper, Program Chairman, 510 E. Homer St., Milwaukee 7, Wisconsin.

TUBEROUS BEGONIA EXHIBIT VIEWED BY GARDEN CLUBS

An invitation to visit the unusual estate of Oscar U. Zerk on Cooper Road, Saturday, August 28, at 7:30 p.m. has been extended by Mr. Zerk and the Kenosha County Garden Club to all Garden club members in that locality, to the officers of the Milwaukee District and to club presidents throughout the state. The magnitude of the plans for this gathering (which will have taken place before our September issue leaves the press) indicate that it will be one of the most beautiful affairs in Wisconsin Garden Federation circles this year.

From the letter sent out by Mr. Paul Vigansky, President and Mrs. Esther Schaefer, Corresponding Secretary of the Kenosha Club we quote: "Among many other things in the garden, one of the loveliest spectacles will be Mr. Zerk's magnificent Tuberous Begonia Exhibit consisting of over 150 plants of 20 named varieties including the hanging basket type, all situated under his heavily vine covered 80-foot-long pergola. . . Additional flood lighting is now being installed to enhance the beauty of the tuberous begonia exhibit."

FOX RIVER SCHOLARSHIP

the need to realize and to teach that our natural resources are not inexhaustible. We need also to develop in the youth of America a greater appreciation of public property so that the tremendous destruction and waste of facilities and accomodations in public buildings, parks, playgrounds, and historic and scenic places may be brought to a minimum. These are the aims of the conservation department as stated in the school catalog.

Central State Teachers College pioneered the field in conservation education. It had the first, and for a short time, the only conservation major in the nation. Naturally it attracted attention and letters of inquiry came from schools in all parts of the country asking for details of part or all of the program. Only last month Mr. Schmeeckle, Chairman of the department, was invited to Valley City, North Dakota, to assist in opening at Valley City State Teachers College a conservation department patterned closely after the one at C. S. T. C.

And that brings us back to the place from which we started—those 50 dollar scholarship checks given by this garden club district. When it was suggested a year ago that it would be a fine thing to sponsor a scholarship as an educational project, we in Fox River Valley district felt that we had something outstanding in our midst that merited recognition. And so, while still supporting the federation scholarship (in Madison,) we set up our own \$100 scholarship fund.

The requirements for earning the scholarship are simple. The student must stand high in the class academically, must show promise of efficient leadership out in the field, and must return to C. S. T. C. for his senior year. In case of a tie between two students the one with the greater need is given preference. The recipients are chosen at the end of their junior year and the names are announced on award day just prior to commencement.

It is thus that we, the garden clubs of the Fox River Valley district, recognize merit in a field close to our own gardening and do our bit in the great work of conservation.

-Mrs. Warren Jenkins. North Side.

ANNOUNCEMENT

The Madison District will hold its annual meeting, Wednesday, September 29 at Kennedy Manor, Langdon St., Madison. Registration will begin at 9:30 and the business meeting at 10:00. The forenoon will be given over to annual reports of officers and district chairmen and election of officers for the coming year. Following luncheon at Kennedy Manor, there will be music and an illustrated talk on Flower Gardens of the Orient by Mr. George Sieker, recently returned from 21/2 years in the Orient. Mr. Sieker. who is a brother of your district president will also talk about conservation efforts being made by people throughout the Orient, and by the Japanese in particular.

Clubs of the district should be well represented at this important meeting. If you will send me your reservations early, we can move ahead promptly with our plans and insure you a good meeting.

William Sieker President, Madison District.

LILIES, THEME OF MEETING

Members of the Sheboygan Garden Club have had a busy summer judging from news of their activities sent us by Miss Nellie Palmer, Publicity Chairman.

At the July meeting they gathered in Evergreen Park for a basket lunch. Food was abundent and good will prevailed. Mrs. R. G. Maiselein, talking on the appropriate topic "Trees", told members where various species are found, their size and practical use.

Late in July members and friends, housed in a comfortable bus toured the Kraft Gardens.

The highlight of the season was the August meeting held in the garden of the president, Mrs. Otto Hobson, at which Mrs. Charles Schultz, Sheboygan District President, spoke on "Lilies." Mrs. Schultz said that there are 100 species of lilies, that those grown from seed are more disease-free than those grown from bulbs, and that the Madonna is the easiest to grow.

A table decorated with garden flowers was the setting for the punch bowl at which Mrs. Busse and Mrs. Hobson presided. Cakes frosted with white or yellow lilies were appropriate or the occasion. Later in the afternoon members visited the Paul Conrad, Lewis Arndt and Charles Hedlund gardens on the South side and the William Beringer, Dr. F. A. Nause and E. C. Hoyer gardens on the North Side.

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Sup 1 16 2



October 1948

In This Issue

Annual Convention Programs

PIT STORAGE OF POTATOES Department of Horticulture, University of Wisconsin

Potatoes store best at between 35°

and 40°F, and in a moderately moist atmosphere. They may become undesirably sweet when chilled at temperatures below 34°F. and are seriously damaged by even light freezing which happens at about 29°F.

Perhaps the cheapest and simplest way to store potatoes temporarily is to place them in an elongated pile and cover them with alternate layers of straw and soil.

The piles should be placed on well drained ground. Reasonably good ventilation should be provided, and adequate covering of straw and ground should be used. A single ventilator, is sufficient if the pile is not longer than 10 feet. Additional ventilators should be provided when larger quantities are stored under the same cover. Straw should be placed beneath the potatoes to insulate them from the soil and the pile should not be more than four feet deep. It is also well to store in a single pile, no more potatoes than may be moved quickly when the pile is opened.

When the potato pile is completed, it is covered uniformly with an eight to ten-inch layer of dry straw. The straw is then anchored in place with a light covering of soil. Unless cold weather or rain is expected soon, the pile should be left in this condition for a week to ten days. This lets heat and excessive moisture escape. As the weather gets colder, the outer layer of soil should be increased to six inches or so. If the potatoes are to be stored beyond November additional layers of straw and soil will be necessary to prevent freezing. Ventilators are covered to keep out rain and, as cold weather approaches, they will be closed. From Special Circular, Wisconsin College of Agriculture.

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WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Herticultural Society

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Subscription to Wisconsin Horticulture is obtained by membe State Horticultural Society for which the annual dues are Clubs, Horticultural Societies, and other Horticultural Organization at a reduced membership rate. Seventy-five cents of the annumember is for a year's subscription to Wisconsin Horticulture.

Orchard Day Highly Successful

Tour of Orchard and Machinery Demonstration at Nieman Bros. Orchard Cedarburg, Attracts Large Attendance.

About 250 fruit growers and their wives attended the orchard tour and machinery demonstration at Nieman Bros. Orchard on September 1. An account of the forenoon orchard tour is presented by Prof. C. L. Kuehner.

Nieman Bros, and the local committee had made splendid preparations for the event. The local 4-H Club took charge of parking automobiles and served a luncheon at noon. Seats



Mr. Peter Lewis Swartz of Swartz Orchards, (on tractor) demonstrates duster mounted on rear of tractor. "The men are close enough together so when they work at night they can talk to each other," said Jayson Swartz.

had been placed on the east side of the large packing shed so that all visitors could sit in the shade while watching the machinery demonstration.

Open Meeting With A Fire

The afternoon session opened with a fire-run by a Bean Sprayer Co. fire engine, demonstrated by Leon Miller of Okauchee. The fire engine is a high pressure sprayer, developing 900 pounds pressure and it put out the fire in a very few minutes.

Masters of Ceremony, Vice President Gilbert Hipke of New Holstein

and members of the board, Wisconsin Apple Institute Don Reynolds, Sturgeon Bay, took charge of the afternoon program. Dr. Dewey Moore first demonstrated the ground spray boom developed by his department, now being produced by Herbert Reynolds, Sturgeon Bay, who also demonstrated a spray mast made by the Grand Traverse Orchard Supply Co. of Traverse City, Michigan.

Leon Miller of the Bean Sprayer Co. then demonstrated a speed sprayer; a standard sprayer with gun and a Spartan sprayer which he called the "baby speed sprayer." The latter is a small unit made for growers who have only a few trees. It develops about 200 pounds pressure.

The Hardy Manufacturing Co., Hudson, Michigan, was represented by Mr. C. D. Hunter of Kansas City. He exhibited a 35 gallon per minute sprayer mounted on a truck and operated by DeSmidt Tree Service of Racine.

The Iron Age Sprayer with oscillating spray head was next demonstrated by the Kenney Machine Corporation in Indianapolis, Indiana. The demonstrator was J. J. Mills of York, Pa., engineer with the company. This ma-

chine had never been seen by growers present and the oscillating spray head created a great deal of interest. Local representatives are Schubert & Sons, Thiensville.



Mr. Jayson Swartz, Swartz Orchards, Waukesha told fruit growers, "These apples are clean. They had the same liquid spray as the scabby ones I showed you but in addition had 2 applications of sulphur dust during wet periods."



Masters of Ceremony and Hosts at Orchard Day. Left to right: Gilbert Hipke, New Holstein; Don Reynolds, Sturgeon Bay; Arnold Nieman and Roland Nieman.

A power chain saw made by McCullock Chain Saw Co. of Los Angeles, Calif., was then demonstrated by Mr. S. Gromnicki of Milwaukee. This chain saw is less expensive than some other types and was of interest to orchardists because it will save labor and time in cutting down old trees.

Schubert and Sons of Thiensville were represented by Mr. Henry Schaefer who demonstrated a weed sprayer for controlling weeds on the farm and also a Myers Orchard Sprayer drawn by an International tractor.

Dusters Demonstrated

The Niagara Sprayer and Chemical Co., Littleport, N. Y., was represented by Mr. J. Henry Smith, Waupaca, and Mr. E. A. Erickson (son of Elrich Erickson of Horseshoe Bay Farms, Egg Harbor.) They demonstrated a Niagara duster, recommended as a supplement to a sprayer in case of continuous wet weather or when the ground is too wet for a large sprayer to enter the orchard.

A Hamilton gun made in Bangor, Michigan, was demonstrated by Nieman Bros. It is an inexpensive device which can be mounted on a small sprayer. The gun is worked on a swivel so that the operator does not need to carry it.

Mr. Peter Swartz of Swartz Orchards, Waukesha, then demonstrated the Howry-Berg duster made at Denver, Colorado. This duster was obtained for Swartz Orchards by Mr. Lester Tans of the Southeastern Coop and is mounted on the rear of a tractor. Mr. Jayson Swartz talked about the duster and said that if dusting is done during the night, the two men on the machine are close enough together so they can talk and keep from getting lonesome.

Mr. John Boehlke representing the J. I. Case Co. of Racine then demonstrated a Little Giant fertilizer spreader. This machine is suitable for spreading fertilizer in the orchard and on the farm.

Following the machinery demonstration everyone was invited to view the large cold storage rooms for apples operated by Nieman Bros. and see the large apple grader in operation.

With the help of our congenial masters of ceremony and a loud speaker provided by the local distributor for

(Continued on Page 37 Col 3

The Fruit Growers Orchard Tour

By C. L. Kuehner

On September 1st, more than 200 fruit growers from not less than 15 counties, from Door Co. to the north, Kenosha and Rock to the south, and Sauk Co. to the west assembled at the Nieman Orchards at Cedarburg for a full day's demonstrations. The forenoon was spent in the fine 100 acre orchard studying cultural practices and tree responses. Special attention was given to a block of irrigated trees, mostly Northwestern Greening. Marked effects were noticeable in these trees both in improved foliage and larger fruits. Fruit size was defi-

than the adjoining block of trees in blue grass sod. Alfalfa robs the tree roots of more soil moisture than the blue grass. The fruit in the blue grass sod was definitely larger than in the alfalfa sod, showing that under dry conditions, at least, alfalfa removes more soil moisture from the subsoil area than the blue grass.

Visiting growers also had an opportunity to see trees which were lacking in nitrogen as indicated by sparse, thin, yellow foliage in contrast to the more abundant heavy green leaves and huskier terminals on trees which



Howard Nieman, son of Arnold Nieman of Nieman Orchards, Cedarburg, operates a gun on Myer sprayer.

nitely better than on trees which were not irrigated.

Effect of Mulching

Trees which had been moderately mulched with pea cannery vine refuse had excellent foliage and good sized fruit. It was quite apparent in these vine-mulched blocks of trees that they were getting not only moisture benefits but some growth stimulation from the nitrogen in the decomposing mulch. In still other blocks of trees a bale of straw had been applied to each tree in 1947. Improved moisture effects showed up in heavier foliage, better terminal growth, and satisfactorily sized apples on these trees as compared to trees which had not been mulched.

Blue Grass Sod And Alfalfa

Another interesting observation was that the block of trees in alfalfa suffered more from lack of soil moisture had been given more adequate nitrogen applications.

Pruning practices were observed and explained. Young trees showed fine training. Most of the older bearing trees had been very well freed of the weaker cull branches thus eliminating much of the small cull fruit which grows on this type of wood. It was pointed out that the fruiting of some of the older dense-topped trees could be improved by moderate top pruning, so designed as to lower the height of the tree and at the same time bring more light into the middle and lower branches.

Rodent Control

Rodent control in this orchard is obtained by wire mesh protectors around each tree trunk and the baiting of runways under the mulch with poisoned vats. The Niemans believe in, "An ounce of prevention is better than

a pound of cure."

Good insect and disease control was very evident in nearly all parts of the orchard. Aggressive and alert attention to timely, thorough spraying all season long surely brings results in pest control.

Dr. Fluke contributed a lot to the success of the meeting by answering growers insect and insecticide questions in his effective and interesting way.

In the same manner Dr. Moore handled the disease questions, particularly apple scab control, very competently in the light of experimental evidences. Ground spraying and the use of newer fungicides received most of the emphasis. Prof. Vaughan answered many of the growers fruit disease questions on the trip through the orchard.

In Appreciation

The Nieman brothers, Arnold and Roland, and the local committee, County Agent Gilman, chairman, are to be complimented on the excellent job they did in planning the many details of the day's events. There was not a hitch all day. Everyone will long remember the friendly hospital-

ity and the efficient management of the day's meetings and the gracious help, good food and smiling services of the Elm Tree 4-H Club.

FERTILIZERS FOR CHERRY ORCHARDS

A lack of plant food in the soil has probably played a part in the failure of our cherry orchards, particularly in those areas of the state where phosphorus is in low supply. Recent experiments at the Monett Experiment Field indicate that the sour cherry will respond to fertilizer containing this element. Cherries failed to grow satisfactorily with nitrogen alone on a soil where peaches made normal growth. Fertilization with nitrogen is as essential for the growth and production of cherries as any other fruit.

A. D. Hibbard in Horticultural News, Missouri Horticultural Society. (Continued from Page 36)

the Pabst Brewing Co., the demonstration kept the interest and enthusiasm of all in attendance at a high pitch. At the close of the meeting, Mr. Gilbert Hipke asked if they wanted another meeting of this kind next year and almost every hand went up.

For Fruit Growers

FOR SALE—Butler, power driven Apple Grader, used two seasons and the ideal machine for any orchard from three to fifteen acres. Also — 500, bushel size, cardboard apple boxes; knocked down and complete with liner and cover. 23.5 cents per box.

And — 200, one-half peck, Christmas gift apple boxes; green with red designs on cover. Mailing box included with each gift box. 26 cents each.

Inquire of Carl Ohm Sr., Hilbert, Wisconsin R F. D. 1

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BASKET BOTTOM PADS

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PLACE YOUR ORDER NOW for Ammonium Nitrate Fertilizer for acceptance at any time our supply arrives. Suppliers will not guarantee delivery of material for Spring orders.

Poisoned Oats for Mice Control, 10-25 lb. bags.

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Lester F. Tans

Cherry Rootstocks

Dr. Chas. Swingle Begins Report On Studies Of Hardiness And Adaptability Of Various Rootstocks. To Be Continued In Future Issue.

Introduction

Although there has been but little discussion in Wisconsin recently on this subject, with orchard plantings of sour cherry in Door County and generally throughout the state being almost wholly on Mahaleb roots, the last word is far from being said on this important matter. Like some families, in many cases the most important part of the tree is below ground. What do we really know about this part?

Although of course other points are important, the question of root adaptability to diverse soil and moisture conditions; resistance to virus and other diseases and pests; compatibility with the top varieties; length of life; size of trees; fruitfulness; winter hardiness — these are a few of the things intimately tied up with the rootstock problem that largely determine orchard success or failure. Accordingly, it seems worth the time of every fruit grower, and the limited pages of this magazine, to devote some attention to this important subject.

Recently Dr. Charles F. Swingle was appointed to the staff of the College of Agriculture and stationed full time at Sturgeon Eay, in furtherance of the fruit work on the Door Peninsula, Dr. Swingle has done considerable apple and cherry understock work, and he has promised to give us some items for the magazine, including pertinent information taken from his previous work (mostly in Maryland and Virginia) and from time to time up to date information as he has additional observations to report. In the meantime he has called our attention to some published work on cherry stocks, and we have picked up other items, including one from the July 1948 Tennessee Horticulture.

Notes On Cherry Rootstocks

 Extracts from Coe, Francis M., "Cherry Rootstocks." Utah Agric. Exp. Sta., Bull. 319, 1945.

Description of the Rootstock Species

Mahaleb

Mahaleb rootstocks are seedlings of the related cherry species, Prunus mahaleb Linn. When allowed to form its own top mahaleb makes a large round-topped shrub or small tree with glossy recurved green leaves showing little resemblance to a cherry. This species grows wild in Europe and also as an escape from cultivation in the eastern states. The fruit is small, black, bitter, and inedible. The mahaleb seldom sprouts from the roots of cherry trees, but occasionally does so from the trunk below the bud.

Howard reported that imported mahaleb seed came mostly from hedges in the Rhone Valley, but that he found old trees that were 20 feet high growing wild at 3,000 feet elevation in the French Alps. They seemed to thrive especially well on dry, gravelly soils, and on steep hillsides where moisture was scarce. They appeared to thrive equally well in the deep, moist soils of the Rhone River Valley. In the foothills of the Alps, where soil had washed away and exposed roots of mahaleb a pronounced taproot running straight down was found in practically every case. He observed great uniformity among the wild mahaleb trees. He quoted Armand, leading seed dealer

(Continued On Page 43)

FRUIT GROWERS MEETING

MINNESOTA FRUIT GROWERS ASSN.—WISCONSIN HORTICULTURAL SOCIETY

WINONA HOTEL—WINONA, MINNESOTA NOVEMBER 8-9

PROGRAM-MONDAY, NOVEMBER 8

Mr. William A. Benitt, president Minnesota Fruit Growers Association, presiding.

9:30 a. m. Registration.

10:00 a.m. The winter of 1947-48 and its effect on variety selection for future planting. Prof. W. H. Alderman, University of Minnesota.

10:45 a. m. The 1949 orchard spray program for insect control. Mite control experiments. Dr. C. L. Fluke, Entomologist, Wisconsin, Dr. A. C. Hodson, Entomologist, Minnesota.

12:00 noon Luncheon. Plans to be announced.

AFTERNOON PROGRAM

Mr. Wm. F. Connell, president Wisconsin Horticultural Society, presiding. 1:30 p. m. The 1949 orchard spray program for disease control. New types of spray machinery. Dr. Thomas H. King, Pathologist, Minnesota, Dr. J. D. Moore, Pathologist, Wisconsin.

3:00 p. m. Results of the apple advertising program of the Wisconsin Apple Institute this season. H. J_7 Rahmlow, Madison.

3:30 p. m. Round table by growers on orchard problems, machinery, spray program and possibilities of establishing scab spray service. Leader—Prof. C. L. Kuehner, Madison.

6:30 p. m. Banquet.

TUESDAY, NOVEMBER 9

Mr. Wm. F. Connell presiding.

9:30 a. m. In what condition do our apples reach the consumer? By Dr. R. A. Kelly, University of Illinois.

10:15 a. m. Processing sliced apples for bakery and institutional users. By Prof. J. D. Winter, Minnesota,

11:00 a. m. What we learned by observations in orchards in 1948. Dr. R. H. Roberts, Department of Horticulture, Madison.

AFTERNOON PROGRAM

Mr. Al. Loffelmacher, Vice-President, Minnesota Fruit Growers Association, presiding.

1:30 p. m. New and old varieties of apples that the drive-in trade likes to buy. Mr. A. P. Bremer, Lake City, Minn.

2:15 p. m. New ideas in orchard management. C. L. Kuehner, Extension Horticulturist, Madison.

FRUIT EXHIBIT

All growers are invited to bring plates of new and standard varieties for exhibits. No premiums or judging.

Pointers on Field Mice Control

By G. C. Oderkirk

Field mice populations have been quite low in most orchard areas in the middle west the past year and although reports were received of damage by mice we found in several instances that the injury had been inflicted over a year ago.

In your movement about your farm and orchard part the matted grass here and there along fence rows to note how numerous the runways are and also whether the runs are well traveled. During the hot summer months mice are prone to take life easy but with the coming of cool weather from September on they become increasingly active. Therefore it is best not to mistake the activity in July and August as an indication of what the population of mice might be late in fall. If the infestation has been quite low the past year or two it is probable that it will be on an incline this year, assuming of course that conditions so far as food and shelter is concerned will not vary a great deal.

Use Poisoned Bait

Most fruit growers have established field mice control as a regular orchard practice and find that it pays to use poisoned bait quite thoroughly each fall. Unfortunately some wait too late in making orchard treatments. Late October is a busy time for most fruit growers but it is the best time to apply poisoned bait.

The best poison and type of food bait for field mice control is not easy to say in a few words. Lacking funds for research to improve the control methods now in use we continue to recommend zinc phosphide on cut pieces of apple, or strychnine-treated. steam-crushed oats. A combination of wheat and rolled oats treated with strychnine seems quite effective but there appears to be little to gain through mixing up this combination of grains when the poisoned whole oats is available in ready-to-use form.

Place Bait In Runways

The type of poison and the food material to use is not nearly as im-

portant as the thoroughness of application and the weather conditions at the time of bait exposure. Therefore be thorough when bait material is applied. Place bait in the runways where mice will readily find it. It takes time to do it this way but it gets results. If zinc phosphide on cut apple bait is used don't be concerned about the abundance of drops on the ground for if your pieces of poisoned apple are placed in the runways mice will feed on it readily.

Changing Bait

If you have convictions about the efficiency of strychnine or zinc phosphide or what not, relax your ideas for this reason: the mice in your orchard may develop a dislike for the poisoned bait you are using or a tolerance for the poison. If you have been treating your orchard consistently with a certain poisoned bait it would be well to make a change.

More can be said about using poisoned baits but following are the main points to keep in mind: Use a

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POISONED OATS Bait for Mice

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Formerly F. R. Gifford Company

good lethal bait; place baits in mouse trails or runways; do the baiting job thoroughly; expose the baits during nice weather, that is, neither during high wind, snow, or rain so that mice will have 24 to 48 hours to find and feed on the bait; treat your orchard if possible late in October or the first week in November preceding the foul weather that customarily arrives in November.

(Mr. Oderkirk is District Agent, U. S. Fish and Wildlife Service.)

Where to Get Bait

Get your supply of field mice poison so it will be on hand when you are ready to use it. Don't put it off! Order today!

Strychnine treated whole oats is available from Southeastern Fruit Growers Association, Waukesha; Fruit Growers Co-op, Sturgeon Bay; G. A. Dunn & Co., Madison.

Zinc phosphide rodenticide is available from G. C. Oderkirk, Expt. Sta. Annex, Lafayette, Indiana to prepare cut apple bait, at 50 cents per can F.O.B. Lafayette. A can will treat about 20 quarts of apple bait. For good coverage figure one-half to one pound or quart per acre, depending upon the degree of infestation.

TRADING IN APPLE FUTURES STARTED

By the Associated Press, Chicago

The Chicago Merchantile Exchange is starting today, for the first time anywhere, trading in apple futures.

Trading will be in Washington State Delicious and Winesap apples. There will also be a sour apple in the pit, dropped there by the International Apple Association. At a meeting last week, directors of the associations passed a resolution saying they did not want apple futures dealings.

Paul W. Sea, chairman of the association's board of directors, said, "A large majority of the industry does not believe that trading in future will act to stabilize prices."

O. W. Olson, executive vicepresident of the exchange, replied: "We believe that when

FRUIT SHOW ANNUAL CONVENTION WISCONSIN HORTICULTURAL SOCIETY RETLAW HOTEL, FOND DU LAC

November 16-17

Committee in charge: Prof. C. L. Kuehner, Madison, chairman, assisted by Mrs. Peter Thelen, Fond du Lac, Secretary; Lenore Zinn, Hartford; Walter Diehnelt, Menomonee Falls; Leroy Meyer, Hales Corners.

NEW APPLE VARIETIES

Plate of 5 Apples

Judges: Prof. C. L. Kuehner, Madison, assisted by R. L. Marken, Kenosha.

Classes

 1. Milton
 7. Fireside

 2. Macoun
 8. Prairie Spy

 3. Haralson
 9. Hume

 4. Secor
 10. Lobo

 5. Kendall
 11. Orleans of Newfane

Perkins
 Any other variety
 Premiums: 1st prize, \$1.50; 2nd prize, \$1.00; 3rd prize, 50c on each class.

STANDARD VARIETIES

Plate of 5 Apples

Classes

13. McIntosh

14. Cortland

15. Delicious — any type of red.

Premiums on Classes 13, 14 and 15 offered by the Niagara Sprayer and Chemical Co., J. Henry Smith, representative, Waupaca.

Premiums on each class: 1st prize, \$2.50; 2nd prize, \$1.50; 3rd prize, \$1.00.

ADDITIONAL STANDARD VARIETIES

Golden Delicious

17. N. W. Greening

18. Snow

Premiums on Classes 16, 17 and 18: 1st prize, \$2.50; 2nd prize, \$1.50; 3rd prize, \$1.00. By the Wisconsin State Horticultural Society.

SEEDLING APPLE EXHIBIT

Five Apples Not Previously Shown

Prizes: 1st, \$5.00; 2nd, \$3.00; 3rd, \$2.00; 4th, \$1.00.

Only seedlings of merit will be awarded prizes. Send only seedlings of merit. Bring in person or mail to Retlaw Hotel, Fond du Lac to arrive Nov. 15th.

PACKED BUSHEL BASKET OF APPLES

A bushel basket of apples, any variety, faced, packed.

Prizes: 1st, \$10.00; 2nd, \$7.00; 3rd, \$4.00; 4th, \$3.00. Each additional entry \$2.00. The amount of \$5.00 for this class has been donated by the Southeastern Wisconsin Fruit Growers Co-op, Waukesha.

SCORE CARD

The first and second prize winners will be offered at auction at the annual banquet. Proceeds will be used for the apple advertising program of the Wisconsin Apple Institute.

Judges: Prof. J. G. Moore, Prof. C. L. Kuehner, and Mr. Roland Nieman, Cedarburg.

National Apple Week — October 30 to November 6.

trading is commenced it will quickly demonstrate its value. If it cannot demonstrate its value to the industry as a whole, it simply will not survive."—From The Christian Science Monitor.

APPLES AND PEARS RIPEN FASTER OFF THAN ON THE TREE

In horticultural publications, one finds frequently the opinion expressed that apples and pears ripen slower on the tree than in the packing shed and that, if necessary, one should "store," for a limited time, the fruit unharvested. No accurate tests, however, seem to have been made till recently to prove this contention.

In 1947 Dr. Fisk Gerhardt of the U.S. Dept. of Agriculture compared the rate of ripening of Delicious and Starking apples and Aniou pears by keeping half of the fruit unharvested and an equal number of picked fruit in cheesecloth bags suspended from the same limbs. Differences in maturity of the two lots were determined periodically by means of the pressure test and the amount of soluble pectin present. which is another test for maturity. It was found that the Delicious apples ripened 3 times faster in the bags than on the trees and the pears in bags 4 times faster.

Gerhardt concludes that "this study shows what every grower should know, that the best place to keep his fruit is on the trees unless it can be packed and placed immediately in cold storage."

—A. E. Murneek in Horticultural News, Missouri Horticultural Society.

APPLE BARREL REVERIE

At about this time of the year, apple picking always began at Uncle Harry's farm on Bear Creek. When I viewed the barrels, boxes and crates filled with delicious Northern Spies and Baldwins, I could not help but envy the people who were to receive them.

All this reminds me of the little verse in the facetious acknowledgment received from an English cousin

80TH ANNUAL CONVENTION

WISCONSIN STATE HORTICULTURAL SOCIETY

FRUIT GROWERS PROGRAM

RETLAW HOTEL, FOND DU LAC, NOV. 16-17

Program-Tuesday, November 16

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

10:00 a. m. Call to order by President William Connell. Announcements. Continued study of apple pollenation. By Dr. E. Esther Struckmeyer, Department of Horticulture, Madison.

10:30 a. m. Results of orchard insect control experiments by Dr. C. L. Fluke, Department of Entomology, Madison.

11:30 a.m. Ten minute reports. How I cleaned up codling moth this year. How I cleaned up European Red Mite in the orchard. By Alrich Ericksen, Horseshoe Bay Orchards, Egg Harbor.

How we cleaned up cherry aphids this year. By S. S. Telfer, Ellison Bay. 12:00 noon Meeting Board of Directors Wisconsin Horticultural Society.

AFTERNOON PROGRAM

1:30 p. m. Apple promotion: where do we go from here. By Minard Farley, Jr., Michigan State Apple Commission, Lansing, Mich.

2:15 p. m. The apple scab control program for 1949. By Dr. G. W. Keitt and Dr. J. D. Moore, Dept. of Plant Pathology, Madison.

3:00 p. m. Processing apples. By Prof. J. D. Winter, Minnesota. Dept. of Horticulture. Discussion—This year's experience canning apples. By Gilbert Hipke. New Holstein.

3:30 p. m. Experience reports by growers. Experience with mulching cherries and apples. Door County Report, by Dr. C. F. Swingle.

Results with orchard irrigation. By M. B. Goff, Sturgeon Bay.

How I solved some of my orchard problems. Ey R. L. Marken, Kenosha. What we learned about orcharding in 1948. By Don Reynolds, Sturgeon Bay.

ANNUAL BANQUET

6:30 p. m. Ballroom Retlaw Hotel.

Honorary Recognition Certificates to be awarded to Two Outstanding Horticulturists.

More Power To You. By Rev. Thomas Perry Jones, Sheboygan.

Entertainment and additional features to be announced.

Auction. Prize winning bushels of apples will be sold to highest bidder.

WEDNESDAY, NOVEMBER 17

9:30 a. m. Annual business meeting Wisconsin Horticultural Society.

10:00 a.m. Joint session. Fifth Annual Meeting Wisconsin Apple Institute. Mr. C. J. Telfer, President, Sturgeon Bay, presiding. Report of the Wisconsin apple promotion program.

10:30 a. m. Can we lower the cost of producing apples. By Minard Farley, Jr.

11:00 a. m. Hail insurance for orchardists. Representatives of Wisconsin Farm Bureau Federation, L. F. Roherty, Madison.

11:20 a. m. Round table. Some experiences in selling apples. By Arno Meyer, Waldo. A. K. Bassett, Baraboo. Roland Nieman, Cedarburg. Emil Beyer, Malone, Dawson Hauser, Bayfield.

AFTERNOON PROGRAM

1:30 p.m. Orchard Notes. By Dr. R. H. Roberts. 2:30 p. m. Annual business meeting Wisconsin Apple Institute.

to whom a barrel had been sent:
And now the jolly farmer
Packs his apples up for town;
This is to top row in the bar'l

In The Berry Patch

QUESTIONS ABOUT BERRIES

Manure For Strawberries

QUESTION: Can I use rabbit or chicken manure as a top dressing for my strawberry bed this winter?

ANSWER: The effect of rabbit or chicken manure will depend somewhat upon the condition of the soil. If it is somewhat heavy and already fertile, use of manure may result in a very rank growth which may interfere with pollenization through restricting insect flight. Such an over-vegetative condition may cause more nubbins than if the plants are in normal vigor. It is not a safe practice, as the nitrogen may stimulate too much leaf growth in spring. The manure should be plowed under on the new beds to be set out next spring.

Raspberry Winter Killing

QUESTION: Is there anything I can do to prevent winter killing in my raspberry bed this winter?

ANSWER: Here is what one of our leading Eastern authorities on small fruits writes in the Rural New Yorker. "The only thing you can do to prevent winter killing is to discontinue cultivation after harvest, let the weeds grow or sow a cover crop of buckwheat between the rows to compete with the raspberry canes and check their growth in late summer and fall so that the canes will mature. This may not always work, but it is the best that you can do."

Planting Raspberries In Fall

QUESTION: Is it all right to plant red raspberries in the fall?

ANSWER: Yes, red raspberries may be set out in the fall before the ground freezes. It would be well to mound up the soil

around the newely set canes to prevent them from heaving and to give them added protection during winter. Unless the winter is overly severe, fall planting will give extra growth the next year and larger yields of berries within several years.

STRAWBERRY TASTE TESTS Will New Spray Materials Effect Flavor

By Ernest G. Christ

During April and May, several strawberry plots in commercial fields were dusted with the newer organic insecticidies to determine their effect upon berry flavor.

No "off flavors" were detected in any samples of berries from the weevil control plots, dusted on April 29 and May 7, and harvested on June 1. Materials used included 5 percent Toxaphene, 1 percent refined Benzene Hexachloride, 5 percent Chlordane, and a standard Lead Arsenate-Sulfur dust. Also, no objectionable flavors

were detected in samples of berries from one commercial field in which a ½ percent crude Benzene Hexachloride dust was used on April 25; the berries were harvested on June 1.

No "off flavors" were detected in fresh berries and jam from plots dusted with refined Benzene Hexachloride. A ½ percent material was used, applied two and three times. Dusts were applied on April 30, May 10, and May 19. Berries were harvested on June 8 and June 13 and tasted the following days.

No "off flavors" were detected in fresh berries dusted once, twice, and three times with 1 percent crude Benzene Hexachloride. Plots were dusted April 28, May 11, and May 21. Berries were Harvested on June 11.

Off Flavors

"Off flavors" were detected in fresh berries from the following plots: (1) ½ per cent crude Benzene Hexachloride; two dusts—first picking only, second picking gave no "off flavors." (2) ½ percent crude Benzene Hexachlordie; three dusts—both first and second pickings.

VEGETABLE AND BERRY GROWERS MEETING

CENTRAL WISCONSIN BERRY AND VEGETABLE GROWERS ASSOCIATION

In Conjunction With Annual Convention Wisconsin Horticultural Society

RETLAW HOTEL, FOND DU LAC WEDNESDAY, NOVEMBER 17

9:30 a. m. Call to order by President Charles Braman, Waupaca. Topic: Experiences in growing tomatoes and early cabbage this past season.

10:00 a. m. Recent developments in vegetable production. Varieties, cultural practices, fertilizers, weed control with chemicals, by Prof. O. B. Combs, Dept. of Horticulture, Madison.

11:00 a. m. Round table on vegetable growing problems. Experiences of growers. By growers and specialists present.

11:45 a. m. Annual business meeting. Report on committees. Election of officers.

12:15 p. m. Luncheon in Hotel Retlaw. Arrangements to be announced. Continuation of business meeting during luncheon hour.

1:45 p. m. Session on small fruit growing. What we have learned about growing strawberries and raspberries in Minnesota. By Prof. J. D. Winter, St. Paul.

2:30 p. m. What is new in small fruit pest control. By E. L. Chambers and H. E. Haliday, State Dept. of Entomology.

3:15 p. m. Grower round table on small fruit conducted by Prof. C. L. Kuehner, Madison.

"Off flavors" were detected in strawberry jam from the following plots: (1) ½ percent crude Benzene Hexachloride; three dusts — first picking only. (2) 1 percent crude Benzene Hexachloride; three dusts—first picking.

In summary, refined Benzene Hexachloride dust caused no objectionable flavors. Crude BHC caused "off flavors" in fresh berries from one plot dusted, with ½ percent, whereas no "off flavors" were noticeable from another plot receiving a 1 percent dust.

STRAWBERRIES AT GENOA CITY

Mrs. Geo. E. Vincent of Genoa City, Wis. writes, "We have about 3 acres of strawberries which we let people pick. This year we charged 30c per quart as we did last year.

"We have a few Robinsons but about 98% Dunlaps. We feel the Robinson has not a good strawberry flavor. The berry is larger than the Dunlap but we do not feel it would take with our customers as the Dunlap does. We would miss not getting this magazine."

CHERRY ROOTSTOCK

(Continued from Page 38) of Angers, France, as stating that about 2,500,000 mahaleb seedling stocks were used annually to about 200,000 mazzards.

Mazzard

Mazzard stocks used for budding by nurserymen are seedlings of the sweet cherry species from which the cultivated sweet cherries Prunus avium Linn, have been derived. These seedlings were formerly imported from Europe, but are now grown from domestic sources. Seedling mazzard trees commonly grow as escapes from cultivation or in neglected orchards in humid regions. These trees usually have small fruit, either red or black, often bitter. Types presumed to be hardier than average have been imported and grown by the New York Agricultural Experiment Station at Geneva, and by Howard of the California Experiment Station.

According to Bradford, mazzard seedlings from different parts of the United States vary considerably, and trails of mazzard seed from different seedling trees growing in Utah orchards showed marked individual differences in germination between different trees in the same orchard and section. Mazzard seedlings make tall, vigorous, up right growing trees. The characteristics of mazzard as a rootstock are discussed in the review of literature which follows.

Sources of imported mazzard seed were studied by Howard who reported that wild mazzard trees were found chiefly in Normandy near the English Channel. Mazzard trees there, from which seeds were collected, grew to 40 feet in height. He significantly reported that the bulk of the mazzard seed going into the trade was not collected from wild mazzard trees, but was from cultivated varieties or seedlings, which were apt to be a mixture of sweet and sour cherries. This would account for much of the variation in this stock.

Stockton Morello

All seedlings of sour cherries used for rootstocks are referred to in the literature as "morello stocks," although the term "morello" is more properly used in pomology to designate those sour cherries which belong to the red-juiced morello group. The Stockton morello is a selection or clone propagated by suckers which has been used in the vicinity of Stockton, California, to adapt the sweet cherry to heavy, wet soils where trees on mahaleb and mazzard failed to succeed. It is commonly used as a Morello seedling dwarfing stock. stocks have been recommended where great hardiness is required. The Stockton morello, when allowed to form its own top, grows into a dwarfish morello type tree, with small dark red acid fruit. The fruit is suitable for culinary use, but inferior in size and quality to the standard varieties of this type.

The Mazzard vs. Mahaleb Controversy

While generally favoring the mazzard stocks, authorities are by no means unanimous in their conclusions. Mahaleb stocks are favored by a number of writers on the cherry. The status of opinion thirty years ago is aptly summed up by Hedrick: "Curiously enough so fundamental a question as the best stock upon which to grow cherries has not yet been settled; indeed . . . interest as to which

is the best seems but recently to have been aroused... there is a warm controversy as to which is the better of the two leading stocks... Since no systematic attempts seem to have been made to determine the peculiarities and values of these two and other cherry stocks, both sides dispute without many facts... a fine crop if misunderstandings has grown up about the whole matter.

Dwarfing Effect of Rootstocks

Hedrick states that mahaleb is a dwarfing stock, but that this effect is delayed and not apparent the first few years, and is not as marked as with dwarfing stocks of apples and pears. Howard reports that many California growers and nurserymen preferred mazzard as less dwarfing and more satisfactory, reporting that 71 per cent of all cherries in that state were budded on mazzard.

On the other hand, Bailey notes that mahaleb is recommended in the books for dwarfing the cherry, but states that the dwarfing depends more on pruning than on the mahaleb root. Chandler holds that more evidence is needed, and concludes, "We know only that good results can be obtained with either stock." Talbert and Murneek state that mahaleb gives a more vigorous tree for the first few years. Bryant found Montmorency trees on mahaleb in eastern Colorado after 5 years' growth were 2.78 inches larger in trunk circumference than those on mazzard

(To be continued)

APPLE PRODUCTION BY VARIETIES

The Delicious apple leads all varieties produced in the United States according to the U. S. Dept. of Agriculture. In 1942-46 there were 21,000,000 bushels produced or almost twice as many as any other variety. Winesap was second with 12,000,000 bushel; McIntosh third with 9,000,000 and Jonathan fourth with 8,000,-000 bushel.

Cortland, Macoun and Lodi are gaining in popularity according to the New York Experiment Station.



OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPERS
ASSOCIATION — OFFICERS

Walter Diehnelt, Menomones Falls, President Robt. Knutson, Ladysmith, Vice-President H. J. Rahmlow, Madison, Cor. Seey Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer

DISTRICT CHAIRMEN

S. C. Fox, Pewaukee Robt, Knutson, Ladysmith Newton Boggs, Viroqua Guy Sherman, Seymour E. Schroeder, Marshfield Ivan Whiting, Rockford

How to Prepare Bees for Winter

Whether a colony survives the winter in good condition is determined more by its make-up than by the kind or amount of protection. A good colony normally requires 60 or more pounds of well-ripened honey and the equivalent of 3 to 6 frames of pollen. The stores must be in the normal position and accessible to the cluster throughout the winter. A 2-story 10frame hive, or its equivalent, is necessary to provide room for this amount of food and clustering space for the bees. Normal 2-story colonies, together with their food supply, should have a gross weight of not less than 130 pounds.

Food Requirement

The upper story should contain not less than 40 pounds of honey, preferably in dark brood comb. There should be 3 or 4 full combs of sealed honey on both sides of the hive. The remaining combs toward the center should contain approximately 10 pounds of honey, as much pollen as possible, and a small area of empty cells for the active center of the cluster. The lower hive body should have 20 to 30 pounds of honey, with the heaviest combs near the outside and combs of pollen in the middle.

The bees will occupy the upper story during the coldest part of the winter. The cluster will cover considerable honey, provided there is an open center 3 to 5 inches in diameter nearly free of honey. The bees will move honey to the upper combs when temperatures permit.

The Entrance

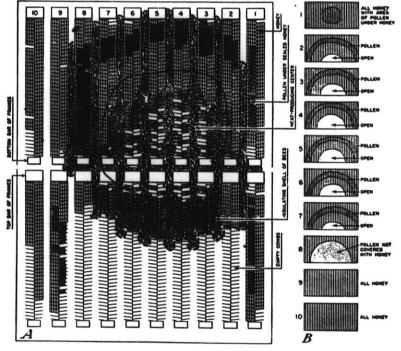
The lower entrance should be reduced to about % by 3 inches with an entrance cleat. An upper entrance in the form of a 1-inch auger hole just below the upper hanhold is coming into general use. The lower entrance allows dead bees to be removed readily and thus keeps molding of combs



at a minimum, while the upper hole serves as a flight entrance and an escape for moisture-laden air.

A location exposed to sunlight and sheltered from prevailing winds is the most economical protection that can be given colonies. For additional protection the hives may be wrapped with tar paper or slater's felt, or they may be packed with chaff, leaves, or shavings.

The cluster protects itself from external temperatures by forming an insulating shell of bees 1 to 3 inches deep to conserve the heat produced by the more active bees in the center of the cluster. It contracts as the air temperature falls, reducing the surface exposed to radiation and increasing the concentration of bees in the center of the cluster. It contracts as the air temperature falls, reducing the surface exposed to radiation and increasing the concentration of bees to



A, Diagram of the winter cluster as seen through a vertical section of a twostory hive cut across the middle of the cluster. B, Face view of frames of upper hive body. The numbers indicate the position of the frames, Note how the bees concentrate between combs and in open cells to form a compact insulating shell around a much less compact heat-producing center. The band of pollen covered with honey indicates an accumulation of reserve pollen before the honey flow. From circular 702, U.S.D.A. produce heat energy. A temperature is maintained in the center sufficient to conduct heat to the surface bees so that their temperature will not fall below approximately 45° F., although the temperature in the hive a few inches outside the cluster may fall to zero or below. Hive insulation allows the cluster to contract more gradually when there is a sudden drop in the external temperature, and gives it more time to organize its position in relation to the stores, so that fewer bees are left stranded.

Hive Temperature

The cluster does not heat the unoccupied space in the hive. During a protracted cold period the temperature of this space will become almost as low in the packed as in the unpacked hive. Too much packing will prevent the colony from responding to warm periods during the day, which would allow the cluster to shift its position on the stores or even allow the bees cleansing flights.

The cluster itself must protect the colony against low temperatures, and the organization of the colony in relation to its food supply will determine whether or not it winters in good condition. Good colonies can be wintered successfully in uninsulated hives, although they may consume 5 to 10 pounds more honey than similar colonies that are packed. Colonies that have consumed less than 50 pounds of honey are seldom in optimum condition at the beginning of the active season. The question of whether to insulate the hives is therefore an economic problem involving packing costs balanced against saving in stores.

It is good beekeeping practice to take winter losses in the fall. Colonies that are not in condition for wintering should be united with good colonies or killed to prevent needless consumption of stores. The combs of honey and pollen can be used in starting new colonies with package bees the following spring.

By C. L. Farrar in Circular No. 702, U. S. Department of Agriculture.

A teacher received this note one morning: "Please do not give my son any more home work. The question you asked about how long it would take a man to walk around the block 40 times caused me to lose a whole day's work. Then, after I had walked it, you marked the answer wrong!"

70TH ANNUAL CONVENTION WISCONSIN BEEKEEPERS ASSOCIATION RETLAW HOTEL, FOND DU LAC OCTOBER 27-28

Program-Wednesday, October 27

9:30 a. m. Registration. Set up exhibits.

10:00 a. m. Call to order by President Walter Diehnelt, Menomonee Falls, Observations on this season's beekeeping. Report of the Centennial honey and beekeeping exhibit.

10:30 a. m. Our new honey grading regulations. Exhibit of color grader and grading. Discussion of value of grading and labeling honey. By John Long.

11:15 a.m. First year's experiences in production of test queens on Kelly's Island, Ohio. Ey Prof. Wm. Roberts, Central States Bee Laboratory, Madison.

12:00 noon Luncheon. No plans. Business meeting Board of Managers. Board consists of State officers, district presidents and county association delegates.

AFTERNOON PROGRAM

1:45 p. m. Why do we like honey. How we can interest the consumer in our product. By Harriet Grace, American Honey Institute, Madison.

2:15 p. m. Observation on beekeeping methods in Minnesota by Mr. C. D. Floyd, St. Paul.

3:00 p. m. Experimental results showing advantages of large populations during a short honey flow. By Dr. C. H. Farrar, Central States Bee Laboratory, Madison.

4:00 p. m. Experience meeting. Things I learned in the apiary. By bee-keepers present.

THE BANQUET

6:30 p. m. Contests, entertainment, prizes. Speaker to be announced. Sound movie! Beekeeping in Australia by the Australian Information Bureau.

The beekeepers and the State Department of Agriculture. By D. N. Mc-Dowell, Chief Administrative Division.

THURSDAY, OCTOBER 28

9:30 a. m. The bee disease situation in Wisconsin. Plans for 1949 by Mr. John Long. Madison.

10:15 a. m. Colony Organization for queen rearing. Developments we anticipate in bee breeding. By Prof. Wm. Roberts and Steve Taber, Madison.

10:45 a. m. "To Market - To Market Goes The Beekeeper," by C. D. Floyd, Minnesota.

11:15 a. m. Problems of wintering related to the winter losses of 1947-48 and how to overcome them. By Dr. C. L. Farrar, Madison.

12:00 noon Luncheon

AFTERNOON PROGRAM

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

2:15 p. m. Practical beekeeping questions and answers. Round table conducted by H. J. Rahmlow of Madison. Answers by beekeepers and specialists present. Send in questions.

HONEY EXHIBIT—ANNUAL CONVENTION

All beekeepers attending the convention are urged to bring honey for the exhibit. Each jar must be labeled.

Class 1. Six 1 lb. jars of Wisconsin Fancy White honey.

Class 2. Six 1 lb. jars of Wisconsin No. 1 White honey.

Class 3. Six 1 lb. jars of Wisconsin Golden honey.

Class 4. Six 1 lb. jars of Wisconsin Dark honey.

Class 5. Three sections of Wisconsin Fancy White Comb honey.

Premiums on each class: 1st prize, \$3.00; 2nd prize, \$2.00; 3rd prize, \$1.00. Two jars from each exhibit receiving prizes will be served at the annual banquet.

Score Card

Quality of honey-40; Sales appeal in jars-30; Sales appeal of label-30.

The Subject of Wintering Bees

Have We Been Following the Wrong Path?

Editors of bee journals would have no trouble filling their pages if they cared to publish all articles submitted discussing the relative merits of different methods of wintering bees. The question has filled many pages as far back as we can remember and far beyond that.

Packing in 1877

Looking for some historical material, this being Wisconsin's Centennial year, we read an item in the January 1878 issue of the American Bee Journal written by Mr. Prescott Young of Freeport Illinois. He states:

"For the benefit of my fellow beekeepers I will relate my sad experience of last winter. Last fall, (1877) I had 53 colonies, nearly all strong. I was very anxious to save them through the winter, as they had rewarded me handsomely for my summer's care and especially anxious about them as I had lost heavily during the last 7 years.

"In accordance to some writer's directions in THE AMERICAN BEE JOURNAL, I procured lumber and made large boxes...1 for each hive; large enough to admit 2 inches of chopped straw around, under and above the hive. In place of a honey board, I used a quilt. Now for results:

"By the 1st of January nearly all were getting very uneasy, trying to get out of the hives, and exhibiting signs of disease. By the 1st of April, one third of the stock were entirely gone; by middle of May, only about one-half were left, and they were very weak. Will some one tell me why they died when I had taken so much pains to save them?"

This is a sample of many such articles.

Reading in Dr. C. C. Miller's book, "50 Years Among the Bees"... a most interesting book, we find some enlightening statements about his early attempts at wintering. He wintered in the cellar, some years with success and again with heavy losses.

For years experiments have been conducted to determine what is best to put on the outside of the hive for wintering... so many, we wonder why Experiment Stations still continue along that line. In all of these we can remember only that there were losses with each method used.

Why should that be so? Why should

there be, during so-called "bad winters," from 40 to 50 per cent loss with one method, from 30 to 40 per cent with another and perhaps 20 to 30 per cent with a third... more or less as the case may be? Why should there be any winter loss at all in an average winter?

Considering all of these experiments we can come to only one conclusion: we have failed to find the real cause of loss.

We have all heard of the heavy losses of the past winter. Yet here in Wisconsin there were those who wintered without loss without packing, with packing and in the cellar. Many more had heavy losses by the same methods.

If 40 per cent of the colonies died, why did they die? If 60 per cent lived, how did they differ from the others? Could the 40 per cent that died have been saved? What beekeeper can continue to operate profitably under heavy winter losses.

We should begin to look for the source of the trouble on the inside... not on the outside of the hive. It has been definetly proven that if colonies have a large population of relatively young and healthy bees; if the brood clusters are located properly, surrounded by enough pollen and honey . . . such colonies will with-stand the winter in any location where honey plants will do well.

We suggest therefore more study of what is on the inside of the hive and its relation to winter loss. Let us remember, as in the case of Mr. Young in 1878 and many others since, packing alone did not solve the problem. We will not win this game unless we get our eye on the ball and follow through.

IT WILL HELP TO CLEAN HOUSE

A writer in the Canadian Bee Journal, points out that honey sales may be helped if we clean house ourselves and he gives this imaginary conversation which can very well take place.

"You can imagine a customer in a store pointing to a can of honey and asking the store keeper.

"What do you keep in that handsome looking container?"

"Madam, that is honey — nature's finest sweet, gathered by the busy little bee from roses, gardenias, the rarest orchids. . . ."

"Oh! That's what they make in those dirty little boxes, with the old iron, stones, and broken crockery on top of them. We saw some of them at a farmhouse the other day, when we called to buy a chicken, and, really, the height of the weeds they were in! So that is how they manage to sell it—in those lovely containers? Give me some sauerkraut, please."

HONEY ADVERTISING CAMPAIGN BEING TESTED

We may soon know whether or not it pays to advertise honey in newspapers. The National Federation of Beekeepers Associations started advertising in newspapers in Louisville, Kentucky, early in August. Large advertisements will be run every two weeks for the next 6 months. On alternate weeks the food pages of the paper will carry small advertisements, 1 column by 2 inches.

It was found that 10 brands of honey appear in retail stores. Reports from retailers show a surprisingly slow movement of honey. If the advertisements increase the movement it will help determine whether or not it will pay to advertise in other cities. We wish to point out that the cost of the advertising must be charged to the increase in sales rather than to the total amount sold.

Some valuable information will no doubt be gained from this test.

SPRAYING WEEDS ALONG THE ROADSIDE

Point out to your weed commissioners that if they spray weeds along the roadsides they will kill not only weeds with round leaves but all the desirable plants such as clovers. What happens after that? The most spreading plant we have is quack grass which may fill in so that eventually our roadsides will be covered with quack grass—a constant source of trouble to adjoining farm land.

Whatever method is used only those plants that are detrimental should be destroyed.

Another item to be considered is the cost of spraying—it is not cheap.

WOMAN'S AUXILIARY MEETING WISCONSIN BEEKEEPERS ASSOCIATION

RETLAW HOTEL, FOND DU LAC OCTOBER 27-28

Program Wednesday, October 27

10:00 a.m. Call to order by the president, Mrs. H. W. Knight, Dalton. Holiday gifts of honey items and new styles in wrapping by Miss Phyllis Rasmusson, Home Economist, American Honey Institute.

10:45 a.m. New hints in honey cookery by Harriet Grace, American Honey Institute.

11:30 a. m. Annual business meeting, Woman's Auxiliary, Wisconsin Beekeepers Association.

AFTERNOON PROGRAM

1:45 p. m. Attend beekeepers meeting. Topic: Why do we like honey. How we can interest the consumer in our product by Harriet Grace.

2:15 p. m. Holiday arrangements using the materials we have. By Mrs. Lawrence Skilbred, Mrs. Raymond Hardgrove and Mrs. Wilbur Pfeifer of Fond du Lac.

\$:15 p. m. How the exhibits were judged. Comments and discussion. Speaker to be announced. Call on winners for statements about how exhibits were made. Judge: Miss Marjorie Snyder, Home Agent, Fond du Lac.

4:00 p. m. A tea for auxiliary members and guests. All prize winning cookies will be served. Tea will be furnished by Wisconsin Beekeeper's Association.

BANQUET

6:30 p. m. See beekeeper's program for details.

THURSDAY, OCTOBER 28

Attend beekeeper's program, shopping or visiting.

Auxiliary officers are: President: Mrs. W. H. Knight, Dalton, Vice-President: Mrs. Emerson Grebel, Beaver Dam, Secretary-Treasurer: Mrs. Wallace Freund, West Bend.

PREMIUM LIST WOMAN'S AUXILIARY EXHIBIT

Class 1. A practical and attractive lunch box of foods made with honey. Cardboard box may be used. Only food will be scored. Prizes: 1st prize, \$5.00; 2nd prize, \$3.00; 3rd prize, \$2.00. Every other entry \$1.50.

Lunch boxes will be used as decorations for the banquet.

Class 2. Honey cake, any kind, not less than 50% honey. 1st prize, \$3.00; 2nd prize, \$2.50; 3rd prize, \$2.00. Every other entry \$1.00.

All cakes will be served at the annual banquet.

Class 3. One dozen honey cookies not less than 50% honey. Prizes: 1st prize, \$2.00; 2nd prize, \$1.50; 3rd prize, \$1.00. Every other entry 75c. Cookies will be served at the tea at 4 p. m. on October 27.

National Honey Week — the last week of October

HONEY EXTRACTING EQUIPMENT FOR SALE

Extractors, clarifiers, filters and tanks. All available in stainless steel.

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HONEY CONTAINERS

We now have a good supply of 60 lb. cans, 5 and 10 lb. pails. Also the 5 lb., 3 lb., 2 lb. and 1 lb. and 8 oz. glass jars. We can make immediate shipment.

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

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Everything you need in Containers
at the lowest prices.
5% discount on \$50.00 orders
10% discount on \$100.00 orders
GLASS
1/2-lb. jars — carton of 24 — wt.
9-lbs. —\$.72
1-lb. jars — carton of 24 wt. —
11-lbs. —\$.84
2-lb. jars — carton of 12 — wt.
11-lbs. —\$.55
5-lb. jars — carton of 6 — wt.
10-lbs. —\$.49
5-lb. pails — carton of 50 —
wt. 25-lbs. — \$4.26
10-lb. pails — carton of 50 —
wt. 44-lbs. — \$6.20
60-lb. cans — carton of 24 —
wt. 72-lbs — \$10.67
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WINDOW CARTONS
ALL SIZES
Per 100-\$1.55-Per 500-\$7.50
Per M — \$14.25
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Manufacturers and Jobbers of Bee Supplies

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Carloads and less than carloads Mail sample and best prices in all grades.

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From the Editor's Desk

Mr. G. J. Hipke, New Holstein, orchardist and present vice-president of the Wisconsin Horticultural Society.

Mr. Arnold Nieman, Cedarburg, has been a member of the board of directors of the society. Associated with his brother Roland, operating the Nieman Orchards. Is secretary-treasurer of the Wisconsin Apple Institute.

For Director

Mr. M. H. Ward, Durand, owner of a 10 acre orchard. Very horticultural minded. Operates a farm of over 500 acres. Appointee of the Governor on the Soil Conservation Committee. On board of directors, Durand Canning Co.

Mr. Arthur Brunn, Hales Corners is president of Milwaukee County Fruit Growers Association. Operates a small orchard, travels extensively in orchard circles and is a member of the Wisconsin Apple Institute.

Mr. Oscar Conrad, West Allis, operates a large farm with 6 acres of apples and pears. He is a member of the Milwaukee County Fruit Growers Association, Milwaukee County Agricultural Society and Farm Bureau. His home is surrounded by choice flowers and rock garden plants.

Mr. John Torbick, Bayfield, one of the leading young fruit growers of Bayfield County. Grows apples, strawberries and raspberries.

Mr. Spencer Eames, Egg Harbor, operates one of the largest cherry and apple orchards in Door County. Produced over 1 million pounds of cherries in 1948. His apple orchards produce a wide variety of fruit and some of heaviest crops in northeastern Wisconsin.

Mr. Philip S. Peterson, Sawyer, is both a cherry and apple grower; with his father, H. L. Peterson. He produces a large volume of apples. Particularly interested in storing and grading apples on his own premises and markets them successfully from that location.

Mr. W. L. Thenell, Sturgeon Bay, manager of the Martin Orchard Company, reputed to be the largest cherry orchard in the world. Produced over 2 million pounds of cherries in 1948. Handles the fruit of other growers and cold pack processing plant operated by his organization handled more than 5 million pounds

OFFICIAL BALLOT

FOR THE ELECTION OF OFFICERS

OF THE

WISCONSIN STATE HORTICULTURAL SOCIETY

GILBERT J. HIPKE, New Holstein For Vice-President ARNOLD NIEMAN, Cedarburg	
For Director to succeed Dawson Hauser, Bayfield	
JOHN TORBICK, Bayfield	님
M. H. WARD, Durand	
For Director to succeed Alfred Meyer, Hales Corners	
ARTHUR BRUNN, West Allis	H
OSCAR CONRAD, West Allis	
For Director to succeed Carl Reynolds, Sturgeon Bay	
SPENCER EAMES, Egg Harbor	Ц
P. S. PETERSON, Sawyer	
W. L. THENELL, Sturgeon Bay	
Instruction: Mark an X after name of person for whom you vote, fo	r each

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

ALL MAIL BALLOTS MUST BE MAILED ON OR BEFORE NOVEMBER 10th. Voting may be done the first day of the annual convention where extra ballots will be available. Voting closes at 4 P. M.

Notice. YOU MUST SIGN YOUR NAME, as only members may vote. Write your name on the outside of the envelope only with the statement "ballot enclosed." All ballots will be checked without opening, for membership. They will then be opened in the presence of tellers by disinterested persons, the envelopes discarded and the ballots counted by the tellers after balloting is closed.

LANDSCAPE NURSERYMAN

The services of the landscape planner, whether he be a modest landscape designer or has the prestige of the title of landscape architect, are as much needed today as ever. In fact, one might say that such services are more important in the arrangement of planting on the grounds of small dwellings than on the large private estates of the days when the landscape architects flourished.

The owner of a big estate is likely to have the intelligence and the cultural background to supervise his plantings without making too glaring mistakes. If he does make errors, they are less conspicuous on grounds of several acre or more than if made in a smaller area.

The owner of the small dwelling, on the other hand, is much less likely to have any knowledge of landscape design and probably less aptitude for it. His mistakes are glaring, and the effect is evident, not only in his grounds, but in the appearance of the community.

The landscape nurseryman enjoys a special place in the community. He meets most of the best people at their best moments. He maintains an establishment of which the community is instinctively proud. He does more than other people to infuse into the community an appreciation of good taste and beauty. He is welcome anywhere in his town.

Condensed from Editorial in American Nurseryman

APPLE AUCTION AT ANNUAL CONVENTION

At the suggestion of President Wm. Connell, the Wisconsin Horticultural Society and Wisconsin Apple Institute will conduct an apple auction during the annual convention at Fond du Lac, November 16-17.

All growers are invited to bring a standard bushel of any variety of apples, packed and faced, for entry for judging and prizes. The first prize will be \$10.00; second prize \$7.00; third prize \$4.00; fourth prize \$3.00. Each addition-

AUXILIARY PROGRAM ANNUAL CONVENTION

WISCONSIN HORTICULTURAL SOCIETY RETLAW HOTEL, FOND DU LAC

NOVEMBER 16-17

Tuesday, November 16

10:00 a. m. Call to order by President Mrs. William Connell, Menomonie.

10:15 a.m. Flowers in our garden. How we grew them. Illustrated with colored slides by Miss Merle Rasmusson, Oshkosh.

11:15 a. m. The Funny Bulbs, Prof. J. G. Moore, Madison.

11:45 a.m. Business meeting. Women's Auxiliary. Discussion of articles in the exhibits.

12:00 a.m. Luncheon for Auxiliary members and guests. Arrangements to be announced. Luncheon speaker, Mr. John Hauser, Bayfield. Topic: I grow Perennials but I like Annuals.

AFTERNOON PROGRAM

1:45 p. m. New developments in frozen foods. By Prof. J. D. Winter, Dept. of Horticulture, University of Minnesota. Discussion.

2:30 p. m. Holiday arrangements using the materals we have. By Mrs. Lawrence Skilbred, Mrs. Raymond Hardgrove and Mrs. Wilbur Pfeifer of Fond du Lac.

4:00 p. m. Tea for members and guests. Arrangements to be announced.

COMMITTEES

Reception and welcome— Mrs. Arno Meyers, Mrs. Arthur Bassett, Jr. and Mrs. Wm. Lorenz.

Nominating-Mrs. Don Reynolds, Mrs. R. L. Marken and Mrs. N. A. Rasmussen.

Resolutions—Mrs. G. J. Hipke, Mrs. R. H. Roberts and Mrs. A. K. Bassett, Sr.

PREMIUM LIST WOMAN'S AUXILIARY EXHIBITS

Class 1. Applesauce Fruit Cake. Recipe on Page 8 of bulletin, "36 Ways To Use Wisconsin Apples."

Class 2. Apple Krunch. Recipe on Page 10 of bulletin, "36 Ways To Use Wisconsin Apples."

Class 3. Applesauce Cookies, Recipe on Page 21 of bulletin, "36 Ways To Use Wisconsin Apples."

Premiums on each class. 1st prize, \$2.00; 2nd prize, \$1.50; 3rd prize, \$1.00. Each other entry 75c.

NOTE: All entries will be served at the tea at 4 p. m. Copies of recipe bulletin will be sent on request..

al entry \$2.00.

The first and second prize winners will be auctioned and the proceeds given to the Wisconsin Apple Institute for promotion of apples in Wisconsin.

Rainbow Mixed Tulip Bulbs

Large blooming size

25 for \$1.00

Write for our Holland Bulb Catalog featuring named varieties of Tulips, Daffodils, Hyacinth and other bulbs.

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For the WISCONSIN GLADIOLUS SOCIETY

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Harold Janes, Whitewater
Mrs. E. Plepkorn, Plymouth
D. M. Puerner, Milwaukes
Paul Ravet, Marinette

Directors for 1 Yr.
W. H. Kurts, Chilton
Chas. Melk, Milwaukee
Leland Shaw, Milton
D. L. Sleezer, Lake Geneva
Theo. Woods, Madison

Our Gladiolus Symposium

Almost 100 Members Send In their Choice Of Favorite Varieties

Almost 100 members of the Wisconsin Gladiolus Society responded to a request for a symposium of favorite varieties this year. Perhaps the time was right . . . in late August when variety names and quality were still fresh in their minds.

The results are most interesting because we learn which varieties are most popular and what our members think of the many kinds now being grown. Note that a few old varieties, like Picardy still lead in their color class. In the whites Maid of Orleans received many votes though in the opinion of leading growers there are now better whites among the newer introductions. No doubt many members of the Society have not had the opportunity to grow the latest introductions and so cannot compare the newer with the old. That is why the state and chapter shows are so important. Here everyone can see and study the newer kinds. It is where some new varieties gain glory but others fall by the wayside because they cannot stand up in competition.

Best Variety Any Color

In the years when Picardy was the leading variety, a choice in this department was easily made and few excepting Picardy received votes. In 1948 there were 43 varieties listed as the best of any color.

Corona, Leading Lady and Spic and Span were the top favorites but with only 6 votes each. Picardy received 4. There were 3 votes for Phantom Beauty, Miss Wisconsin, Elizabeth the Queen, Burma and Connecticut Yankee. There were 2 votes for Evangeline, Strathnyer, Red Charm and Connie G.

We will not list varieties receiving only one vote in any of the classifications.

ANNUAL MEETING WISCONSIN GLADIOLUS SOCIETY MEDFORD HOTEL MILWAUKEE

SUNDAY OCTOBER 31-1:00 p.m.

PROGRAM

1:00 p. m. Results of experiments growing Gladiolus this season. By Prof. Paul Krone, Michigan State College or associate.

2:00 p. m. This season's experience in thrips control. By Dr. John T. Medler, Dept. of Entomology, University of Wisconsin.

2:20 p. m. Some Problems of Gladiolus Breeding. By Dr. James Torrie, Madison.

2:45 p. m. Discussion and round table.

3:15 p. m. Business meeting.

(Board of Directors meeting at 10:00 n. m.)

Best White

Silver Wings led this field with 15 votes while Maid of Orleans and Snow-Bank each received 9. Margaret Beaton had 4, White Magic 3. Leading Lady is really a cream but received 6 votes in the white class. There were 27 varieties receiving votes.

Cream or Buff

Here are the results: Leading Lady 24; Oriental Pearl 17; White Gold 13; Sun Spot 6; Connie G. and Lady Jane 5; Corona and Crinkle Cream 4; Helen of Troy and Winston 3; Salman's Glory, Shirley Temple and Amulet 2. There were a total of 24 varieties receiving votes.

Salmon-Pink

Picardy is still popular. It led the field of salmon-pink with 26 votes to 22 for Spic and Span and 16 for Ethel Cave Cole. Others were: Connecticut Yankee 6; Bengasi 3; Dieppe and Pioneer 2. There were a total of 21 varieties receiving votes.

Pinks

What a list... 35 varieties received votes in this class but none of them with any large numbers. They were: Rosa Van Lima 10; Glamis (really a salmon) 9; Pink Radiance 5; Jeanie 4; Marguerite and Evangeline each with 3 and Phantom Beauty, Legend, Stella Antisdale, Magnolia, Cover Girl and Pandora each with 2.

Yellows

Here again was a large class with 31 yellow varieties listed but with Spotlight really taking the "spotlight" with 31 votes compared with Crinkle Cream 15; Golden State 7 and Golden Teton, Gold Medal, Mother Kadel and Gleam 4; Vangold, Oregon Gold and Golden Beauty 2.

Lavender

Elizabeth the Queen was an easy winner in the lavender class with 54 votes. Huntress received 5; Minstrel 5; Lavender Dream and Minuete 4; Poets Dream 3; Kittyhawk, Patrician, Myrna Fay and Lavender Queen 2. There were 17 varieties listed in this class.

The Reds

With 32 varieties listed, Red Charm was the easy winner with 28 votes. Others were: Algonquin 8; Red Wing 6; Stoplight and Firebrand 5; Mid-America and Mountain Gem 4; Mighty Monarch and Rocket 3; Birch Red, Kenwood, Micharlotte, Errey's Scarlet, King Click, Rewi Fallu and Ohio Nonpareil 2.

Purples

Purple Supreme received 20 votes in this class with a total of 16 mentioned. Others were: King Lear 14; Lancaster 9; Purple Beauty 6; Mrs. Marks Memory 5; Vulcan and Parnassus 3; Margaret Wood and Paymaster 2.

Violets

With 14 varieties listed in the violet class Blue Beauty was an easy winner with 21 votes. Others were: Abu Hassan 13; Blue Lagoon 4; Blue Ice 3 and Badger Beauty 2.

Smoky

Tunia's Mahomet was an easy winner in the smoky class with 18 votes out of 27 listed. Others were: High Finance 6; Flying Fortress and R. B. 5; Misty Dawn 3; Jalna, Voodoo, Oklahoma, Zuni, Bagdad, Mistaya, Tecumseh, Chief Multnomah and Vagabond Prince each received 2. Buckeye Bronze received 7 votes in this class but it is really considered a bronze and should be listed under "any other color."

Any Other Color

There were 24 varieties listed under "any other color." Vagabond Prince received 7 votes; Robinson Crusoe 6 and R. B. 5. Buckeye Bronze 2 or really a total of 9 counting those in the smoky class; Color Marvel and Pinochio 2.

Orange

There were 10 varieties listed in the orange section, written in by members. The votes were as follows: Tuts Both, Lantana and Orange Gold each with 2.

Rose

Also written in were 5 varieties listed under rose. Miss Wisconsin was the easy winner with 19 votes; Burma second with 9; Corona and Oregon Rose had 2.

The Seedlings

There were 14 seedlings listed as favorites this year . . . by far the argest list we have ever had. The following varieties were listed but are not seedlings: Micharlotte, Ivory Keys, Cover Girl, Black Cherry.

The following seedlings received otes: Ted Wood's Ruffled Red; Bayer's Red 564-A; Ted Wood's Yellow; led Wood's Madeling Hefty; Ted Vood's 1-55-43; Torrie's T45-186-1; lrueger's Miss Chicago . . . the winner ith 5 votes; Clarence D. Fortnam 2; led Walter Axel 44-10-13, 2 votes; Dr. raff's Yellow 22D21; Fisher's 173-45; ledrey; Ted Wood's White and Dr. Evan's Ruffled White 17-15.

A NEW DISEASE OF GLADIOLUS IN FLORIDA

By James H. Torrie

Robert O. Magie, Pathologist, at the Florida Agricultural Experiment Station, in charge of gladiolus disease investigations reported in the Jan. 15. 1948, issue of Florists Review, a new disease which threatens Florida's gladiolus industy. This disease caused by a fungus named curvularia was first observed in August 1947 in both Alabama and Florida. During August and September this disease ruined hundreds of acres of gladiolus in Northwest Florida and Alabama, During October the disease appeared in all of the principal gladiolus areas of Florida. Even some of the most isolated planting in the state were found to be diseased.

The disease causes the most damage by attacking the stems, leaves and plants. The petals are disfigured and many florets fail to open properly. The leaves of bulblet plants are especially susceptible.

The lesions are oval in shape, tan to dark brown in color and sunken at the edges. The lesions grow from a pin head to an inch or more in length in a few days. Black spores resembling powder appear in the center of the affected areas.

This disease caused most of its damage during warm moist weather. When night temperatures were below 58° the disease was checked, however, it reappeared with warmer weather. Control measures consist of growing resistant varieties or spraying with Dithane or Parzate. Of 176 varieties observed, 36 were found to be susceptible.

Since curoularia disease is new, there is a lot to be found out concerning its control and range of adaptation. It is not known whether or not conditions in Wisconsin are favorable for the spread of this disease. However, growers in Wisconsin and other states should be on the look out for it.

LIKES THESE NEW VARIETIES

Mr. Mark J. Murphy of Elkhorn writes, "I had excellent luck with these new varieties this year: Strathnaver, White Wings, Texas, Florence Nightengale, Tivoli, Dr. Van DubbenDeBruyn, Tarawa, Salman's Glory, Gen. Eisenhauer, Johan von Konynenburg and Roosevelt's Memory."

TWIN CITIES SHOW

The Twin Cities Gladiolus Show held August 21st-22nd at the Peshtigo High School gymnasium was a highly successful event with over 650 high quality blooms on exhibit in a beautiful setting. The background was a blue stage curtain, with potted white pines on a yellow stage covering, which formed the Honor Court.

The R. I. entry Cover Girl won the Grand Championship for Arnold Sartorius; another entry of Cover Girl won the Amateur Division for Herbert Mueller of Marinette; single spike champion was Leading Lady, and King William won in the 3 spike division.

In the large and beautiful garden club arrangement section, an arrangement made by Mrs. Ralph Garland of Marinette, was judged the most outstanding.

On Saturday evening a banquet was given for members by the Badger Paper Mill of Peshtigo, with 53 members present.

By Arnold Sartorius, Porterfield, Wisconsin.

MARATHON CHAPTER SHOW VERY SUCCESSFUL

The Marathon County Chapter Show at Mosinee on August 28-29, was very successful this year.

Show manager Val White, Wausau said the champion arrangement of white gladiolus, sumac blossoms and wild berries in a silver dish, entered by 17-year-old John Janke, son of Mr. and Mrs. Carl Janke was the outstanding entry.

Cecil McAdams, Mosinee was the point winner with 52 points. He also won second-day champion on Red Charm. Other winners were Mrs. Val White, sweepstakes arrangement; Rev. Herman Schedler, Hamburg, grand champion on Phantom Beauty; Mrs. E. C. Hornbeck, Marinette, reserve champion on Avalon; E. A. Sommerfeldt, Marinette, most points in the amateur section and Mrs. Elsie Riedel, Mosinee, novice division.

Garden Gleanings

PEONIES CAN STILL BE PLANT-ED until the ground is frozen. Fall is the best time in which to plant them. Old clumps can be divided now.

To prepare the soil for any permanent plant such as Peonies, it is well to dig deeply and add as much organic matter as possible. A cupful of fertilizer should be dug into the soil to a depth of at least 8 inches. Set Peony roots so the bud or crown will be only about 1 inch below the surface of the soil. After planting, rake a mound of dirt 3 or 4 inches high over the roots for additional winter protection. This provides drainage and prevents heaving.

"Seeds of hardy annuals can be planted now", is the advise of some garden writers. We have thought of doing it many times but have always given up the idea. It seems much easier to prepare the ground in spring and sow the seed then. Isn't it much easier to control weeds that way?

CONTROLLING WEEDS WITH CHEMICALS is receiving much attention particularly in the press. It makes exciting reading to learn that one can control weeds by simply spraying them instead of hoeing and cultivating. This past summer we have talked to a number of larger vegetable growers who have successfully controlled weeds in onions, carrots and other crops and find the amount of labor in preparing to do an accurate job and not burn the vegetables makes it easier to go along in the old-fashioned way of hoeing. We could probably cultivate the average family garden in less time than it would take to work out the details of the exact amount of chemical, the proper amount of water . . . and then apply it at a rate per foot or row that will not injure the crop. Large growers of vegetables have found chemicals very successful however.

RED SPIDER again proved a menace in our garden. We talked with entomologists and found there are some new materials, notably parathion, which are quite successful in controlling Red Spider and Red Mite. However they were not sure if there would be any harmful effects through the use of the chemicals to the plants.



A nice planting of Kentucky Wonder pole beans on each end of the screened porch vielded a fine crop of beans until the leaves began to look rusty. Numerous Red Spiders were found on the lower side of the leaves. Should we dust them with new chemicals? What would be the effect upon the young beans. Would it poison them? After thinking it over, we decided to use the garden hose, playing a strong stream of cold water on the under side of the leaves. It was effective. The water helped the soil too: the beans had to be watered every 4 or 5 days during this dry summer.

ROSES BLOOMED ONLY WHEN WATERED FREQUENTLY during the past season. Much of Wisconsin had weather similar to that of the irrigated sections of the west...long hours of sunshine no rain and warm weather. Gardens with trees growing near by or on sandy soils had to be watered frequently. Roses responded remarkably well to irrigation. When watered every 4 or 5 days, new shoots grew rapidly and gave beautiful blooms. Plants which were not watered sufficiently made very poor growth with no flowers.

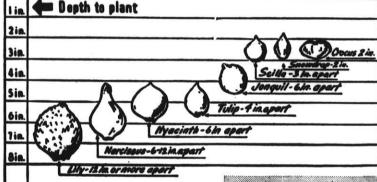
EVERGREENS

Use our hardy evergreens to beautify your home grounds. Blue Spruce, Pyamidal Arbor Vitae, Mugho Pine, Savin Juniper.

Thrifty, well rooted trees sure to grow

Quincy Nurseries, Friendship, Wisconsin

FALL IS BULB PLANTING TIME



Fall root development is vital to successful bulb gardening. This growth puts the plant in a position to develop quickly in the spring. For flowers that are prettier and longer lasting, the Vigoro department of Swift & Company recommends planting according to the chart shown above. Mix complete plant food in the bottom of the planting trench at the rate of 2 pounds for each 50 feet. Cover the mixture with 1/2 inch of sand or soil and plant your bulbs according to the diagram. Then it is just a matter of waiting until spring sunshine and rain bring on these beauties of the early flower garden."



LILY CULTURE UNDER COLD WEATHER CONDITIONS By L. E. Longley, Minnesota

Under the cold weather conditions encountered in Minnesota, it is especially Most important of these is the matter necessary to be sure other cultural conditions are as near ideal as possible. of drainage. Soil should be particularly well drained. For that reason sandy soil or heavier soil with a gravelly subsoil gives better wintering conditions for lilies in Minnesota. If the soil is not well drained dig it up to a depth of say two feet and put some gravel below. Planting the bulb in a handful of sand, tends to prevent rotting of the bulb before roots have formed. Most lilies should be planted rather deeply, at least 6 to 9 inches. The deeper they are the less likely they are to have the soil around them to drop to a lethal temperature. Exceptions are the coral lily group which should be planted only three or four inches deep and the Madonna and Nankeen lily which should be planted with not more than three inches of soil over the bulb.

A six inch mulch of marsh hay or straw is the best protection against our cold winter weather to prevent the soil temperatures from dropping too low. Leaves may be used if well mixed with branches of shrubs or evergreen boughs or even tomato vines.

Some of the lilies require special treatment; a number of them may be grown by digging them in the fall and carrying them over in a cool cellar, packed in some material to prevent moisture loss, and replanting them in the spring. The Regal lily may be grown by this method as well as the Gold banded lily and the speciosum types. The Regal lily responds particularly well to this treatment. At the Minnesota Experiment Station, there has never been loss of Regal lilies from winter cold but some gardeners report winter losses of Regal lily bulbs and also injury from cold in spring after growth has started.

A number of the lilies mentioned do better if grown in partial shade under our conditions. This causes bleaching of the colors of many lilies particularly in those of yellow colors such as L. henryi and L. hansoni; this applies to such lilies as L. speciosum, L. Martagon, L. willmottiae and L. maximowiczii. It is also true that our native lilies do better if grown in partial shade as L. canadense, L. superbum and L. philadel-phicum.

Many other types of lilies could be

grown in Minnesota, but due to the war further testing was discontinued so the newer types have not been fully tried. When these have been tested, it will be found that the lily is really a rather important flower for Minnesota gardens.

—From The American Lily Year Book by The American Horticultural Society, 1946.

MORE TREES FOR OUR HIGHWAYS

Questions Answered By Mr. R. L. Williams, Roadside Development Engineer of The Wisconsin Highway Commission

Question: as sent in by a Garden Club Committee Chairman. "We would like to get information about planting trees along a proposed new highway. Can you tell us how to obtain information?"

Answer: Planting on highway right of way of the State Trunk System can be done only in conformity with a planting plan which has been approved by the State Highway Commission. This regulation tends to avoid indescriminate plantings at location where they might cause traffic hazards by cutting off sight distance on curves or at highway intersections. Plantings are permitted only on highways having sufficiently wide right of way so that they will not shade the roadway and cause icy pavement during freezing weather.

Trees are a very desirable feature along our highways, but it is exceedingly important that their location be chosen by someone who is thoroughly familiar with highway problems. The writer has been authorized by the Highway Commission to assist the various civic groups, who desire to do roadside planting in the preparation of the necessary planting plans.

Question: What variety of trees are best in Wisconsin?

Answer: A safe rule here is to use whatever varieties are predominant in the vicinity. Elms are satisfactory since we have had no difficulty with the Dutch Elm disease here in Wisconsin.

Question: How far apart should the trees be placed?

Answer: Outside the limits of cities and villages trees should not be spaced but set in naturalistic groups at irregular distances. Inside cities trees may be planted in rows 50 feet apart.

Question. What size tree should be planted?

Answer: This depends on the variety of tree. With elms, maples, and oak, we have found 2 to 2½-inch caliper to be very desirable.

WHAT'S YOUR GARDEN I. Q.?

Are these statements true or false?

- 1. A Century plant blooms only every hundred years.
- 2. Tulips should be dug after blooming and rested every year.
- Gladiolus may be planted as soon as the ground can be worked in the spring.
- 4. Lettuce belongs to the same family as the dandelion and thistle.
- 5. Common morning glories often self sow and become a pest.
- Bindweed and wild morning glories can be killed by spraying with 2.4-D.
- 7. The moist orange fleshed yams are really sweet potatoes the same as the dry light colored varieties.
- 8. You can identify many evergreens by their cones.
- 9. It is natural for some shrubs, such as the Beautybush, to have the old bark on the old branches peel off.
- 10. Some kinds of clematis are garden flowers and not vines.

ANSWERS

True—3, 4, 5, 6, 7, 8, 9, 10. False—1, 2.

For Sale Holland's Best Varieties

Tulips

Peonies

Daffodils

Oriental Poppies

Hycinths

Iris

Madonna Lillies and Miscellaneous Bulbs WRITE FOR OUR COLORED FOLDER

Gartman's Gardens

ROUTE 1 FOND DU LAC, WIS.

African Violets

(Saintpaulias)

By Mrs. Theo. J. Peterson, Waupaca

In my home, African Violets grow on every window sill, on stands, in two old-fashioned wire plant racks, in ferneries, on a wide shelf between a window and a door in the garage. Leaf cuttings are planted in pots of moist sand, out of doors in the shade of an Ash tree.

Anyone can grow African Violets. If your first method has failed, try another one until you succeed.

They grow in clay pots, set in a saucer, watered from the bottom when the top soil feels dry. Or one may place "Mystic Mat" in bottom of saucer, place pot on mat and keep saucer filled with water.

Grow them in glazed pots or low pottery bowls with no bottom opening but press a low furrow in the soil around the edge of the pot where the plant can be watered without wetting the leaves or crown. Wetting the crown every time you water the plant, will cause crown rot. The sun will scald leaves if they are wet. Cold water on the leaves will cause leaf spot. Water with soft water if posible, but if you have to use chlorinated water. let it stand over night before using.

Several plants may be planted in large low containers. Put a layer of gravel in the bottom, place a small thumb pot filled with gravel in center of bowl. Space three or four plants evenly between pot and edge of bowl, fill in with good soil, water well to settle soil around roots, place in shady place for two or three days and then bring into good light. When the top soil feels dry, pour water in small center



pot of gravel until moisture appears on surface.

My favorite pot is the new scientifically designed, self-watering pot called the "Wik-Fed." Plants need no attention except that water be kept in the reservoir on which the pot containing the plant is placed. A fiberglass wick draws water into the soil only as it is needed.

A good soil for African Violets may be mixed at home. Use 4 parts good garden soil, 4 parts leaf mold or peat, 2 parts sand, 2 parts well-rotted cow manure, 1/2 cup bone meal to a peck of mixture.

Add a collar of sharp sand around crown to prevent crown rot. Remove all outside leaves as soon as they start to turn yellow, also all blossom stems, with a clean break close to crown as soon as they are through blooming.

White Lady and the variegated leaf sports, striped and marbelized with creamy-white do best in subdued light, so may be grown in a north window.

Blue Girl, Pink Girl and Pink Beauty do well in an east or west window.

Ionantha and Neptune can be

grown in a southern exposure if shaded from hot afternoon sun.

Red Head, Red-headed Girl and Bi-color may be grown in sun when plants are young, then removed to a shaded spot as they come into bloom as hot sun fades the blooms.

"Better Homes & Gardens sends out a good list of growers of African Violets. A very attractive catalogue arrived today from Michigan.

Plants may be increased by leaf cuttings rooted in water, moist sand or vermiculite. Plant first in thumb pots then gradually into larger pots as the plants increase in size. Do not over-pot.

Divide multiple-crowned plants as single crowned plants are much prettier and bloom much better.

Do not be without African Violets as any one can grow them.

DON'T USE FLY SPRAY ON PLANTS

Preparations of DDT now on the market are of two typesone for killing insects on plants, the other for killing insects in the house and around the barn. The DDT is the same in both types but they differ in the solvent or carrying portion. Both kill insects but the house and barn type have an oil base that is usually fatal to plants. We know of two cases where plants were killed by use of fly spray. The natural reaction is-why, this has DDT in it and it should kill bugs on my plants. Well, we expect it does but the plants go with the bugs. Therefore, DO NOT use fly spray on plants. This information should be put on the packages by the manufacturers. -By E. L. White, Fort Atkinson. Wis.

Control of Food Quality in the Locker

By J. D. Winter, Minnesota

Very recently, a "bomb" has been exploded under the theory that slow freezing results in large ice crystals which rupture the cell structure of plant and animal tissue. Studies with a polarizing microscope, which clearly shows the boundaries and structure of the ice crystals, have revealed no tendency whatever for the crystals to reupture cells walls. These findings (reported by Lebeaux in Refrig. Eng., December, 1947 support many observations in our laboratory that rate of freezing itself, within certain limitations, is not one of the factors that are most important in determining the quality of the frozen product.

Quick Handling and Cooling

It is obvious that one must start with a product of good quality to obtain satisfactory quality in the frozen product. Almost everyone knows that vegetables should be handled without delay from garden to freezer, and that they should be kept as cool as possible at all times. This applies especially to asparagus, snap beans, Lima beans, sweet corn, and peas. Fewer people realize that placing warm vegetables in a cold room or refrigerator, or standing them in cold water does not necessarily accomplish quick cooling. The amount of surface exposed, and the air or water temperature and velocity will be the determining factors in heat removal.

Processing Fruits and Vegetables

Proper scalding or blanching of vegetables is necessary for retention of quality during storage. The homemaker should be reminded that quick heating to the boiling point, scalding no longer than required, and very prompt cooling for the shortest possible

time will best retain nutritive values. Quality can not be retained unless the packed vegetables are placed in the freezer with the least possible delay.

Sugar or syrup is needed to preserve the quality of most of our fruits. In general, the better the sugar penetrates the fruit tissues the better will be preserved the flavor of the product. This is why sliced strawberřies retain their quality better than whole berries.

Storage Temperature

If the storage temperature is held above zero, enzymes will be more active and the storage life of meat will be shortened materially. Most vegetables held at 10° F. lose their vitamin C at a rather rapid rate, but the loss is very slow at zero. The proper

storage temperature for most products is zero or lower. Fatty fish keep best at about minus 20° F. Condensed from Circular of the Division of Horticulture, University of Minnesota.

BULBS

WILD TULIPS — Delightful early spring bloom — plant this fall. Leading varieties including Clusiana, Eichleri, Dasystemon, Sylvestris, Praestans, Red Emperor and others. Write for list. Selected Collection, 25 for \$2.50.

Mammoth Red Emperor - brilliant scarlet and the largest of all Tulips, Top Size bulbs 12 for \$1.80. Regale Lily, jumbo bulbs, 3 for \$1.10. Mixed Darwin Tulips, large bulbs, 100 for \$6.95 Dutch Hyacinths, mixed colors, 12 for \$2.50.

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PRESIDENT'S MESSAGE

Dear Members:

October is a beautiful month and with it we turn once more to our fall activities. With it also comes a thought of the things we set out to accomplish and we wonder if we have done as much as we could have done in the various fields of study we have sponsored and in our projects.

For the future let us plan to promote horticultural perfection in our gardening and to set perfection as our goal in all our projects. Let us aim to have more Flower Shows and Judging Schools. We need judges and I hope many of you will attend our school this month in Wausau.

Our garden club meetings should be a place where we gather for serious study. There we should learn much about the cultivation of our flowers and the arranging of them in an artistic manner both in our gardens and when they are cut for decorating our homes.

The National Gardener contains many pages of interest and can be a great help in your club meetings. I hope all those who can will subscribe to it. At the National meeting last May it was voted that, instead of raising national dues, each club belonging to the State and National organization have two Volunteer Members of the National who would pay dues of \$1.00 each, receiving in return a subscription to The National Gardener (then called The Bulletin). One free subscription will continue to go to each club president.



I would like to call your attention to the National Awards. All applications for National Awards must be sent to the National Chairman (of awards) by Feb. 1st, 1949, and must be sent also to the state presidents. National awards are as follows: Kellogg Medal for Outstanding Civic or Conservation Work. Garden Centers Medal for Service to the Community. Purple Ribbon for Creative Horticultural Achievement. Green Ribbon for Conservation Work (must be outstanding project.) White Ribbon for Outstanding Achievements which do not come under any of the other awards. Helen Hussey Champlain Award (annual) of \$25.00 to the club giving the most outstanding service to gardening among youth. If your clubs are entitled to any of these awards get in touch with your state president.

Our Regional Meetings will be held in November and I trust all members in the districts will attend.

One more thought October has brought to me. That is the thought of a lovely Scrapbook we could have made through the year and might

State Committee Chairm Membership: Mrs. Gilbert 414 Erie St., Sheboygan Program: Mrs. Charles Br Waupaca Birds: Mrs. R. A. Walker 2222 Chamberlain Ave., Madison Conservation: Mrs. Malvin Schneid-Conservation: Mrs. Malvin Schneider, Hales Corners
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PLANT SALES

Many garden club members would profit immeasurably this fall if their clubs would take to heart suggestions that have come to us, directly or indirectly, from our membership regarding the merits of the Plant Sale.

In our June issue we printed a report by Mr. H. H. Groth on the success of the Manitowoc Garden Club's annual spring auction. We are wondering if a fall sale might not be as great a boon to many gardeners. The necessary removal in autumn of shrubs and perennials from a crowded city lot, along with the desire of the new home owner, Mrs. X. who admired very much the lovely things Mr. Y. had in his garden this summer (and had so much of it, too,) might well give the sale idea a second boost in late fall.

Anyway the Milwaukee District favored the idea as in their What's News bulletin for September members were asked to "donate your surplus perennials, bulbs, shrubs etc." for a - Co-Editor

now have the pleasure of enjoying in our clubs. By a Scrapbook I do not mean a collection of pictures from all the seed catalogues we receive but. rather, a book concerning our projects, our programs that have been successful and any of our other accomplishments that would give us pleasure to read over and would improve our future work and be of help to future officers and club members. Cordially.

Mrs. F. J. Fitzgerald, President.



Thou comest, Autumn, heralded by the rain,

With banners, by great gales incessant fanned,

Brighter than brightest silks of Samarcand,

And stately oxen harnessed to thy wain!

Thou standest, like imperial Charlemagne,

Upon thy bridge of gold; thy royal hand

Outstretched with benedictions o'er the land,

Blessing the farms through all thy vast domain.

Thy shield is the red harvest moon, suspended

So long beneath the heaven's o'er hanging eaves;

Thy steps are by the farmer's prayers attended:

Like flames upon an alter shine the sheaves:

And, following thee, in thy ovation splendid.

Thine almoner, the wind, scatters the golden leaves.

Henry Wadsworth Longfellow

THE GARDENER'S ALMANAC The Gardener's Almanac, by Edward I. Farrington, published by the Massachusetts Horticultural Society in 1939 and now in it's Seventh Edition is conceded to be the most complete garden "calendar" ever published. Much of the material in the little book was originally printed in Horticulture the official monthly publication of the Massachusetts society. Advice in the Almanac can be applied in general to the northern part of the country. Special information is given for southern gardeners each month. We consider it a handy tool for any gardener.

Soil Conservation

- A CHALLENGE TO ALL -

By H. H. Bennett, Chief, U. S. Soil Conservation Service

"Before we began our soil conservation job, we had allowed something like half of our farmland to be damaged by erosion. Millions of acres have been ruined for any further immediate cultivation, and other millions of acres have been damaged and continue to be damaged in varying degree. Nearly a third of our original supply of topsoil has washed or blown away since our forefathers came to America.

The price we are paying, for this damage is tremendous. The estimated cost of erosion in the United States is more than a billion dollars a year, in such items as direct losses to farmers, increased flood damage, damage to highways and railways, and silting of reservoirs, rivers, harbors, and drainage and irrigation ditches. Add to these items such other costs as reduced trade and tax revenues from depleted agricultural lands, and you have a clearer picture of what soil erosion does to undermine our welfare.

Now let's look at our soil balance: About 85 percent of the farmland in the United States which is still subject to impoverishing erosion is as yet without the protection of effective adaptable conservation treatment. We have left in this country only about 460 million acres of high grade cropland. Nutritionists tell us that at least 21/2 acres per capita of reasonably productive, cultivable land are needed to provide each person with a minimum adequate nutritional diet. So, this 460 million acres is slightly more, on the basis of present population, than the 3 acres per person it is estimated are required to meet per capita food requirements, plus 1/2 acre to take care of industrial, clothing, and other needs. Unfortunately, however, all but about 100 million acres of our good cropland, without adequate safeguard, is subject to erosion, waterlogging, desiccation, or other forms of soil impoverishment or ruin. From 80 to 100 million acres of it needs clearing, drainage, irrigation, or other improvements to make it productive. Moreover, around a fourth of the cropland in the United States is being damaged at a critically rapid rate by erosion. This is an area estimated at something like 115 million acres of highly vulnerable cropland, much of which will be permanently damaged and some of it ruined for further cultivation every year it is cropped without protection. It ought to be protectedand can be-during the next 10 to 15 years, or not later than by about 1960.

The full import of our shrinking land resources lies in measuring it against the constantly increasing population and other pressures on our land. Our population has passed the 145 million mark, and predictions range as high as 185 million people by 1975. The increase was 2.6 million in 1947 alone, as shown by late Bureau of Census estimates. That means, if the latter rate of increase continues, nearly 8 million more acres of cropland will be required each year to meet the needs of our added population. So the hard truth is, we may be even closer to the danger line than we like to think. We could do some mighty interesting speculation on where that extra crop-producing land is going to come from, after we have developed the limited resources I mentioned. We can't ship productive soil in from other countries and stockpile it, the way we are doing today with some other essential materials.

Fortunately, we don't have to sacrifice anything in order to keep our land healthy and productive. On the contrary, multiple experiences, times almost without number, prove that soil conservation actually pays a handsome immediate and long-time profit. Soil conservation is an investment. It increases yields, income, and business, and safeguards health and general community welfare. It pays back more than it costs to the farmer, to the business and professional people in town where he trades, and to local, state, and federal governments which derive their revenues from taxes on production and earnings. It is a chain of increased wealth which stems, as does most wealth, from the land."

In conclusion Mr. Bennett made the following specific suggestions:

 Encourage all members of your local club to learn about soil erosion and conservation in general, and in your own locality in particular.

(Continued On Page 59 - Column 2 - 3)

From One Gardener To Another

Genevieve C. Dakin

My year's contribution to the Magazine would be incomplete if I did not include an article along the line of my real hobby - rock gardening.

An expert gives advice that my own experience tells me is worth heeding when he says, "If you are one of those people to whom a rock garden consists of a bit of Mountain Pink or a rampant Sedum growing all over it or an ugly bare bank with a few stones set in it that tend to make it more ugly and irksome rather than retarding erosion; if you have a so-called garden that falls into this category or if you are contemplating building a rock garden stop right where you are and READ."

Many books and magazines deal with this fascinating inexhaustible subject. The Rock Garden by James Bissland is obtainable for a dollar from the Massachusetts Horticultural Society. Cornell University has a bulletin No. 403-The Rock Garden-by Henry T .Skinner available for a small sum. Louise Beebe Wilder's books may be out of print but may be secured from libraries. Henry Correvon has written a book entitled Rock Garden and Alpine Plants: Reginald Farrer - The English Rock Garden, T. C. Mansfield, another English authority, gives us Alpines in Colour and Cultivation and there is B.H.B. Symons-Jeune's Natural Rock Gardening. Dwarf and Slow-growing Conifers by Murray Hornibrook is interesting. Ira N. Gabrielson has written on Western American Alpines and Stephen Hamblin on American Rock Gardens. I have mentioned just a few sources of information. Membership in the American Rock Garden Society entitles one to its bulletins, seed exchange and other privileges.

What is a rock garden? It is not a display of rocks. It is a garden constructed to house choice and interesting plants of the higher altitudes. The small size and special needs of these mountain treasures make it too difficult to grow them in the perennial border. Between rocks, under right soil conditions, with perfect drainage, they thrive. Alfred Hottes writes, "If you have a rock garden you are an advanced gardener, for the rock garden is for the true plant lover."

Some years ago we had a fad which went under the misnomer of rock gardening. You recall the time when



View of the wall from Entrance to Mrs. Dakin's Garden.

atrocious conglomerations of miscellaneous stones planted with incongrous material and peopled with storks and gnomes were common. The real art of rock gardening is in its infancy in America. England and Scotland have been years developing its technique. Collectors are devoting their lives to collecting alpines in Europe and Asia and recently treasures from our own mountains have made their presence known. South America is making its contribution. The true rock gardener becomes more or less a specialist with his general gardening experience his background as he studies the vagaries and meets the challenge of thousands of rock plants.

Some of our best colleges of Horticulture are training students not only in rock garden construction but also in the best possible plant material for this type of garden. Cornell maintains a large, well-planted rock garden where they grow 250 species of primrose, 200 varieties of sempervivum, 175 of Sedum, 35 of phlox and as many of dianthus and campanula. Students experiment with soil requirements, propagation, methods of hastening growth of alpines, hardiness and winter protection.

Here in Wisconsin, where stone is at hand to use advantageously, this type of garden is worthy of intelligent consideration. Many home owners are making effective use of planted dry walls.

Influencing position and type of any rock garden are the topography of

one's property, its size, the architecture of the house and, of course, the kind of stone available. Low walls, terraces and paving - a formal treatment - make a delightful medium for planting. This paved court may be near the house to serve as an outdoor living-room. The naturalistic rock garden is better at a distance from the house. Choose a spot where there is plenty of air circulation and sunshine. High, light shade is often an asset in our summers. Exposure, excellent drainage and soil mixture are of primary importance. Be sure that your naturalistic rock garden looks natural.

Have you ever tried to pick up a rock to find how little shows above ground? Set your rocks deeply, letting them lie on their broadest faces so stable that you can walk or climb upon them in perfect safety. Nature never stands rock on end. Limestone is unparalleled for rock work but boulders may be utilized well. Always have plenty of roughage on hand for drainage before you start construction. Coarse clinkers, broken brick or cement, gravel, small stones or ashes all serve.

Next consideration is soil. It must be light and fairly rich. A good mixture is one third loam, one third sharp sand, one third leaf mould or peat. Certain plants may require more sand or more peat. Some will like finely chipped limestone or small stones.

Perhaps the first step is to lay out a path or paths for one must be able to reach every point of the garden. Next - excavate for 12-15 inches below ground level if the garden is to be built on level ground, somewhat less if the surface is hilly. Fill with roughage to provide that perfect drainage which is the first requirement of rock plants. Over this drainage place a layer of sod turned upside down to prevent the upper soil from filtering through. Now comes the prepared soil. If manure is added it must be very old and pulverized. The soil must be loose in the hand.

In building use as little rock as possible, avoid all pinnacles and upheavals, keeping a flattened effect. See that the strata of your rock run in a natural direction. Place the largest rocks first, setting them deeply and firmly, each on its broadest face. Ten good-sized rocks will give a better result than 100 small ones.

Be sure to pack the soil between the rocks as you build, tamping it in well. Watering may prove helpful to make soil settle into every crevice. Air pockets will prove disastrous for plants. Avoid overhanging rocks.

In dry-wall construction the same general rules apply. Excavate for a foot and put in drainage. Lay rocks in courses as for a masonry wall except that the face of the wall should be inclined slightly toward the bank to make sure that water reaches all roots. Soil, instead of cement, is used between the layers of stone. One may liken this construction to making a layer cake, using soil for the filling between layers of stone. Tamp the soil in with small sticks. Some choose to plant the wall by laying roots on the soil, covering them and then laying a course of stone on top.

When it comes to planting a rock garden give careful thought to a background. My personal idea is that any garden needs a green frame. Evergreens with birch and small flowering trees like shadbush or crab may serve if space permits. Avoid overhanging branches of any size. In the garden itself dwarf evergreens are ideal to set the scale and give distinction to the planting. Many rock plants and miniature bulbs bloom before deciduous shrubs are leafed out. Avoid large evergreens like yew or pfitzer juniper using such varieties as picea Albertiana glauca, Maxwell spruce, retinsporas, Hornibrooki juniper, and dwarf arborvitaes. In small shrubs cotoneaster adpressa, c. humifusa, c. glacialis, daphne, hypericums, genistas, potentilla fruticosa with spirea

bullata are desirable. This spring I added two dwarf barberries which I like very much. It is well to use prostrate evergreens high in the composition keeping pyramidal forms low to add height.

Easy doers in plants include: aethionema, ajuga, myosotis alpinus, alyssum saxatile citrinum, arabis in variety, armeria, aubrieta, campanula carpatica, c. garganica, c. muralis, c. porscharskyana pseudo-raineri, c. rotundifolia, c. turbinata, corydalis lutea, dianthus in variety, dicentra eximea, d. formosa, geranium lancastriense, g. sanguineum, gypsophila repens, iberis, iris pumila, phlox camla, phlox subulata, polemonium, potentilla, primula, thyme in variety, veronica incana, v. rupestris, v. pectinata rosea. As to sedums, choose carefully if your garden is small. Acre will take over, crowding choicer plants. Above all never use sedum sarmentosa in a dry wall or rock garden unless in the former where no other plant is desired. "Hens and chickens", sempervivums, are charming subjects for rock gardens. They are varied in form and color.

Dwarf bulbs, species crocus, species daffodils and species tulips are must-

haves. Chionodoxas and snow-drops are delightful. Scilla campanulata comes in various colors, adding a vertical line, as do the white and blue grape hyacinths. For annuals leptosiphons and violas are desirable.

As you acquaint yourself with growers' lists you may wish to try dwarf aquilegias, androsaces, drabas, dryas, erodiums, gentians, saxifrages or silenes. The February issue of Horticulture gave several addresses of nurseries specializing in plants and seeds for the rock garden. Raising from seed is slower, of course. Through the seed exchange of The American Rock Garden Society any member may obtain fresh seed of choice plants. If you wish information about the society write its secretary, Mrs. Dorothy Hansell, 19 Pittsford Way, Summit. New Jersey.

If this form of gardening has an appeal, if you need a new, absorbing interest, make a small rock garden or lay a dry wall next spring. Believe me when I say, "It is fun!!"

Co-editor's note:

Mrs. Dakin is Chairman of the Central Region of The American Rock Garden Society and a member of the Alpine Garden Society of England.



Pool at Left of Steps to Rock Garden

SOIL CONSERVATION — (Continued from Page 2)

Make soil and water conservation the subject of meeting talks and discussions. Make use of motion pictures, bulletins, books, magazine articles, and other sources of information, obtainable through soil conservation or Soil Conservation Service offices.

Practice soil conservation in your own flower and vegetable gardens, and encourage your neighbors to do likewise.

Note: The above paragraphs are from a speech given before a meeting of Western Region Garden Club Federation of Pennsylvania in April Upon request I will see that you receive a copy of the entire speech.

- Mrs. Malvin Schneider, Conservation Chairman.

SHRUBS NATIVE TO WISCONSIN

Wisconsin woods and fields abound with interesting and beautiful native shrubs which are fine for landscaping purposes and should, therefore, be of interest to home owners. They are valuable because, in general, they grow well in shady places, and provide brilliant fall coloring.

Ordinarily nursery grown stock is preferable to that which is growing wild in field and woods. It is also well to remember that Wisconsin law prohibits the moving of plant material from one area to another without a permit from the state entomologist at Madison, Wis.

Large shrubs (12 to 20 feet)

- Amelanchier canadensis (Shadbush Juneberry) a. 10-20 feet high; b. White flowers in June c. Yellow fall foliage.
- 2. Cornus alternifolia (Dogwood Pagoda) a. Small tree 15-30 feet b. White flowers in June—fall fruit attracts birds—attractive in appearance c. Dark red fall foliage d. Winter bark is green e. Thrives in shade.
- 3. Hamamelis Virginiana (Witch Hazel) a. 8-20 feet b. Flowers appear in October and November after leaves have fallen. c. Bright yellow fall leaves d. Thrives in partial shade.
- 4. Rhus typhina (Staghorn sumac)

 a. 8-12 feet b. Fruit is red, velvety and cone-shaped, very lovely

 c. Foliage turns brilliant orangered very early d. Grows well in poor soil, gravelly banks, etc.
- 5. Rhus Blabra (Smooth Sumac) Differs from typhina only in having smooth rather than hairy twigs.
- 6. Sambucus canadensis (Elderberry) a. 8-15 feet b. Large compound clusters of white flowers in June or July c. Dark purple edible fruit, good to attract birds d. Thrives in shade.
- 7. Sambucus pubens (Red Elderberry) a. 10-18 feet b. Yellowish white flowers, red clusters of fruit c. Will grow in rocky places.
- 8. Viburnum Americanum (Highbush Cranberry) a. 8-15 feet b. Flowers in May, bears clusters of scarlet red edible fruit, Beautiful c. Fall foliage dull red purple d. Likes moist shady places.
- 9. Viburum lentago (Nannyberry)
 a. 10-25 feet b. Flowers in May, produces attractive dark blue fruit c. Fall foliage purple red.

Shrub Borders

From Symposium on Shrubs — By Milwaukee District Garden Club Federation

SHRUB BORDERS NEARBY

Any mass planting within 75 feet of the house is a nearby border. Because it is at close range, it must be done carefully. Skyline is just as important as in the far border. Winter silhouette a picturesque shrub against your neighbor's house or against the sky if you can find an open spot.

A border of nothing but forsythia, spirea, barberry, weigela or mockorange seen close at hand looks like a brush heap in winter. Limit each shrub in number and set to back of planting with something of a different habit in front and their general twiggy mass passes unnoticed.

The color scheme must be carefully studied. Have no strong pinks and strong yellows at the same season. Large shrubs should be grown in ones, small delicate things in groups of 3-6.

Do not try to get one of everything you like in the same border. You cannot get all the flowers you like into one flower bed, so you cannot get all the shrubs you like into one shrub border.

A pitfall to be avoided in the near border is the use of shrubs that demand certain soil conditions. In our Mid-West, do not plant acid soil lovers such as azalea, etc.

(Continued on Page 63 Col. 2)

SHRUB BORDERS AT A DISTANCE

Borders well away from the house are used for:

1. Windbreaks.

Lonicera, Buckthorn, Siberian-pea and Russian olive are all well adapted to strong wind. Use where winds are strongest and plant thicker than most borders because you want an impenetrable mass. Before planting a windbreak, however, consider whether it will cut off summer breezes, or cause snow drifts to form across driveways.

2. Screen out objectionable views.

Use quick growing material. Evergreens best, but add a few broad spreading trees and shrubs such as hawthorns, crabapples, viburnums, dogwoods, or witchhazels.

3. Mark property line.

Commonest use of all. Too much overdone, often spoiling pleasant views and a feeling of spaciousness. Unless you are unfriendly with your neighbor there is no reason why the space in front of your house and all your neighbor's houses should be cut up into square little boxes. So before obeying that impulse to mark every property line, look around and be sure you are not shutting out something you might as well claim visually if not legally.

(Continued on Page 63 Col. 3)

Small Shrubs (3-12 feet)

- 1. Cephalanthus occidentalis (Buttonbush) a. 3-5 feet b. Fragrant white flowers in August c. Prefers moist shady place.
- 2. Cornus paniculata (Gray dogwood) a. 6-8 feet b. Creamy white flowers in June; fruit is white berry carried on red stem which remains on bush during winter c. Thrives in shade.
- 3. Cornus stolonifera (Red osier)
 a. 8-10 feet b. May flowers, white
 clusters c. Dark red fall foliage
 and reddish twigs which give good
 winter effect d. Thrives in shade.
- 4. Dirca palustris (Moosewood or leatherwood) a. 3-6 feet b. Small yellow flowers appear before leaves c. Foliage is a yellowish green, turning bright yellow in fall d. Prefers shade and moisture.
- 5. Ilex verticillata (Winterberry)—a. 5-10 feet b. May flowering, small,

- white c. Fruit is brilliant red hollylike berry which clings to branches most of the winter d. Thrives in wet. shady places.
- 6. Ribes odoratum (Flowering currant) a. 3-6 feet b. Flowers in May spicy yellow blooms its most valuable point c. Fall foliage bright yellow, falls early.
- 7. Spirea tomentosa (Steeple bush)

 a. 2-4 feet b. Flowers are dense
 terminal cluster of rosy red to reddish purple flowers, appear in August

 c. Moist soil and shade.
- 8. Viburnum acerifolium (Maple-leafed viburnum) a. 3-6 feet b. Flowers in June. Fruit is deep purple berry which clings to branch during winter. c. Leaves like maple tree in shape. In fall are deep red fading to rose pink. d. Thrives in shade.
- 9. Viburnum dentatum (Arrowwood) a. 6-10 feet b. Fall foliage is purple-red, very attractive.
 - From Symposium on Shrubs

BOOK REVIEWS

Dagny Borge

Climbers and Ground Covers, Including the Vast Array of Hardy and Subtropical Vines Which Climb or Creep, by Alfred Carl Hottes.

A welcome addition to the many excellent books by this authority on gardening. As may be expected, more of the book deals with climbers than with ground covers. A chapter on garden enclosures includes walls, gates, fences, pergolas, arbors and trellises.

Douglas of the Fir, a Biography of David Douglas, Botanist, by Athelstane George Harvey.

An exhaustive study of the young naturalist who collected plant material for the London Horticultural Society over one hundred years ago. Largely self-educated, and greatly hampered by poor eyesight, he succeeded in discovering 215 new plants, most of which were sent to the gardens of the Society and to the Glasgow Botanical Garden. During his travels in the northeastern and northwestern regions of America, California and the Hawaiian Islands, he spent several years on the Pacific Northwest. His greatest enthusiasm and effort was for the sugar pine. He was only thirty five years of age when he met an untimely accidental death. A list giving the plants introduced by Douglas with both Latin and common names is appended. Mariposa lily, Clarkia, Evening Primrose, Pentstemon, Phacelia, and Cinquefoil are among some of his best known introductions.

Gardening for Health and Happiness, by Hugh Findlay.

This modest pamphlet is dedicated to war veterans. It is intended primarily for the blind and for teachers of the blind. The author, who teaches landscape architecture at Columbia University, has been instrumental in having garden tools made especially for the use of those who cannot see, yet who receive pleasure from gardening. These tools and their use are pictured.

Dahlias, What is Known About Them, by Mortan T. Riley.

This is a manual for use by amateurs and professionals alike. It is semi-conversational in style, and while perhaps not as all inclusive as the title might lead one to believe, it contains valuable material on exhibition as well as growing, based on the author's extensive experience, and giving details on the level of the ama-

teur's needs. It begins by giving the history of the dahlia in pictures. There are lists of varieties, and of dahlia societies. The Wisconsin societies included are the Badger, the Dahlia Society of Wisconsin, and the South Central Wisconsin Dahlia Society.

Your Book of Garden Plans, by Norman A. Morris.

This book was written because of requests for practical ideas on land-scape design for home grounds. It is beautifully and profusely illustrated with sketches by the author, who is head of the National Landscape Institute. A number of years ago he was on the staff of the University of Wisconsin, and as such served as extension landscape architect in this state.

A list of Horticultural Organizations of the United States and Canada, issued by the U. S. Department of Agriculture as its revised Library List No. 16, published last January, names for Wisconsin the following:

Dahlia Society of Wisconsin, Incorporated.

Wisconsin Garden Club Federation. Wisconsin Gladiolus Society.

Wisconsin Iris Society.

Wisconsin State Cranberry Growers' Association.

Wisconsin State Horticultural Society.

Wisconsin State Horticultural Society Auxiliary.

The President and Secretary of each organization is included. Another list, that of Commercial Horticultural Organizations (List No. 17) mentions the Fruit Growers' Co-operative of Wisconsin.

Life magazine for July 5, 1948, devotes several pages of pictures and text to visiting and amateur gardeners. The story and illustrations are about as disillusioning as that of Mr. Blandings' Dream House. The amateur visited is a young real estate man who has never before tilled the ground.

NEWS ITEMS FROM THE NATIONAL GARDENER

Membership in the National Council of State Garden Clubs Inc. increased this year by 24,250 making a grand total of 232,701. There are 607 new clubs making a total of 5,748 clubs in 41 states.

Mr. Ellsworth D. Lumley, Seattle, Wash., Bird Chairman, is issuing a small pamphlet on "The Preservation of Hawks and Owls,' under the sponsorship of National Council of State Garden Clubs. It is available from Headquarters Office for Bird Chairmen of the various member clubs.

Judging Schools are making rapid strides in the South. Schools will be held this month in four Arkansas cities. South Carolina had three Judging Schools in September and will hold four more in October. Reading examinations are also being given this month in two South Carolina cities.

States in the Central Region of the National Council are: Iowa, Illinois, Indiana, Michigan, Missouri and Wisconsin.

and who has to use a plot needing extensive clearing.

A Bulb of the Month Club, Box 1010, Chicago 90, offers at one dollar per month different, professional size bulbs. There are no club dues. Notice of selections are sent to members each month, but there is no obligation to order. The selection for September is the South African Ixia, ten bulbs with instructions.

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CO-EDITORS

We are sorry to announce that the very fine series of articles entitled "From One Gardener to Another" by Mrs. Walter Dakin which we have been privileged to read each month has come to an end. After this month we shall hear from her occasionally but not regularly and as yet we do not know what subject she will choose.

The article on Rock Gardening which Mrs. Dakin wrote for this isue should go into safe keeping for future reference by her readers who intend to make a rock garden or dry wall either this fall or in the future. We think it is one of the most comprehensive articles on the subject we have seen in many a day.

We hope to see you at Wausau, and next month at the Regionals

THE WILLOW TWIG

Wth strong young hands I planted it,
A willow twig, in the ground.

I watered it and nurtured it
And stirred the earth around.

The little twig was very brave
And smiled up at the sun.
Each morning I would measure it
And again when day was done.

My first attempt at forestry
(I, like my tree, was young)
Had fired my zeal for growing things
And I searched the hills among

For other things that I might plant
In the garden I had made,
Wild lilies from beside a brook
And hawthorn from a glade.

The little willow grew and grew
Indeed, it was not long
Until the twig I'd nursed with care
Was lithe and tall and strong.

With almost breathless speed it spread

Both out and toward the sky
And brushed against my pane one day
My faith to justify.

The poets sing of nobler trees:
The oak, the lofty pine,
The maple dressed in burnished gold
Or flame or ruddy wine.

But as I lie here in it's shade
And watch the clouds go by
I wonder just who made my tree,
Was it God or I? — A. P. R.

QUEEN OF THE ROSE SHOWS

On April 29th, 1945 two world-shaking events took place, - Berlin fell and Peace was born; I mean the rose. Of the two events, the birth of this rose may be why future generations will remember April 29th, 1945. Cities rise and fall, but after 40 million years we know the rose is here to stay. Certainly no rose has ever been so enthusiastically received all over the world as Peace. Out of a possible 10 points which would be perfect, it has a rating of 9.6.

Originated by Meilland of France, Peace has a vigorous, upright bush with large, glossy, dark green, leathery foliage. The plant is unusually husky and disease resistant. The buds are lemon-yellow, edged with pink, which open very slowly to delicate shades of yellow and cream suffused with pink, 5-7 inches across, borne singly on long stiff canes.

Fred Edmunds, curator of the International Rose Test garden, Portland, Oregon, says "A must for every garden." Mallerin, another French hybridist says, "The best new rose in 100 years."

Again this year Peace is Queen of the Rose Shows, having won 30 high awards in 41 rose shows.

Mrs. Peter A. Duehr American Rose Society Madison, Wisconsin

FALL CHORES IN THE ROSE GARDEN

"Garden Work For November"

"All classes of rose bushes can be set out during the next few weeks. Plant them with the knuckle an inch or two below ground. Water the plants heavily when they are set. Soil hilled around the stems will keep them from drying.

Pot-grown roses that were set out during the past year may have their roots wound close together. The bushes may be dug before the ground freezes, and reset with the roots spread down and out.

Work a trowelful or two of bonemeal around old bushes in the garden before they are covered for the winter.

Clean away all dead foliage from around the rose bushes and hill soil around the tender types such as hybrid teas, polyanthas, and even the hybrid perpetuals. No further protection will be needed until nearly the first of the year.

BADGER STATE DAHLIA SOCIETY INC. STAGES BEAUTIFUL SHOW

The recent Dahlia show put on in the Madison Community Center by the Badger State Dahlia Society Inc. not only brought to Madison a flower show of beauty but proved the increasing popularity of the Society's show with fanciers and exhibitors outside of Wisconsin.

Mrs. E. L. Kriel, who, with Mrs. Max Freudenberg had charge of arrangements gives us the following first hand account of the event:

"Dahlia growers are a singular species. As soon as the tubers come out of winter storage the dahlia fan lives solely and completely for his dahlias. To him the crowning event of the season is the Annual Dahlia Show; then he can proudly display his choice blooms for all to see.

As the years go by more growers turn to the culture of the Dahlia. This extended interest increases the scope and popularity of the Badger State Dahlia Society's shows. This year's show included exhibits from Sheboygan, Milwaukee, Chicago, Moline and Rock Island.

On entering the show room guests saw the mass of cool green foliage which banked the musicians platform. This foliage served to bring out the beauty of color of the dahlias displayed on long tables draped in white. Throughout the entire display dahlias of one color, shade and tint blended into another color, shade and tint in rainbow fashion. The beauty and variety of the artistic arrangements displayed also on tables extending the entire width of the room could not fail to satisfy the most exacting taste. There were arrangements for every occasion including children's parties, wedding breakfasts and dinner parties; living rooms and hallways; thimble sized miniatures and roadside material in log contain-

This gorgeous display of specimen blooms and artistic arrangements in a spacious and cool setting combined to create a fairyland of beauty."

Bend down carefuly all standard roses and peg the tops close to the ground so that they may be covered with soil to protect them for the winter. Many persons find it easier to do this by loosening the soil on one side of the plant."

"The Gardener's Almanac."

the meeting.

HO/TEL WAUSAU Ready For Judging School

Mrs. Clifford Cyphers, National Accrediting Chairman and Mrs. Bertha L. Downes, editor of Golden Glories, official publication of the Garden Clubs of Illinois, Inc. are the teachers chosen for Wisconsin's third Judging School to be held at Hotel Wausau, in Wausau October 19-21. Mrs. Cyphers will teach Flower Show Practices, Color and Design. Mrs. Downes, a newcomer to Wisconsin's Judging Schools, is well qualified for the course she will teach in Horticulture. Ada Portman 308 - 12th Street, Wausau, state Judging School Chairman is in charge of

Hotel Wausau has all modern facilities, 275 rooms and a Coffee Shop. Meetings will be held in the Ballroom and luncheons will be served to the entire group each noon in the hotel. With the complete event housed under one roof, Wausau clubs sponsoring the school will be saved the worry of inclement weather conditions and members will be saved time and inconvenience.

Our Judging School is open to all garden club members and to all outsiders interested in expert training in Flower Arrangement and in Horticulture courses designed to make better gardeners of all of us. Examinations are optional. If you are training to become a qualified judge you will of course, take the examinations. Better take them anyway and get everything the school has to offer.

Cost of the three day course for federation members is \$4.50. For non-members it is \$5.00. Single meetings are \$1.50. Handbooks also are \$1.50.

Have you written to Mrs. Portman and asked her to enroll you and to the Hotel Wausau for your room? HURRY!

FOND DU LAC CLUBS HOLD HOLIDAY FLOWER SHOW

A Holiday Flower Show sponsored by Ledgeview and Fond du Lac Community Garden Clubs will be held in Hamilton Community Building, Fond du Lac on Wednesday and Thursday, November 10th and 11th from 2 PM-10 PM and 10 AM - 5 PM respectively. Tables for Armistice, Thanksgiving Christmas (Old and new) Tea, Christmas wedding, football and lumber camp will be featured. Also dioramas, gift packages, door and mantle decorations; exergreens, dried seed pods, Nursery Rhymes arrangements and many other novelties. Neighboring clubs are invited.



A HOLIDAY SHOW

West Bend Garden Club will hold a Holiday Show on Saturday, October 16 from 2 to 9 p.m. and Sunday, October 17 from 2 to 6 p.m. at the home of Mrs. Ida Wiebe, newly elected president of the club. Arrangements and decorations for Halloween, Thanksgiving, and Christmas will be featured at the show.

A cordial invitation is extended to all garden club members and their friends.

Garden Club officers for the coming year are:

Pres: Mrs. Ida Wiebe

Vice-Pres: Mrs. Wallace Freund Sec-Treas: Mrs. Ethel M. Gill

Borders Nearby (Cont.)

If you have a wet spot on your property, plant those shrubs which like wetness as a contrast to your neighbor who must plant different shrubs on his higher land. In a near border it is better to adapt your shrubs to the soil conditions rather than struggle against adverse soil.

For the same reason it is better to rule out any shrub that is known to be subject to a certain disease or pest.

While border bloom is important and must be planned for most carefully, leaf or foliage texture is the most important. This border is so close you can see the fine gradation between coarse-leaved shrubs and fine lacy ones, the contrast of gray green and light green leaves against very dark ones. The contrast of shiny leaves and hairy leaves makes an interesting picture when there is little bloom.

When the list for your near border is completed, ask these questions:

- 1. Is everything in this border presentable twelve months in the year?
- 2. Is there contrast of foliage both in texture and color?
- 3. Are the brilliant seasons of bloom and fall color taken account of, so it is outstandingly interesting at those seasons?
- 4. Is the skyline varied, and is every plant harmonious with its neighbor?

REGIONAL MEETINGS.

Our state Regional Meetings are just around the corner. Although the dates have not been announced we expect they will be held during the third week of November (as the Constitution states.)

The purpose of the Regional Meetings is to permit close co-operation between state officers and chairmen and those in the districts and individual clubs, thus speeding up the entire year's program for all units in the Garden Club Federation. Hence any club which has not elected it's officers for the coming year by that time has already suffered a major setback. The advantages a newly elected president gains through attendance at these orientation meetings outweigh, we think, all other considerations.

CLUB PRESIDENTS!

When you go to the Regional Meetings this fall please take along with you a list of your club officers for 1949 with both names and addresses. If accurate information can be secured at the meetings it will simplify putting out the directory later on.

Borders at a Distance (Cont.)

If planting a property line for privacy is necessary, it should be done sparsely. Take advantage of your neighbor's planting to make color schemes of your own. If he has two purple lilacs, add a white one to your planting and you have something unusual.

If your property is from 2-5 acres, you have a wonderful opportunity to do good naturalistic planting with native material. Elders, sumacs, dogwoods, crabapples, hawthorns, witchhazels, all look good. Consider the skyline. The distant border is the place for unusual silhouettes. One lone wild crabapple or hawthorn standing against the sky is beautiful in summer and winter.

Use bold color masses. This is the place to go wild on the most brilliant colors of fall foliage and fruit. Use red berried shrubs, the sumacs, etc. The birds will enjoy them.

The following are effective in masses 75 to 150 feet away: Flowering Quince, Forsythia, Lonicera Korolkowi, Kowitzea amabilis, Philadelphus grandiflorus or lemoinei Mont Blanc, Spirea van houttei, Viburnum tomentosum, the hawthorns or crabapples, Rosa setigera, the elders and the shadblows.

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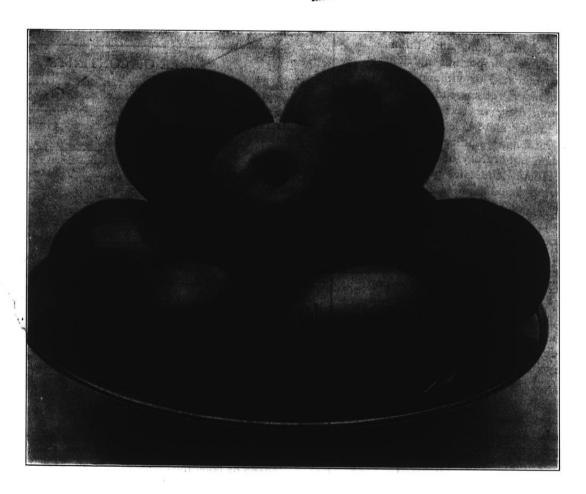
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November 1948

TESTS SHOW RUTABAGA HAS HIGH VALUE AS SOURCE OF VITAMIN C

Rutabagas give good returns for time and land going into their production. They are a cool weather crop growing satisfactorily where the climate is neither extremely dry nor hot.

Like other root vegetables, rutabagas contribute significant amounts of minerals and vitamins to the diet. Although they compare favorably with other vegetables in their content of calcium, phosphorus, iron, and thiamine, their most important nutrient is ascorbic acid or vitamin C. Nutritionists recommend 75 milligrams daily of this vitamin for an adult man. Eleven varieties of rutabagas studied in the Nutrition Laboratory of the Division of Home Economics give the following amounts in milligrams of the vegetable: Laurentian, 29; Halls Westbury, 40; Perfect Model, 42; Ditmar Bronze Top, 44; Bangholm Purple Top, 47; American Purple Top, 47; Lord Derby, 48; Derby Bronze Top, 57, and Wilhelmsburger, 62 milligrams. Thus it will be seen that a medium-sized serving will provide a considerable part of the day's need for ascorbic acid, even if only a half or two-thirds is retained in cooking.

—Condensed from Minnesota Farm and Home Science.

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WISCONSIN HORTICULTURE

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Volume No. XXXIX November, 1948 No. 3 TABLE OF CONTENTS The Door County Apple Crop _____ Cherry Rootstocks _____ Retailing Fruits and Vegetables _____ Reports From Our Fruit Growers Consumers Packages For Apples _____ Better Sports Wanted _____ Apples From Canada _____ Raspberry Pests Control _____ Strawberry Observations _____ Wisconsin Beekeeping _____ Our New Honey Grades _____ Reports On The Honey Crop _____ From The Editor's Desk _____ Rudolph K. Froker New Dean Of Agriculture Scientists Receive Honors Gladiolus Tidings _____ Quack Grass Eradication _____ Mr. Jack Reynolds Appointed Chief Of Fairs Storing Vegetables At Home _____ Are Earthworms Beneficial? Garden Gleanings _____ The Teasel An Interessting Plant _____ 87 Officers Wisconsin State Horticultural Society Term Ending December, 1950

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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. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Seventy-five cents of the annual dues paid by each member is for a year's subscription to Wisconsin Horticulture.

The Door County Apple Crop

Irrigated Trees Produce Largest Fruit. Processors Help The Market.

By Chas. F. Swingle

Except for Delicious which suffered considerable damage last Fall and Winter, the apple crop generally throughout Door county and adjoining parts of Brown, and Kewaunee, has been good. This is not the biggest crop ever harvested, but it is one of the best in years. Due to the extremely dry weather until late in August, the fruit did not size up where excessive amounts were left on the tree, as with many Wealthies, but in general Mc-Intosh is running well sized. Courtland, with only young trees in bearing, will yield very few fruits under 21/2". Northwestern Greening in most orchards has a lighter crop than last year's overload which led to enormous amounts of undersized fruits.

The extremely dry weather early was not all loss, as it resulted in an apple crop almost completely without scab. Insect damage was negligible up until the late August rains, when a large emergence of codling moths resulted in considerable damage to orchards which did not get on a satisfactory spray cover within a few days. Only insignificant damage was done by the apple maggot, plum curculio, and leaf roller. Oystershell scale, present in a few orchards, was controlled by DDT.

Results From Irrigation

The Goff Orchard, Sturgeon Bay, is the only Northeast Wisconsin orchard prepared to irrigate on a large scale. This orchard irrigated part of its Wealthy and McIntosh trees 3 times, part 4 times. Mr. Goff and Mr. Frank DeFere, manager, are well pleased with the results, as these irrigated trees defi-



nitely turned out larger fruits than the non-irrigated trees in the orchard. No even the satisfactory rains which came the last of August and early part of September were enough for the non-irrigated trees to catch up with the irrigated ones.

The apple market was most unsatisfactory in early September when Duchess was ready to harvest. Some growers did not bother to pick, while others managed to get barely enough returns from sales to cover picking, packing and shipping costs. The situation improved slightly with Dudley, which was picked and shipped by most growers who had this important pollinator, but here again some growers did not bother to pick-partly because of the poor market prospects, partly because by the time the Dudleys were really ready it was time to get busy on Wealthy.

Processing

The only market for cider apoles of the early varieties was the Richter vinegar plant at Sturgeon Bay, which paid 40c per hundred. As a result, practically all windfalls were left under the tree.

The M. W. Miller Co., Sturgeon Bay, took 2½" and up of most varieties after Dudley, paying up to \$3 per hundred for good apples which were not No. 1 but which could be used for peeling. This company has put several thousand 30-lb tins in the freezer. In fact the demand is such that it is even packing McIntosh this year.

The Reynolds Brothers Apple Juice plant did not operate with early varieties. Starting the first of October, it has accepted clean undersized and off color fruits of McIntosh, Courtland, Snow, Tolman, and Delicious at 60c per hundred, and of Wolf River and Northwestern Greening at 50c. Apparently no regular cider is being made in Door county.

THOUGHTS ON THINNING APPLES

It takes only about 100 of 3" apples to make a bushel, but it takes about 230 of the 21/4" size for the same bushel.

That is a good thing to keep in mind when deciding whether or not to thin. Then there is the fact that larger apples will sell much better and bring a higher price.

The big problem in Wisconsin is to reduce the number of small and under grade apples and produce a high percentage of top grades.

After reading about thinning fruit by shaking and tapping branches with a rubber hose, one is led to conclude that here hand thinning has decided advantages, especially if defective fruits can be eliminated.

Cherry Rootstocks

Dr. Chas. Swingle Continues Report on Comparative Hardiness And Adaptation.

Longevity of Cherry Trees on Mazzard and Mahaleb

Hedrick states, "though the evidence is somewhat conflicting on this point, it is probable that cherries on mazzard live longer than on mahaleb. It may be that the frequent statements to this effect arise from the knowledge that dwarf fruit trees are generally shorter lived than standard trees since there seem to be no records of actual comparisons." Howe reported the cherry trees on mahaleb root on rather poorly drained loam soil at Geneva. New York, were much shorter lived than those on mazzard stocks. At the end of fourteen years, most of the trees on mazzard were in good condition while less than half of those on mahaleb were alive and most of those in poor condition. Similar results were reported by Anthony. Sudds, and Yerkes at Rosslyn, Virginia, with plantings on clay loam or silt loams. Sweet cherries were more successful on the mazzard stocks. The results were not so clear with sour cherries.

Bryant reported a lower death loss with Montmorency sour cherries in Colorado on young trees, 6.3 percent on mahaleb compared to 22.9 percent for those on mazzard at the end of 5 years.

Comparative Hardiness of Rootstocks

Authorities are in general agreement that cherries on mahaleb are hardier and less subject to winterkilling both in the nursery and in the orchard than they are on mazzard. Price and Little report mahaleb as hardier than mazzard in Iowa, but neither as being hardy enough for the colder regions of the northwest, recommending use of sour cherry stocks, "American morello," where a high degree of hardiness is required, in spite of their fault of sprouting. Hedrick states, "Cherries on mahaleb ripen sooner than on mazzard." Tukey and Brase cite as an example (of mahaleb being the hardier) a block of 60,000 nursery trees on mazzard at Dansville, New York, which was a total loss from winter injury in 1933-34, while adjacent blocks on mahaleb showed little injury. Differences in maturity owing to susceptibility of the mazzard stocks to leaf spot may have been a factor.



Anderson found that both sweet and sour cherries on mahaleb stocks suffered less from winter killing in 1933-34 on light sandy soils in the Hudson River Valley than those on mazzard.

Comparative Adaptation to Wet and Dry, Heavy and Light Soils

Here also authorities do not entirely agree, although the majority opinion is that mahaleb is more sensitive to wet soil conditions, but otherwise not as particular in its soil requirements as the mazzard stock. Hedrick states on this point, "Mahaleb is probably the more cosmopolitan stock will thrive on a greater diversity of soils than the mazzard. In particular it is somewhat better adapted to sandy. light, stony, and arid soils that are not well adapted to growing cherries. . . . It is better adapted to shallow soils than mazzard." Bailey notes that mahaleb is said to be better adapted to heavy clay soils than mazzard. Howard cites the claim of the California nurserymen who favor mahaleb that this stock enables trees to withstand better, extremes of too much or too little water in the soil. Philip makes the statement that more dieback was reported in California on mazzard under unfavorable soil and moisture conditions, while mahaleb adapts the cherry to drought conditions much better than mazzard but will not stand prolonged saturation of soil. Howe's results in New York appear to confirm Philip's conclusions as to the failure of the mahaleb stock under wetsoil conditions. Hansen and Eggers report mahaleb as more

resistant in California. Chandler characterizes mahaleb as "not tolerant of wet soils," while mazzard is "moderately tolerant of poorly aerated soils, being as tolerant as peach and apricot roots, but not as tolerant as myrobolan plum, apple or pear roots." Drought resistance is given by Gourley and Howlett as one of the reasons for the use of mahaleb. Schuster on the other hand, states that in Oregon mazzard is more vigorous and able to cope with adverse conditions, such as dry seasons, than is mahaleb. It is likley that trees on mahaleb are adversely affected by the poor drainage common in western Oregon.

Quality of Graft Unions

Hedrick states that better unions are made with mazzard than mahaleb. Butcher reports that some trees on mazzard "pinch off" at the union and never make good trees, the trunk being always larger than the rootstock. Philip observed overgrowth of the scion with many varieties on mahaleb stock, especially where highbudded. Tukey and Brase state that both stocks overgrow the Montmorency scion, but that mazzard makes a stronger union than mahaleb, observing that the top breaks off at the union more often with mahaleb when trees are pulled with a tractor.

Coe considers that "If soil conditions are the determining factor in the superiority of the mahaleb in this experiment, as appears likely, it is probable that the mahaleb stock would also be the best risk for sour cherries of the Montmorency variety, especially in view of the results of Bryant in Colorado favoring mahaleb over mazzard for Montmorency stock."

He concludes, "The divergence of these results from those obtained in eastern experiments where mazzard was superior to mahaleb is thought to be the result of the coarser, more open, faster draining soil in the Utah experiment to which the mahaleb is evidently better adapted, although it is possible that soil reaction and high summer transpiration may have been factors.

"It is clearly evident that under the conditions of this experiment, commercial mahaleb proved less dwarfing than mazzard and morlelo and more satisfactory where large trees and yields are desired. In view of these results it is concluded that mahaleb stocks may well be preferable for commercial planting under many similar conditions where this stock is adapted, especially where porous soils provide good drainage and aeration."

"Compared to mazzard, mahaleb stocks, where they are adapted, appear to have the following advantages:
(1) superior ability to withstand drought, shallow and unfavorable soils (except wet feet); (2) good root anchorage; (3) less affected by little leaf; (4) cheaper to grow in nursery; (5) more resistant to "buckskin disease' when high budded."

"Disadvantages of mahaleb stock where adapted appear to be: (1) trees on this stock transplant with more difficulty than is desirable; (2) susceptibility to gopher injury; (3) tends to be overgrown by sweet cherry scions."

Wisconsin Apple Institute Tells Consumers About Our Apples



Wisconsin APPLES

WALDORF SALAD

Sliced home-grown, juicy McIntosh apples, mix with chopped fruit, nuts, marshmallows and salad dressing — serve cold.

ASK YOUR GROCER FOR

Wisconsin APPLES

This is a sample of one of the advertisements appearing in 12 daily papers with largest circula-

tion in Wisconsin on September 16.

The recipe was changed each
week and the ads were paid for by
the Wisconsin Apple Institute.

Fruit Growers Supplies

PLACE YOUR ORDER FOR YOUR REQUIREMENTS FOR 1948 NOW. ..

SPRAY MATERIAL

Puratize
Lead Arsenate
Lime Sulphur
Spreader Stickers
Kolofog
Kolo Spray
Mike Sulphur
Parmone
Fermate

ORCHARD SUPPLIES

Ladders Bushels

BASKETS

1/2 Bushels
Pecks
1/2 Pecks

Paper Stock

Graders Cleaners

Picking Bags
Packing Forms

NEW SPRAYERS - ALL MODELS

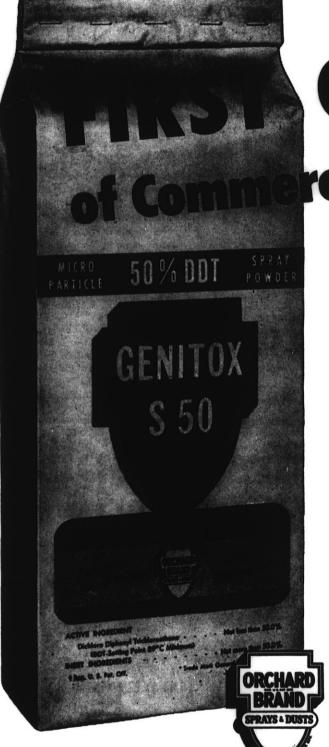
U S E D — 1 BEAN 7 Gallon — 150 gallon tank mounted on rubber 1 BEAN 7 Gallon — 100 gallon tank — Skid Type Both Priced to Sell

Southeastern Wisconsin Fruit Growers Cooperative, Inc.

Waukesha Wisconsin 227 Cutler Street (Near C & N. W. Freight Depot)

Tel. 4167

Lester F. Tans



CHOICE rcial Growers

Through the years, men who grow fruit as a business have relied on General Chemical spray materials. In their own orchard "proving ground" they have seen the proof that Orchard Brand products can be counted on for consistently good results.

When DDT was originally released, General Chemical was among the first to field-test it and offer it to commercial growers for orchard use. The qualities of Genitox DDT for high efficiency in spray equipment, good coverage of foliage and fruit, and all-around insect control performance convinced growers that this new General Chemical insecticide could be used with the same confidence as the "old reliable" Orchard Brand products.

That's because all General Chemical spray materials are carefully developed through sound research and thorough field investigations. Then they are produced under the most exacting quality-control conditions. This results in the inherent product qualities which mean year-in and year-out dependability. For '49—choose the best: demand General Chemical Orchard Brand.

GENERAL CHEMICAL DIVISION

JED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N. Y.

Offices serving principal agricultural centers from coast to coast

Other Orchard Brand Spray Materials for the Fruit Grower Include:

Lead Arsenate, Astringent & Standard Genithion[†], Parathion Formulations Nicotine Sulfate Spraycop^{*}, Neutral Copper Fungicide Micro-Dritomic[®] Sulfur, advanced type of sulfur fungicide Purulized[®] Agricultural Spray, early scab spray

Benzone Hexachloride Filmfast^{*}, Spreader-Sticker Stafast^{*}, Pre-Harvest Sprays * Beg. U. S. Pat. Off. † General Chemical Trade Mark

Reports From Our Fruit Growers

Crop Was Good Along Lake Shore

This has been a good season for some of our orchardists-not so good for others. Here are a few comments from members of the Wisconsin Apple Institute on the past seasons operations and results.

FROM ARTHUR BRUNN, Hales 'Corners. "In spite of a dry summer we are harvesting the best crop of Mc-Intosh, Red Delicious, N. W. Greening and Cortland we have ever had. The market is good."

FROM G. J. HIPKE, New Holstein. "Delicious crop looks poor. McIntosh fair to poor. Wealthy crop is good but heavy drop. Crop is selling well."

FROM S. S. TELFER, Ellison Bay. "Have had a good crop of some varieties-McIntosh especially good. Excellent size and color when not picked too early."

FROM FRANCIS ALLEGAR, Wyocena. "Have good crop of Greenings, Cortlands, Snows and Golden Delicious. Market good, could sell more than we have."

FROM ALOYS PFEIFFER, Racine. "Our apple crop will be small. Sales good but fruit of small size due to drought."

FROM KERT WIEGAND, Cleveland. (Manitowoc County) "Apples have very good color and are clean. No scab at all and very few worms. Market good. Heavy set on Golden Delicious but light on Red. Yield better than expected.

FROM ERVIN TUMA, Cato, "Market good. Greenings loaded and of good quality. Apple trees mulched with straw gave good size for such a hot and dry summer."

FROM L. B. IRISH, Baraboo, "Apple crop short. Demand very good.

JOSEPH MORAWETZ, FROM West Bend. "Our entire crop wiped out by hail on June 7. Market very

FROM JAMES CHERF, Antigo. "Had about 50% crop. Quality good demand good. Apple magot was late in coming and injury showed up when apples began to mellow."

BULLETINS AVAILABLE ON TOP GRAFTING FRUIT TREES

If you are planning to top graft fruit trees this season, by all means send for "Stencil Circular 62" entitled "Top Grafting Fruit Trees." Address Mailing Room, College of Agriculture, University of Wisconsin, Madison.

The bulletin is written by Prof. C. L. Kuehner and is quite complete with explanations, drawings and discussion how to do this important job.

NEW PLANT SPRAY MAKES PLANTS IMMUNE TO INSECT ATTACK

A new insecticide, Pestox 111, is reported by British agricultural scientists. They say that this new spray enters into the system of plants immunizing them against attack for two or three weeks. In other words, it acts about like vaccination for animals.

The new spray will also kill aphids but does no harm to ladybirds which feed upon the aphids.

The new spray is expected to be on sale to the public next year.

HARVEST SUPPLIES---

Ladders

Liners

Packing Forms

Baskets Top Pads Apple Pickers

Cleaners

Polishers

We can make immediate delivery on all makes of Bean Orchard Sprayers

POISONED OATS Bait for Mice

G. A. DUNN & CO., Inc.

2138 University Avenue

Madison 5. Wisconsin

Formerly F. R. Gifford Company

CONSUMER PACKAGES FOR APPLES

Results of Brief Survey on Consumer Preferences for Packaging Apples

Nine families or individuals living in small apartments were shown four types of packages: A 5-lb. open mesh bag; a 5-lb. Carry-out carton; a 2-lb. cellophane bag and a cellophane boat for 5 apples.

Four preferred buying their apples in bulk—like to select each apple.

Two liked the boat holding 5 apples—one liked this because she only buys 4 or 5 apples at a time. The other liked boats because she had bought them in Boston and found them satisfactory. Ot least 2 did not want boats because of their experience with tomatoes.

Two definitely liked the 5-lb. mesh bags—one other who preferred bulk apples thought mesh bags might also be good. All mentioned using the bag later for other purposes.

One preferred the small cellophane bag to all other packages.

Three throught the 5-lb carton looked expensive and even if price were same as bag they would think they were paying a lot for the carton. Two did not like the carton because apples were not visible.

GENERAL CONCLUSIONS. Only one out of nine had purchased apples in consumer packages. All four types were considered both desirable and undesirable. The chief objection was that the purchaser could not see the apples sufficiently.

Packaging of apples would seem to be justified on the basis of quality, providing consumers with apples in as nearly perfect condition as possible.

Report at Fruit Growers Day. From Pomological Pointers for Connecticut Fruit Growers.

Better Sports Wanted

Paul Stark, Jr. Research Department, Stark Bro's Nurseries, Louisiana, Mo.

Little did Lewis Mood realize, when he discovered one limb on his Stark Delicious tree was bearing apples, that were all over red in August while the apples on all the other limbs of this same tree were still grass green, that this Bud Sport Mutation was destined to start a new era in plant variety improvement.

Named Starking Delicious, this improved color bud sport apple created a sensation in fruit growing circles.

GIANT SPORTS

A more recent development in the sport department is the discovery, testing and development of giant sports which may prove to be of great economic value, especially in those areas where growers have difficulty getting desired size in the all too frequent unfavorable seasons. Several of these giants proved to be large, rough and coarse and not too desirable from a commercial point of view, but recent discoveries promise some outstanding contributions to horticulture, especially in the apple and grape line.

Although most of the important recognized and widely disseminated sports are improvements over the parent variety, there are equally as many or more that are definite degenerates that tend to revert back to the standard and others are degenerates from the standard strains direct. Russet forms of several varieties have also been observed and tested in many orchards and by some this may be considered a type of degeneracy. It might be a dangerous situation if propagation wood were taken from a tree of this kind and stock built up in the nursery, since russet fruit is in disfavor these days.

SPORTS ARE TESTED

We receive as many as 50 more bud sports from growers all over the country every year. We have many Delicious sports but none are as good as Starking. These sports are, of course, in addition to the many thousands of back yard and commercial orchard new variety seedlings that are sent in to us for appraisal. Bud sports and seedlings are all carefully evaluated by our research department and those definitely showing promise are top-

worked into bearing trees for quick observation and comparison with standard varieties under similar soil and climatic conditions. After the first crop matures and shows commercial possibilities, a stock block is developed for propagation purposes should succeeding crops continue to prove superior. This topwork test also determines in a short period whether the sport propagates true to type and stabilizes the caprice of nature. Young trees are also planted in test blocks to get fruiting as soon as possible for whole tree additional comparison tests, and distribution is started to commercial orchardists and experi ment stations in all the leading fruit sections. Only after careful testing by qualified fruit variety specialists, as well as commercial and amateur growers, can a new bud sport be released for general planting in a commercial way.

It then becomes the nurseryman's job to keep the strain pure. Nowadays this is important, not only from keeping the color or seasonal sport from degenerating but also the parent stock must continue to be healthy, prolific and free from disease. Stability of the Bud Mutation variety is maintained by careful selection and annual inspection of this parent source. Although degenerative sports are relative rare, it is imperative that these be prevented from getting into commercial propagation by eternal vigilance on the nurseryman's part. We find that the Record Bearing Strain of a tree means a lot more in these days of improved sports than ever before and is our only positive means of sport stability.

Heavy yielding strains of any fruits, especially sour cherries, have promise and when discovered should be tested and evaluated for future commercial propagation. There are any number of sporting types, and any one, from fuzzfree peaches to an all-red or blushed Golden Delicious, should be investigated, tested and evaluated for commercial merit by reliable horticultural authorities. Then they should be introduced to American orchardists for more profitable fruit production.

Condensed from Hoosier Horticul-

APPLES FROM CANADA By L. W. Marvin, Mgr.

N. Y. & N. E. Apple Institute

There is considerable misunderstanding concerning the importation of apples from Canada and we have many inquiries as to why the Institute has not done something about it. In former years, Canada found a satisfactory market for her exportable apples in Great Britain but, like ourselves. Canada has lost this market and naturally turned to the United States for some relief. Under existing conditions, Canada can export any quantity of apples to us as long as she pays the duty.

However, to avoid creating disastrous marketing conditions. the Canadian and United States Departments of Agriculture have held annual meetings since about 1940, for the purpose of discussing ways and means whereby a reasonable quantity of Canadian apples can be consumed in the United States without upsetting local markets. Through these discussions, the Canadians have materially eased the effect of their United States distribution problem by spreading shipments widely and through a greater portion of the season. They have scrupulously undertaken what they could live up to and the annual discussions have provided a measurable prospect instead of a dangling question insofar as the United States apple industry is concerned.

Last August the Canadians were of the opinion that they would have to market about 2,275,000 bushels of fresh apples in this country, but it now appears that the total will reach only about 1,600,000. As we have already stated, the distribution of these apples has been wide-spread over the United

States, and there has been no tendency to flood any given market.

Our Foreign Policy

The whole matter of Canadian apples is wrapped up in top level United States foreign policy. The Canadians point out that they buy roughly \$5.00 worth of fresh fruit and vegetables in the United States for every dollar's worth given to us. But they do respect the hazards of breaking the market they wish to enjoy.

Since coming to the Institute almost two years ago, we have had great confidence in the long term outlook for apples. They are the most versatile fruit grown and can be used in dozens and dozens of ways. In my opinion, there is no over-production of apples. Rather, it is a problem of underconsumption and we are hoping that all northeastern growers will want to support financially the work of the Institute so that we can rapidly correct this situation. Apples are encountering severe competition from other fruits and other foods, also from apples produced in other areas. The New York and New England area constitutes the most condensed and most profitable apple market in the United States and you can be sure that your competitors are constantly shooting at it.

From talk to Vermont Horticultural Society Meeting. Proceedings Vermont State Horticultural Society, 1948.

THE SAGEBRUSH OF THE WEST

Travelers over the western plains may have wondered about the varieties of sage brush found growing on the prairie. Mr. W. R. Leslie, Superintendent of the Experiment Station at Morden, Manitoba writes in his Weekly Notes, of a recent trip to the Horticultural Science meeting at

Cheyenne, Wyoming and describes the Sagebrush as follows:

Sagebrush is associated with the dry plains area. In Saskatchewan the woody plants were mostly the Silver sagebrush (Artemesia cana). The leaves are narrow and without dentation. The Big sagebrush (A. tridentata) is a more renowned species and was a dominant plant over hundreds of miles of valley land in Montana and southward. It may reach a height of 9 feet. The leaves are usually dented with 3 teeth at the apex. The non-woody Artemesias are called Wormwoods. The woody types are mostly much branched. It was a common sight to see from one to sixteen Pronghorn antelopes pasturing about the sagebrush.

CAN STRAWBERRIES BE PLANTED IN FALL

QUESTION: I would like to set out strawberry plants in the fall and have read articles in the magazines stating that fall is a good time to plant them. Will fall planting succeed in Wisconsin?

ANSWER: A number of years ago, the Experiment Station at Ottawa, Canada sent us several thousand plants of new varieties of strawberries in the fall. These were distributed to about 10 different growers in various parts of the state—including Madison. They were planted and well cared for by the growers. The next spring only about 10% of the plants remained alive.

We have not heard of other strawberry growers successfully planting strawberries in the fall.

However it might be done on a small scale if rooted runners were dug up with a clump of dirt and then moved to a different location nearby allowing the soil to remain on the roots intact.

Raspberry Pest Control

By E. L. Chambers, State Entomologist

A question frequently asked is, "How often should one spray or dust the small fruit plantings?" There is absolutely no way of telling in advance just how many sprays are going to be necessary. The answer we usually give is to spray only when necessary. By that we mean if serious injury is becoming evident from some pest or there is beginning to appear signs of the re-appearance of the work of a pest which was serious during past seasons, immediate timely action should be taken. Because the application of sprays recommended in a seasonal spray schedule are frequently unnecessary, requiring useless expenditure of time and money, and because there is always some risk involved in spray applications, whether as direct injury to the plant or the destruction of beneficial insects we do not advocate spraying small fruit unless there is some very good reason.

The Secret of Success

The possibility of having an undesirable or dangerous spray residue on the fruit at harvest time must be likewise reckoned with. Furthermore, a spray schedule is often followed too closely and folks using them do not fully appreciate the fact that these schedules are relative things and sometimes vary widely with varieties of plants, season and geographical location. The secrets of success in insect and disease control are: (1) Apply thorough spray cover; (2) Apply spray often during rainy season, and (3) Follow directions carefully. Spraying will not control certain small fruit maladies and should, therefore, not be attempted at the risks just mentioned. Among the principal diseases of raspberries coming in this category are orange rust, late raspberry rust and virus diseases such as mosaic, leaf curl, and streak. To avoid these, the grower should plant only vigorous growing, disease-free certified stock. Whenever a trace of any of these appear, the infected plant should be dug up and burned. These systemic diseases necessitate the removal of all sucker plants of the parent one since they, too, will be infected. These are the diseases that are most responsible for the so-called "running out" of berry plants. Since Black raspberries are especially susceptible to mosaic, it is well not to plant Red raspberries



Anthracnose is a most serious disease. Above — unsprayed and below sprayed fruiting Spurs.

within at least 300 feet of any Black raspberry plantations. To avoid crown gall, the bacteriological disease causing the formation of wart or cauliflower-like enlargements on the roots, raspberry plants should not be planted on soil where infected fruit trees or can fruit have been growing.

While there is no doubt that some very useful and perhaps more effective sprays will come out of the recent flood of new insecticides and fungicides appearing on the market, which may revolutionize our present spray recommendations, it should be pointed out that the research folks have not been able to keep pace with the chemists who are turning them out and too little is known about their toxicity to human beings to permit their gen-

eral recommendation. Rotenone. Pyrethrum, and Sabadilla sprays and dusts can be safely used up until about harvest time, but sprays such as DDT. Benzene hexachloride, Chlordane, etc., are even more dangerous than would be the arsenical sprays including Arsenate of lead and Calcium arsenate. Most of these sprays just mentioned will be found effective against the sawfly and other foliage feeders and the fruit worm, and can be applied prior to blossom time but should not be applied during the blossoming time because of danger of killing the honey bee and the other polinizing insects. and should not be applied after the fruit is well formed because of the danger of leaving a spray residue.

TO CONTROL ANTHRACNOSE

To control anthrancnose, dormant Bordeaux, "D. N." or Lime sulphur sprays can and should be applied after the beginning of the new growth but not after the leaflets are approximately % inch long because of the danger of injury to the foliage. Fermate and milder copper and Lime sulphur sprays can be applied up to within a week of their blossoming. The delayed dormant sprays most commonly used now consists of Copper sulphate, eight pounds; Hydrated lime, eight pounds and dormant Miscible oil two gallons in 100 gallons of water or 12 gallons of Lime sulphur liquid in 100 gallons of water. The "D.N." is used at the rate of four pounds of powder in 100 gallons of water. These sprays are directed against anthrancnose, powdery-mildew, spur blight, and red spider. The pre-blossom sprays consist of Fermate at the rate of two pounds in 100 gallons of water or Copper sulphateeight pounds, Hydrated lime-eight pounds, and Summer oil-1 gallon in 100 gallons of water. These are the second spray applications recommended for anthracnose and spur blight control.

Other Pests

The most serious insect pests requiring additional spray treatments are the spittle bug, raspberry fruit worm, and the red-necked cane borer. The spittle bug is dealt with by the use of a 5% Chlordane dust and is directed against the insect while it is still in its first or second instar, or in other

words within a week or 10 days after they have hatched. The dust penetrates the small newly established spittle mass surrounding the nymphs but the penetration is less marked as these bugs develop and reach maturity. The time of application will vary with the season and locality, but generally speaking this should be made by the last week in May or the first week in June in the vicinity of Madison. The Chlordane dust should be applied when there is little or no wind and at the rate of from 25 to 30 pounds per acre. When frequent winds make its application difficult, it is usually found that the quietest air period is shortly after the break of dawn. Like many of our new insecticides, too little is known about the toxicity of the residue on food crops and consequently it cannot be recommended just prior to harvest but can be safely used up until ten days prior to the ripening of fruit.

The raspberry fruit worm and the red-necked cane borer require a spray or dust application just before the raspberry blossom and a 85-15 lime lead dust mixture is suggested. A Rotenone dust or a DDT spray made of one pound of the 50% wettable powder in 100 gallons of water, to which has been added one pound of dry skim milk. Four pounds of Rotenone in 100 gallons of water will also be found effective.

STRAWBERRY OBSERVATIONS

By H. E. Halliday

While making a fall checkup of strawberry fields in the Bayfield, Douglas, and Jackson County areas last week, I noticed some rather disturbing conditions. The first is one that could be expected in such a dry year - narrow spotty rows. To begin with, many patches were reset once and in some cases twice, giving the plants a late start. White grubs did heavy damage in many patches not only in the Bayfield-Jackson areas but throughout the state. There is hardly a patch that has not been injured to some extent by the grubs.

In most instances the rows are very thin and narrow, due to the dry weather which would not allow the plants to send out the number of runners which we consider normal. The most serious things I noted were injury to the roots and failure of the runner plants to set roots. Many plants that I dug had severely injured roots. Many of them were brown near the crown, and were dead from the tip end for 1/3 to ½ of their length.

Mulching Important

I suppose that one must attribute this to very high soil temperatures due to high air temperatures plus the almost complete lack of moisture in the soil. This would seem to me to make it almost imperative to follow the practice of mulching just before the ground freezes so that these injured roots can have all the protection possible this winter.

Failure of the runner plants to root is probably the worst condition I noted. This trouble is not apparent until one picks up runners and finds that they can be lifted clear back to the mother plant. Where I made definite checks, I found that from 40 to 60% of the new plants had no roots in the ground at all. The plants have made desperate efforts to set themselves, sending out many new roots only to have burned off by high temperatures of the dry soil surface, or rubbed off by the whipping action of the wind. There is considerable root activity now, due to recent rains and 'cooler temperatures. authorities whom I have consulted feel that it is coming too late. Also there seems to be a failure of fruit bud formation in many of the new plants. Examination of several plants under the microscope has failed to show any bud formation.

Reports from other sections of the state seem to indicate that many of these conditions are quite widespread. Give your plants all possible protection this winter, as they will need it come fruiting time next year.

RASPBERRIES NEED COVERING IN MINNESOTA

By J. D. Winter, University of Minnesota

Raspberries need covering in all sections of Minnesota. The Minnesota State Horticultural Society is changing its recommended fruit list and will make recommendations to this effect at the annual meeting. Complete covering is practiced chiefly in the Lake Minnetonka region and in La Crescent area. New and improved covering machines are being made now for use this fall around Excelsior. The covering will be done at so much per hour for any grower requesting the service.

Covering by use of tractor and covering machine is preferred. The rate is about 1 acre per hour. Some growers prefer the horse and plow because there is usually less cane breakage — so they claim. Growers who cover by machine do not feel they get excessive breakage.

Covering will pay in any section of our state except where soil is too stony or of heavy clay.

Tipping Down Canes

Tipping down the canes of raspberries in fall without complete covering has not proved reliable protection. Sometimes it helps a lot and sometimes it doesn't.

When To Remove Old Canes

We recommend and it is recognized as best practice to remove old canes immediately after picking is finished. The old canes are then burned.

Wisconsin Beekeeping

OFFICIAL ORGAN OF THE WISCONSIN STATE BREKEEPERS ASSOCIATION — OFFICERS

Robert Knutson, Ladysmith President
Lawrence Figge, Milwaukee
Vice-President H. J. Rahmlow, Madison, Cor. S Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer

DISTRICT CHAIRMEN

S. C. Fox, Pewaukee Robt. Knutson, Ladysmith Newton Boggs, Viroqua Guy Sherman, Seymour E. Schroeder, Marshfield Ivan Whiting, Rockford

Annual Convention Highlights

Faced with a short crop of honey officers of the Wiscinsin Beekeepers Association feared a drop in attendance at the convention this year. However, the annual event which was held in the Retlaw Hotel, Fod du Lac, October 27-28, was highly successful. There were 140 registrations and 125 at the banquet.

More detailed reports will be published in our next issue as only one page could be reserved in this issue due to the lateness of the convention.

New Officers Elected

The following officers were elected for the coming year. President -Mr. Robert Knutson, Ladysmith; Vice President Mr. Lawrence Figge, Milwaukee and Secretary-Treasurer Mrs. Louise Brueggeman, Menomonee Falls, H. J. Rahmlow continues as exificio member of the board and corresponding secretary.

The officers of the women's Auxiliary who have done such an outstanding piece of work this year were re-They are: President-Mrs. Harold Knight, Dalton; Vice President - Mrs. Emerson Grebel, Beaver Dam and Secretary-Treasurer-Mrs. Wallace Freund, West Bend.
Change Constitution

One important change was voted at the annual business meeting-the Constitution was changed to provide that all business of the convention be conducted by the Board of Managers. This boad is to consist of the Board of Directors, (the officers and District Presidents) plus one delegate from each affiliated association havng 10 or more members. They will be entitled to one delegate for each 25 members whose memberships are paid up in the State Association.

This is an excellent plan and will give fair representation on all matters of business from every part of the state.

Notice To County Association Secretaries

In the future, the county associations will be entitled to delegates only



if they have 10 members paid up in the State Association. Affiliated membership dues to the State Association through the County Association is \$1.00 per member per year. These dues are sent to Mrs. Louise Brueggeman, Treasurer, Menomonee Falls. Blanks for sending in membership names may be obtained from Mrs. Brueggeman

Individual memberships to the State Association remain at \$1,25 per year. Membership can also be ibtained in the State Association through the district treasurer and the amount is the same - \$1.00 for state dues plus the district dues which are usually 25 c.

The county association dues are, of course, added on to the \$1.00 for the state dues when paying county memberships.

(To be continued in our next issue)

WISCONSIN BEEKEEPERS ASSOCI-ATION HAS ITS BEST FINANCIAL YEAR

Profits From Honey Sales At Centennial Bring Large Sum

The Wisconsin Beekeepers Association had during 1948 what was probably its best financial year. Total receipts for the year were \$974.00, divided as follows:

From dues	\$189.00
Stationery sold	. 5.40
Commission on glass and pails .	. 211.22
Association profits from honey	

sales at Centennial 569.20 Total\$974.82 This with the balance in the general fund for the past year makes a total of \$1,729.30.

Expenses were not large this past year. Total convention expenses (without itemizing details of the financial report of the treasurer. Mrs. Louise Brueggeman) were as follows:

1947 convention expenses	170.58
Office expense	51.37
American Honey Institute	25.00
Dues to Nat'l. Federation	
Secretary Salary	100.00
Other Items	24.23

Total\$404.08 This left in the general fund on September, 1948, \$1,325.22.

The association also has in the label fund \$489.85 which is a revolving fund for the purchase of labels.

Also in the advertising fund is \$166.90. This fund has been built up by registration fees at the annual convention and other items.

It is of course due to the untiring efforts of our president, Mr. Walter Diehnelt that this financial standing is so good. When we analize the report and realize the dues from members amount to only \$189.00 while the total expenses are \$404.08 we can readily see that dues account for less than 1/2 of what we spend. Commission on glass and pails accounts each year for more than the dues.

The associations profits from honey sales at the Centennial of \$569.20 is a credit to the committee. Mr. Diehnelt and the Centennial committee were responsible for this good showing. They set up the exhibit, purchased the honey at wholesale prices—(it was labeled with Centennial labels) and sold it. The state received 1/2 of the profit while the Wisconsin Beekeepers Association received the other half.

Our New Honey Grades

Mr. John Long Answers Some Important Questions

 What do you mean when you talk about grading honey?

Separating one comb from another, one season's production, or one yard's production, or one colony's production from another, or one tank or container from another because of looks, flavor, color, thickness, or any other reason is grading the honey.

2. Who will want to use Wisconsin grades?

If you are one who believes that Wisconsin Honey is as good or better than honey produced in other states you will want to use Wisconsin grades. (Wisconsin grades identifies your honey as Wisconsin Honey.)

- 3. What about Federal grades?
 Use U. S. grades for honey not produced in Wisconsin or honey from Wisconsin blended with honey from outside of the state.
- 4. May I sell ungraded honey? Yes, if you sell all of your crop for one year as ungraded.
- 5. Under what conditions may I sell honey without a label on the container?

.When you fill the container in the presence of the purchaser.

6. What must be stamped on the container (paper or cardboard) or printed on the label?

The words WISCONSIN HONEY, the grade (Fancy No. 1 or No. 2), the color, (White, Golden, or Dark), produced or packed by, your name and address, net weight (of contents of container), the word "Ungraded" in place of grade and color if honey is not graded.

7. What else is permissable?

Flavor of honey such as clover or basswood or buckwheat, or any other statement of advertising value you may wish to have on the label. 8. What can I do with my old labels?

New grades become effective October 15th. Since there is no change in Wisconsin White Honey, old labels can still be used. Labels having Amber can be changed to Dark or Golden if honey is of that color.

- 9. Can I use old containers? No, not for anything smaller than 50 lb. sizes.
- 10 What containers must be labeled?

Any container in which you are selling honey or offering it for sale.

11. Are copies available?

Yes, Bee and Honey Section, Room 419 South West, State Capitol.

12. When will color graders be available?

As soon as we can find some one interested in making up approved graders.

Honey License

If you are selling honey to any one in Wisconsin for resale or shipping it outside of the state for resale, it is necessary that you have a license. The cost of the license depends upon the amount of honey you sold last year. The fee is one dollar for less than a \$1,000 dollars worth of business in any one year, and increases with the amount of business you may do. Licenses must be renewed each year as they are good for only one year.

Apiary Inspection

Apiary inspection work the past year has shown that we still have plenty of A.F.B. with us. For some reason, unknown at present, little European Foul Brood was found this year. Tremendous winter loss last year has greatly increased the num-

ber of dead colonies inspected and many yards were found in which no bees were being kept.

Some A.F.B. was found in nuclei shipped into Wisconsin and we have at least three shipments of package bees which were strongly suspected. Those who reported receiving package shipments from these apiaries are being inspected.

A complete summary of the work done in the various counties along with indemnity funds paid out will be furnished at a later date.

AUTUMN WORK IN THE APIARY

What We Learned This Season By Working With The Bees

New methods cut labor and costs. Mr. G. N. Ranum of Mount Horeb is to be complimented. He is one of the oldest beekeepers in the state. Yet he told us this fall that he has adopted several new practices including the 3 brood chamber method of management. He made the remark, "I could never have handled the number of colonies I have by my old method and I think I got a lot more honey by using 3 brood chambers." May none of us ever get so set in our ways that we cannot adopt something new.

This year we started preparation for winter earlier than usual. There was no buckwheat flow because it was too dry. It is important that we check all colonies before brood rearing ceases, otherwise we are unable to tell if there is a queen present. We started in mid-September this year and were pleasantly surprised to find that 95% of the

Reports of the Honey Crop and Price Situation

Officers of County Associations Report On Conditions for 1948

From Oscar Ritland, Elroy. The honey crop here was a total failure. The tendency is to cut down on the number of bees here. They will have enough honey for winter without feeding. 5 lb. pails retailing at about \$1.00.

From Arthur Schultz, Woodland. (Dodge County) Our honey crop was about 80% of normal. I don't think there will be any increase in bees in this county. Colonies will go into winter with plenty of honey. 5 lb. pails retailing at \$1.25. Old honey lower.

From Gerald Pulaman, Exeland. (Sawyer County) We took off 315 lbs. of honey and will feed back 1500 pounds of sugar. Beekeepers are not very much interested now. I expect colonies will not have too much honey for winter. Retail price from \$1.00 to \$1.50 per 5 lb. of pail. Mr. Robert Knutson has been having quite a bit of bear trouble. You no doubt know what a mess it would be to have hives upset and smashed frames scattered for many rods with the bees mad and robbing. I have had much damage to sheep from bear but have been able to trap 5 this and last year.

From Louis Rackow, Goodrich. (Taylor County) Honey crop will be about 35% of normal here. There is a decrease of interest in beekeeping. There will be some feeding necessary to put colonies in condition for winter. 5 lb. pails are retailing at from 89c to \$1.10.

From Joseph A. Deiser, Superior. (Douglas County) We had only about % of a crop in the Superior area. There will likely be a decrease in the number of colonies. About % of the colonies will have to be fed. Prices are from 95c to \$1.19 for a 5 lb. pail.

From L. W. Timm, Ripon. (Fond du Lac County) The crop here was ½ less than last year due to dry weather and damage through spraying. There has been a slight increase in number of colonies this past season. Smart beekeepers are leaving plenty of honey on each colony and they have provided plenty for their own use. Prices range all the way from 95c to \$1.25 per 5 lb. pail.

From Frank Greeler, Neillsville. (Clark County) The crop here was about ½ of normal and there was a decrease in the number of colonies this year. Some colonies have plenty of honey but some must be fed. The price to stores is \$1.25 per 5 lb.

From Henry Piechowski, Red Granite. (Waushara County) The honey crop will be about 50% of normal here. There is a decrease of interest in beekeeping. There will be some feeding necessary to put colonies in condition for winter. 5 lb. pails are retailing from 89c to \$1.00.

From Cornelius C. Meyer, Appleton. Crop has been only from ½ to ¾ normal. Number of colonies, remains about the same as last year and most colonies have plenty of stores for winter. Honey has been selling at from 85c to \$1.25 per 5 lb. pail. A similar report was given by Mrs. A. I. Bennett of Hortonville, Secretary of Outagamie County Association.

From Gerald Wentz, Sheboygan Falls. Honey crop in this section is about 40% of normal.

From Ivan Whiting, Rockford, Ill. Honey crop is short here this year, but have about 80 pound average. Sales are slow. Have considerable honey on hand. Am feeding though very little is needed.

From A. Babcock, Milton, Wis. Crop was about $\frac{2}{3}$ or normal in this section. No increase in number of bees. Bees have plenty of honey on the hives for winter. Retail price 5 lb. jar about \$1.25.

From A. H. Deuel, Chippewa Falls, Wis. Crop about 50% normal here. Tendency is to decrease the number of colonies. Bees will have plenty of stores for winter. Honey selling at \$1.00 per 5 lb. pail for dark and \$1.25 for white.

From Fred W. Mack, Reedsville, Wis. (Calumet County). Honey crop is ½ of normal. There is a decrease in number of colonies in this section. Bees will go into winter with less honey than usual and many must be fed. Retail price 5 lb. pail about \$1.05.

From Ernest Schoeder, Marshfield. (Wood County) The crop was about 1/3 normal here. There will probably be no decrease in the number of colonies. Bees have plenty of honey for winter but some beekeepers had to feed. Retail price from 98c to \$1.00 per 5 lb. pail.

EXPERIENCE USING THREE BROOD CHAMBERS

By G. M. Ranum, Mount Horeb

For several years I have been looking forward to the time when I would have enough combs and bee equipment to use 3 standard hive bodies as a brood chamber for each colony. I had been given the inspiration to try the 3 brood chamber method by Dr. C. L. Farrar and his teachings. I believe all beekeepers will profit by studying his method of management.

In 1947 at the sacrifice of 1 super less for each colony for extracting, all but a few of my colonies went into the winter in three hive bodies pretty well filled with bees and stores. There was some lack of pollen because many of the new combs had been filled about the excluders.

The winter of 47-48 was admittidly a hard one on outdoor wintered colonies. None of mine were packed excepting that each hive had $3\frac{1}{2}$ inches of litter at the top for insulation. A 1" auger hole was left open in the top body. The bottom entrance was reduced $2\frac{1}{2}$ " by $\frac{3}{8}$ ". There was some winter loss by dysentery which might in nearly every case be accounted for as resulting from nosema infection.

During the spring, which was not at all favorable, healthy colonies held their own throughout building up to good strength by the time of the first honey flow, with scarcely any attention needed. Then some reversing of hive bodies was done but less than usual. With the additional brood-room furnished there was very little if any swarming tendency which of course saved a lot of time.

No queen excluders were used

November, 1948 79

and top supering was practiced exclusively which for the first time in my experience was satisfactory.

It appears to me that this system practically insures colonies against lack of stores for winter. While we left a lot of honey on each colony for winter we have also taken a satisfactory crop of honey. Perhaps it is better for the morale of the colony too, if the stores are left arranged by the bees rather than have the disturbing effect of fall feeding which sometimes counts against good wintering.

On the whole I can see that time can be saved and surplus production increased by the use of three brood chambers.

Autumn In The Apiary

(Continued From Page 77)

colonies had arranged their stores for winter just as we would like them. The top of the 3 brood chambers was in almost every case filled with honey but with 2 or 3 frames in the center having brood in the lower third portion. Most of the brood was in the middle or second brood chamber and there was some honey there too. Many colonies also had brood in the lower brood chamber and there seemed to be quite a lot of pollen present in most colonies.

Many colonies have young queens and these lay more vigorously than their older sisters. They had brood into October while older queens stopped laying in September. As far as we know there was not a single case of swarming this year.

With sugar at about 9c per pound and dark honey bringing little more, it certainly doesn't pay to feed sugar syrup. We put all the wet extracting supers back on top of each colony from which they came—(all are numbered).

This is a safeguard against spreading foul brood and enables bees to clean up the combs and use the honey. That they clean the combs dry is certain because when we take them off in early October, they are so dry that the robbers don't bother with them. It is easy to take them off. We simply place the cover upside down on the ground and gently tap the hive on it and the bees fall out. What few remain will fly home after the supers are stacked in the yard.

May Have Poor Wintering

In sections of the state where there was no fall honey flow, old queens stopped laying early so winter clusters may be small with a high percentage of old bees. A prolonged cold spell in February and March is usually disasterous to such colonies. The old bees are short lived and by mid-winter or later the winter cluster may be quite small. After brood rearing starts in February it further taxes the strength of these older bees and they die rapidly. It may be just as well to kill such colonies in the fall saving their honey and pollen to give to packages in the spring.

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From the Editor's Desk

COUNTY FAIR

HORTICULTURAL EXHIBITS

During the past summer there have been many exhibits in Wisconsin showing the tremendous progress made in agriculture during the past 100 years. Note the difference between dairy cattle of 1848 and 1948; the improvement in farm machinery, transportation, in home conveniences and in our method of life.

There was no exhibit showing the difference between the exhibits of fruit or flowers at the fair in 1848 and 1948. In fact, there has been little improvement along that line. We judged horticultural exhibits at a number of County Fairs this season, as we have for the past 20 years. At most fairs, cut flowers are still being shown in tin cans of varying sizes and shapes without regard to the way flowers appear in them. Tall flowers such as Perennial phlox or Zinnias were shown in large tin pails many of the shorter flowers being hidden by the taller ones. When we suggested the flowers would look much nicer if they were arranged in a suitable container the answer was, premium book doesn't say anything about arrangement; you are to judge only on the quality of the flowers."

We suggest that all County Fairs adopt this rule for exhibiting most annuals and perennials, "50% will be allowed in judging for quality of the flowers and 50% for the arrangement and suitability of container." Only with some such ruling will the appearance of the flower shows at



County Fairs be raised. There will be objections to the rule from a few exhibitors who make dozens of entries and want to do so with as little work as possible because they are interested only in the cash prizes. The answer is that the public is beginning to be quite conscious of poor flower arrangement and shows no appreciation for the kind of exhibits entered at so many of our County Fairs. It surely often means that the tax payers money (80% of the premium money comes from the State) is being wasted. One of the reasons the State gives this aid to fairs is because they are supposed to be educational.

Superintendents of horticultural exhibits at County Fairs complain that fair officials do not give them enough money to set up good exhibits. Our answer to that is if they can show the fair management some real improvement in this department — improvements that will attract visitors and raise some enthusiasm especially on the part of the women who attend the fairs, then officials will see the value and more money will be forthcoming.

Improvements will also have to be made in the fruit exhibits. The plates of every conceivable variety now being shown lack both point and purpose. It is becoming more and more difficult to get real fruit growers interested in showing. Can we make the kind of progress in this field during coming years that we have made in others? Lets make the Fairs of use and help to Horticulture. Here is a real challenge to Horticultural organizations.

RUDOLPH K. FROKER NEW DEAN OF AGRICULTURE

Rudolph Froker, widely and favorably k n o w n agricultural economist, was named by the Regents of the University of Wisconsin as dean of the College of Agriculture.

Prof. Froker joined the staff of the University in Wisconsin in 1927 and has helped Wisconsin farmers form and develop their marketing organizations.

President E. B. Fred in complimenting the Regents upon their choice said: "Rudolph Froker is splendidly fitted for the position. He is widely known and respected in every section of the state.

h. h. harris

Our oldest member, Mr. H. H. Harris of Warrens, Wisconsin passed away at the home farm near Warrens on November 5 at the age of 97 years, 1 month and 12 days.

We have mentioned Mr. Harris many times when he was our oldest living member. He had an interesting and eventful horticultural career. We dedicated our Seventy-five Year History of the Society to him in November 1943 when he was 92. The Society extends sympathy to his family.

Scientists Receive Honors

Charles L. Fluke and George W. Keitt Receive Certificate of Honorary Recognition

Two University of Wisconsin scientists, Dr. Charles L. Fluke of the department of Economic Entomology and Dr. George W. Keitt of the department of Plant Pathology received the honorary recognition certificates of the Wisconsin State Horticultural Society at its 80th annual convention.

Charles L. Fluke

Mr. E. L. Chambers presented the certificates on behalf of the society. The certificate to Dr. Fluke read, in part: "The Wisconsin State Horticultural Society recognizes the eminent services of Charles L. Fluke in advancing the art and science of horticulture through research and teaching in the field of Economic Entomology; present this testimonial upon the recommendation of the Board of Directors..."

Dr. Charles Fluke was born in the then small town of Grand Junction, Colorado on the Western slope of the continental divide. His father was a printer who moved to a small fruit farm near Grand Junction when Charles was a small boy. The orchard was mixture of apples, pears, peaches, and plums.

The codling moth was the principal pest of apples in that district so he grew up under the influence of a constant fight against this pest.

He graduated from the Grand Junction High School and then went to the agricultural College at Fort Collins where he received his B. S. Degree in 1916. His first summer was spent near his home carrying on experiment against the codling moth for the Colorado Station. In the fall of 1916 he came to Wisconsin, receiving his Masters Degree in 1918 and his Ph.D. in 1928.



Charles L. Fluke

His work at Wisconsin has been mostly on fruit insects having started experiments first in Door County and then in Crawford County. He was sent to Door County in 1918 to study the Pea Moth and later Grasshoppers and it was only natural to shift over to fruit pests since that was his early training.

From 1942 to 1946 he was chairman of his department but gave up the work because of illness and is now back to research on fruit insect pests.

Ever since he came to Wisconsin he has been interested in a group of flies known as Syrphidae and has one of the best and most complete collections of these flies for both North and South America. He has described 70 new species and receives many collections each year from all over the world, sent to him for determinations.

In 1931 he was honored with a Sigma Xi fellowship to travel and study these flies.

He likes the out-of-doors, likes

to fish and collect flies; enjoys sports of all kinds, especially baseball. He is a mason and was elected to Sigma Xi and Phi Sigma. In 1944 he was listed in Who's Who in America.

George W. Keitt

The certificate presented to Dr. George W. Keitt read in part: "The Wisconsin State Horticultural Society recognizes the eminent services of George W. Keitt in advancing the art and science of horticulture through research and teaching in the field of plant pathology and presents this testimonial. . . ."



George W. Keitt

Dr. George Keitt was born in Newberry County, South Carolina. He was reared on the home plantation which he still owns with an environment of pine forests, flowers and southern crops. His boyhood enjoyment of the open pine forest, the fields, and gardens of the home environment influenced greatly his lasting interest both in the conservation of our natural resources and in the

(Continued on Page 84)



For the WISCONSIN GLADIOLUS SOCIETY

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F. M. Bayer, Milwaukee Harold Janes, Whitewater Mrs. A. E. Piepkorn, Plymouth D. M. Puerner, Milwaukee Paul Ravet, Menomonie, Mich.

The Annual Meeting

The annual meeting of the Wisconsin Gladiolus Society held in Milwaukee on October 31, brought out the largest attendance in years due largely to a very educational program. Excellent talks were given by Prof. Ray Nelson of Michigan on Glad diseases; Dr. James Torrie, Madison on problems of Gladiolus breeding and Dr. John Medler on control of Thrips.

The Business Meeting

A very lively business meeting was held by both the Board of Directors Society. New members and the elected to the Board of Directors are: Mr. Hugo Krubsack of Peshtigo; Dr. Scheer, Sheboygan; Mr. Arnold Sartorius, Porterfield and Mr. A. F. Scholtz, Wausau. Officers elected: Mr. Walter Krueger, Oconomowoc, president; Dr. George Scheer, Sheboygan, vice president; Mrs. A. E. Piepkorn, Plymouth, secretary and Mr. F. M. Bayer, Milwaukee, treasurer.

Financial Report

Mr. Frank Bayer read the financial report and indicated a loss of \$87.42 for the year. Total income from dues was \$151.20; total income including receipts from two bulb auctions \$396.36. Expenses for the year were \$483.78.

Cash on hand October 1, 1948, including accounts receivable was \$804.00. It was \$875.36 a year ago.

There was a loss of \$114.23 on this years State Gladiolus Show. Donations collected at the show amounted to \$141.73. Expenses of the show were \$255.96.

The Society voted to continue affiliations with the NEGS and NAGC. Delegates will be named to attend the annual meetings.



Mr. John Flad of Madison, holding his Grand Champion Seedling Spike at the State Seedling Show at Walter Millers, Sun Prairie. This is a large Ruffled Pink of which Mr. Flad says more will be heard next year.

The Beloit Junior Chamber of Commerce invited the society to hold its annual flower show in their city. The matter was referrd to a special committee consisting of Mr. D. L. Sleezer, Lake Geneva, Harold Janes, Whitewater and Leland Shaw, Milton.

Spring Meeting

The spring meeting of the Wisconsin Gladiolus Society will be held in the Retlaw Hotel, Fond du Lac on Sunday, April 3. The feature will be the annual bulb auction. Mr. Leland Shaw was named chairman of a committee to have charge of the auction and is to name additional members of the committee.

New Bulletin Available

Dr. Ray Nelson of Michigan announced the publication of a new bulletin No. 350; Disease of Gladiolus, available from Michigan State College, East Lansing, Michigan for 25 cents. All growers should get this bulletin. It is well illustrated with many pictures of diseases — some in color.

Dr. Ray Nelson gave one of the finest talks heard by the Society in a long time. Since many of the points he brought out were illustrated with colored slides and may be studied in the new bulletin No. 350 we will report only briefly on his talk. He said that the Gladiolus industry in Michi gan is reaching the 20 million dollar mark in value. Disease control is no miracle only hard work. He told of experience on two different farms with scab. On one farm scab could not be controlled even when the bulbs were On the other farm there treated. was no disease when bulbs were untreated. It was found that mercury is selective in its effect. It will kill organisms you want killed in some soils and not in others. Dry rot is controled by Calomel and we have nothing better as yet. It is also best for basal dry rot. Wilt disease is in the soil and destroys susceptible varieties. Picardy has been a great variety because of resistance to yellows.

"Flecking" is a virus disease which may do queer things to Gladiolus Don't try to grow beans near Gladiolus. White break mosaic may break the color so badly we cannot recog-

(Continued on next page)

QUACK GRASS ERADICATION

Walter C. Krueger, Oconomowoc

One of the more interesting experiments conducted at Reliance Gardens the past 2 years was the eradication of quack grass by chemical means.

Since this pest grass is widely distributed, the method and results may be of interest to many readers.

An advertised quack grass eradicator by the trade name of "Quax" was obtained and spread upon tilled ground at the recommended concentration by means of a lawn seeder or lawn fertilizer spreader. This was done in July of 1947. After application the ground was cultivated with a garden tractor. Three additional cultivations were made prior to September 20th.

Part of this test plot was planted with winter wheat on September 20, 1947. The resulting crop of wheat this past summer, in the opinion of many farmers and seed men, exceeded other yields by four to one. Whether this increase may be attributed to stimulation, or to better growing conditions because of the absence of quack grass, or both, is difficult to determine.

The balance of the treated plot was planted with gladiolus this spring. No injury to the growing plants, nor any stimulation, was observed. The plants flowered normally and the bulb crop is normal.

The cost per acre is so low that such eradication is within the reach of everyone who desires to get rid of quack grass.

EDITOR'S NQTE: Prof. Kenneth Buchholtz of the Dept. of Agronomy, University of Wisconsin tells us that he has been experimenting with this material, "Quax" which is also called I PC, for the past two years. The

results have not been too encouraging in all cases. On sod it has been disappointing. The secret of success may be in cultivation after the application. In some cases the material did not kill all of the root system so that in another year or so, it came back. Similar reports come from other states according to Prof. Buchholtz.

(Continued from page 82)

nize the variety. It is spread by insects.

Heat Cure Bulbs

Dr. Nelson recommended curing bulbs with heat at a temperature of 85° F. "Dry the water out fasts and you won't have storage diseases or rot after that.", he said.

Dr. Torrie has promised a paper for our next issue covering his discussion on breeding problems. We appreciated his help.

Dr. John Medler said that DDT has not successfully controlled Thrips in all cases and there have been many complaints. He tested Parathon and it cleared up Thrips much better than DDT. It is put out by the American Cyanamid Company and is also excellent for control of Aphids and Red Mite which are not controlled as well by DDT. We will have future articles on Parathion and how to use it. Dr. Medler also recommended Chlorinated Camphene and Chlordane as excellent for grasshopper control.

APPOINT N.E.G.S. COUNSELOR

George Graves has been appointed executive counselor of the New England Gladiolus Society. He will supervise the office and general activities of the organization, although routine details with respect to mailings and membership will be handled under contract by a firm of mailing specialists. The trustees of the society take pride in this forward step of the organization.

George Graves received his education at Denison University, in Ohio, and at the University of Massachusetts in horticulture, with subsequent study at Harvard University and at the Royal Bo-

tanic Garden, Edinburgh, Scotland. He has had over twenty years' experience in nursery employment, horticultural journalism and radio broadcasting. His book on trees and shrubs is well known.

-From Florists Review

MR. JACK REYNOLDS APPOINTED CHIEF OF FAIRS

Mr. Jack Reynolds of West Allis has been made chief of the division of fairs of the state department of agriculture according to Mr. M. H. Button, department director.

As chief of the fairs division, Mr. Reynolds will also be manager of the Wisconsin State Fair. Mr. Ralph Ammon will continue as manager of the Wisconsin Centennial Exposition until the end of this year.

After graduation from the University of Wisconsin in 1939, Mr. Reynolds was employed in the state fair publicity department for 3 years. After serving 3 years in the Navy he became assistant fair manager in 1946.

Mr. Ralph Ammon became manager of the state fair in 1931. Under his supervision it has developed into one of the leading state fairs of the nation. The fair has been on a sustaining basis financially for several years, receiving no direct appropriation from the state. Mr. Ammon was in large measure responsible for making the \$5,000,000 exposition a complete success, financially as well as artistically.

Just how serious a lady's injuries were in an accident which occurred recently, it is hard to tell because the paper spoke thus of the mishap:

"Mrs. Wilson, in attempting to get out of the way of the auto, fell to the pavement, injuring her somewhat."

Scientists Receive Honors (Continued from Page 81)

protection of our cultivated crops.

His general education and technical training were obtained at Clemson College, South Carolina (B.S. in Agriculture 1909) and the University of Wisconsin (M.S. 1911 and Ph.D. 1914 in Plant Pathology and Botany). His Alma Mater recognized his contributions to science, horticulture, and his ability as a teacher with the award of the honorary Doctor of Science degree at their commencement in June 1937.

His investigations have been directed continuously toward the understanding and control of diseases of the fruit crops. Early work with the United States Department of Agriculture on peach diseases in the Southeastern United States showed him the value of careful, sound investigation in the laboratory, greenhouse and orchard and of technical service. This constructive policy of working intimately and intensively with the growers has been continued and has contributed greatly to the economical production of quality fruit in Wisconsin. He and his students have devoted over 30 years to this detailed, intensive study of disease control in which the fruit men have taken active part.

He developed the concept of parasite eradication as the safe, economical method of fruit disease control. The present use of eradicant sprays to supplement protective sprays, has resulted from the intensive study in Wisconsin cherry and apple orchards.

Always alert to new problems of the orchardist, he has pioneered in the investigations of the virus diseases of the stone fruits. Here again fundamental knowledge of the viruses concerned and new techniques for obtaining virus free stocks have been worked out not only in the laboratory

and greenhouse, but also in the nurserymen's propagation beds and the fruit growers orchards.

Honest in his thinking and discussions, perfectionis in his investigations, techniques and teachings, unselfish and sympathetic in his dealings with students, colleagues, and growers; his contributions to horitculture and to plant pathology can be measured in confidence and cooperation of the growers as well as in bushels of quality fruit.

LIST OF MEMBERS HAVING RE-CEIVED HONORARY RECOGNI-TION CERTIFICATE

1929—H. H. Harris, Warrens, John F. Hauser, Bayfield, *Geo. J. Kellogg, Janesville.

1930—Louis G. Kellogg, Ripon *E. S. Sullivan, Alma Center; *William Knight, Bayfield.

1931—*Frederick Cranefield, Wm. P. Longland, Lake Geneva; C. B. Whitnall Milwaukee.

1932—*Mrs. Frances K. Hutchinson, Lake Geneva; Mrs. C. E. Strong, West Allis.

1933—*Huron H. Smith, Milwaukee. 1934—H. C. Christensen, Oshkosh; Axel Johnson, Lake Geneva; *W. J. Moyle, Union Grove.

1935—James Livingstone, Milwaukee.

1936—Mrs. E. L. Roloff, Madison; *A. W. Lawrence, Sturgeon Bay. 1937—D. E. Bingham, Sturgeon Bay;

J. G. Moore, Madison. 1938—N. A. Rasmussen, Oshkosh.

1939—*Walter J. Kohler, Kohler. 1940—William G. McKay, Madison;

*Peter C. Swartz, Waukesha. 1941—Arthur K. Bassett, Baraboo; *William A. Toole, Baraboo.

1942—Ray H. Roberts, Madison; Arthur J. Schultz, Ripon.

1943—J. Earl Leverich, Sparta; Mrs. Chester Thomas, Milwaukee.

1944—C. J. Telfer, Green Bay; S. S. Telfer, Ellison Bay.

1945—Walter Diehnelt, Menomonee Falls; Conrad Kuehner, Madison.

1946—W. H. Alderman, St. Paul, Minn.; Geo. H. Scheer, Sheboygan.

1947—Charles D. Rosa, Gays Mills; Joseph C. Schubert, Gays Mills.

1948—Charles L. Fluke, Madison; George W. Keitt, Madison. *Deceased

STORING VEGETABLES AT HOME

Circular No. 322, entitled "Storing Vegetables at Home" written by Prof. O. B. Coombs, department of horticulture has plans for a basement storage room prepared in cooperation with Prof. M. J. LaRock of the department of agricultural engineering, University of Wisconsin.

The plans are quite complete and valuable for anyone wishing to build a basement storage room.

Prof. Combs emphasizes that many varieties of vegetables shrivel rapidly unless stored in a moist atmosphere. Such vegetables should be kept in a room in which the air is quite moist, protecting the vegetables either by wrapping or putting them in closed containers and by adding moisture directly to the vegetables now and then. He recommends a dirt floor for the storage room so that it can be kept moist by occasional sprinkling. A concrete floor may be covered with 4 to 6" of soil or sand to help hold moisture.

Vegetables like onions, pumpkins and squash must be stored in some other location where the air is dryer. Canned foods should be stored in a dry room to prevent lids and metal containers from rusting.

Root crops like carrots may be stored in a dry room by placing them in closed containers and keeping them damp. The containers should be clean, dry and lined with paper before the vegetables are packed. A layer of paper may be placed between each layer of vegetables.

EVERGREENS

Colorado Blue Spruce — \$1.00 each and up. Pyramidal Arbor Vitae—\$1.75. Mugho Pine—\$2.00. Black Hills Spruce, Moster Blue Spruce. Write for lists. Quincy Nurseries Friendship, Wis.

Are Earthworms Beneficial?

An experiment was conducted at the Ohio Agricultural Experiment Station during 1946 and 1947 to determine the benefits, if any, of earthworms on the growth of several annuals, perennials, and woody ornamental plants. Two types of earthworms were used, one the common earthworm dug from apple pomace piles and the second, a so-called "hybrid" earthworm purchased from an earthworm farm. Treatments were made according to recommendations of the earthworm farm.

The data recorded on annuals during 1946 and 1947 show no discernible difference between any of the plots in respect to earliness of bloom, intensity of flower color, size of plant or flower, or freedom from insects or diseases, reports L. C. Chadwick, of the station's Department of Horticulture. Of the 23 growth measurements taken on annuals in 1946 and 1947, the check plots gave results equal to or better than one or more of the treated plots in 17 of the comparisons. Similar results were found with the growth of perennials and woody plants.

The data compiled by Prof. Chadwick on soils in which the perennials were grown indicates no significant and consistent changes in porosity when similar treatments in the different areas were compared. The data compiled indicates that while there may be a slight increase in capillary pore space (water-holding capacity) where earthworms are added, any advantage here is more than offset by the decrease in non-capillary pore space (aeration).

The percentage of soil aggregation at the end of the four-month period of study was lowest where earthworms were added. The "hybrid" earthworms were no better than the common earthworm. Organic matter in the form of manure was more effective in increasing soil porosity and aggregation than was the addition of earthworms.

On the basis of these experiments, Prof. Chadwick says the addition of earthworms is not sufficiently beneficial to the production of herbaceous and woody ornamental plants to warrant their purchase. Earthworms will not persist in soil unless a high content of organic matter is maintained and, if a high content of organic matter is maintained, there



seems little need for adding earthworms.

Ohio Agricultural Experiment Station Bulletin

HOW TO STORE TUBEROUS-ROOTED BEGONIAS

The tubers of Tuberous-rooted Begonias should be dug before frost. Since they are planted shallow, even a light frost will injure the tubers.

After digging, tubers should be allowed to dry for a few days and then packed in peat moss, sand or similar material and placed in a closed container. A tin coffee can with a cover or wide-mouthed glass jar which can be closed are good. The glass jar has the advantage that one may see how the tubers are getting along during the winter.

If mold forms, the material is too damp. If shriveling occurs, it is too dry and warm. The tubers should be stored at about 45 to 50 degrees.

If the stored temperature is too high and there is moisture in the packing material, the bulbs will start to grow along about February and of course the sprouts will be white and spindly and drop off when the bulbs are moved. This is not desirable. Storage temperatures should therefore be cool enough and packing material dry enough to prevent this.

WILL MULTIFLORA ROSE MAKE A FENCE IN WISCONSIN

QUESTION: I have read articles about the use of Multiflora Rose as living fences. I have a number of acres I would like to fence and according to the description, this rose would be ideal for planting around my property. Is the rose hardy here and suitable for our climate? From Wausau.

ANSWER: The best information we have available is that the Multiflora Rose is not reliably hardy in Wisconsin. If such a fence were planted and it winterkilled during a severe winter, it wouldn't make much of a fence.

We have not seen anywhere in Wisconsin any type of shrub or tree successfully used as a fence. We will appreciate hearing from anyone who has had experience with living fences in Wisconsin.

SEEDS OF THOMAS BLACK WALNUT AVAILABLE

A letter from Mr. Leander Hay of Gilliam, Missouri states that he has some seed of the Thomas Black Walnut which he would be willing to sell to members of the Wisconsin Horticultural Society. He is one of our members. He says the trees are young so he will not have very many. He would like to exchange some of the seeds with seeds of good quality Butternuts, Crath Carpathian English Walnuts, etc.

He will sell seeds of the Thomas Black Walnut at 20 for 25c postpaid. He would like it understood however that the trees will not come true from seed. The Thomas is a grafted variety of large size and thin shell. Its seedlings may not be as good or again some may be better.

Garden Gleanings

GROWING DUTCH BULBS INDOORS

A number of varieties of dutch bulbs may be grown in pots indoors during the winter months and provide beautiful flowers for home decoration.

An excellent bulletin is available from the Mailing Room, Wisconsin College of Agriculture, Madison, entitled "Growing Dutch Bulbs Indoors", Stencil Circular No. 193, written by Prof. J. G. Moore. The bulletin will be invaluable for anyone planning to grow different varieties in the home.

GOOD VARIETIES FOR FORCING

Different varieties of Hyacinths, the early Tulips, Darwin Tulips and Cottage Tulips are very good for forcing. Breeder Tulips are not particularly good. Daffodils are excellent for forcing as are Narcissi, especially Paper White, Grandiflora which is suitable for water culture. The Poetaz or Pheasant's Eye are not particularly adapted to forcing and neither are Jonquils.

ROOT DEVELOPMENT IMPORTANT

Writes Prof. Moore in the Circular:

"Giving a period for root development before there is much growth of top is one of the principal requirements of success. The length of time varies with the kind of bulb, the lateness of planting, temperature of storage, and whether soil or water culture is used. The important thing is to have a good body of roots before conditions favorable to top growth are given. The extent of root development commonly is determined by examining the earth ball of the potted bulbs by slipping them out of the pot.

"Root development requires from 3 to 12 weeks with 6 to 10 being the average for soil culture. The bulbs do not have to be brought in when they have developed sufficient roots, but may be held and brought in at intervals to give a longer period of bloom.

"The proper temperature is the determining factor in the development of roots and little or no development of tops. Forty degrees is usually considered about ideal, but it may fluctuate a little either way from this point. In order to secure the temperature, it may be neces-



sary in some cases to dalay planting somewhat.

"During the root development period, the bulbs are commonly placed in "Storage". A cool basement room, an area around a cellar window, a hotbed pit, or a specially constructed storage pit are all satisfactory places so long as the temperature can be kept down and also prevented from falling below that necessary for root development.

Low Temperature Necessary

"Maintaining low temperature is not only important during the root development period, but after the bulbs are brought in for top forcing if best results are to be had. If 40 degrees marks the desirable temperature for root growth, 50 to 60 degrees is most desirable for foliage development. It will be difficult if not impossible to provide this temperature in most houses, but one should remember that it should be as near that as possible rather than to set the bulbs in the brightest, warmest place in the room because there the growth will be most rapid.

ANSWERS TO—WHERE DID THESE HOUSE PLANTS COME FROM?

- 1. Brazil
- 2. American Tropics, West Indies
- 3. Tropical Mexico and Central America
- 4. Greece to Syria
- 5. China
- 6. Zanzibar
- 7. Brazil
- Assam, but those you know are all hybrids with other species.
- 9. Asia and Polynesia
- Southern Florida and tropics of both hemispheres.

WHERE DID THESE HOUSE PLANTS COME FROM ORIGINALLY?

Look these up in your books and catalogs and see what you can find out about each one.

- 1. Christmas Cactus
- 2. Night Blooming Cereus
- 3. Poinsettia
- 4. Cyclamen
- 5. Primrose
- 6. Impatiens
- 7. Begonia semperflorens
- 8. Rex begonia
- 9. Birds nest fern
- 10. Boston Fern

NEW HEAD LETTUCE, PROG-RESS, TO BE TESTED

The U.S. Department of Agriculture and New Jersey Experiment Station have announced a new variety of head lettuce called Progress. It is described as an early dark green, thick leaved, heavily savoyed, tipburn-resistant, crisp head lettuce of good flavor and high quality. A number of seedsmen will handle the seed this coming season.

Prof. O. B. Combs, vegetable specialist, University of Wisconsin reports that he saw this variety growing at the U. S. Experiment Station at Beltsville, Md., and that it looked very fine. However, he says it has not been tested in Wisconsin and so we do not know what it will do here. It will be tested this coming year.

In the meantime he recommends the variety Great Lakes for early planting.

BULBS FOR WINTER BLOOM

Order immediately and enjoy symbols of spring and before winter is over.

4 Dutch Hyaccinths \$1.00—3 Hybrid Amaryllis \$2.00—20 Oxalis Bowiei \$1.00 —10 Daffodil Helios \$1.00.

There is still time for outdoor planting. We guarantee immediate shipment of the following: Darwin Tulips, 100 for \$6.95—Regale Lily, 3 for \$1.10—Coral Lily 3 for 50c—Crown Imperial 60c, 3 for \$1.60—Wild Tulips—Selected Collection of 25 bulbs, \$2.50—Giant Flowered Red Emperor Tulip—Special 15 for \$1.80.

HAROLD LYKE Gibsonia, Pa. Box 272 R. D. 2.

Gloxinia Eudbs-Early 1949

The Teasel - An Interesting Plant

By C. P. Holway, Evansville, Wisconsin

We found it growing in a wild corner, worried its identification out of "Hortus," and then looked to see what popular authorities said of it. They said little; practically nothing. It was in a thumbed 1900 copy of Neltje Blanchan's "Nature's Garden" that finally we found the story of Dipsacus, the biennial work-plant from Europe that emigrated to America to lead an idle life, and to run wild in rural fence rows.

Used In Woolen Trade

Dipsacus fullonum, fullers teasel or fullers thistle, was imported to be grown here as a crop, and has since escaped. In the old-world woolen trade, its dried flower heads, armed with numerous little hooks, were used to brush up . . . to tease . . . the nap of wool cloth. Wagonloads of teasel burrs were sent into England from France and Germany. After the flower heads were dry in late summer they were cut with eight-inch stems, the prickles on the stems removed, and shipped off to the teaseler.

Now the difference between Fullers teasel and the D. sylvestris of our garden corner is slight — a small variation in the length of the slender, tulip-curved bracts — and the quaint old-country names apply equally well to both: card teasel, gypsy comb, water thistle, and three tributes to the Roman goddess: Venus' cup, Venus' bath, Venus' basin.

The latter names allude to what Blanchan calls the plant's "curious little tank," a tiny cup formed at the stalk by the upper leaves. Here dew and raindrop gather into a minature pool whose waters were believed, by rural folk, to be a certain cure for warts. Less fanciful, Francis Darwin noted that too-venturesome insects drowned in Venus' bath, to the teasel's silent pleasure; protoplasmic filaments reach into the pool and absorb the insect nutriment.

Yet it was not for all this that I was greatly pleased, on inspecting the back of the perennial border one March day, to find half a dozen teasel rosettes, fall-transplanted seedlings, green and vigorous after a winter under the snow. It was rather for the thought that, by July, they would have sent up stout five-foot stalks, strongly branched. At the tip of each branch would be a fine gypsy comb three to four inches long, a solid cylinder



THE TEASEL WITH ITS BIG BURRS FULLY FORMED

The opposite sessal leaves actually join as though one and, around the main plant stem, form the little cup that is "venus bath". The Teasel is a big bold plant, equals Globe Thistle in height and spread. It may be grown in a corner at the back of a perennial border and will perpetuate itself.—Photo by C. P. Holway.

bound with tiny lilac bloom. Guarded by their thin, fancifully curving bracts, the combs would be a handsome sight . . . a delight to bumblebees and a puzzle to visitors who would exclaim over "those strange thistles."

Then we would tell them how the fullers teased the nap of woolen cloth with the dry heads, and how Venus' bath can undo the insect who, would take a forbidden dip. Yes, and if the visitors were garden-club ladies, we should suggest how happily these gypsy combs might lend themselves to the ladies' beloved arrangements of old dried weeds and weathered sticks.

SUCCULENTS FOR SALE

Small potting succulents, attractive shapes and leaf mottlings suitable for spring planting in border or rock garden. 3 different kinds 60c N. E. Schmidt, Route 1, Sarona, Wisconsin.

EFFECT OF SOFTENED WATER ON PLANTS

QUESTION: The water in our city is quite hard; almost everyone has a water softener. For watering house plants would it be all right to use water from the water softener in preference to the hard water.

ANSWER: Prof. E. Truog, Chief of the Soils Department at the University, tells us that continued use of softened water would raise the ph or alkalinity terrifically. In the softening process the calcium carbonate in the hard water is changed over by the use of salt to sodium carbonate. While this does not leave a residue in the teakettle like calcium carbonate because it is soluable in water, it will nevertheless raise the alkalinity of the soil rapidly-raise it to pH 9 to 11 or higher. The long use of softened water then would be very detrimental to most plants. Hard water on the other hand does not raise the pH much higher than about 8 to which many plants are tolerant. Acid loving plants like the Azaleas however would not grow in such a soil.

SUCCULENTS OF INTEREST

The term "Succulent" is generally used to differentiate these plants from cacti. They are "dry plants" that can exist for moderate periods of time without water. They present an interesting appearance caused by fleshy leaves, stems, mottlings, hairs, etc., and for that reason they make attractive window plants.

These plants can be made to serve a duel purpose by being removed to the border or rock garden in the spring to remain until frost. In the garden the leaf color becomes more pronounced and the vigor of the plant is improved. Also they add color and varietay especially to a rock garden. Some of the colorful Echverias can be used in flower arrangements.

Among the interesting Succulents are Echeverias, Kalanchoes, (4 species of Mother of Millions), Ceropegia, (Hearts on Strings), Sedum guatemalense, a few Haworthias, Gasterias, Aloes, Pachyphytum compactum, (Tower of Jewels) and other oddities.

N. E. Schmidt, Sarona, Wisconsin.

An optimist is a woman who takes a market basket when she goes out for \$5.00 worth of groceries.



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Editor — Mrs. Oliver S. Rundell, 2227 Van Hise Avenue, Madison, Wis.

DATES TO REMEMBER Miss Werstner's Lectures

Nov. 19 — Milwaukee, Art Institute Nov. 20 — Masonic Temple, Edgerton

REGIONAL MEETINGS.

Nov. 22 — Plymouth (changed from December 3.)

Nov. 29 - Kenosha.

Nov. 30 - Fort Atkinson.

December 1st - Madison

Dec. 2 — Seymour,

(State officers will conduct the meetings after 11 A. M., continuing through the afternoon: District business meetings will precede the state session.)

PRESIDENTS MESSAGE

Dear Fellow Members

May I take this opportunity to thank you for showing your confidence in me by electing me to serve you as your next president. This is a challenge, a pleasure and a duty to which I shall give the utmost of my effort and ability. May I serve you well.

We have an outstanding group of people in our Federation and it will be my endeavor to utilize our talent from every locality to make this a fine year of great activity. Let me have your help, your suggestions and your ideas for any group is only as great as the sum total of all of its parts. This is your Federation, our Federation. Let us make it useful and enjoyable to all of us.

Our Regional Meetings will take place as follows: Kenosha, November 29; Fort Atkinson, November 30; Madison, December 1; Seymour, December 2; and Plymouth, November 22.

We are planning a different procedure for the meetings this year. Only the Executive officers will make the tour and each meeting will be an informal exchange of information conducted in the manner of an institute. You list and ask the questions and also bring your problems to us and we will try to solve them or else refer them to the chairmen who know the answers. Don't you think this will be a very helpful way of handling the situation?

There are several key projects we

THANKSGIVING

When Spring doth wake the song of mirth,

When Summer warms the fruitful earth,

When Autumn yields it's ripened grain

Or Winter sweeps the naked plain,

We still do sing To Thee our King;

Through all their changes Thou dost reign.

- J. H. Gurney.

hope to emphasize at these Regional meetings.

First: Support and use your Garden Federation pages in Wisconsin Horticulture. Let them be a useful medium for exchange of ideas, plans, projects, and association. Read the pages and contribute to them everything you have that is worthy.

Second: We hope to establish a continuous file of members who have done exceptional garden club work stating in what phase of work they have been exceptional. Having been so suddenly placed in the position of President, with chairmen to appoint, I find it difficult (without a file of this sort) to select the members best fitted for the office.

Third: We suggest an inexpensive leaflet containing names and addresses of Executive officers of all the garden clubs throughout the state. This leaflet would be a great convenience

MISS WERSTNER VISITS WISCONSIN

An event of importance to Wisconsin garden club members this month is the forthcoming visit to our state of Miss Anne B. Wertsner, Field Secretary of the Pennsylvania Horticulture Society. Miss Wertsner, lecturer, writer and experienced judge will present an illustrated lecture on "Christmas Decorations" at the Milwaukee Art Institute, Nov. 19, at 2:15 p. m. and at Edgerton, in the South Central District, Nov. 20, also at 2:15 p. m.

Miss Wertsner, who has staged many flower shows for the Pennsylvania society, has a rich background of experience from which to draw for her lectures. Among other things she is the author of the practical illustrated book "Make Your Own Merry Christmas."

Both the Edgerton and the Milwaukee Art Institute Clubs are hoping for a large attendance at the lectures, thus making Miss Wertsner's visit to Wisconsin a great success.

For added interest the Edgerton Club will have a holiday display.

to all committee chairmen.

What do you think of these ideas? If you have others to offer which you feel will make ours a better Federation please send them to me. New ideas are always welcome.

Your President Gretchen Fiebrantz.

Convention

Echoes

October 1948

Wisconsin Garden Club Federation

Central Region National Council

CONVENTION LUNCHEONS AND BANQUET DECORATIONS

Members attending the convention luncheons and banquet were thrilled at the sight of the beautiful table decorations.

Chrysanthemums with gourds, Indian corn and foliage in colorful profusion, made up the decorations for Thursday's Chrysanthemum luncheon.

Committee members were: Mrs. Jene Muenzberg, Chairman; Mrs. Stephen Cushman; Mrs. Oscar Fleischer and Mrs. John Nyle.

Decorations for the banquet were original, extra-ordinary and delicately glamorous. Large Luna moths cleverly created, artistically made in varied colors and gleaming with brilliance and sparkle, graced the tables.

Credit for this work goes to the decorations committee, headed by Mrs. Victor Schmitt, and her committee members: Mrs. Wm. Armitage; Mrs. Theo. Wisniewski and Mrs. H. S. Bostock,

Friday's luncheon with its gay nineties theme, displayed large dubonnet satin-like paper fans with white lacy edging; the fans placed on blue and pink tarlatan.

Adorning the speakers table were three, three-tiered standards, gaily decorated with flowers, fruits and ornaments and remindful of the Victorian era. A garland of sprengeri greens with dubonnet satin bows and long streamers added glamour to the table and a bright note to the joyous and beautiful setting of the room. Hostesses promenading and attired in gay nineties fashion were a pleasing part of the scene.

A quartet of girls entertained with melodies in keeping with the spirit of the occasion.

Mrs. L. G. Stewart was chairman of this committee with Mmes A. K. Ackeret, Carl Hofstetter, Val Suttinger, Joseph Pelnar, Arnold Dietrich, Elmer Sieber assisting. (cont. p.95 Col. 2)

A Beautiful Flower Show



One of the "three-tiered standards gaily decorated with flowers, fruits, and ornaments, and remindful of the Victorian era."

Autumn Bloom In Fine Display

Members of our Wisconsin Garden Club Federation again responded whole heartedly when the announcement was made that a Flower Show would be a part of our annual convention to be held October 7 and 8 at Milwaukee, in conjunction with the meeting of the Central Regional of the National Council of Garden Clubs.

The desire to exhibit and the interest and enthusiasm shown by members was beyond all expectation, and entries in the several classes exceeded plans and estimates of the Show Committee. We have sponsored flower shows on a far larger scale, but from the standpoint of artistic excellence and superb quality, our Convention display was considered by all quite unsurpassed.

Each one of the nine tables, beautifully and exquisitely done portrayed the prevailing style of the period, thereby holding to the theme, "Tables thru the Years". The completeness of these tables as to detail and authenticity indicated clearly that the members spent time in study and research to accomplish such splendid results.

Although our show had its limitations as to classes, the season of the year, Wisconsin's Autumn, offered many opportunities for the unusual. Fall flowers, vari-colored foliage and berries in true brilliance, made possible some pleasing and delightful displays.

Lending a colorful and seasonal touch were the exhibits in the class calling for dried materials. Dock, milkweed, seed pods, yarrow, berries, grasses and the like, were cleverly arranged.

Another class very much admired and most praiseworthy consisted of the four exhibits skillfully and ingeniously created in the Wisconsin products section.

Attractive as well as educational were the exhibits in the Antique and Junior divisions. The Antique section, with its array of old style containers of various types and materials, added an interesting note so definitely a part of the traditional past. Clever and unique were the many exhibits of the Junior members.

It was good to hear so much high praise for and favorable comment on the show. Particularly gratifying were the many fine expressions and complimentary remarks on the part of delegates and visitors from other states. Their admiration and interest more than rewarded our workers and members for the time and effort put forth to make possible this lovely show.

Speaking also for the Federation officers your chairman again wishes to thank all members who took part as exhibitors and committee workers. Your support and cooperation, always so willingly extended, has been of utmost value in bringing to fruition the plans and objectives of your Flower Show Chairman.

Mrs. Chester Thomas



"Cleverly created, artistically made in varied colors and gleaming with brilliance and sparkle, large Luna moths graced the tables."

Pictures courtesy Milwaukee Journal.

Convention Flower Show Awards

By Mrs. Chester Thomas

Rating

Excellent - Blue ribbon - Score 93-100 Very Good - Red ribbon - Score 85-92 Good - White ribbon - Score 80-84 CLASS - THROUGH THE YEARS Excellent

1865 TEA TABLE - CIVIL WAR ERA Mrs. Lucille Hopkins, Seymour, Seymour, Garden Club. 1948 THANKSGIVING Mrs. Oscar Fleischer, Milwaukee, Art Institute Garden Club. 1898 BRIDAL

Galecrest Garden Club, Wauwatosa 1958 CONTEMPORARY

Mrs. Clarence Fiebrantz, Milwaukee, Art Institute Garden Club.

Very Good

1948 GOLDEN WEDDING Whitnall Garden Club, Hales Corners Good

1848 THANKSGIVING

Mrs. J. C. Stevens, Oconomowoc, La Belle Garden Club.

CLASS - ARTISTIC ARRANGE-MENT - DRIED MATERIAL Excellent

Mrs. E. H. St. Clair, Wauwatosa, Blue Mound Garden Club. Mrs. Carl Hofstetter, Wauwatosa, Ravenswood Garden Club. Miss Emma Schipper, Milwaukee, Art Institute Garden Club. Mrs. Theo. Wisniewski,

Madison Garden Club. Miss Fay Wisniewski, Madison Garden Club.

Mrs. Arthur Leidiger, Milwaukee, Blue Beech Garden Club.

Very Good

Mrs. Walter Diehnelt, Menomonee Falls Garden Club. Mrs. Theo Vanderheide, Kenosha Garden Club. Mrs. L. G. Stewart, West Allis,

Home Gardeners Garden Club. Mrs. B. C. Spransey,

Oconomowoc, LaBelle Garden Club. Miss Celia Dix, Milwaukee,

Art Institute Garden Club.

Mrs. C. W. Clausen,

Ripon Garden Club.

Good

Mrs. Rudolph Peterson, Milwaukee, Galecrest Garden Club. Mrs. J. Engler, Waukesha,

CLASS - INDIAN PALETTE

Excellent

Mrs. Roy Sewell, Wauwatosa, Blue Mound Garden Club.

Spring City Garden Club.

CLASS - ARTISTIC ARRANGE-MENT CHRYSANTHEMUMS Excellent

Mrs. L.G. Stewart, West Allis. Home Gardeners Garden Club. Miss Fay Wisniewski. Madison Garden Club. Mrs. Stephen Cushman. Racine Garden Club.

Very Good

Mrs. Theo. Wisniewski. Madison Garden Club.

Good

Clara Mears. Ripon Garden Club.

CLASS - WISCONSIN PRODUCTS -DAIRY - MANUFACTURED -AGRICULTURAL

Excellent—DAIRY

Mrs. E. A. St. Clair, Wauwatosa, Blue Mound Garden Club. MANUFACTURED Mrs. L. G. Stewart, West Allis, Home Gardeners Garden Club. AGRICULTURAL Mrs. Walter Diehnelt,

Menomonee Falls Garden Club. Mrs. John Nyl.

Brookfield Garden Club. CLASS - AUTUMN - FLOWERS

OR FOLIAGE

Excellent Mrs. L. G. Stewart, West Allis, Home Gardeners Garden Club. Miss Fay Wisniewski, Madison Garden Club. Mrs. Stephen Cushman, Racine Garden Club. Mrs. Arthur Leidiger, Milwaukee,

Blue Beech Garden Club. Very Good

Mrs. Theo. Wisniewski, Madison Garden Club.

Good

Mrs. Clara Mears. Ripon Garden Club.

Mrs A. L. Noerenberg, Milwaukee Art Institute Garden Club.

· CLASS D - ARTISTIC ARRANGE-MENT - AUTUMN

Excellent

Mrs. E. R. Welch, Madison, Little Garden Club.

Mrs. Arthur Leidiger, Milwaukee, Blue Beech Garden Club.

Mrs. Rudolph Peterson, Wauwatosa, Galecrest Garden Club.

Mrs. Mark Pfaller, Wauwatosa, Ravenswood Garden Club.

Miss Olive Longland, Lake Geneva Town & County Club.

Mrs. Jeff Johnson, Waukesha, Spring City Garden Club. Mrs. Walter Patitz. Ravenswood Garden Club. Mrs. Theo. Vanderheide, Kenosha Garden Club. Mrs. Clarence Fiebrantz, Milwaukee Art Institute Garden Club. Mrs. R. Klaus. Oconomowoc. LaBelle Garden Club.

Very Good

Mrs. Conrad Biebler, Milwaukee, Art Institute Garden Club.

Mrs. Theo. Wisniewski.

Madison Garden Club.

Good

Mrs. Clarence Fiebrantz, Milwaukee, Art Institute Garden Club.

GOURD NOVELTY Excellent

Miss Mary McGrath, Milwaukee Art Institute Garden Club.

SPECIAL CLASS - AUTUMN -BLACK SCREEN

Very Good

Mrs. A. L. Noerenberg, Milwaukee Art Institute Garden Club.

ANTIQUE SECTION CLASS A. ARRANGEMENT IN COLORED GLASS

Excellent

Mrs. Roy Sewell, Wauwatosa, Blue Mound Garden Club.

Good

Mrs. B. C. Spransey, Oconomowoc, LaBelle Garden Club.

CLASS B. COLORED MILK GLASS Very Good

Mrs. Carl Hofstetter, Wauwatosa, Ravenswood Garden Club. CLASS C. ARRANGEMENT IN BRASS

Excellent

Mrs. Carl Hofstetter, Wauwatosa, Ravenswood Garden Club.

Very Good

Mrs. Carl Hofstetter, Wauwatosa, Ravenswood Garden Club. Mrs. Stephen Cushman. Racine Garden Club.

Mrs. Donald Rowe, Hales Corners, Hawthorn Garden Club.

CLASS E. ARRANGEMENT UNDER GLASS DOME

Excellent

Mrs. Fred Marquardt, Hales Corners, Whitnall Park Garden Club. CLASS F. ARRANGEMENT OF FRUIT IN COVERED DISH

Excellent

Mrs. Elmer Sieber, Wauwatosa, Galecrest Garden Club.

Very Good

Mrs. Clarence Fiebrantz, Milwaukee, Art Institute Garden Club.

Good

Mrs. Clarence Fiebrantz, Milwaukee Art Institute Garden Club. CLASS G. ARRANGEMENT -WOODEN CONTAINER

Excellent

Mrs. Donald Rowe. Hawthorn Garden Club. Mrs. John Engler, Waukesha, Spring City Garden Club. Mrs. Stephen Cushman, Milwaukee Art Institute Garden Club. CLASS H. ARRANGEMENT - CUP & SAUCER

Excellent

Mrs. J. C. Stevens, Oconomowoc, LaBelle Garden Club.

CLASS I. MEMORY PICTURE

Excellent

Mrs. O. F. Stelling, Oconomowoc. CLASS - SPECIAL ANTIQUE -IRONSTONE CHINA

Good

Mrs. Charles Fickau, Tess Corners Garden Club.

SPECIAL GARDEN PRODUCE Excellent

Mrs. John Lees, Wauwatosa, Ravenswood Garden Club. SPECIAL CUP & SAUCER WITH

PLATE Excellent

Mrs. Fred Marquardt.

Hawthorn Garden Club. SPECIAL CUP & SAUCER -

NOSTALGIO Excellent

Mrs. Fred Marquardt. Hawthorn Garden Club.

SPECIAL CLASS - SPECIMEN

BLOOM - CHRYSANTHEMUMS AND DAHLIAS

Very Good

Walter Knuth, Milwaukee County Horticultural Society.

JUNIOR DIVISION - CIGAR

BOX GARDENS

Excellent

Sandra Lochen, Waukesha. Glen Stewart, West Allis. Mary Zietlow, Waukesha. Carol Roche, West Allis. Nancy Merriam, Waukesha. Karole Howard, Waukesha.

CENTERPIECE ARRANGEMENT Excellent

Binner School For The Deaf. Milwaukee. Mary Cinquamani Patsy Kanneberg

Jennie Taratino Marion Hein Patsy Besgrove

Very Good Margaret DeFour, West Allis. TABLE TEXTURES Excellent

Margaret DeFour Pat Uttech, West Allis. TRAY SETTING

Excellent

Jim Alby, Binner School. Barbara O'Dea, West Allis. Jane Scott, Binner School.

Very Good

Nancy Oberlander, Milwaukee. BOUQUET FOR TEACHER'S DESK Excellent

Jim Alby

PURPLE RIBBON - SPECIAL AWARD

Mrs. Arthur Leidiger. Milwaukee. Blue Beech Garden Club.

PURPLE RIBBON - SPECIAL AWARD - JUNIOR CLASS

Jennie Tarantino, Binner School for the Deaf.

RESOLUTIONS

The Wisconsin Garden Club Federation expresses its appreciation for the fine organization which provided a very worth while convention.

To Mrs. Clarence Schultz of Neenah, as General Chairman, we offer congratulations and sincere thanks.

To Mrs. F. J. Fitzgerald of Menasha, with her love for gardening and her great desire to strengthen the Federation, and to keep it growing, we are deeply grateful.

We can never fully express our gratitude to our State Flower Show Chairman, Mrs. Chester Thomas, of Milwaukee, and her assistants for their splendid contribution. The Convention Flower Show was not only one of rare beauty, but one of educational value as well. To all, who participated in the show and contributed to its success, we extend our thanks.

There were innumerable features of our convention. At this time midwest state representatives were our honored guests, each of whom had an inspiring message for us. Mrs. E. J. Delarue of Davenport, Iowa, acted as the Regional Director.

To Mayor Frank Zeidler who welcomed our State members and the National Mid-West Regional Officers, we are very grateful.

To the following members who so ably served on the Chrysanthemum Luncheon Committee, we owe a big vote of thanks:

In Appreciation

We wish to extend our thanks to Mr. Walter Diehnelt of Menomonee Falls, member of the Executive Committee of the Wisconsin Horticultural Society. for the very attractive little jar of honey found at each place at Thursday's luncheon. Members at the convention greatly appreciated this friendly token from "Honey Acres."

Mrs. Gene Muenzberg, Elm Grove, Chairman

Mrs. John Nyle, Brookfield

Mrs. Stephen Cushman, Racine

Miss Olive Longland, Lake Geneva To the Banquet Committee we owe sincere thanks. Mrs. Victor Schmitt, of West Allis, served as Chairman and to her we extend our great anpreciation for her untiring effort in designing and constructing the many large, handsome Luna Moths used as decoration. Committee members were:

Mrs. Victor Schmitt. West Allis Chrm.

Mrs. H. S. Bostock, Madison Mrs. Theo, Wisniewski, Madison Mrs. William J. Armitage, Milwau-

Mrs. Elmer Sieber, Wauwatosa Mrs. J. E. Pelnar. Wauwatosa

Also to the committee who took charge of the "Gay Nineties" Luncheon on Oct. 8, we wish to express our appreciation. Their unified efforts represented careful thought. It was all that the name implied! "Gay Nineties"! Also to those who added to the enjoyment of the noon hour by promenading, charmingly dressed in Victorian Costumes.

To the following members, who made this luncheon a huge success.

Mrs. L. G. Stewart, West Allis, Chrm. Mrs. Oscar Fleischer, Milwaukee Mrs. A. K. Ackeret, Wauwatosa Mrs. Carl F. Hofstetter, Wauwatosa Mrs. Val Suttinger, West Allis Mrs. Arnold Dietrich, West Allis

Too much praise cannot be given to those who assumed the responsibility of managing the Convention "Shop". Our thanks to Mrs. Ilma Koch, Milwaukee, Chrm., to Mrs. A. H. Knorr, Wauwatosa, and to Mrs. R. A. Walker, Madison. Last but not least we wish to remember all the other members who worked so diligently behind the scenes. It was through the united efforts of everyone that this convention was the success that it was. Submitted by:

Mrs. Charles Braman, Waupaca Mrs. William J. Armitage, Milwaukee Resolutions Committee



WHEN
the
Frost
is on the
Punkin
and the
Fodder's
in the
Shock.
Riley

STORAGE OF DAHLIAS Prof. J. G. Moore

The plants should be dug after the tops are killed by frost but before there is a sufficiently hard frost as to freeze the roots. The stems may be left several inches long for handling if desired but before they are put in final storage they should be reduced to two or three inches. The major portion of the soil should be removed from the roots. It may be washed off with a fine spray from a hose or it may be left to dry and rubbed off later on. Do not shake the clumps. The roots should be stored temporarily under conditions where there will be ventilation so they will dry off. They may be placed on boards or in crates, but care should be exercised not to break or bruise them. The common method of storage is to put the roots in a box or barrel using sawdust or shavings as the material in which the roots are packed.

If the clumps are large they may be cut into smaller sections for storage. The fibrous roots should be trimmed off and if any of the other roots are broken they should be removed. Also, the old root if it still persists. If the center of the stem is soft, the soft part should be taken out. It is a good plan to dust all cut surfaces with sulphur. Put about four inches of dry shavings in the bottom of the container and then put in a layer of roots and dust them with sulphur. Repeat this operation until within five or six inches of the top of the container and then fill the remaining space with shavings.

The stored roots should be examined during the storage period. Some growers practice making two or three examinations. It probably would be a good plan to examine the roots about two weeks after storage to see that rot is not developing. If it is, the rot should be cut out and the wound treated with sulphur. Probably the

Winter Birds

In Kenosha Harbor

- On Lake Michigan Shores

We could make a long list of migratory birds passing through Kenosha County every fall and spring, but what we are most interested in at present are those to be seen from now until spring arrives. Some birds will be staying here another month longer and a few of the more northern ones will spend the winter with us. Others are year-around residents.

Our Kenosha harbor and Lake Michigan shores are very interesting places to watch through fall, winter and spring months. At times when the harbor is not frozen over it is literally alive with gulls and diving ducks.

The Mergansers (American and Red-breasted) are beautiful, large, stream-lined diving ducks. Males of both species have green-black heads. All have crests but the American males. The most numerous are American Mergansers.

The Old-squaw is another cold weather diving duck. It can be identified by its long needle-like tail. We also have Scaup, American Goldeneye and occasionally Ring-necked and Redhead.

The Herring Gulls are most abundant. They are large, robust birds, with long wings and square tails. They are good swimmers. The young are quite dusky, not acquiring their adult plumage until after the second year.

The smaller Ring-billed and Bonaparte gulls may be seen in late fall and early spring. Although the Terns winter in the south they can be seen until late fall at the lake front. They are smaller, more slender birds than Gulls, with black caps and forked tails.

The tiny Golden-crowned Kinglet has been here for several weeks. This grayish mite of a bird, with its yellow crown patch, white eye stripe and wing bars flits nervously about evergreens and deciduous trees searching for food. Its call is a rapid hissing. "see-see-see."

The White-breasted Nuthatch, nearly sparrow size, has black cap, white throat and breast, blue-gray back. It works tree trunks upside down as well as right side up. Its call a nasal "Yank." It will relish suet and seeds from your feeding station. The smaller Red-breasted Nuthatch is seen occasionally.

The friendly little Black-capped Chickadee is a favorite. It may be recognized by its black cap, black throat, white cheeks and pleasant call of "dee-dee-dee", or "chick-a-dee-dee." The Flicker and Downy Woodpecker are common. Downy is a handsome little fellow in black and white with his red crown patch. Hang out a suet feeder and watch him help himself. The Red-bellied Woodpecker is known to winter here rarely. Erown creepers are seen a great deal. They are the small brownish birds seen spiralling up one tree trunk after the other. Their note a single, wiry, "seeeee".

What could be more strikingly beautiful than the sight of a Cardinal on a winter day? His whistled "whatcheer," or "whoit, whoit, whoit" can be heard for blocks. They are year around residents here and can be attracted to feeding trays with sunflower, muskmelon, squash and pumpkin seeds and cracked corn.

Now is a splendid time to get the children interested in birds and conservation. A Junior Audubon Club can. be formed by any teacher, mother or other leader by writing to the National Audubon Society, 1000 Fifth Ave., New York. They have enrolled eight million members since 1911 and have 400,000 this year in U. S. and Canada.

- Mrs. Howard Higgins.

first examination should be made about the first of January. It should be very carefully done and all rots or spots on the roots should be cut out and the wound treated. The stems should also be examined carefully at this time and brown or black indications of rot should be cut out and similarly treated. If clumps are

shriveling, it will show that the storage conditions are slightly too dry. Very little moistening should be done or possibly even a safer way would be to wrap the bulbs in wax paper. The temperature for storage should be around 40 to 45 degrees.

In January we shall resume the District Mailbox.

BOOK REVIEWS

Dagny Borge

Bulbs for Beauty, by Charles H. Mueller: Drawings by Else Bostelmann. M. Barrows and Company, Inc., Publishers, New York, 1947.

This guide to growing bulbs is written by a dealer, but also from the point of view of the amateur gardener, with emphasis on ease of culture and market availability. About half of the book is devoted to varieties. The last chapter is a month by month reminder of seasonal tasks. Only the frontispiece is in color. The price of this volume of about 300 pages is \$3.50.

Our Old-Fashioned Flowers, by Olive Percival. Pasadena Humane Society, Pasadena, Calif., 1947.

This dainty volume consists of an essay on flower name history, with most of its almost 250 pages occupied with lists of flowers, herbs and books on the subject, including a special list of roses. It is fully indexed. The lists give Latin-English names, but the indexes have the English name first. The book is printed on unusually fine paper, but the pages are narrow, and it seems expensive at \$5.00.

Trees and Toadstools, by M. C. Rayner. Rodale Press, Emmaus, Pa., 1947.

After explaining what toadstools are and how fungi differ from trees and other green plants, this British author discusses their distribution in nature, particularly their association with trees or other plants. He concludes that fungi are of great importance in forestry, especially in nurseries and in afforestation as well as in establishing trees not native to the locality. Although somewhat technical in treatment, it is written for the layman. Well printed and bound, the 91 page book is listed at \$2.50.

How to Attract the Birds; planting, feeding, housing, by Robert Stell Lemmon, with line drawings by Roger T. Peterson, Tabea Hofmann and Henry B. Aul. The American Garden Guild. Inc., and Doubleday and Company, Garden City, N.Y., 1947.

The author makes known at the outset that he does not favor protection of either English sparrows or starlings. Illustrations include diagrams for making various kinds of shelters for birds. Perhaps the most interesting chapters in this slim little volume are those on nests and migration. The lists of plants liked by birds include a special one for hummingbirds. Although it has only 44

pages it seems worth the dollar and a half asked for it.

Another small book with almost the identical title as that above is Fran Chapman Pelett's How to Attract Birds, which is a new edition of his Birds of the Wild, published twenty years ago. It is published by the A. T. De La Mare Company, Inc., New York, 1947. This is a personal account of experiences with bird visitors in the author's Iowa home and on his Nebraska farm. Of especial interest to Wisconsin readers are his account of an experiment in attracting quail to a residential area near Madison cemeteries more than a score of years ago, and a picture of a bird bath in Edgerton in which is grown watercress. All the illustrations are photographs. The book contains 156 pages and is priced at \$2.50.

How to Know the Land Birds; pictured-keys for determining all of the land birds of the entire United States and southern Canada, with maps showing their geographic distribution and other helpful features, by H. E. Jaques, is published by Wm. C. Brown Company, Publisher, Dubuque, Ia., 1947. The author is Professor of Biology at Iowa Wesleyan College. Available in either cloth or in spiral paper binding, this volume is one of a nature series which have been issued beginning in 1941: Plant Families-How to Know Them; Plants we Eat and Wear; How to Know the Trees; Living Things - How to Know Them; How to Know the Insects, all by Jaques; How to Know the Spring Flowers, by Cuthbert; and How to Know the Mosses, by Conard. The birds are grouped according to ornithological orders, with subgrouping of families. The illustrations are in black and white, with a postage stamp sized map included with almost every bird picture to show its region. Each bird picture also bears the American Ornithological Union check number. There is

Greetings

With this issue our calendar year ends. We hesitate to extend Christmas and New Year's greetings before the Thanksgiving turkey is stuffed, but this is our best chance so we take it: A MERRY CHRISTMAS and A HAPPY NEW YEAR TO ALL.

— The Editor
The melancholy days are come, the
Saddest of the year.

Of wailing winds and naked woods And meadows brown and sear.

—The Death of the Flowers William Cullen Bryant

a list of state birds giving the robin as that for Wisconsin. Priced at \$2.50, the book contains about 200 pages.

The Garden Print Club, now in process of formation, advertises charter memberships at ten dollars for two flower prints annually. The first print is of tree peonies, an original impression of a silk screen print in fifteen colors, by Louis Ewing, after a drawing by Ling-fu Yang, especially made for the club, mounted on a 14x19 inch mat. Succeeding prints will be of appropriate subjects in colors, and may be block prints or lithographs. Each will be autographed. There are no membership dues. Information may be secured from Irvin Haas, Director, The Garden Print Club, Box 355, Hicksville, N. Y.

The American Beauty series of greeting cards by Norcross features more than two dozen entirely decorated by roses, not only red but also in lighter colors, for various occasions, as well as note paper and gift wrapping paper.

GARDEN EXCHANGE MAGAZINE

Just what the name implies. Features exchange of ideas, suggestions and garden knowledge, as well as seed and plant material.

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WISCONSIN TREE SERVICE

Emphasizing Principles in

Flower Arrangement

"Rhythm and proportion are emphasized in Japanese flower arrangement," we have been told.

In our own flower arrangements the art principle known as "focal point" or "center of interest" comes in for more than its share of attention. To suggest a focal point is not enough for some flower arrangers. According to them it must be "strong" in all flower arrangements.

How is it possible to have, for example, a line arrangement without emphasizing rhythm? In the case of Japanese flower arrangements the focal point is very subtle and does not cry out "I am the center of interest." Let us remember in our interpretation of line arrangements that it is rhythm that counts and that the line quality, or importance should not be overshadowed by a large center of interest.

More sins have been committed against good design in the name of focal point than any other thing. If the focal point in an arrangement is too large or overly important it can upset the balance of the arrangement from front to back. This is not so apt to happen in a rectangular shaped container as in a round one.

One of the loveliest chrysanthemum arrangements shown at the recent Convention Flower Show had but a single full blown flower to suggest the focal point—all other flowers were in different stages of development. Very clearly here the principle of gradation, also referred to as sequence, was emphasized.

A black container was used for contrast. It was a charming arrangement which we shall always remember. Let us open our eyes to the importance of other art principles, "Focal point" or "center of interest" has had the spotlight long enough. It's time to wake up.

Emma C. Schipper
Milwaukee Art Institute Garden
Club.

Note: Miss Schipper's article is the first in a series on Flower Arrangement to be printed in succeeding issues.)

1948 Year-Books Show Artistry

I'm certain that of all the various duties that I have performed for this Federation, the duty of being year-book chairman has been the most pleasant. Every week from January 1st until the dead line (which was extended to July 1st) my mail carrier brought at least one of your delightful yearbooks.

The 1948 year book committee was composed of Mrs. R. H. Malisch, Wisconsin's first federation president. Mrs. A. W. Sperber, Wisconsin's first federation secretary and treasurer. and, of course, myself. It is a pleasure to report that 48 year books were received by your chairman. The books continue to show great improvement in make-up and artistry as well as in general program material. Each club sending in a year book is to be congratulated, whether it received an award or not. Judging was done solely on the merit system. Of the 48 year books received, 23 received the blue ribbon or Excellent award, 9 the red ribbon or Very Good award and 5 the white or Good award. One book was unjudged-due to too late entry, about mid-September. The committee had already completed its work and could not be called together again.

There were three very outstanding or "SPECIAL MENTION" awards. These books were sent in by Ravenswood Garden Club, Milwaukee, Ledgeview of Fond du Lac and also the Fond du Lac Community Garden Club. However, the judges voted unanimously to give Ravenswood the "Most Outstanding" award due to its excellence in every detail.

Blue Ribbons: Ravenswood Garden Club, Ledgeview, Fond du Lac Community, Wausau, Milwaukee Art Institute, Spring City, Waukesha Town, Sheboygan, Blue Mound, Antigo Federated, Rosholt, North Prairie, Manitowoc, A. A. U. W. of Manitowoc, Whitnall Park, Horicon, Scandinavia, Menomonee Falls, Racine, Sturgeon Bay, Edgerton, West Allis and Wauwatosa Garden Clubs.

Red Ribbons: Ceresco, West Bend, Mequon, Delavan, Brookfield, Tess Corners, Home Gardeners, Town and Country of Lake Geneva, Marinette and Home Garden Club of Wausau.

White Ribbons: Ripon, Iola, Hillcrest of West Allis, Baraboo, Cambridge and Lake Ripley.

Mrs. H. G. Harries, Chairman.

Save Our Hawks We Need Them

Garden Clubs should know and be interested not only in our beautiful song birds, but in the hawks and owls that contribute so much to our daily welfare. These birds are better mousers than any cat. They are more deadly enemies of rats than any terrier. It is in the interest of good conservation that all state garden clubs take action to save these birds.

The annual loss of crops destroyed by rodents in the United States has been reliably estimated at \$200,000,000. Strangely, however, man befriends these rodents by killing their natural enemies. He wages ceaseless war against hawks, owls, badgers, coyotes and skunks—all natural foes of rodents. He has accepted as an infallible truth that "The only good hawk is a dead hawk!" This mistaken philosophy costs him untold millions.

All scientific studies have shown that hawks and owls are beneficial. These studies show that mice, gophers, ground squirrels and rats make up the bulk of the diet of hawks and owls. Now and then a hawk may take a chicken, but that is a rare occurence. Few hawks have the speed or skill necessary to capture other birds. They must live largely on rodents—mankind's enemies.

Rodents are extremely prolific. If all of the offspring of one female mouse lived and bred, she would have about a million descendants at the end of twelve months. A mouse may have 17 litters a year of from five to nine baby mice. A mouse will breed when four weeks old. It is estimated that there are 21 billion rodents in the United States. This figures out to 150 rodents eating at the table of each person. What a staggering amount of food they must consume and contaminate.

Many states, including Wisconsin, have laws affording some protection to hawks and owls. But too frequently these laws are ignored or not enforced. Hawks and owls are generally slaughtered without official hindrance. In

(Continued on page 95 Col. 1)

NATIONAL COUNCIL HIGHLIGHTS

Some accomplishments in our National organization this year (listed in the National Gardener) and the number of states participating in these projects:

Civic Plantings—779—3 states.

Cemeteries Beautified — 331 — 6 states.

Roses Planted—5,742—5 states. Shrubs Planted—51,710—4 states. Shade Trees Planted — 37,593 — 6 states.

Flower Shows—1,434—24 states. Garden Centers—450—23 states. Junior Clubs—791~-21 states. Judging Schools—145—31 states. (With an attendance of—11,451. Members passing course—3,431.)

(Note: These figures, show us to what extent urban and rural beautification projects are being sponsored.)

Save Our Hawks — (Continued) fact conservation officers in another state were given orders to kill hawks in the field.

Minnesota and Pennsylvania have not only passed laws giving real protection to hawks and owls, but have carried on an educational program to awaken in their citizens a desire for proper hawk management. Pennsylvania has the only hawk sanctuary in the country. Each year thousands of people visit it to watch and study these birds.

Our nation is just beginning to recognize the great need for the conservation of our soil, water, forest, grass lands and wild life. Any program for food conservation or wildlife conservation should include a demand for scientific hawk management. Our hawks are a resource we have too long destroyed.

Every state bird chairman and every local bird chairman should see that all members are informed on the status of hawk protection of their state. Every garden club should take an active part in seeing that proper legislation is enacted and enforced to give the hawks and owls protection. By so doing, each garden club will be contributing in a small way to the saving of valuable birds, to the saving of urgently needed food, and the saving of precious lives."

The above is a brief resume of a pamphlet "Save Our Hawks. We Need Them" by Ellsworth Lumley, National Bird Chairman of the National Council of State Garden Clubs. Copies of this pamphlet may be secured at

slight expense from the Council at 500 Fifth Ave., New York 18, N. Y. Let's see that Wisconsin does its duty in protecting hawks!

Mrs. R. A. Walker.



Chrysanthemums in bronze tones (William Longland) arranged in copper bowl by Mrs. T. F. Wisniewski, Madison.

Convention Echoes Continued

A busy place at convention time was the giftshop conventiently located for visiting members and displaying a variety of useful items for both home and garden.

With limited time to be open for business, buying and selling was brisk and exciting.

Final figures show a net profit of \$71.95 which indicates a job well done. For the efficient handling of this undertaking we are indebted to Mrs. Ilma Koch and Mrs. A. H. Knorr of Wauwatosa.

Mrs. Chester Thomas Flower Show Chairman. NEW OFFICERS HOLD BOARD MEETING

A meeting of the Executive Board of the Wisconsin Garden Club Federation was held at the Pfister Hotel, at 5 p. m., October 8, upon adjournment of the recent annual convention. Mrs. Clarence Fiebrantz, Milwaukee, newly elected President, presided.

Plans for the State Regional Meetings to be held Nov. 29—Dec. 3 inclusive were completed. Mrs. Ervin Kulow, Waukesha, 2nd Vice-President will serve as Chairman of the meetings.

Other action taken by the executive board at this meeting included the reappointment of Mrs. Ada Portman,

A WISCONSIN LAW

In our October issue, under "Shrubs Native To Wisconsin" was the statement: "It is also well to remember that Wisconsin law prohibits the moving of plant material from one area to another without a permit from the state entomologist of Madison, Wis." Under "Plant Sales" in the same issue we failed to say that the same inspection service is required prior to the sale of nursery stock in Wisconsin.

Section 94.59 Paragraph 2 reads as follows: "It shall be unlawful for any person to sell, to offer for sale, or remove or ship from a nursery or other premises, any nursery stock unless such stock has been officially inspected and a certificate or permit has been granted."

According to the statutes "Nursery Stock shall include all field-grown florist stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits and other seeds of fruit and ornamental trees and shrubs, and other plants and plant products for propagation, except field, vegetable, and flower seeds, bedding plants, and other herbaceous plants, bulbs and roots."

After official inspection and granting of a permit we are assured of the legality of our sales.

- Abigail P. Rundell.

COME ON, WISCONSIN!

In the annual report of the retiring president of the West Virginia Garden Club, Mrs. Marguerite S. Ziler, we read these startling figures:

"The past two years mark a period of splendid progress due to the fine spirit of co-operation of all clubs, officers and chairmen of the Federation. Twenty-nine adult clubs and thirty-six Junior Garden Clubs have been organized during this regime.

A guide book "Outdoors and Indoors With the Juniors" written by Mrs. W. W. Dickinson of Bluefield, has had a far-reaching influence in the work with the Juniors. We feel in West Virginia that our most outstanding achievement this year is this quickened interest in Junior Garden Club work. Our greatest resources are the youth of our land—our future gardeners, foresters, and conservationists." Excerpt from—

West Virginia Garden News

Wausau, as State Judging School chairman and the appointment of Mrs. Oliver S. Rundell, Madison, as Editor of the Wisconsin Garden Club Federation section published monthly in Wisconsin Horticulture.

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The Spirit of Horticulture

January 1949

WISCONSIN'S GOLD (A Centennial Tribute)

Where is Wisconsin's gold? In her land and in her people, In her farms and in her factories, In her schools of education, In her glorious reputation.

Where is Wisconsin's gold? In her lakes and in her hills, On the rivers, in the mills; In our churches where we bring Thanks to God for everything.

Where is Wisconsin's gold? you ask-It's in the men who took the task Of making Wisconsin great, What some may call a 'Vanguard State''.

Of keeping her a clean and noble state.

Where is Wisconsin's gold? In her courts of honest justice-Administering laws, keeping peace, In her laws as made by men, Chosen by the people as best they can.

Where is Wisconsin's gold? You know now.

I've told you the best that I know how. Our gold is not metallic ore, Nor silver coin, heard jingling more, But things I mentioned here before.

Is anything truly needed more
To make our state what it should be—
Deserving of this great country?
Progressive, forward looking state
Growing since its founding date.

—Sarah E. Dance
Editor's note: - This poem was used
as a part of the Waupaca Garden
club Centennial recognition meeting.

To refuse to believe that there are any circumstances which may arise — and nothing worthwhile has ever been accomplished without some obstacles having been overcome is a myth.

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No. 4

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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. Garden Clubs, Horticultural Societies, and other Horticultural Organizations are affiliated at a reduced membership rate. Seventy-five cents of the annual dues paid by each member is for a year's subscription to Wisconsin Horticulture.

Convention Highlights

A Bushel Of Apples Sells For \$100. Fruit Growers Vote For Publicity Legislation. New Officers Elected.

The 80th Annual Convention of the Wisconsin Horticultural Society held at the Retlaw Hotel, Fond du Lac, November 16-17, was a notable one. A total of 221 members registered, not including members of the new Wisconsin Berry and Vegetable Growers Association and 186 attended the banquet.

Detailed reports of the program will be found in this and future issues of this magazine.

Officers Elected

The following officers were elected for the coming year: Mr. Gilbert Hipke. New Holstein, president; Mr. Arnold Nieman, Cedarburg, vice president; Mr. H. J. Rahmlow, secretary; Mr. E. L. Chambers, Madison, treasurer.

New board members for 3 years are: Mr. M. H. Ward, Durand; Mr. Arthur Brunn, West Allis and Mr. W. L. Thenell, Sturgeon Bay.

Womens' Auxiliary Officers

The Womens' Auxiliary had a most interesting program. It was climaxed with a social tea at which about 75 members were able to taste the delicious apple sauce fruit cake, apple krunch and apple sauce cookies exhibited.

Officers elected for the coming year are: Mrs. Oscar Conrad, Hales Corners, president; Mrs. Gilbert Hipke, New Holstein, vice president and Mrs. John McIlquham, Chippewa Falls, secretary-treasurer.

Apple Institute Elects

New members elected for 3 years to the Board of Directors of the Wisconsin Apple Institute are: Mr. Arthur Brunn, Hales Corners; Mr. Martin Fromm, Cedarburg; Mr. Alfred Meyer, Milwaukee and Mr. Arno Meyer, Waldo.

A Bushel of Apples Brings One Hundred Dollars

Following the annual banquet the Institute conducted an auction, selling the prize winning bushels of apples exhibited at the convention fruit show. Members were thrilled when the prize winning bushel of Cortlands exhibited by Mr. Armin Frenz of Cedarburg was sold for \$100. It was purchased by Mr. John Buck of the Kroger Grocery Company of Madison.

The second prize bushel of Kendalls exhibited by Mr. S. S. Telfer, Ellison Bay went to Mr. A. J. Guequierre of



the Grasselli Chemicals Department of the DuPont Company, Milwaukee for \$22.00.

Mr. John Buck of the Kroger Company was also high bidder on the third prize bushel of Cortlands exhibited by Nieman Bros. of Cedarburg. It brought \$13.25.

A bushel of Jonathans exhibited by Mr. John Zahn of Fond du Lac went to the Michigan Orchard Supply Co. for \$8.50.

A bushel of Cortland exhibited by Mr. Gilbert Pieper, Oakfield went to Mr. Edward Huckstep of the General Chemical Company for \$9.00.

The money received from the auction was donated to the Wisconsin Apple Institute for the apple promotion fund. We are indebted to our past president, Mr. Wm. Connell for suggesting the auction.

Following the auction, members enjoyed the first square dance held at a convention of the society. A 4-H Club demonstration team from Washington County under the direction of Mr. Earl Skaliskey, County Agent, demonstrated various forms. The calls were given by County Club Agent Alvin Jindra, Portage. Everyone had a most enjoyable evening.

Mr. Buck of the Kroger Company announced he would give the prize winning bushel of apples to the 4-H Club couple from Washington County receiving the most applause for their dancing. The winners were Miss Noreen Barndt and Mr. Edward Arnold both of Germantown.

Growers Request Apple Promotion Law

During the Wisconsin Apple Institute meeting growers discussed the question of whether the Institute should ask the Wisconsin Legislature to pass a law taxing commercial apples a small amount such as 1½c per bushel for the purpose of raising funds for apple promotion. On a showing of hands, with about 100 growers present, only 2 voted against the proposal.

In case such an excise tax law is passed a certain number of bushels perhaps 200, should be exempt in order that the small grower and the dairy farmer with only a few trees will not come under the law.

Mr. Karl Reynolds, Sturgeon Bay, president of the National Cherry Institute suggested cherries be included in the act and that it be called a "fruit" promotion law. The suggestion met with approval.

CONVENTION ROUND TABLE BY GROWERS

Apples Processed for Pie Bakers

A solid pack of appetizing looking canned apples in No. 10 tins, was shown at the convention by Mr. Gilbert Hipke, New Holstein, Inverting the tin on a plate, the contents "stood up" alone. Varieties shown were N. W. Greening and Snow which are good for pie baking. Wolf River breaks down fast and may become sauce unless great care is used, said Mr. Hipke. Good prices were paid for these apples this year and canning for pie bakers offers a good future outlet. Only fruit of good size can be profitably used because of the waste in the core and peel. The canned product is fully as good as the frozen for pie baking, said Mr. Hipke.

Likes Retail Sales Best

"Years ago I shipped 35 barrels of apples to a commission house in Chicago—and received 38 cents per barrel for them. That was the last time I ever shipped that way", said Mr. A. K. Bassett of Baraboo at the convention round table. The Bassetts' now sell most of their apples at the orchard in bushel and half bushel lots. "Its a Sunday game," said Mr. Bassett. They sell at a little less than retail and a little more than whole-

sale. "And don't talk politics when you are busy," he advised. Their top sales for 1 day was \$3,000.

He advised growers to buy copies of the cook book, "36 Ways To Use Wisconsin Apples" to put into each basket. It will help future sales and increase the use of apples.

Thin The Orchard

Thinning the orchard by cutting out trees on the diagonal when they begin to crowd each other was highly recommended by Mr. Don Reynolds, Sturgeon Bay in the "Growers Forum". Advantages listed were easier spraying and better quality fruit. Mr. Reynolds advised that the orchard owner go fishing on the day the trees are cut down or he might change his mind. A bulldozer was used to take out the roots and prevent future sucker growth.

Mr. Reynolds recommends planting cherry trees 20 x 20 feet, with a 25 foot space between every 10th row and a 30 foot space through the center of the orchard.

Red Mite Controlled

Red Mite were controlled satisfactory at Horseshoe Bay Orchards, Egg Harbor on test rows with dormant oil and T.E.P.P. sprays, Mr. Aldrich Ericksen reported at the convention. A dormant aphid oil and also Dendrol were used in spring. No injury could be seen on the trees. During midsummer Mite populations on rows not given the dormant spray built up to about 50 Mites per leaf. A spray of T.E.P.P. reduced the number to less than 5 Mites per leaf.

Controlled Cherry Aphids

Mr. Sid Telfer of Ellison Bay reported excellent control of the Black Cherry Aphids by spraying with T.E.P.P. at the rate of 1½ pints per 100 gallons of water. The cost, he said was less than for Nicotine which also requires a higher temperature for good control. The Aphids were so serious that leaves were beginning to drop when the spray was applied.

Dr. C. L. Fluke remarked that the Cherry Aphid normally leaves the Cherry trees at about picking time—some years a little before, and some years after Cherry picking and then feeds on Pepper grass.

Orchard Irrigation Pays

Mr. M. B. Goff reported on the results of irrigation in his orchard at Sturgeon Bay at the convention. He said he was thoroughly sold on irrigation from results obtained so far—

there is no doubt about its value. In the future he will not worry about a dry season.

He gave the cost of the distributing system at \$65.00 per acre, not including cost of the well or pump. Labor costs run about \$5.00 per acre per application. Mr. Goff reported no serious effect on fruit color and an increase in size of fruit due to timely watering.

While he did not think an irrigation system would pay for cherries alone it will help that crop during a dry spring. "Water enough or not at all. Two inches of water is a minimum", advised Mr. Goff.

Since the spray program is designed to control scab if rains come as often as every 10 days, irrigation does not increase the scab control problem. If the growth of apples is checked during a dry period growth will not come back to give normal size, so careful tests are made to determine when to irrigate. The proper time is when the second six inch layer of soil is getting dry. Some persons can tell this by feeling the soil.

We have asked Mr. Goff for an article covering more experiences with irrigation, to appear in an early issue.

The Institute appreciates the excellent work done by Mr. Don Reynolds, Sturgeon Bay as auctioneer, by Mr. Gilbert Hipke New Holstein assistant auctioneer and Mr. Arnold Nieman as clerk. Their efforts made the auction both successful and enjoyable.

EXCISE TAX PROPOSED BY FRUIT GROWERS

Fruit growers at the annual convention of the Wisconsin Horticultural Society and Wisconsin Apple Institute on November 16-17, voted almost unanimously to ask the Legislature to pass an excise tax law on apples and cherries. Money so raised will be used to promote more extensive use of these fruits.

Similar laws have already been passed in several other states and copies have been received by the secretary of the Institute to serve as a guide. The law should exempt at least 200 bushels of apples and a certain number of pounds of cherries so that the small grower will not come under it. Apple growers are being asked to give their opinion as to whether the excise tax should be one cent, one and one half cents or two cents per bushel. A one cent tax might produce only a tot-

al income of 4 or 5 thousand dollars from which the cost of collection would have to be deducted.

If you have any comments on this plan they should be sent to any officer of the Wisconsin Apple Institute.

Institute Praised

Mr. Minard Farley, Jr. of the Michigan State Apple Commission praised the efforts of the Wisconsin Apple Institute highly in his talk at the convention. He said he had been watching the work carefully and felt we had made excellent use of the small amount of money available.

This past year the Institute spent over \$1500 in newspaper advertising and about \$100 in preparing and sending publicity material to 150 weekly and about 50 daily papers. A third edition of 20,000 copies of the recipe booklet, "36 Ways To Use Wisconsin Apples" was printed and paid for during the year. This completes a total of 60,000 copies which have been printed during the past four years. The Wis. consin Institute has membership in the National Apple Institute. The National Institute coordinates the promotion work of all of the apple producing states.

Join Now

All apple growers are invited and urged to join the Wisconsin Apple Institute and help carry the program of informing the consumers of the value of apples. Such publicity is valuable to the industry, Many growers think that at present far too small a percentage of the growers are contributing to the cost of the program. To join write to Mr. Arnold Nieman, Cedarburg, recording secretary-treasurer. Dues for 1949 are \$5.00 plus 50c per acre of bearing orchard.

-H. J. R.

The American Association of Nurserymen is among 2 or 3 of the oldest trade groups in the United States. It is made up of about 1,100 members. Its objectives are to raise the standards of ethics and maintain a high standard of fair dealing. Also to promote research for new varieties, disease control, etc.

COMMERCIAL APPLE AND CHERRY ORCHARD FOR SALE

Thirteen acres, for sale, ½ bearing trees, ½ young trees, suitable for truck gardening, berries, etc. Produced \$6,000. Apple house; power sprayer; near town; reasonable. See Martin Koebel, Mgr., 504 Home Ave., Plymouth, Wis. Phone 217.

Place Your Orders Early For Your 1949 Requirements

Ammonium Nitrate Fertilizer:

This material is scarce. Must have your order now so we can guarantee shipment. We have to accept the material during the winter months; they will not guarantee us any deliveries in the spring months. WE CAN FILL YOUR ORDER IF PLACED NOW, no matter how large or how small.

NURSERY STOCK

Our nursery stock price lists will be available this month. Please write for one if you do not receive one in the mail.

SPRAY MATERIALS

Do to advance in prices, we would like to have you place your order with us for Lead Arsenate and DDT as soon as possible. There will be a scarcity of Lead Arsenate the coming season.

Lead Arsenate

DDT 50% Wettable

Dormant Spray Oil (Kleenup)

Lime Sulphur

Puratize

Sinox W

Elgetol

Krenite

Sulfron X

Kolofog

KoloSpray

Mike Sulphur

Tri Ton B 1956

DuPont Spreader Sticker

and many other materials too numerous to mention.

REPAIR YOUR SPRAYER

If your sprayer needs to be repaired bring it into our shop and let us do it while the slack season is on. Do not wait until you want to use it. We carry a complete line of John Bean parts for all models. We will everhaul and paint it for you for a reasonable price.

SPRAYERS

Models 4A, 4E, 06TP, 3TPW, 3AW and Sparton now available. If you need a larger sprayer, we will have to order direct from the factory. John Bean is building a new model Low Pressure Weed Sprayer, so if interested in a weed sprayer call and see us, or write and we will call on you. If you PURCHASE YOUR WEED SPRAYER FROM US, you can get repairs for same on a few hours notice.

Southeastern Wisconsin Fruit Growers Cooperative, Inc.

227 Cutler Street

WAUKESHA

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Genithion 15% PARATHION and 25% PARATHION

A new high mark in field performance against Orchard Mites and certain insects!



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rs of the Nation's Foremost Insecticides and Fungicides

The Work of The Red Cherry Institute

At a meeting of Door County Cherry Growers at Sturgeon Bay early in November, Mr. Edgerton Hart, secretary of the National Red Cherry Institute (office in Chicago) told about the work of the Institute since its organization in June 1947.

Since that time the institute has been solidified in the ten states represented on the advisory council. A greatly intensified promotional program was carried on during national cherry week in February 1948. There were large advertisements in trade magazines; 250,000 beautiful window streamers went to food merchants throughout the country and a half million menu stickers were sent to restaurants and hotels. Food companies and related industries gave the program splendid support. As a result the popularity of cherry desserts was greatly increased.

The success of the program was such that growers and processors were so enthusiastic that at the meeting last June they doubled the budget over the preceding year. The Board of Dir-

ectors were unanimously re-elected. With the increased budget it is now possible, for the cherry industry to make a real place for itself in the food merchandising field.

Cherries For Christmas

This past year, for the first time the industry arranged a Christmas Holiday promotion which will be followed by the regular national cherry week activity in February. Advertisements announcing the new crop will run in trade magazines reaching the bakery, restaurant, hotel and grocery channels. For pre-holiday stimulation advertisements were arranged in a larger list of trade papers, the magazines having a total circulation of about 350,000 establishments.

The total of 250,000 beautifully colored window streamers were distributed to grocery stores, restaurants, drug stores, etc. The theme in this preholiday program is "CHERRY CHRISTMAS" and also "MAKE IT CHEERY WITH CHERRIES."

Throughout the United States tens

of thousands of wholesale groceries. restaurants and hotels as well as retail grocers are being urged to take part in the first big program to establish red cherries as a very suitable fruit for the holiday season.

Magazine Advertisement

In the December 18 issue of the Saturday Evening Post there was a full page, full color beautiful advertisement of red cherries given preferred position due to its beauty.

National Cherry Week February 15-22 Plans to make this year's national cherry week on February 15-22 the largest in history are under way. There will be a national cherry pie baking contest in Chicago celebrating George Washington's birthday and many contestants are expected. Cooperation from other industries and food companies is being obtained to help feature cherries in their own advertisements during February. A trip to the White House, Washington is to be arranged for the young lady who wins the cherry pie baking contest that

(Continued on Page 104)

HARVEST SUPPLIES---

Ladders

Liners

Packing Forms

Baskets Top Pads Apple Pickers

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We can make immediate delivery on all makes of Bean Orchard Sprayers

POISONED OATS Bait for Mice

G. A. DUNN & CO., Inc.

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Formerly F. R. Gifford Company



SPEAKERS AT JOINT FRUIT GROWERS MEETING

MININESOTA — WISCONSIN

Left to right: Dawson Hauser, Bayfield; H. J. Rahmlow, secretary; William A. Bennitt, president Minnestoa Fruit Growers Association; Ralph Backstrom, St. Paul, marketing specialist; Al Loffelmacher vice president, Minnesota Association and the chairman, Agricultural Committee, Winona Chamber of Commerce.

Wisconsin and Minnesota Fruit Growers Hold Ioint Convention

Good Attendence and Excellent Program Marks Second Annual Meeting

Fruit growers of western Wisconsin met with members of the Minnesota Fruit Growers Association at Winona, Minnesota, November 8-9, enjoyed a very interesting program and became better acquainted with each other. As a joint meeting is an important step these growers have similiar problems toward solving them. About 80 growers attended the convention. Many expressed themselves highly pleased with the program.

Prof. W. H. Alderman, chief of the Minnesota Horticultural Department opened the program with an interesting discussion of the effect of the winter of 1947-48 on fruit trees in that area. The large crop of 1947 was late in maturing A warm October delayed dormancy and then sudden extreme cold in November injured trees of many varieties. The barks sluffed off on the crotches of some trees while others were killed to the snow line by a blizzard on November 7, 1947. He said that trees three or four years old on which there was no fruit came through the winter the best.

Prof. Alderman made a survey of the bud and spur killing on the two year old wood or 1946 growth on a number of varieties, He reported as follows: on Dolga Crab 15 per cent of the buds and spurs were killed; on Redwell 20 per cent; Whitney 22 per cent; Dutchess 23 per cent; Cortland 29 per cent; McIntosh 60 per cent; Fireside 39 per cent; Wealthy 56 per cent; N. W. Greening 65 per cent. Early maturing trees winter killed the

From a survey of winter killing on high yielding trees as compared to low yielding trees he reported: wealthy trees producing 9 bushel of apples in 1947 suffered 58 per cent winter killing; trees producing only 5 bu. had 54 per cent injury.

Haralson trees producing 14 bushel had 52 per cent injury while those producing 6.4 bushel had only 39 per cent injury.

Dr. C. L. Fluke and Dr. J. D. Moore gave instructive talks-similar to those given at our convention at Fond du Lac. Articles covering results of their experiments and recommendations for spraying will be published in later issues.

Spray Pond Recommended

At the round table of growers conducted by Prof. C. L. Kuehner, Madison, Mr. Dawson Hauser of Bayfield told how he had a large pond dug in a springy area to provide water for spraying. During a dry period he hired a large bulldozer to push out the soil in this low springy spot. Later this filled in with enough water so some could be used for irrigation. Mr. Hauser has also used Poplar sawdust for mulching in the orchard. The soil was always quite moist under the mulch.

Apple Marketing Research Prof. R. A. Kelly of the University of Illinois spoke on the research project on marketing fruit being carried on with funds provided by the Federal Government. He discussed the wide difference in prices of different grades of apples on the Chicago market Prices ranged from \$1.50 to \$3.50 per bushel and up. The difference in price is entirely due to wide difference in quality.

Bruising was cited as cause of the greatest reduction in quality. Other causes are rot, cuts and insect injury.

Dr. Kelly explained that the loss of sale due to poor quality of fruit puts a retailer out of the market until he has sold or dumped what he has on hand. In Chicago alone there are 6,970 retail stores handling fruits.

Apple Processing Discussed

Prof. J. D. Winter of the Minnesota Dept. of Horticulture gave an informative talk on the research being done in Minnesota on fruit processing and freezing. He is working on the problem of preparing apples for processing so they will make a tasty crisp apple pie. There is great need for improvement in the quality of canned apples for pie bakers. Apple pie still leads in popularity but its position at the top is being threatened because of the poor quality pie found in so many restaurants. One of the reasons is that canners have not used the best varieties and have not prepared them so they produce a crisp pie.

In Prof. Winters survey of retail stores he found 25 per cent of the stores did not handle locally grown apples because of poor quality. Store managers said they lose customers by selling apples of poor quality if their competitors have better quality fruit. H. J. R.

Cherry Institute

(Continued from Page 103) she may present a red cherry pie to the President.

Officers of the National Red Cherry Institute include: Karl S. Reynolds Sturgeon Bay, president; Horace M. Putnam, New York, vice-president. On the Board of Directors are W. L. Thenell of Sturgeon Bay and Lougee Stedman of the Door County Fruit Growers Co-op of Sturgeon Bay, represents the processors.

PREMIUM WINNERS FRUIT SHOW ANNUAL CONVENTION

Retlaw Hotel, Fond du Lac November 16-17

MILTON-3rd prize, L. H. Stringer, Milton, Wis.

MACOUN—1st prize, Peter Thelen, Fond du Lac; 2nd prize, S. S. Telfer, Ellison Bay; 3rd prize, Fred Meyer, Waldo.

HARALSON—1st prize, John D. Mc-Ilquham, Chippewa Falls; 2nd prize, Geo. Gannon, Chippewa Falls; 3rd prize, Peter Thelen, Fond du Lac.

KENDAL—1st prize, S. S. Telfer, Ellison Bay; 2nd prize, L. H. Stringer. Milton; 3rd prize, Nieman Orchards, Cedarburg.

PERKINS—1st. prize, L. H. Stringer, Milton; 2nd prize, John Zahn, Fond du Lac.

NEWFANE—2nd prize, Fred Meyer, Waldo; 3rd prize, John Kopp, West Bend.

ANY OTHER VARIETY—1st prize, Nieman Orchards, Cedarburg; 2nd prize, John Zahn, Fond du Lac; 3rd prize, L. B. Irish, Baraboo.

MCINTOSH—1st prize, Emil Beyer, Malone; 2nd prize, John Zahn, Fond du Lac; 3rd prize, S. S. Telfer, Ellison Bay.

CORTLAND—1st prize, Emil Beyer, Malone; 2nd prize, L. H. Stringer, Milton; 3rd prize, Gilbert Pieper, Oakfield.

RED DELICIOUS—1st prize, Emil Beyer, Malone; 2nd prize, L. H. Stringer, Milton; 3rd prize, S. S. Telfer, Ellison Bay.

GOLDEN DELICIOUS—1st prize, L. H. Stringer, Milton; 2nd prize, Emil Beyer, Malone; 3rd prize, John Zahn, Fond du Lac.

N. W. GREENING—1st prize, L. B. Irish, Baraboo; 2nd prize, Art Brunn, Hales Corners; 3rd prize, John D. Mc-Ilquham.

SNOWS—1st prize, Emil Beyer, Malone; 2nd prize, Nieman Orchards, Cedarburg: 3rd prize, John P. Zahn, Fond du Lac.

PACKED BUSHEL OF APPLES— 1st prize, Frenz Orchard, Cedarburg on Cortland; 2nd prize, S. S. Telfer, Ellison Bay on Kendall; 3rd prize, Nieman Orchards, Cedarburg on Cortland.

Other members who exhibited excellent quality bushels of apples were: John Kopp, West Bend, Snows; John P. Zahn, Fond du Lac, Cortland and Jonathan; H. E. Pierce, Edgerton, Johnathan; J. C. Schubert, Gays Mills, Cortland; Ed. Kassner, Casco, McIntosh; Art Brunn, Hales Corners, N. W. Green-



R. C. Pippert, Cleveland, Wis. new president Wisconsin Nurserymen's Association

WISCONSIN NURSERYMEN HOLD MEETING Elect Officers

Mr. R. C. Pippert of Cleveland was elected president of the Wisconsin Nurserymen's Association at the annual convention held in the Schroeder Hotel, Milwaukee on December 15-16. Other officers elected were Mr. L. L. Kumlien, Janesville, vice president and Mr. Thomas S. Pinney, Sturgeon

ing; Emil Beyer, Malone, Golden Delicious and Gilbert Pieper, Oakfield, Cortland.

PREMIUM WINNERS Woman's Auxiliary Exhibits

APPLESAUCE COOKIES—1st prize, Mrs. E. L. White, Fort Atkinson; 2nd prize, Mrs. A. K. Bassett, Baraboo, 3rd prize, Mrs. Arno Meyer, Waldo.

APPLESAUCE FRUIT CAKE—1st prize, Mrs. John D. McIlquham, Chippewa Falls; 2nd prize, Mrs. Eli Paulson, Valders; 3rd prize, Mrs. Arno Meyer, Waldo.

APPLE KRUNCH—1st prize, Mrs. Gilbert Pieper, Oakfield; 2nd prize, Mrs. Eli Paulson, Valders, 3rd prize, Mrs. O. Conrad, West Allis.

Bay re-elected secretary-treasurer. New directors elected were Mr. Edward S. Eschrich, Mr. J. P. Foster and Mr. Max Slinger, all of Milwaukee.

The program this year was very comprehensive, including many topics of vital interest to nurserymen on soil management, chemical weed control, control of nursery pests and highway planting.

Mr. Dwight Forsythe passed out a circular on weeds available from the Wisconsin Department of Agriculture, Agronomy Building, Madison 6, Wisconsin. The title is "Response of Some Plants to 2,4-D. It contains a long list of plants and gives their susceptability and resistance to applications of the chemical. This should be valuable to anyone interested in weed control. We hope to be able to publish some of the papers given at the convention in early issues."

A FIVE FOOT APPLE PIE

CAN YOU TOP THIS PIE? At the recent Kentucky State Fair, an added attraction in the Fruit Department, a five-foot apple pie (made with frozen apples and with solid top and bottom crusts) really brought people to the apple end of the exhibit hall. At Louisville, the A & P Tea Company baked the pie in their large oven. Pie and tin weighed 390 pounds. It was baked on Tuesday afternoon and delivered to the Fair Wednesday morning. Governor Earle Clements of Kentucky cut the pie in a special ceremony Thursday afternoon and about 125 servings were given out. On Friday afternoon the remainder was served to the public (free-first come, first served). There were 1,000 six-inch paper plates for the serving and the pie and the plates ran out together. So, if you have 1,000 guests to serve, a five-foot apple pie, six inches thick at center, will do it. Yes, it was good! We know for we sampled it and the people also. We heard no complaints. The five-foot pie pan, the property of the Kentucky State Horticultural Society, has been used several times.

Until we hear to the contrary, we are calling this the WORLD'S LARG-EST APPLE PIE. If you can beat it, let us know and we will haul down our flag.

By W. D. Armstrong, Secretary, American Pomological Society.

Wisconsin Vegetable and Berry Association Organized

At the business meeting of the organization held in connection with the meeting of the Wisconsin Horticultural Society on November 17, the following action was taken.

A constitution presented by a special committee appointed by the president was read and adopted with some changes.

A board of directors of nine members was elected. For 1 year term: Mr. Frank J. Long, Clintonville; Mr. Dwight Hensel, Waupaca and Mr. Chris Olson, Berlin. 2 year term: Mr. John F. Schwartz, Kenosha; Mr. E. L. White, Fort Atkinson and Mr. E. A. Rosenberg, Clintonville. 3 year term: Mr. N. A. Rasmussen, Oshkosh; Mr. C. H. Braman, Waupaca and Mr. Elmer Whitby. H. J. Rahmlow, secretary Wisconsin State Horticultural Society is ex officio member of the board, provided in the constitution.

The board of directors met at the close of the convention and elected the following officers: Mr. C. H. Braman, president; Mr. E. A. Rosenberg, 1st vice president; Mr. Elmer Whitby, 2nd vice president and Mrs. Charles Wood, secretary and treasurer. The above together with H. J. Rahmlow, Madison constitutes the executive committee.

The board decided to hold the spring meeting preferably in early April and the time and place to be decided by the officers. Considerable enthusiasm and genuine interest was evident by remarks such as these made at the close of the meeting. One member said, "I'm interested in growing apples and other fruit but this is the kind of meeting I really need to help me along."

Another said, "This is the type of meeting I need for help in growing berries and vegetables."

Nineteen new members joined at the Fond du Lac meeting which doubled the membership. About 40 were present.

Once while campaigning in the one state of his opponent, William Howard Taft found his speech constantly interrupted by heckling from the gallery. Finally a cabbage landed on the stage and came to rest near his feet:

Pausing in his address, Mr. Taft peered at the vegetable intently and then remarked, "Ladies and gentlemen, I see that one of my adversaries has lost his head."



C. H. Braman, Waupaca

HEARD AT THE BERRY AND VEGETABLE GROWERS MEETING

At the meeting of the Wisconsin Berry and Vegetable Growers Association at Fond du Lac, November 17, Prof. O. B. Combs said it is now possible to grow a high quality head lettuce in Wisconsin—one that will really head. It is Great Lake and has been successfully grown here.

He also recommended Buttercup and Green Gold squash as of superior quality and earlier maturity than the familiar Hubbard squash.

The Buttercup has a turban like shape. It is small and of a size most housewives would prefer. Hubbard squash takes longer to mature and very often only half the crop in Wisconsin reaches maturity in our short growing season.

A new squash has been developed that keeps all winter. It is Sweet Meat and can be highly recommended. It matures early, has excellent flavor, somewhat resembling Buttercup in size and is of pale green color.

Recommends Hybrid Sweetcorn

Prof. Combs recommended planting the new hybrid sweetcorn in preference to the older variety of Golden Bantam. These hybrids Marcross and Our Choice are regarded as two of the best early hybrids. Gold Rush and Carmel Cross were recommended as the second best early hybrids. They mature early and are ready for the early market.

Value of Irrigation Stressed

Mr. C. H. Braman, Waupaca, president of the association said we can maintain maximum production only by having fewer plants properly spaced in a well conditioned soil and by providing proper irrigation. This is the method of gardening he has been practicing and with extremely satisfactory results both in quality and quantity. He said few of us realize the large amount of water required to produce a good crop of tomatoes, cabbage and berries. By Mrs. Charles K. Wood, Shawano, Secretary.

CONTROL OF PESTS ON RASP-BERRIES AND STRAWBERRIES DISCUSSED

At the meeting of the Wisconsin Berry and Vegetable Growers Association held in conjunction with the annual convention of the Horticultural Society at Fond du Lac on November 17, Mr. E. L. Chambers, State Entomologist and Mr. H. E. Halliday, assistant discussed insects and disease problems of strawberries and raspberries.

Spray Only When Necessary

Mr. Chambers advocated a definite spray schedule for small fruit, as otherwise there may be a useless expenditure of time and money, and because there may be risk of injury to the plant and destruction of beneficial insects. He recommends spraying only when we have evidence of insects or disease injury, which require immediate control. The possibility of having dangerous spray residue on the fruit at harvest time is a factor to be considered.

Black raspberries, which are especially susceptible to mosaic, should not be planted within three hundred feet of red raspberries, and to avoid crown gall raspberries should not be planted on soil where infected fruit trees or cane fruit have been grown.

Mr. Chambers emphasized care in the use of some of the new insecticides, because not enough is known about their toxicity to human beings, the amount of residue left on the fruit, and possible injury to the plants themselves.

Chlordane For Spittle Bug

For control of the Spittle Bug, a 5 per cent chlordane dust, used when the insect is still in its first or second instar, or in other words within a week or 10 days after they have been hatched. The chlordane dust should be applied when there is little or no wind, and at the rate of 25 to 30 pounds per acre. It's use is not recommended later than ten days prior to the ripening of the fruit.

Danger of White Grubs

Mr. Halliday stressed the importance of never planting Strawberries on newly ploughed sod land, because of the danger of white grubs. Many growers had severe injury from white grubs this past summer.

The Red Steele disease of Strawberries is also described, and recommendations are made not to plant Strawberry plants in low, wet, soggy ground. Also, plants should be bought only from sources which have had double inspection. This is necessary to assure that a patch is not infected with the Red Steele disease.

SOUND MOVIES AVAILABLE FOR YOUR CLUB MEETINGS

Swift and Company has available three 16 MM, sound movies for use of garden clubs and other organizations as follows:

- 1. VEGETABLE INSECTS. A full color sound movie: running time 30 minutes. Very interesting and educational.
- 2. BOUQUET OF BEAUTY. An allcolor Sound movie showing the splendor created by roses in the average home gardens. Time 20 minutes. Shows recommended practices in planting, pruning, care and feeding of roses.
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Send your requests for showing the movies to Mr. W. J. Klossner, Mgr., Box 152, Madison, Wis. Give three dates to avoid conflict. A field representative of Swift & Company will show the movies and provide all necessary projecting equipment and screen. There are no charges.

ROUNDTABLE ON BERRIES AND VEGETABLES

By C. L. Kuehner

The roundtable discussion at the Berry and Vegetable Growers meeting at Fond du Lac turned out to be interesting and worth while. Prof J. D. Winter stressed, in particular the necessity of winter covering of raspberries in Minnesota, and showed by a series of pictures how Minnesota growers do this job and what special equipment they use. Judging from the comments of Wisconsin growers present, it was evident only a few have thought seriously about adopting this practice in the immediate future, even though they agreed that winter losses of raspberry canes are altogether too frequent. We hope some growers who have had much trouble with wintering will give the covering practice some fair trials.

Mulching Discussed

Considerable interest was shown in mulching of strawberries and raspberries. Growers present seemed fully convinced that strawberry mulching is necessary and that, for best results, it should be carried out before the first hard ground freeze. Apparently a rather wide variety of mulches is being used. The mulch most widely in favor is marsh hay in areas where it is available. Straw is used quite

commonly. Shavings, shredded corn stalks and leaves are used by some growers. Raspberry mulching is practiced to some extent in small home plantations. Where grass control is not too much of a problem, mulching the established raspberry plantation may well merit more attention than it has had so far.

The value and general need for more abundant organic matter in soils for small fruits was discussed from the standpoint of better growing plants and more adequate moisture supply for best crop yields. It was pointed out that preparing definitely increased the chances for success.

The ready participation of growers in the discussion and the fine contributions offered from their own rich experiences made the roundtable session a helpful and very pleasant program number. The time allotted seemed too short.



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BLUE BOY — Deep Blue Flower With Yellow Centers. — 74 Cents each.

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Made of strong, durable light weight plastic. Available in 6 colors. Ivory, yellow, coral, pink, green or marble. — \$1.10 each; 3 for \$3.00, post-



SUB-ZERO ROSES

A distictive strain of hybrid tea roses that unprotected, has been wintering through 15 degrees below zero for years and with slight protection will withstand 50 degrees below zero. They have all the other qualities of a good rose such as size doubleness, fragrance, vigour and disease resistance. They are everblooming.

Try these roses if you are having trouble wintering the ordinary hybrid tea varieties.

LILLY PONS. White PINK PRINCESS. - Rose Pink

RED DUCHESS. - Beautiful red \$1.85 each; 3 for \$5.25 postpaid.

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Convention Highlights

New Laws

At the annual convention of the Wisconsin Beekeepers Association in Fond du Lac, Mr. John Long, chief of the State's Division of Bees and Honey, told about new laws which effect beekeepers. We cannot sell honey in used containers from now on; even 60 pound cans must be new and labeled unless used for storage.

Plans are being made to provide beekeepers with color graders to determine whether our honey is white, golden or amber. These should be available by next season.

Mr. Long warned beekeepers that when renting colonies for pollenation they should furnish only good colonies. He told about a beekeeper who delivered very weak colonies for pollenating cranberries at \$10.00 per colony. This created a great deal of dissatisfaction.

The New Queen Breeding Project

Prof. William Roberts told an interesting story about the queen breding project on Kelley's Island. About 1,000 queens were produced this year which were sold at \$1.75 each by the Honey Bee Improvement Cooperative. Mr. Charles A. Reese, Ohio University, Columbus. Ohio is secretary of the association. Prof. Roberts said they hoped to produce about 2,500 queens next year to be tested all over the United States. They are of 5 different strains mated to the drone population of known parentage restricted to the island. These hybrid queens will be tested by comparing them with commercial stocks in various parts of the country. No breeding queens are as yet available to breeders but Prof. Roberts said he hoped to have some available in the near future. The work is somewhat similar to the production of hybrid seed corn. It will be an interesting project to watch develop.



Disease Control In Minnesota

While there is no law against the use of sulfa in Minnesota, inspectors have orders to burn all colonies in which they find disease said Mr. C. D. Floyd, chief inspector for Minnesota in an interesting talk on beekeeping conditions in that state. He believes sulfa will not cure colonies permanently and that AFB may show up again in the future. It is up to the beekeeper to keep his colonies free of disease and they are burned if this is not done.

Mr. Floyd said there are 5 acres of good bee pasture in one mile of county road. The weed control program must be watched by all beekeepers so that clover and other good honey plants are not killed by weed sprays. "Spot spray and save money" is the way to sell county weed committees on a program to prevent destruction of desirable plants. We should point out that sprays will not kill quack grass which may be more harmful than the plants that are killed. There should be a beekeeper on every county weed committee.

Importance of Large Populations

Dr. C. L. Farrar reported on the relationship between large populations and honey yields. Large populations are especially important when the honey flow is early and of short duration as it was last June. Two queen colonies with from 100,000 to 120,000 bees averaged 245 pounds of honey above winter requirements while one queen colonies with from 50,000 to 60,000 bees averaged about 70 pounds. He pointed out that medium sized colonies may produce a crop if the flow is of long duration, but only large colonies get a crop during a short early flow. The Wisconsin crop was less than one-half of normal this year.

Dr. Farrar spoke of the severe winter of 1947-48 when we had 120 days of continuous cold weather. There were 82 days when the temperature did not go above freezing. However, he said, it doesn't make much difference whether the temperature is zero or 30 degrees below zero except that the cluster contracts more during the cold weather and the bees cover less honey. Most colonies which were lost died of starvation. The position of the honey in the hives may be as important as the amount of honey. Some colonies starved because the queen started laying below the food supply and the cluster could not reach the honey during a long spell of cold weather. The best colonies will consume the most honey if pollen is available to the cluster in late winter and early spring. The more stores they consume the more young bees there will be in spring. "A colony will winter successfully if it has a good population and plenty of food in the right place. If we give our time to the organization of the colonies-the position of the stores, both honey and pollen, our time will be better spent than in packing," said Dr. Farrar.

How to raise good queens was described by Mr. Steve Taber, Assistant to Prof. William Roberts. He referred to the article on queen rearing by

Prof. Roberts which was published in this magazine several years ago. There have been many calls for copies of this issue and since no more are available we will plan to publish the article again next spring.

To be continued in our next issue.

The suggestion was made at the convention that small county associations may wish to invite the beekeepers of adjoining counties to join with them if such adjoining counties do not have an organization.

Honey Acres To Handle Containers

It was voted that Honey Acres continue to handle honey containers for association members giving a percentage of the profit to the association. A committee was appointed to try to get another dealer in northwestern Wisconsin to do the same.

The Board of Directors is to constitute a committee to act on the budget and other matters pertaining to affairs of the beekeepers with the State Department of Agricuture and the Division of Bees and Honey.

It was recommended that all county associations try and have a beekeeper appointed on town and county weed committes to safe guard against destruction of honey plants along the highway.

HONEY EXHIBITS AT THE ANNUAL CONVENTION

The exhibits of honey by beekeepers and foods made with honey by the Ladies Auxiliary members were larger and better than in many years. Auxiliary members greatly enjoyed the tea at which they sampled the exhibits and they were also placed on the banquet tables for members to taste.

The Winners—Foods Made With Honey

Class 1. A practical and attractive lunch box of foods made with honey. 1st prize—Mrs. W. Freund, West Bend; 2nd prize—Mrs. H. Piechowski, Red Granite and 3rd prize—Mrs. H. Knight, Dalton.

Class 2. Honey cake. 1st prize—Mrs. O. Koepsell, Mayville; 2nd prize—Mrs. W. Mercier, Janesville and 3rd prize—Miss C. Jones, West Bend.

Class 3. One dozen honey cookies. 1st prize—Mrs. W. Mercier, Janesville; 2nd prize—Mrs. W. Freund, West Bend and 3rd prize—Mrs. H. Piechowski, Red Granite.

The Winners-Honey Exhibits

Class 1. Six 1 lb. jars of Wisconsin Fancy White honey. 1st prize — Mr. Otto Koepsell, Mayville; 2nd prize—Mr. Ray Gibbons, LaValle and 3rd prize—Mr. Emerson Grebel, Beaver Dam.

Class 2. Six 1 lb. jars of Wisconsin No. 1 White honey. 1st prize—Merciers Greenvale Produce, Janesville; 2nd prize—Mr. Gilbert Burmiester, Loganville and 3rd prize—Mr. Otto Koepsell, Mayville.

Class 3. Six 1 lb. jars of Wisconsin Golden honey. 1st prize—Mr. R. W. Poole, Greenbush; 2nd prize—Mr. Otto Koepsell, Mayville and 3rd prize—Mr. Ray Gibbons, LaValle.

Class 4. Six 1 lb. jars of Wisconsin Dark honey. 1st prize—Mr. Ray Gibbons, LaValle; 2nd prize — Mr. Otto Koepsell, Mayville and 3rd prize—Mr. Emerson Grebel, Beaver Dam.

Class 5. Three sections of Wisconsin Fancy White Comb honey. 1st prize—Mr. H. W. Knight, Dalton; 2nd prize—Mr. Otto Koepsell, Mayville and 3rd prize—Mr. Arthur F. Schultz, Woodland, Wis.

THE WISCONSIN HONEY CROP

The largest crop of honey ever produced in Wisconsin was in 1945 when beekeepers reported 14,140,000 pounds according to the Federal and State Department of crop statistics. The smallest crop in the past 6 years was in 1942 with a production of 7,320,000 pounds.

The following is the annual production in the state since 1942:

1942 7,320,000 pounds

1943 10,659,000 pounds

1944 8,000,000 pounds

1945 14,140,000 pounds

1946 7,844,000 pounds

1947 11,660,000 pounds

1948 7,410,000 pounds

The number of colonies of bees in Wisconsin increased steadily until 1947. In 1940 there were 156,000 colonies; in 1947, 212,000 colonies. This dropped in 1948 to 195,000 colonies due to heavy winter losses.

If the record of the past 6 years continues we are due for a good crop again in 1949. It looks as if the crop fluctuates from a high to a low every other year. This is not true of all localities however. Some localities may have a good crop for several years while others may have a poor crop several years in succession.

G. M. RANUM HONORED BY BEEKEEPERS

Mr. G. M. Ranum of Mount Horeb, one of our oldest beekeepers and second oldest member of the Wisconsin Beekeepers Association in the state received honorary recognition at the annual convention of the Wisconsin Beekeepers Association at Fond du Lac. October 27.

Mr. Ranum has long been active in beekeeping circles. He has given freely of his knowledge and experience. His articles have appeared in beekeeping journals, especially Wisconsin Beekeeping and Wisconsin Horticulture. He is one of those rare individuals who combines an intensive interest in beekeeping with a friendly and kindly spirit which promotes good will and cooperation.

Born in 1872

Mr. Ranum was born in Grant County, Wisconsin in 1872. He first became interested in bees at the age of fifteen. His brother, a sewing machine salesman took in two colonies of bees on a trade and gave them to Mr. Ranum. He has had bees ever since except for a period of one or two years.

He joined the Wisconsin Beekeepers Association about 1900 and has been quite regular in attending the meetings.

Mr. Ranum moved to Dane County when about 20 years of age and has resided ever since on a farm near Mount Horeb.

At the age of 76, he is still an active beekeeper. Has an apiary of about 50 colonies. He operated about 150 colonies for a number of years until about 12 years ago when he sold part of his holdings to his son Edward.

Mr. Ranum does very careful beekeeping and usually gets a good crop of honey even in rather poor seasons. His largest yield was probably in 1945 when he had an average of 227 pounds per colony on 52 colonies, spring count.

In recognition for his services to beekeeping, Mr. Ranum was presented with a fountain pen desk set engraved with the greetings of the Wisconsin Beekeepers Association.

Have you ever thought of it this way—the reason we like honey is because it is always sweet.

FOR SALE

50,000 pounds white and golden honey in 60's, 1948 crop. Henry Piechowski, Redgranite, Wisconsin — Phone 79M.

Losses From Cellar Wintering

One of the most interesting books on beekeeping is, "50 Years Among The Bees" by Dr. C. C. Miller. Older beekeepers remember well the articles in bee journals some years ago by this eminent beekeeper, the leading authority of his day on beekeeping; many have read his books.

Browzing through it again recently, we were interested in his method of wintering and his winter losses.

Dr. Miller obtained his first colony of bees in 1861 and in 1878 decided to go into beekeeping as a business. He says in his book, "Since that time I have had no other business than to work with bees, unless it be to write about them."

Dr. Miller wintered exclusively in the cellar in his location. Marengo, Illinois. One might expect that by 1902, he would have solved the wintering problem since he was indeed a keen observer of the habits of bees. Yet. he writes in 1902 he had a furnace put in the cellar under his home because of the coal famine following the great coal strikes. This obviously warmed up the bee cellar and so he says, "They wintered beautifully - until they died. They starved to death, and that not so very late in winter, although I think they were well supplied with stores. No doubt the heat kept them so active that they used up their stores with unusual rapidity.

"By the 12th of May there were left only 124 colonies out of 199 put in cellar, and many of them were mere nuclei. A loss of 37 per cent was not gratifying; but, beekeeperlike, I looked

forward hopefully to the next winter.

"Alas for my hopes! Instead of 37 per cent, the loss for the winter of 1903-04 was 47 per cent, leaving 150 colonies alive out of 284. And the loss was mainly due to lack of sufficient stores. Some of them died in the cellar. and more would have died there if they had not been taken out a little ealier than was well, so they could be fed. But feeding very early in spring is not so well as having an abundance of stores in the fall, and the mortality continued well along in spring. The fact that after so many years of experience, and after advising others always to have abundant stores for winter. I should have lost colonies by the score through starvation, was humiliating indeed."

Dr. Miller remarks this taught him a valuable lesson and from then on, he saw to it the bees went into the cellar with enough stores. After that he did not expect any to die unless from queenlessness.

Let us remember: its what is on the inside of the hive that is important.

HOW BEES COMMUNICATE

In the March issue of Wisconsin Horticulture, we published an article covering the work of Dr. Karl von Frisch a zoological professor who worked for about 40 years in Germany on the question of how bees communicate and other important problems. In September the Scientific American published an item on the work of Dr. Frisch. Their report is interesting.

"Pity the poor honeybee. Na-

ture condemned him forever to dance for his dinner! The result of a 40 year study of bee habits, reported currently in SCIEN-TIFIC AMERICAN, shows that bees substitute a pattern of dances for language, telling each other where to go for nectar and pollen.

Immediately upon his return to the hive, a nectar laden bee goes into his dance. If he dances in a tight circle, first to the right and then to the left, other bees know the feeding place is within 300 feet of the hive. But, if on the other hand, he first marches in a straight line, then turns, circles back and retraces the march, the source of nectar lies beyond 300 feet. The slower the marches, the farther away is the food. If he marches straight up the honeycomb inside the hive, his fellow workers know they must fiv straight toward the sun to find the nectar. If he marches straight down, he tells them the food lies directly opposite the sun. When the food is not in line with the sun, the bee shows the horizontal angle between the sun and the feeding place by pointing his line of march at the same angle from the vertical on the honeycomb!"

HONEY FOR FOOTBALL PLAYERS

Mr. Lewis W. Parks, chairman of the Board of Directors of the American Honey Institute, wrote us that the October 25 issue of TIME magazine had the following item in which we are all interested:

"At 5:30 a.m. the day they played Harvard last week, Army's footballers rolled out of bed. Like the other 2,377 cadets, they made their beds and tidied up. At eight, they attended classes, and then had a combined breakfast-lunch (HONEY, whole wheat toast, steak, and milk)."

From Bulletin No. 57, American Honey Institute.

THE PRICE OF HONEY

California Beekeepers Pushing For Government Help To Stabilize Prices

Mrs. Laura Shephard, chairman of the Marketing Committee of the Imperial Valley Beekeepers Association of California sent us copies of letters she has been directing to the Production and Marketing Administration of the U.S. Department of Agriculture in which beekeepers ask for government aid to stabilize the price of honey. We quote parts of a letter Mrs. Shephard sent during November.

"The hazards of honey production, such as unfavorable weather, bee disease, and insecticide poisoning, are so great that a large crop of honey in one season is usually followed by a small crop. For example, in 1947 beekeepers produced 228,162,000 pounds of honey, and in 1948 they produced only 206,-935,000 pounds.

"Also when we reflect that more than 20 million pounds of honey were imported into the United States in 1947 and a similar quantity in 1948 because of a low tariff, we believe that our problem of surplus has been created by government and must be solved by government.

Low Income

"If honey sells for 8½ cents per pound, or 27.7 per cent of parity, a hive of bees which produced 36. 1 pounds of honey, or the average production for 1948, would yield the beekeeper a gross income of \$3.07, and 1000 hives of bees would furnish a gross income of \$3,070, from which the owner would be expected to pay taxes, buy containers for his honey, pay for labor, the warehousing of his project, and other expenses, and support his family. Surely you can understand that this income is inadequate, and that it must be changed.

"Since honey production in the West has outstripped population, producers cannot resort to retailing in neighboring cities, and are forced to accept whatever is offered. The history of the marketing of Imperial Valley honey in 1947 must be considered in the light of the price pattern of the honey industry. The exclusion of 1,000,000 pounds of this honey from the first purchase caused this lot to be sold for 8 1/3 cents per pound later in the season, broke the 1948 market, and perpetuated the price pattern of the industry. The price of the second purchase was made to conform, then, to a commercial price so established.

"We accept your suggestion that the industry enter upon a merchandising program on the condition that the government stabilize the price of honey according to the recommendation of the industry committee. We do not believe that the government has advised the wool grower to peddle a fleece of wool or the wheat grower to sell a sack of flour in lieu of a price support program. Advertising is a charge upon the seller of honey rather than the producer. We fear that the producer who attempts to pay for advertising from his meager 47.7 per cent of parity will find himself in the position of increasing the sale of South American honey for the bottler, while his own honey stands in his warehouse. We are reminded that the price pattern of our industry has not changed since 1929; although supply and demand have fluctuated, only the overwhelming demand of war brought the producer a fair price. If the producer participates in an advertising campaign, the Department must make plans to require dealer and bottler to share some of the spread between 81/2 cents per pound and 30 cents per pound with the producer.

"In regard to funds to support the price of honey, we call your attention to the fact that no funds have been made available to the honey industry during the present fiscal year. We suggest that immediate plans be made to authorize a school lunch purchase at 12 cents per pound in bulk containers to the producer, and that honey be placed under commodity loan as soon as possible."

HONEY WANTED

HONEY WANTED. Must grade No. 1 white. Submit samples and best price delivered to our plant.

Schultz Honey Farms, Ripon Wisconsin

BEE SUPPLIES

We are authorized dealers of G. B. Lewis Bee Supplies We have a complete line of:

- HIVES COVERS
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G. A. Dunn & Co., Inc. 2138 University Ave., Madison, Wis. Telephone — Fairchild 2840

HONEY CONTAINERS

We now have a good supply of 60 lb. cans, 5 and 10 lb. pails. Also the 5 lb., 3 lb., 2 lb. and 1 lb. and 8 oz. glass jars. We can make immediate shipment.

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

WRITE FOR COMPLETE
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Order through your State Beekeepers Association.

HONEY ACRES
Menomonee Falls, Wisconsin

TO OUR

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We Wish to Extend

HOLIDAY GREETINGS

and

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AUGUST LOTZ COMPANY MANUFACTURERS and DEALERS

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HONEY WANTED

Carloads and less than carloads.

Mail sample and best prices in all grades.

C. W. AEPPLER COMPANY Oconomowoc, Wisconsin

Wisconsin Horticulture

New Years Greetings

MESSAGE FROM THE PRESIDENT

As the new president of the Wisconsin State Horticultural Society, I feel highly honored to be able to serve in that capacity. It is my sincere hope I will be able to carry on the traditions set up by this society since the year 1865.

As to advocating anything new by way of departure, I feel it is very much out of order, for the principles set up by this society are fundamental and should be carried out to the end that they concern all people interested in horticulture. In order to accomplish the goals we have set, we must definitely have a united group; united in objective, united in action, and united in the appreciation of a glorious horticultural achievement. The year 1949 carries a lot of promise, lets make it come true.

We do have a rather special condition existing in our society, namely, there are so many phases of horticulture that require so many different directives it becomes quite difficult at times to keep a balance between all these interests without causing some to feel a bit slighted in the promulgation of their particular programs.

I can assure every member that after serving on the board and in the various other capacities, at no time has there been any attempt made to slight any of the groups. The interest of the society as a whole has always been foremost and absolute. We have just witnessed the organization of another group within our society, namely; The Wisconsin Berry and Vegetable Growers Organ-

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G. J. Hipke

PRESERVER SERVER

ization. I wish them every success. It will bring about added interest in our society. Of the membership, I solicit your constant help and guidance in the conduct of our society.

I wish to take this opportunity to make a statement relative to our capable secretary, Mr. Henry J. Rahmlow. He has served our society for twenty years in the capacity of secretary. Over that period he has performed a most admirable task in organizing various groups and helping meet their needs. Mr. Rahmlow is worthy of our sincere congratulation on a job well done. It is my fondest hope that our horticultural proiects will be successful in every respect, that you will continue to support and encourage the activities of the Horticultural Society.

Gilbert J. Hipke, President

THE SECRETARIES REPORT

Five years ago we celebrated our 75th Annual Convention in Waukesha. At that time we published a 75 year history of the Society. This being Wisconsin's Centennial year, we like to recall that the Society was organized immediately after the close of the Civil War in 1865 in the city of Janesville. In those days the men in the field-the fruit growers, berry growers, vegetable and flower growers were the backbone of the industry because they not only carried on research in horticulture but also the horticultural extension work through the Society and local horticultural organizations. Some of those men spent their lives and fortunes experimenting-testing new varieties of all kinds of fruits of which so many failed that they were barely able to make a living. Still they continued to give what knowledge they had to their fellow workers. Today research work is rightly being done by Experiment Stations.

During the past year there have been some changes. First we increased our annual dues to 75c for affiliated members. This has enabled us to overcome our deficit. You will remember that 2 years ago we reported a deficit of over \$1,100 due to increased cost of printing, paper and costs all along the line without any increase in salaries. The magazine at that time was costing us more than we were receiving from membership dues. We were fortunate in being able to get considerable advertising last spring and we have been able to put out a larger magazine than ever before in our history-36 pages during the spring and early summer months and 32 pages since that time. The Board of Directors was also able to increase slightly the salaries of Secretary and assistant. We hope to have enough funds so we may be able to use more pictures in the magazine to illustrate articles. At the present time we have 6.410 names on our mailing list including exchanges, copies to libraries, County Agents and University Horticulturists.

We continue to be among the leading Horticultural Societies in the Nation in the number of fruit grower memberships, beekeeping memberships and members in the Wisconsin Gladiolus Society. The Wisconsin Garden Club Federation, while not among the largest in the

Nation, does have more than 3,000 members.

Meeting with us today is the newly organized Central Wisconsin Berry and Vegetable Growers Association. The officers are optimistic that the organization will grow and bring together growers who have not previously been well organized, but of which there are a large number in the state.

During the past 12 months, in addition to editing Wisconsin Horticulture, arranging conventions and programs, and detailed work in the office, the Secretary spoke at the following meetings. Meetings of fruit growers organizations, 19; meetings of garden clubs, 42; beekeepers meetings, 12; Gladiolus Society meetings, 9: nurserymen, 1 and berry growers, 4. We attended 6 meetings as a member of the Wisconsin Centennial Committee on Agriculture and gave 17 radio talks on gardening and fruit growing. This is a total of 110 appearances.

As a member of the Centennial committee, we tried very hard to get a place for Horticultural exhibits at the Centennial exhibit in Milwaukee. However, lack of space and the desire on the part of the management to have only exhibits of a centennial nature, prevented us from giving due consideration to horticulture. We hope that in another year, fruit, flowers and vegetables will again be represented at the State Fair in their proper place.

We were able to assist fruit growers again through the Wisconsin Apple Institute. With the help of a student in Journalism publicity articles about apples were sent out to 150 weekly and 50 daily newspapers every week. A news story about apples and three recipes for cooking with apples were sent out each week and were used by many newspapers especially large papers like the Milwaukee Journal, Racine Journal, Capital Times and Wisconsin State Iournal.

The Future

Our income from advertising has increased considerably. Our increase from membership dues now enables us to keep out of the red. We believe however that further expansion is necessary and so we have asked the Legislature for an additional \$1,000 state appropriation. This will enable us to expand our work to keep up with our expanding memberships and requests for help. We should have more pictures in the magazine. There are many articles which we cannot publish because we are limited in the size of the magazine. We should

hold still more meetings which requires more traveling expenses.

APPLE CRISP

About 6 apples sliced thin on bottom of buttered pan. (Can be small cake pan or a large pie tin).

Mix the following ingredients as for a pie crust:

- 1 cup white sugar
- 1/2 cup flour
- 3 tablespoonsful butter
- ¼ teaspoon cinnamon
- ¼ teaspoon salt

Sprinkle mixture over the sliced apples and bake in a 350 degree oven for 20 minutes or until apples can be pricked with a fork. Some varieties don't bake as fast as others. Mc-Intosh are done in 20 minutes.

If a square dish is used, cut the dessert in squares and serve with whipped cream or ice cream.

We gave this recipe to several of our customers who in turn came back to remark how much they enjoyed this simple desert and purchased more

Mrs. Art Bassett, Jr., Baraboo.

TRAGEDY Karl S. Reynolds Lougee Stedman Ervin L. Kossow

Every horticulturist in Wisconsin was shocked when the news came on December 5 that these leaders had met disaster in a plane crash north of Sturgeon Bay the evening of December 4.

Returning from a meeting at Beaver Dam they found fog over the landing area. A rapidly dropping barometer evidently made it impossible to determine the altitude accurately and the plane crashed in a forest near Carlsville

Karl Reynolds has been president and member of the board of directors of the society. He was president of the National Cherry Institute.

Lougee Stedman was general manager and secretary of the Fruit Growers Co-op and a member of the board of directors of the National Cherry Institute.

Ervin L. Kossow was manager of the firm Reynolds Bros., Inc.

We extend deepest sympathy to the family of the bereaved.



- Pruning and Vista Cutting
- Fertilizing and Root Treatment
- Tree Removal
- Bracing
- Wound Treatment (Surgery)
- Evergreen Care
- Large Tree Planting
- · Effective Weed Control with Specialized Equipment





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For the WISCONSIN GLADIOLUS SOCIE

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PRESIDENTS MESSAGE

Oconomowoc

A happy and prosperous New Year to every member of the Wisconsin Gladiolus Society and to every Gladiolus grower in the state!

The Editor has suggested that the president of the Wisconsin Gladiolus Society write a message each month. This is our first effort.

A conference was held with Mr. E. L. Chambers, State Entomologist on November 24 relative to an annual mid-week Wisconsin Gladiolus Society show at the State Fair. We should easily be able to set up a show that will be of great help to the industry in advertising value. At our spring meeting at Fond du Lac on April 3, Mr. C. P. Halliday will present a plan for our consideration. We shall be glad to have suggestions on how to "sell Gladiolus" to the many visitors at the fair

We also visited Mr. H. Whipple, attorney in the Secertary of States office, in charge of corporation matters. His suggestions for solving our problem will be explained at our spring meeting. Be sure to attend this meeting and send in suggestions for changes in our articles of incorporation and by-laws.

Prof. James Torrie of Madison accepted the responsibility of drawing up the needed changes and will consult Mr. Whipple regarding legal technicalities.

Our Society will grow only by the total effort expended by everybody. Each member and each officer should contribute something. Put your shoulders to the wheel!

Shows

Here are suggestions for Gladiolus shows for our Society for 1949. They are made only to avoid conflict.

July 31 Wisconsin Seedling and New Introductions Show.

August 6 Wisconsin Regular Show. August 13 Sheboygan County Society.



August 20 and 27 one for each Marathon County and Twin Cities.

August 24 Wisconsin Gladiolus Society at the State Fair.

Remember the bulb auction and meeting at Fond du Lac on April 3.

Walter C. Krueger, President

STORAGE BREAKDOWN OF GLADIOLUS CORMS

Fresh Air Needed To Prevent Trouble

If your Gladiolus corms show signs of discoloration or stains and pitted areas of the base or at the nodes which develop into various shades of brown, look out for storage break-It is especially serious in Picardy and Maid of Orleans.

To prevent storage trouble, provide for constant circulation of fresh air. Do not store in closed containers or very large and deep containers. Well matured and well cured corms are not likely to be affected but even these need good ventilation.

Curing with artificial heat immediately after harvest is the best way to prevent trouble.

TALKS WITH GROWERS

"What's new in the Gladiolus world," we asked Mr. Ted Woods, well known Gladiolus grower of Madison in early December. He replied without hestitation, "There are lots of thrips on the bulbs this winter. We had a very few thrips last summer and fall butwhen we started cleaning last month, they almost ran away with the bulbs.' "

Ted advised all growers to dust their bulbs with a 5% DDT dust at once. He is using Duradust which contains 5% DDT and 9% copper sulfate. He puts the bulbs in a large bag, adds the dust and then shakes so that the bulbs are completely covered with the dust.

Mr. Woods reported a very good season during 1948. Irrigation insured a good crop during an otherwise dry season. He planted his bulbs in new soil quite badly infected with quack grass. The quack roots were pulled from the inside of the furrows by hand before planting. Then as soon as quack leaves showed above the soil, they were given thorough cultivation. This was continued every 10 to 15 days and at the end of the Ted reports, "no quack grass." The good results were due to hard work.

We hear that Mr. John Flad of Madison was successful in controlling thrips on corms by dusting with DDT before cleaning. Right after digging. the bulbs were dried in trays and DDT dust was shaken over them.

If the DDT is applied early, it will prevent the thrips increase that may come if there is mild weather for a time after digging, as there was this year.

Some Problems of Gladiolus Breedings

J. H. Torrie

The breeding of new varieties of gladiolus is done largely by amateurs or by persons who catalogue gladiolus varieties. Plant breeding is both an art and a science. In gladiolus breeding it is largely an art in contrast to many of our crop plants where science plays an important role. There are approximately 150 wild species of gladiolus, which for the most part are natives of the Mediterranean area or Africa. About 20 of these species have been utilized in the development of the gladiolus we grow today.

Breeding Objectives

The gladiolus breeder is interested in incorporating many characters into one variety. Some of the more important of these are listed below.

- 1. Good color
- Reliability high percentage of cuttable bloom—adapted to a wide range of conditions.
 - 3. Disease and insect resistant.
- 4. Good floret attachment, texture and facing.
- 5. Ability to open many florets when cut in the bud.
 - 6. Good propagator.
 - 7. Long flower head and stem.
 - 8. Freedom from crooks, etc.

 Physical Basis Of Inheritance Of

Physical Basis Of Inheritance Of Characters The science of genetics deals with the pheritance of characters. The expres-

inheritance of characters. The expression of any is determined by the environment and the genetic constitution of the plant. The factors which control the genetic expression of any character are called genes. These genes which are many in number, are located on very small rod like structures called chromosomes which in turn are located in the nucleus of every living cell of a plant. These chromosomes occur in pairs. Most gladiolus varieties have 30 such pairs. A reduction in the number of chromesomes occur in the egg and pollen of each pair. When the egg is fertilized by the pollen, the 30 chromosomes of the pollen come together with the 30 of the egg. Thus the seeds which develop have 60 chromosomes, 30 female parent and 30 from the male parent. Anyone character is conditioned usually from a few to many of these genes. Also the genetic constitution of the various seeds develop from any given cross differ widely.

New varieties are developed by crossing as discussed above or occur as sports



Dr. James Torrie holding his winning 3 spike seedling entry at the Sun Prairie Seedling Show.

in an established variety or seedling. Sports arise by some change in the gene constitution of the original variety.

Breeding For Disease Resistance

We have many serious diseases of gladiolus, some effect the corms (rots) others the foliage (leaf spots) and still others the flowers (virus). Gladiolus diseases are caused by fungi, bacteria and viruses. Before we can successfully breed varieties which will be resistant to the important diseases we must know: 1. Which varieties are resistant and susceptible to the several diseases. 2. The life history of the disease organisms (which are living organisms) causing the several diseases. The first point is essential in order that the breeder can make crosses in which the parents are disease resistant to as many of the diseases as possible. The second point is essential so that the breeder can artificially inoculate his seedlings with the disease organism and then expose the seedlings to conditions which are favorable for disease development so that he can eliminate those seedlings which are disease susceptible.

Another point which complicates the entire problem is that new diseases are constantly appearing. Also the organisms causing diseases are not static. They are living organisms and are constantly changing. Thus a variety which is resistant to one collection of a specific disease is not necessarily resistant to all collections. Furthermore new forms of the disease organism may evolve which will attack resistance in other crops indicate that while the problems are many they are not insurmountable.

CONTROL TRIPS ON GLADIOLUS CORMS NOW

By dusting all Gladiolus bulbs with a 5% DDT dust, the Thrips which otherwise live over winter on the corms in storage are destroyed. Dust the corms thoroughly using at least 3 to 4 tablespoons of dust to a bushel of corms. If they are in paper bags the dust may be placed in the bag and then shaken so that all the corms will be covered.

SHEBOYGAN CHAPTER MEETING

The annual meeting and banquet of Sheboygan County Chapter of the Wisconsin Gladiolus Society was held in Sheboygan on November 9 with 44 members and 5 guests present. Following an interesting program by the local barbershop quartette, Mr. Walter Krueger, Oconomowoc, president of the State Society gave a very interesting talk followed by a round table discussion on new varieties, color classification and Gladiolus culture.

Officers of the Chapter elected for the coming year were: Otto Kapschitzke, Sr. Sheboygan ,president; Leonard Wightman, Plymouth, vicepresident; Mrs. Leonard Wightman, Plymouth, secretary-treasurer, directors elected are Dr. L. C. Dietsch, Plymouth; Walter Axel, Sheboygan and Peter DePagter, Cedar Grove.

The secretary was appointed to write a history of the chapter from its organization to the present time.

By Mrs. Leonard Wightman, sec.

The people who drive fastest past a school are the same ones who took so long going through it!

BULBS BULBS BULBS

Best Quality — Best Varieties — S T A T E I N S P E C T E D

Write For Price List Thanks to last years customers

We will entertain offers on large quantities in all sizes and bulblets of SNOW PRINCESS, LEADING LADY, ELIZABETH THE QUEEN and ETHEL C. COLE.

Minneiska Gladiolus Gardens Willis T. Miller, Prop. 1016 Highland Street WHITEWATER WISCONSIN

MOUTE ETTING FOR GARDEN

NEW MOVIE FILMS FOR GARDEN CLUBS AVAILABLE

Mr. John Ott, 730 Elm St., Winnetka, Illinois, well known lecturer who has lectured before the garden clubs of Wisconsin has prepared a new series of films for club programs on a rental basis. Some of these are with sound and require a sound projector. We list a few here. For a complete list write Mr. Ott directly.

Flower Arrangements for the Home. Two unusual films featuring Miss Eve Porter of Montclair, New Jersey, in a demonstration of practical flower arranging for the home. Color and sound. Series one—estimated running time 22 minutes. Rental \$10.00. Series two—estimated running time 22 minutes. Rental \$10.00.

How to Grow Roses. This picture shows Mr. C. Eugene Pfister of Mundelein, Illinois at work in his rose garden and demonstrates his recommendations for planting, pruning, fertilizing and proper care for growing prize-winning roses. Mr. Pfister was past president of the Men's Garden Club of America and is recognized as an outstanding amateur rose grower. Includes many time-lapse pictures of roses blooming. Color and sound. Estimated running time 22 minutes. Rental \$12.50.

Experiments with 2-4-D. This picture shows side by side comparisons of the results of using different brands of 2-4-D weed killers. It also gives some helpful hints on effective weed control. Color and sound. Estimated running time 20 minutes. Basic rental \$12.50.

Free Films

Lawn Care. Sponsored by O. M. Scott and Sons Company, Marysville, Ohio. Entertaining and educational, it demonstrates in an interesting way weed control and the proper method of maintaining a good lawn. Color and sound. Running time 20 minutes.

Apples. Sponsored by the Appalachian Apple Service, Incorporated, Martinsburg, West Virginia. Depicts the story of apples and includes a Time-Lapse picture of an apple growing. Sound and color. Estimated running time 25 minutes.

Order your films as far in advance

Garden Gossip



as possible to help us anticipate your needs. Always list second and third choice in case the film of your first choice should not be available.

GARDEN CLUB ENJOYED SLIDES ON FLOWER ARRANGEMENTS

"The Fond du Lac Community Garden Club appreciated the very beautiful slides on Japanese Flower Arrangement sent to us by the Wisconsin Horticultural Society. They were exceptional and the notes accompanying them were interesting and instructive. We could well recommend them to other garden clubs."

—By Mrs. Raymond Hardgrove, Program Chairman and Mrs. Lawrence Skilbred, President, Fond du Lac Community Garden Club.

HERB MAGIC

The Tooles of Garry-nee-Dule, Baraboo, Wisconsin have again sent us a copy of Herb Magic. It is a catalog of prepared culinary and fragrant herbs, gifts and favors and contains many suggestions of interest to horticulturists and home makers.

The bulletin contains this interesting recipe for herb butter.

- ¼ cup soft butter
- ½ teaspoon salt
- 1/4 teaspoon pepper
- 11/2 tablespoons minced herbs

Combine all, working well with a fork until thoroughly mixed. Combinations of herbs: Basil, chives, and parsley; Dill and parsley; Fennel, chervil, and chives,

You will find a copy of Herb Magic very interesting.

MANURE FROM PEAT BEDDING

QUESTION: Kindly let us know your experience with manure from a stable where cattle have been bedded with peat moss. Is the manure resulting in this case better than from straw, or is it worse? Is the manure too acid when produced in this way?

ANSWEE: The manure resulting from a stable bedded with peat moss would be superior for florists' use to that resulting from straw used as bedding. The peat moss absorbs more of the juices from the manure and will retain these juices high in fertilizer. The addition of the manure will encourage peat moss to decay.

We assume you are going to use this manure as a mulch for plants during the growing period, for mixing in the soil during the preparation process or for composting. It is doubtful that the acidity of the peat moss would be sufficient to be injurious to florists' crops. However, it would be well to check the acidity of the soil when the manure is incorporated. If it is too acid for the crop you are going to grow, an application of lime will correct the difficulty.

Kenneth Post, Cornell University, In The Florists' Review.

WHEN IS A PLUM A PRUNE

Technically a prune is a variety of plum which will dry without spoiling. It has a sufficiently high sugar content that spoilage is prevented and the fruit dries down into a product which will keep.

All prunes are plums, but not all plums are prunes.

In some local circles, however, it is not uncommon to find the word "plum" being used for the Japanese types like Burbank, Abundance, Chabot, and October Purple; while the word "prune" is used for the European types like Bradshaw, Monarch, Italian Prune, German Prune, etc. This is not technically correct, but it is a usage that is developing and perhaps may in time become standard.

From Letters To The Editor, American Fruit Grower.

EVERGREENS

Colorado Blue Spruce — \$1.00 each and up. Pyramidal Arbor Vitae—\$1.75. Mugho Pine—\$2.00. Black Hills Spruce, Koster Blue Spruce. Write for lists. Quincy Nurseries Friendship, Wis.

NEW FLOWERS FOR THE GAR-DEN NEW LOOK

All-America Selections recommend three new annual flowers for 1949 introduction. Silver Medal Petunia wins the coveted silver medal. Indian Summer Hollyhock, double flowers in soft pastel colors, wins the bronze medal. Blue Star Morning Glory gets an honorable mention.

These three debutantes of the flower world stood out over many prospective new varieties from all over the world. All new prospects were thoroughly and uniformly tested in different sections of the United States and southern Canada, under all-season observance, scoring and noting, of twenty-one expert flower judges.

Silver Medal Petunia is the second variety winner in a new hybid class called multiflora. Pink Sensation, a rose-pink petunia was first introduced in 1948. Silver Medal is also of the strong growing, most prolific flowering class with deep salmon coloring, popular for bedding, cutting and for arrangements. It grows to 18 inches high. It starts blooming very early; practically covers the vigorous plants with large single flowers and continues blooming until freezing weather. Its strong, erect, busy growth is self-supporting and its hybrid vigor is well compensated with larger and more abundant flowers than standard bedding petunias.

Indian Summer Hollyhock provides an assortment of pleasing colors. While strictly perennial, to last for years, it will bloom the first year from seeds started in early spring. It is thus called an annual double hollyhock. It grows 5 feet or less.

Blue Star Ipomoea or Morning Glory is a sport out of Clark's Early Heaven ly Blue, the universal favorite flowering vine. It is a very light blue with deeper blue midrib stripes, to form a star, pleasing and attractive. Like its parent, it is a rampant grower growing to 15 feet and is literally covered with bloom. It is not claimed to be superior to Heavenly Blue, but another delightful color to add to the white Pearly Gates, red Scarlet O'-Hara and rich Heavenly Blue morning-glories.

Seeds may be obtained from any reliable seed firm in 1949.

WHERE DID THESE TREES COME FROM ORIGINALLY?

Look these up in your books and catalogs and see what you can find out about each one.

- 1. Empress tree
- 2. Chinaberry
- 3. Chestnut
- 4. Live Oak
- 5. Sweet Gum 6. Mountain Ash
- 7. Redbud
- 8. Scotch Pine
- 9. Norway Spruce
- 10. Sycamore

ANSWERS TO - WHERE DID THESE TREES COME FROM?

- China, escaped and naturalized in Southern U. S.
- S. W. Asia, naturalized in Southern U. S.
- 3. Eastern U. S. until killed by blight.
- 4. Va. to Fla. west to Mexico.
- Conn., N. Y. south to Fla., Ill., Mo., and Mexico.
- Northern U. S., also European form.
- N. J. south, west to Mich., Mo., and Texas; also China and Europe.
- 8. Europe to Siberia.
- 9. North and Central Europe.
- Maine to Ontario and Minn. south to Fla. and Texas.

BELIEVE IT OR NOT

Whitewash is useless as a disinfectant. It may hide but does not kill plant diseases.

Tar and creosote are dangerous and may damage plants.

Mulching with a layer of organic material as corn cobs, peat moss, barnyard manure, etc. often stimulates root action.

So called acid phosphate is not acid. It should be called super phosphate.

Ammonium sulfate, except in very large doses and over long periods of time, does not acidify soil to any appreciable degree.

By Victor Ries in Country Gardeners Program Service.

Smith's legal expenses had been running high, so when he met his lawyer on the street, he said, "Nice day, isn't it? Remember, I'm not asking you, I'm telling you."

FLOWER MAGAZINE

Small but interesting. Published monthly. Gardening, Flowers, Nature Notes. Bargain ads. 75 cents per year. Sample copy 10cents. Introductory offer 16 months \$1.00. GARDEN GLEANINGS, 76W
NEW TROY, MICHIGAN



Garden Gleanings

USE OF FERTILIZERS has increased by 2½ times over the amount used before the war in the United States according to the Fertilizer Association. Nitrogen and Potash fertilizers has increased by 26% of the 5 year pre-war average. Nitrogen has increased by 25%.

CROCUSES AND TULIPS will survive under trees and shrubs but not under evergreens. The reason-enough sunlight penetrates through the leaves and branches of trees and shrubs early in spring to provide food for the bulbs for next years bloom. This would not be true under evergreens. We have seen tulips blooming under a Sumac bush for a number of years in a relatively dry and unfertile soil.

TREE WOUNDS ON LARGE TREES can be filled with a special wood—flour mix and heal over. Even very large wounds can be healed but the job should probably be done by an expert. The wood—flour mix will expand and contract like natural wood and will heal over in a number of years. The wound underneath however must be properly cleaned and chisled out down to healthy wood so that rot organisms will not continue under that filler. Do not use concrete fillers.

WATER FROM YOUR WATER SOFTENER will alkalinize your soil much more rapidly and show a higher degree than hard water. This may be a surprise to many gardeners. According to soil experts, these sodium carbonate which results when a water softener is used is very soluable and if continued use may bring your soil up to pH 10 or 11. If this happens, many essential plant food elements may be locked up and unavailable to the plants. The Calcium carbonate or lime in hard water will not raise the pH more than 8.

DOES DDT KILL FLIES AS QUICKLY as it did several years ago. There have been many complaints especially from farmers who are troubled from flies in August and September that DDT is not as effective as it was when it was first introduced. Analysis shows that DDT is, in most cases, of good quality. Experts now think the flies are more resistant. Perhaps the weaker flies were all killed off and a stronger strain was



developed more resistant to the effect of DDT. We will have to get them now with a new type of spray.

EXPERIENCE IN GROWING AFRICAN VIOLETS

"Why dont my African Violets bloom?" This question has been asked so many times that we decided to grow these beautiful plants and try to find out how to make them bloom. Last September we purchased 14 named varieties, which are being grown in different ways.

First we decided to find out if it is really true that one should not wet the leaves. We placed some plants in the greenhouse on a bed of gravel. sprinkling the gravel frequently to keep it damp and provide humidity. Then almost every day we took a sprinkling can full of warm water-so warm it was almost hot to the touch and sprinkled it over the plants, wetting all the leaves but being careful not to get the soil too wet. They seemed to like it and produced flowers sooner than plants in the office window where the leaves were not moistened. The plants were in part shade due to a tree which shaded that part of the greenhouse. It is claimed that the leaves will burn if in bright sunlight after being moistened. The plants do not like direct sunlight excepting in midwinter.

We also found that after repotting in a large pot of rich soil, the plants did not bloom for several months. They developed a large root system, produced large vigorous looking leaves and finally when the pot was full of roots they produced flowers. Such plants however were larger, more vigorous and produced more flowers than those in small pots. So even though we had to wait quite a while for the flowers it was worth it.

WARNING—KNOW YOUR NURSERYMEN

In the American Nurserymen magazine is found an excellent warning for all home owners. It emphasizes that you can't get something for nothing and it is best to know your nurserymen before you buy. An 8-point warning was given as follows:

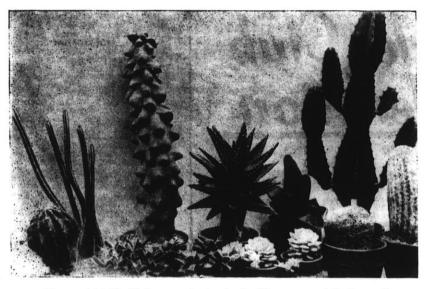
- 1. Grass seeds which may be ninety-five per cent chaff may be sold at exorbitant prices.
- 2. Trees may be sold without being inspected.
- 3. Rosebushes kept in greenhouses longer than two years will not grow.
 - 4. Sod cut too thin will not grow.
- High-powered selling of impractical plans for landscaping, shrubs, etc., sold which will not grow in this territory.
- 6. Black dirt allegedly sold from greenhouses and represented as extragood. It may be worn-out.
- 7. Out-of-town nurseries may fail to deliver in time for the growing season.
- Salesmen representing out-of-town concerns may not accept responsibility for unfilled or unsatisfactory nursery shipments.

In the same magazine is the statement that the Michigan Bulb Company of Grand Rapids, Michigan, who advertised extensively in Wisconsin for several years was finally tracked down. They advertised gladiolus bulblets—100 for \$1.94. They were stopped by the Federal Trade Commission.

Sambo: "How come you're in jail?"
Rastus: "For throwin' rocks out my
neighbor's yard into mine."

Sambo: Dat don't sound right."
Rastus: "Well, they was Plymouth Rocks."





Types of highly fleshy succulents, six families represented: Compositae Cactaceae, Alzoaceae, Liliaceae, Euphorbiaceae, Crassulaceae. — Cut courtesy Missouri Botanical Gardens.

What is a Succulent?

These Popular House Plants Do Well In Average Home By Ladislaus Cutak, Missouri Botanical Gardens

Succulents are now an essential feature of almost every flower and garden show that is staged in this country. However, it is only within the last few years that they have become popular and that their suitability to so many purposes has been appreciated.

First, it is well to know the origin and meaning of the word "succulent." It is derived from the Latin succulentus, meaning juicy, pulpy, and thus is an apt term to describe plants with juicy stems, branches, or leaves. However, we must remember that there are a great many juicy individuals in the plant kingdom which, horticulturally speaking, must be excluded from the succulent category for a number of reasons. For instance, many of the Begonias possess fleshy stems and leaves but usually they require a great deal of moisture to keep them alive. Also, they are ruled out as succulents because they do not possess the general character of stiffness, spininess, or grotesque elegance usually associated with succulent plants.

Like Dryness

A true succulent is a plant which has leaves and stems of greater thickness than the average and which can periods withstand prolonged drought. Usually the appearance is rigid and sculptured, weird and grotesque, and, to use a modern expression. "strictly out of this world." Succulents generally are exposed for the greater portion of the year to extraordinary dryness. They prefer arid sandy and stony plains, master rocky plateaus and crevices of rocks which are almost completely wanting in soil. Succulents are capable of hoarding water from infrequent rains in special storage tissues and rely upon it during periods of need.

One reason why succulents differ from other plants in appearance is that they have developed thickened or fleshy organs so that the transpiring surface would be reduced to a very small area. Plants transpire just like people, and unless they modify their structures to meet abnormal conditions of the deserts, the excessive heat and dryness would soon cause the moisture from within to evaporate and the plants would die.

Arbitrarily, succulents can be divided into two classes: thick-leaved and fleshy-stemmed. The former have modified their foliage so that it is unusually fleshy, more or less cylindrical in shape, and often of firm and leathery texture. Good examples can be found in Sedums, Kleinias, Gasterias, and Mesembryanthemums. In the fleshy-stemmed (usually referred to as cactiform) group, best exemplified by cacti, spurges, and stapeliads, the plants have discarded foliage almost entirely or reduced it to a rudimentary state. In this group the greatly thickened and fleshy stems have assumed the function of leaves. It is an established fact that a thickened organ has less surface exposed to the air than a thin flattened one of the same bulk. To make this point clearer, take a small ball of meat or dough about an inch or two in diameter; now roll it out in a flattened cake, and the surface area will have been increased many fold. Thus the plump forms typified in succulents were designed to reduce surface and lessen water loss by evaporation.

Condensed from Missouri Botanical Garden Bulletin.

See Andrews

Hardy Perennials For Gardens and Cut Flowers

in the NEW FREE '49 Color Catalog



ROSES Exquisite Sub-Zero Hybrids, bred for northern gar-Sub. for northern dens . . . R little care.

Be sure to send for your copy of the all-new ANDREWS 1949 CATALOG. It's full of color illustrations, factual descriptions of the best varieties of many fruits and perennials, and helpful hints for northern gardeners. Below are some of the items we believe you'll like best because they are all bred for hardiness . . . bred to withstand cold Wisconsin and Minnesota winters, yet display all the color and fragrance southern gardeners enjoy with less hardy varieties.

MUMS till frost.

PHLOX Hardy, dwarf Early late, Ever-Enjoy lovely red.
Minnesota Mums blooming varieties lilac-blue and pink for a riot of gar- to fit every gar- blossoms in your den color from dener's pleasure. garden this year.

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PRESIDENTS MESSAGE Dear Fellow Members of the Wisconsin Garden Club Federation:

When your state executive officers went into each of your five regions last week for our annual visits with you we found you warm in your welcome, gracious in your hospitality and most eager in the "give and take" of our "Club Institute."

For the benefit of those of you who missed these inspiring and useful meetings I'll explain that this year instead of having both the executive officers and state chairmen make the tour, the executive officers, only, visited the regions. Mrs. Ervin Kulow, 2nd Vice President of the Wisconsin Federation and director of the meetings called on each club for its successful accomplishments and also its problems, with the amazing result that many of these problems were automatically solved upon hearing of the successful programs and projects of other clubs.

This interchange of ideas brought inspiration as well as a closer relationship to clubs of our Federation. Your president finds this gratifying as the keynote of my year's service will be to unify and therefore strengthen our garden club federation.

In line with this idea several new policies were presented at the meetings. The first is to compile a list of state and district officers and chair-



"And then again I see you and your Massed dimly on some disslope, Like giant sentinals in lave."

"Trees In Winter." kind conclave.

men and also the executive officers of each garden club in the Wisconsin Federation. This list will be multigraphed and sold at 25c per copy.

Secondly we are making district not state projects of our tours. Also our state flower show will be dispensed with this year in favor of five large district flower shows. In this way all garden club members can take part in putting on a big flower show.

Besides having educational value, this year's plan promises financial benefits for the districts. All funds resulting from the five shows will belong to the districts.

The third new policy is that of having a mailing list of our own. We are a group of 3,299 but we have never received any every-member announcements from our federation because we are not equipped with our own mailing list.

At the Regional meetings I presented this matter to the members where it was well received. It was then voted that a ten cent per capita assessment be made on all of our members, five cents of which will be used to have an addressograph plate (with frame) made for each member's name and address, a number for your district and two letters for your club. The other five cents will go toward buying an addressograph machine (second hand) in which to use these plates.

When this is accomplished you will, for the first time, receive an every member notice of your Federation's vital activities. Heretofore all federation notices have gone only to the presidents of the clubs. If you were absent from the meeting at which the announcement was made the chances are you never heard about it.

We hope you like these new ideas, for our only aim is to serve you, our Wisconsin Garden Club Federation, in the best way possible and to please the large majority in an evergrowing federation.

Let me thank all of you kind, thoughtful people who gave so generously of yourselves and your energies in making the Regional meetings so pleasant and so memorable. They were wonderful because you made them

> Very gratefully, Your executive officers. Gretchen Fiebrantz, Pres.

Highlights—

from

THE NATIONAL GARDENER

The November-December, 1948, issue of our National Council bulletin The National Gardener is unusually full of inspiration and information. The president's message, "The Miracle of the Seed," tells how "SEEDS OF PEACE have grown not only into peas and carrots and tomatoes. but have flowered in faces of children and in the hearts of men and women." Among the accounts of garden activities for veterans in hospitals is a particularly heartening story of sailors in Rhode Island who exhibited their own flower arrangements at the state show and won awards.

The following announcement was made:

"At the Lexington meeting, the National Council Board voted that our 20th Anniversary Gift to our Nation will be 40 acres of magnificent Giant Redwood Trees situated in Humbolt County, California. It is especially appropriate to make this Anniversary gift because this Grove will be the terminus of the Blue Star Drive, our memorial to our Armed Services. This Blue Star Drive now stretches in an unbroken line from the Atlantic Ocean to the Pacific Ocean and the Redwood Grove will be a dramatic ending on the Pacific coast.

"The National Council of State Garden Clubs is now a large and powerful organization. It is growing rapidly, and it is fitting that it now take its place on the list of public spirited organizations who have helped to preserve these trees.

"This is an Anniversary Gift that will have a special appeal to all conservationists because this grove is an almost pure stand of redwood. After 20 years of constructive conservation work you now have an opportunity to act to save a portion of this magnificent forest."

It is suggested that the necessary funds for this gift may be raised by individual contribution, by state federation gifts, by club donations as a conservation project, or by Life Memberships in the National Council of State Garden Clubs, one half of each \$100 membership going toward this project until its completion. Checks should be made payable to Mrs. Hugh Peters, Chairman, the Redwood Grove, National Council of State Garden Clubs, 500 Fifth Ave., New York 18.

A New Year's Thought

Anyone who has not learned to escape from this world has missed one of the most elemental lessons of life. As year follows year this demand grows more imperious. How can anyone stand this world's noise and confusion, its externalism and immediacy unless occasionally we get away from it? Moreover, see how people everywhtre are trying to escape it. If we are one kind of person we turn to the monastery, if we are another kind we turn to drink or drugs, if we are still another kind we turn to music or nature. This sort of experience so needed, so sought after, far from being wrong gives to men strangely new power so that escaping this world a man can go back to it with an impact upon it for goodness, truth and beauty hitherto unknown.

As one thinks of the world we have left behind and the world ahead is there not a secret here which we garden lovers need? We need escape and where is there a better place to escape to and be alone and think on the eternal verities of life than in our gardens. It has been said, that man is nearer to God in the garden than anywhere else on earth. There must be definite truth in this for wherever our Lord sought renewed strength and courage we find him in a place called a garden. The greatest decisions of his life were made there and to a garden-lover this is understandable. If one gazes long enough and works hard enough in one's garden the garden's beauty and strength will gaze into us. I never walk through the lovely garden of Genevieve Dakin except that I feel refreshed and empowered.

We need something more than mere busyness to get our lives lived well. We need a place of retreat where we

can be alone with our thought and God. Laziness is not America's besetting sin. We are a busy, active people. What we have not learned is how to retreat into the garden ourselves alone. When I'm sickened by the world I find great healing and health in my own modest garden. As I watch the glorious flowers come and go I join the poet's spirit as he contemplated the handiwork of the Creator. From the little blue scilla as it appears early in the spring to the last fading mum laid low by the icy hand of winter I say, "And what are kings in all their wealth and splendor compared to the beauty of these, and if God so clothes these which today are and tomorrow are gone will he not much more care for you, oh ye of little faith." My garden has always been, and wherever I go I hope will always be, a place of retreat to which I can retire myself alone and from which I can return to a sick world with love and healing in my hands. What I feel as I move about in my garden I find expressed in Thomas Edward Brown's lines when he wrote:

"A garden is a lovesome thin, God wot!

Rose plot,

Fringed pool,

Fern'd grot-

The veriest school

Of peace; and yet the fool

Contends that God is not-

Not God! in gardens! when the eve is cool?

Nay, but I have a sign;

'Tis very sure God walks in mine."

May 1949 find all of us using our gardens this way.

-Rev. W. C. Emigholz, Platteville

An important resolution adopted by the American Association of Nurserymen in their annual convention, held late in August in Milwaukee is quoted:

"In recognition of the interest and efforts of the National Council of State Garden Clubs through its national, state and local organizations in the promotion of a more beautiful America by landscaping, and

"In consideration of the confidence the Council has expressed in the American Association of Nurserymen, Inc. by suggesting it prepare the basic planting design for the markers of the Blue Star Highway, a memorial project to World War II veterans, conceived and promoted by the Council,

"BE IT THEREFORE RESOLV-ED, that the American Association of Nurserymen, Inc., formally express our appreciation of the Council's confidence and vote to extend to the Council our support to its program for the elmination of highway billboards and other roadside blights which destroy or impair the natural beauties of the landscape."

A REQUEST

Mrs. Conrad A. Biebler, Milwaukee, our new Conservation Chairman has sent in the following request to be printed in this issue:

"Will each Garden Club President, elected in January, please appoint a Conservation Chairman, and will that chairman report to me as to whether the subject of Conservation is taught from lower grades through High School in the schools in their respective locals."

NOTE: Mrs. Biebler is president of the Woman's Conservation League of America, an alert organization of devoted conservationists.

SCHOLARSHIP AWARD

Everyone who attended the annual meeting in October, here in Milwaukee heard that we were able to increase our Scholarship award this past year to \$200, an amount much more fitting to our membership. The scholarship was won by a married veteran, Eugene L. Peterson, senior in the Wisconsin College of Agriculture, where he proved himself to be a superior student in Horticulture.

Mrs. Fiebrantz has asked me to carry on the Scholarship chairmanship another year and I am delighted to do so. This scholarship idea has taken a hold on me, and I am gratified to see how much more interested the clubs have become.

The 79 clubs who responded last year did just the right thing. What about the 23, who did nothing?

Now what can I do to make this Scholarship idea strictly 100 per cent? It is true, no one is forced or under any obligation, other than a moral one, to contribute. Our contributions are entirely voluntary. And yet—this is such a fine thing to support!

If I can make each club realize that it is a privilege to support this Scholarship and that you should contribute in proportion to your size and ability to pay, then will we as a Federation be proud that we are matching our efforts with those of the worthy student chosen to receive our award.

This is the beginning of our fiscal year. Let me urge you in setting up your club budget to make the Scholarship appropriation right away and to send it in immediately.

Please help me. Let us make this year's Scholarship fund 100 per cent representative of our Federation.

- Allison More Kiechefer

TREASURER'S FINAL REPORT AS OF NOVEMBER 26, 1948 WISCONSIN GARDEN CLUB FEDERATION GENERAL FUND

GENERAL FUND		
BALANCE NOVEMBER 1, 1947	\$	695.25
RECEIPTS		
Dues to and incl. Nov. 26, 1948		
Regional Meetings	113.50	
Seeds of Peace Contributions		
Sale of Judging School Handbooks		
Judging Sohool, Milwaukee District Stationery	10.30	
Volunteer Subscriptions to National Gardener	7.50 7.00	
Sale of Bird and Floral Notes		
Garden Tours		
Convention Receipts (Registrations)	303.00	
	5,479.48	
DISBURSEMENTS		
Wisconsin Hort, Society Dues (3108)		
National Council Affiliation Dues (3299)	164.95 10.00	
Board of Directors' Meetings (2)		
Executive Board Meetings (3)		
Regional Meetings		
President's Gen. Exp. Allowance	75.00	
President's Regis, fee at Natl. Coun. Mtg	24.00	
President's Exp. Allow. at Natl. Coun. Mtg.	25.00	
Addl. Allow. voted Pres. by Bd. of Drs		
Vice Pres. Regis. fee at Natl. Coun. Mtg.	24.00	
Vice-Pres. Exp. Allow. at Nat'l. Coun. Mtg	25.00	
Co-Editor's Expense Allowance	25.00	
Treasurer's Salary	50.00	
Treasurer's Bond	5.00	
Treasurers Postage & Supplies	29.68 18.62	
Secretary's postage & supplies		
Committee Chairmen's Expense	23.19	
National Council—Seeds of Peace		
National Council-Vol. Subs. Natl. Gardener	7.00	
National Council—Vol. Subs. Natl. Gardener	7.00 66.00	
National Council—Fl. Show Judging Handbooks		
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense	66.00 250.36 3.50	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis, Conservation Dept.—Film for Korea	66.00 250.36 3.50 82.08	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds	66.00 250.36 3.50 82.08 1.75	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award	66.00 250.36 3.50 82.08 1.75 4.02	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy	66.00 250.36 3.50 82.08 1.75 4.02 4.69	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award	66.00 250.36 3.50 82.08 1.75 4.02 4.69	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total	66.00 250.36 3.50 82.08 1.75 4.02 4.69	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts Total Disbursements \$5,479.48	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$ 349.57
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 \$1,361.93	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 \$1,361.93 RECEIPTS:	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 RECEIPTS: Net Profit Convention Flower Show	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 \$1,361.93 RECEIPTS: Net Profit Convention Flower Show	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 \$1,361.93 RECEIPTS: Net Profit Convention Flower Show Milwaukee, Oct. 7-8 10.04	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 \$1,361.93 RECEIPTS: Net Profit Convention Flower Show Milwaukee, Oct. 7-8 10.04 DISBURSEMENTS:	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 RECEIPTS: Net Profit Convention Flower Show Milwaukee, Oct. 7-8 Total Total Total Total 49.88 Boom Rent Pfister Hotel, Flower Show	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 \$1,361.93 RECEIPTS: Net Profit Convention Flower Show Milwaukee, Oct. 7-8 10.04 Total DISBURSEMENTS: Expenses Centennial Exhibits 49.88 Room Rent, Pfister Hotel, Flower Show Exhibits Oct. 7-8 50.00	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35 85,129.91	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 RECEIPTS: Net Profit Convention Flower Show Milwaukee, Oct. 7-8 Total Total Total Total 49.88 Boom Rent Pfister Hotel, Flower Show	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35	\$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35 55,129.91	\$1,044.82 \$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 \$1,361.93 RECEIPTS: Net Profit Convention Flower Show Milwaukee, Oct. 7-8 10.04 Total DISBURSEMENTS: Expenses Centennial Exhibits 49.88 Room Rent, Pfister Hotel, Flower Show Exhibits Oct. 7-8 50.00 Total BALANCE NOVEMBER 26, 1948 SCHOLARSHIP FUND	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35 55,129.91	\$1,044.82 \$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 \$1,361.93 RECEIPTS: Net Profit Convention Flower Show Milwaukee, Oct. 7-8 10.04 Total DISBURSEMENTS: Expenses Centennial Exhibits 49.88 Room Rent, Pfister Hotel, Flower Show Exhibits Oct. 7-8 50.00 Total BALANCE NOVEMBER 26, 1948 SCHOLARSHIP FUND BALANCE NOVEMBER 1, 1947 \$6.32	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35 55,129.91	\$1,044.82 \$1,044.82
National Council—Fl. Show Judging Handbooks Barton-Cotton: Bird & Floral Notes Judging School Expense Wis. Conservation Dept.—Film for Korea Refunds Achievement Award Courtesy Convention Expenses (Listed separately) Total Total Receipts \$5,479.48 Total Disbursements \$5,129.91 Balance BALANCE IN GENERAL FUND NOV. 26, 1948 Brought Forward: General Fund FLOWER SHOW FUND BALANCE NOVEMBER 1, 1948 \$1,361.93 RECEIPTS: Net Profit Convention Flower Show Milwaukee, Oct. 7-8 10.04 Total DISBURSEMENTS: Expenses Centennial Exhibits 49.88 Room Rent, Pfister Hotel, Flower Show Exhibits Oct. 7-8 50.00 Total BALANCE NOVEMBER 26, 1948 SCHOLARSHIP FUND	66.00 250.36 3.50 82.08 1.75 4.02 4.69 539.35 55,129.91	\$1,044.82 \$1,044.82

From One Gardener to Another

Genevieve C. Dakin

By Thanksgiving the fall garden work was practically behind us. About the middle of November saw roses hilled up ready for the top cover of marsh hay. We hill up with compost to a height of ten inches. In spring the compost is worked into the soil. Alberta spruces will need protection of burlap screens when winter sun tends to burn their snow-laden boughs.

That the marsh hay really came from a marsh, I am confident. Its scent brought back memories of those warm spring days long ago when we waded a creek, picked bunches of watercress and drank in the minty fragrance from the marshy margins of the stream.

To cover part of the primroses we gave those prostrate junipers which top the wall a severe trimming. Hay had to help out with others. Newly acquired stands and seedlings are coddled a bit under glass wool. Some choice primula came from British Columbia in August. Though well established after three months of watchful care, glass wool protection seemed the safest bet for their first winter in our severe climate.

Perhaps you know there is but fourteen degrees variation in Victoria's temperature. Lucky gardeners, these folks in the Pacific Northwest, with the Japanese Current's moderating influence!

Azaleas, Japanese Maple, daphnes and hypericum Sungold are wrapped as a protection against drying wind and sun. A blanket of leaves was first placed around the base of each shrub. A tall inverted basket filled with oak leaves offers good protection, too.

Layers of newspapers are wrapped around two young Nanking cherries and a Burkwoodi viburnum. A few years ago three prunus of blooming age were girdled by rabbits and twenty-seven inches of the viburnum were cut off. I am taking no chances on the two descendants of my bird cherries sharing their parents' fate. We miss the April bloom as well as the translucent fruit of those prunus tomentosas. They vied with viburnum fragrans and a Sargent's cherry in serving as companions to hepaticas and early bulbs.

Last year snow fell before we got crates over foxgloves and several did not survive. I felt almost self-righteous when I got their seedlings covered early this fall and marked mums to be moved in the spring.

The vegetable garden had been turned weeks before. A bale of peat lies open to absorb winter rain and snow. The cold frames are covered. In one are violas from the border and some ladyslippers received too late to plant in the garden.

In the newer frame—the one with the electric cable—are planted seeds of Vetterle and Reinelt's polyanthus, seeds of dryas and blue geranium collected in Canada, along with others purchased at the Butchart Gardens and Glacier Park. A third frame holds labeled rows of Alpine seeds from the American Rock Garden Society's seed exchange. In April I shall be eagerly watching for tiny seedlings to make green lines against the soil's dark surface. Those in the electrically warmed frame will come along fast after the current is turned on.

Someone asks: "Do you have a greenhouse?" No, I do not. It would

be fun to dig in the dirt, when I feel the urge, or to grow some flowering house plants. However, the truth is I have to recognize my own limitations. When plants are ready for their winter sleep I am happy to see the garden tucked in safely. Thousands of plants have been lovingly mothered for many months and. frankly, I am ready to forget weeding, watering and such duties for a time. Other interests fill the winter months and with spring my gardening vigor is renewed. Winter evenings give an opportunity to catch up on magazines and bulletins. With midwinter a surfeit of catalogs means lists made, cut and recut in a vain attempt to strike a balance between wants and budget.

The florist's shop augments a few fool-proof houseplants and a battery jar and covered antique compote are being utilized as terrariums to house some erodiums, tiny gentians and cuttings.

Christmas roses, a dozen strong plants in a colony near a living room window, are a real joy. Waxy white chalices, with just a flush of pink as they age, rear their heads above broad cut leaves of grayish green to bring their own message of holiday cheer.

TREASURER'S REPORT — Contin	ued		
RECEIPTS:	ueu		
Transfer Living Memorial Donation	5.00		
Contribution	1.00		
Mrs. Kieckhefer, Chairman			
_			
Total		\$ 229.82	
DISBURSEMENTS:		•	
Mrs. Kieckhefer, Chairman	6.00		
Regents, University of Wisconsin (Award)	200.00		
Total		206.00	
BALANCE NOVEMBER 26, 1948	••••••	•••••	23.82
PERMANENT FUND	20.20		
BALANCE NOVEMBER 26, 1948 (No receipts—no d	isburser	nents)	250.00
TOTAL IN ALL FUNDS NOVEMBER 26, 1948			.\$2,590.73
RECAPITULATION			
TOTAL IN ALL FUNDS NOV. 1, 1947		.\$2,318.50	
Transfer of Living Memorial Donation			
to Scholarship Fund		. 5.00	
90			
			\$2,313.50
TOTAL RECEIPTS 11/10/47 to 11/26/48		\$5,713.02	
TOTAL DISBURSEMENTS 11/10/47 to 11/26/48		5,435.79	
NET GAIN			277.23
BALANCE NOVEMBER 26, 1948			\$2,590.73
RECONCILATION OF CASE			·• ·• · ·• · · · · · · ·
November 26, 1948			
Bank Balance 11/26/48		\$2,621.57	
Checks Outstanding Nos. 241-3-4		30.84	
Check Book Balance 11/26/48			\$2,590.73
Continued on Page 126			um• au • comit = to total

Dock is a favorite,

Weeds in Arrangement Emma C. Schipper

"I didn't know you could do anything so nice with weeds," was one of the first things I heard after my television flower arrangement broadcasts over WTMJ last July.

The weed which aroused so much admiration was none other than ordinary dock, picked in its early rust stage of development, combined with prunus foliage and small sized hosta leaves. To complement this arrangement a leaf-shaped container, terracotta on the outside and chartreuse colored on the inside, was used.

Because of its changing color from early spring to late fall, dock has become one of our most popular weeds. In spring, during its yellow-green stage of development, I have seen it combined effectively with orange lilies, arranged in a brass container - copper would have been just as lovely. For an all green effect I have seen it combined with darker green foliage and arranged in a still deeper green container, all of which served to illustrate how the monotony of one color can be relieved, and var-

lety introduced, by using it in different values. The deeper green of the container was in sharp contrast to the lighter green of the dock and the medium green of the foliage was the transition which tied them together.

It is in its rust stage of development that dock has its greatest attraction for me. My favorite concoction is to combine it with yellow-rust helenium and zinnias in a pyramid style.

The arrangement pictured here shows dock in its darkest, or last stage of development, combined with milkweed pods and peony foliage which has begun to turn brown. At the base clinkers were used to conceal the holder. Here again the square container is terracotta on the outside and chartreuse colored on the inside. Most apparent in this composition was the harmonious blending of color and texture and the Oriental influence expressed in the arrangement.

Dark brown dock also combines well with cattails and small sunflowers.



Dock, Milkweed Pods and Peony Foliage Attractively Arranged in Terracotta and Chartreuse Container.

The most unusual way to use it that I know of is to fashion it into a Christmas wreath, adding some cones and highlighting the whole with gold paint.

To those who "never have anything to arrange" try dock. It's plentiful and as free as the air you breathe.

Five Letters

DISTRICT PRESIDENTS SEND GREETINGS ---

Urge Unity and
Co-operation in
Garden Clubs.

Dear Fellow Members of Fox River Valley:

Just a little note to bring the season's greetings to each of you, and to express the hope that during this coming year our interest in and enjoyment from our garden clubs may be even greaer than it was during the past year.

Perhaps I am, as the old Quaker told his wife, a "little bit queer," but to me the most valuable thing we get from our garden club associations is not additional knowledge in the ways of delephinium and chrysanthemum, but the acquaintance and friendship of people in clubs many miles distant from our own.

To attend a district or a state meeting and to receive from across the room a smile from a friend made through garden clubbing is indeed heart warming. In the East, beyond our Nation's borders, is confusion, dissention, utter disorder; to the West is war with its attending horrors. May we, in the quiet of our gardens, plant the seeds of peace and friendship so thick that the weeds of strife never get a chance. Marion B. Jenkins, Dist. Pres.

Dear Members of the Madison District:

We officers of Madison District cherish this opportunity to greet each member of our 11 clubs. We trust that your holiday includes a reunion and other traditional joys of Christmas. We earnestly hope that the New Year will bring fulfillment in dreams realized and a keener enthusiasm day by day.

All of us are gardeners, whether of window boxes or of landscaped acres. We are united in the friendly business of making seeds and bulbs grow for greater beauty. We seek to understand and promote one of the fundamental things in live — the earth's fruitfulness. That is a mighty bond!

Because we are members of a federation there is available to us every sort of help from our district and state departments, communicating through the appointed chairmen — a simple law which is workable insofar as club chairmen are alive and interested.

Pride in the integrity of our State Federation is well justified but that integrity in turn depends upon the zeal and contribution of 3,315 individual members.

Mrs. David Bogue, District President.

The Westfield Garden Club, with 16 members, is the newest addition to the Madison District. The Federation welcomes them.

GARDEN CLUBS!

Please -

 Read carefully the financial report printed in this issue.

Report to the District Mail Box news of any outstanding activity or successful project you think other clubs should be told about Our District news columnist will be grateful to you for your help in making this a constructive and valuable page.

BOOK REVIEWS

Dagny Borge

Now that our gardens are dormant, and the new seed catalogs have not yet put in an appearance, there may be time to read of gardening in other countries. Perhaps horticultural books from the British Isles are of more general interest than those of other lands, since they are written in a language we all can read, and more easily available.

In a short article on English gardens, published in the November-December issue of the National Gardener. Bulletin of the National Council of State Garden Clubs, amazement is expressed at the beautiful dooryard gardens that the British somehow contrive to maintain under their austerity regime. During the years when England was expecting an invasion at any moment it was amazing to see the continued high quality of English garden magazines, that kept up publication under a much more severe paper shortage than America experienced. There is still some evidence of such shortage. Occasionally business letters from the Eritish Isles are enclosed in reused envelopes, and there are instances of jackets on new books being printed on paper with wholly unrelated prior printing on the reverse side

Some British books issued during the last year or so treat of the "allotments" planted from necessity and desire to help increase the food supply, the British version of Victory Gardens. Among these are the following:

Planting for Plenty, When and What to do in the Garden, by R. C. McMillan. This is composed of a page per week, with an appropriate photograph on each opposite page, a practical guide to gardening in Scotland. The writer took a large part in the "Dig for Victory" campaigns of that country. Faber and Faber, Ltd., of London published the book in 1947.

Gardener's Chance, from War Production to Peace Possibilities, by Roy Hay, is written by a man who was employed by the Ministry of Agriculture to direct and reward the efforts of "Victory Diggers." During the recent hostilities areas under cultivation were increased upward of 200,000 acres. Waste ground, parks, and recreation grounds, as well as blitzed sites were used to grow vegetables.

The author believes that efforts of backyard gardeners are well worth encouraging in peace time as well. The book was published by Putnam and Company, London, 1947.

Over to Flowers, by Marguerite James. Taking advantage of the interest developed by children during the war in allotments for vegetables, this author writes with the intention of fostering a continuing interest in horticultural pursuits for pleasure. The book is very elementary, both in text and illustrations, but could be used profitably by adult beginners. Lutterworth Press, London, published the book in 1947.

The World of Living Green, by Kathleen Madge, is dedicated "to all children who understand flowers." The first half of the book is devoted to "Plants in the Real World." The second part deals with flower myths and legends. It has "scraperboard" illustrations similar to woodcuts, and was issued in 1947 by the same firm that published the children's book mentioned above.

During the late war an unusually attractive series of slim volumes, Britain in Pictures, began publication by Collins of London. All contain exquisite color plates, in addition to other illustrations, although selling for less than two dollars. Those of the series that are of horticultural interest include Trees in Britain, by A. L. Howard; British Herbs and Vegetables, by G. M. Taylor; Wild Life of Britain, by F. F. Darling; Wild Flowers in Britain, by G. Grigson; English Gardens, by Harry Roberts.

The Ministry of Agriculture continued during the war and since to issue attractive informative bulletins, including several on various phases of horticulture. Recently issued are one on plums and cherries and another entitled "Outdoor Salad Crops."

An Agricultural Testament, by Sir Albert Howard, is an English book in which a good many American gardeners have shown particular interest during recent years. It seems deservedly to be the best known of the books by this distinguished exponent of composting. In The Earth's Green Carpet, Louise E. Howard, Sir Albert's wife describes in non-technical language the principles of her husband's agricultural reforms. Lady Howard also is a scientist, and this is not her first venture in writing. In this book she stresses what has been learned from agricultural practices in the Orient, where population presses heavily upon the land, and where widespread poverty prevents general use of commercial fertilizers and new improved strains of seed. Appendices explain Sir Albert's Indore process and give practical and explicit directions for composting. This book was published by Faber and Faber, Ltd., of London, 1947.

All publications reviewed in these pages may be borrowed from your local public library, or from the Traveling Library in your state capital.



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WISCONSIN TREE SERVICE

Saving Our Pines

During the Christmas holidays we have been enjoying decorations of various evergreens. Among these the pine is a favorite. A recent issue of Scientific Tree Topics,* published by the Bartlett Tree Research Laboratories is devoted to diseases and pests of pines, and means by which control or eradication of these troubles is attempted.

In a paper on white root rot and its relation to white pine blight, the following statements are made:

"Planted pines of eastern United States and Canada are sometimes subject to a disorder which causes them to become more or less permanently stunted and yellowed in addition to tending to exhibit browning of the needle tips. The eastern white pine is more markedly affected than are other common pines.

"This stunting and yellowing is sometimes referred to as white pine blight, or as blight, although the latter name is also sometimes used as synonomous with needle blight or needle scorch. The condition has been variously interpreted as due to a deficient root system or to needle blight which has become chronic.

"Trees affected with this disorder have long been a matter of concern. Foresters read decreased yields in plantation plantings. Owners of ornamentals are disturbed by the unsightly appearance of their trees. Tree experts are hesitant to undertake treatment of this condition because *Condensed from Vol. 1, No. 9, 1948. they have learned by experience that such trees have not responded well to feeding or to other normally-applied restorative procedures.

"During the fall of 1947 the symptoms of this disorder were more conspicuous or the condition was more prevalent than in most seasons. One of the striking characteristics of the disorder was the spotty distribution of the affected trees. Normal and affected pines grew side by side. Such lack of uniformity might easily be accounted for by the explanation that the trees with weaker root systems were less able to rapidly supply water lost through excessive transpiration. This in turn, however, left the unsolved problem of why the roots of certain trees were weak. Field observations were made in an attempt to gain information on root *From Vol. 1, No. 9, 1948. injury.

"The fact that the symptoms of white pine blight are not always clearly different from those caused by needle scorch or by numerous other difficulties lent itself to confusion from the outset. Common among these are the effects of noxious fumes and of seepage from calcium chloride and common salt and from road oil.

"Troubles of the root appear legion. Important among these are damage by mice, lowering of the watertable, wet feet, deep planting, and attacks by weevils.

"A white to buff colored fungus mycelium was found growing as a saprophyte in the duff at the ground line under a group of blighted white pines which exhibited the symptoms of dwarfing and yellowing. White, silky strands of mycelium extended to the roots. A white rot of the roost was evident, numerous feeding roots being destroyed. A sample of

this fungus was sent for determination to Ross W. Davidson, of Forest Pathology, U. S. D. A., Beltsville, Md. Dr. Davidson replied that the fungus seemed to be Corticium galactinum.

"It is of especial interest that the fungus was first found on the estate of Randolph G. Pack, at Darien, Conn. In keeping with the support which he and his father, the late Charles Lathrop Pack, have ever given to conservation, Mr. Pack has very generously permitted experimentation on these pines. Simple empirical tests of the effect of liming, fertilizing and fungicidal treatment have been applied in the hope of finding remedial treatment."

Another paper in the same publication treats of the more important insect pests of pine. There is also a list of fungi which occur frequently on ornamental pines. Of these white pine blister rust has been valiently fought in Wisconsin.

- Dagny Borge

FINANCIAL REPORT—21st ANNUAL CONVENTION MILWAUKEE, OCT. 7-8, 1948

RECEIPTS:		
303 Registrations at \$1.00 each	•••••	\$30
Net Profit from Convention Flower Show		1
DISBURSEMENTS:		\$31
Dr. Scott Bedford, Speaker	\$ 50.00	
Mrs. C. Schultz for Mr. Jens Jensen	19.25	
Mrs. F. J. Fitzgerald, President, Exp.	24.49	
Mrs. Clarence Schultz, 1st V. P. Exp.		
Mrs. Ervin Kulow, 2nd V. P., Exp.		
Mrs. L. H. Erehm, Secretary, Exp.	13.70	
Mrs. Eric Martin, Treasurer	16.40	
Mrs. Fred C. Marquardt, Publicity	5.92	
Mrs. Eric Martin; Telephone re credentials	• .90	
Mayer Printing Co. 400 Programs	30.00	
Wis. State Hort. Soc. postage re credentials		
Quality Print Co.—300 Badges		
Mil. Elec. Ry. & Transport Co.—Bus charter		
Leidiger Florist—8 corsages		
Mrs. Wm. Armitage: Courtesy Regional Guests		
Mrs. Chester Thomas: Decorations 2 luncheons and banquet	19.91	
Pfister Hotel as follows:		
Balance due on dinners\$182,00		
Room Charge for Exhibits 50.00		
Public Address system 10/7		
Public Address system 10/8		
Room: Jens Jensen 5.75		
Telephone call		
7 extra waitresses		
\$327.06		
Less .06		
Total amount paid Pfister Hotel	327.00	
TOTAL EXPENSES		
TOTAL EXPENSES		
TUTAL RECEIFTS	010.04	
DEFICIT	\$276.31	

Respectfully submitted,

Mary E. Martin, Treasurer.

District Mail Box

The excellent contributions which garden clubs have made to community life has been noted in the news sent to this department. At the regional meeting of the Fox Piver Vellev district held in Seymour, December 2nd, attended by representatives from Fond du Lac, Ripon, Berlin, Oshkosh, Green Bay, Menasha, Omro, Seymour and Washington Island, the response to roll call brought forth many suggestions.

Shut-ins are cheered with bouquets which Omro Garden Club members select from their own gardens and deliver. At Fond du Lac members work with the Girl Scouts in their nature program. They also maintain a small park, where, monthly, two members are appointed to care for the park's appearance. The Washington Island club has purchased a spraying machine, instigating a program to rid the roadsides of poison ivy. A Nativity scene became the project of the Seymour group. They have also maintained a weekly "Gardener's Corner" in the local newspaper, a column dealing with local gardening news, seasonal tips and articles of general gardening interest.

Horicon's busy summer of 1948 was one of excellent accomplishment and may well be inspiration to other clubs planning community contributions in the coming season. June found the Horicon Garden Club members hostess to the visiting Ripon-Berlin group of garden clubs. The tour was planned to include local gardens lovely in the height of the tulip and lilac season as well as commerical gardens and the outstanding tulip and hopa crab garden in Mayville.

In July the Horicon group found their attention directed to a beauty spot on Highway 28 where they placed a wayside table and bench, noting the grading, landscaping and outdoor fireplace as projects for future development.

August was the month of their flower show. Special displays gave unusual interest to the event. A community dinner table complete with wild duck decoys and cattails focused attention on the Horicon Marsh location of the club, thus utilizing material of local interest. Among the other scenes was a fireplace wedding arrangement with bride's and bridesmaid's bouquets, a church altar using

Five Letters - cont.

Dear Garden Club Members of the South Central District:

It is a pleasure to extend greetings to you at the beginning of the new year.

Our Regional meeting on November 30, at Fort Atkinson was well attended, and there was a splendid spirit of cooperation. Each club told of their programs and achievements. By exchanging ideas and working together I am confident we can build a strong and progressive district.

Two important projects for our district are the flower show which will be held sometime during the year and the Judging School which will be held at Lake Geneva May 17, 18, and 19. I hope that each club in the district will begin to look forward to the show and that you will make plans to attend the Judging School. With the help of all, both of these undertakings can be a success.

Please remember that a district is no stronger than it's clubs and the Federation is no stronger than it's districts. The Wisconsin Garden Club Federation can be assured of the full support of the South Central District.

Mrs. Harold C. Poyer, President.

Dear Garden Club Members of the Milwaukee District:

It is with much pleasure that I take this opportunity to greet you all. In the past years it has been my privillege to know many of you, and your friendship and cooperation have been an inspiration and delight.

Working for a splendid organization like our Federation is a great joy, due to the fact, I believe, that the program is made up of such worthwhile constructive projects.

Look at the list! Horticulture, Flower Shows, Conservation, Scholarships, Living Memorials, Roadside Beautification, Birds, etc., and last but not least, in the words of National Council, "The raising of the standard of Horticulture and floral beauty in the community. How could we spend our time to better advantage than to work for and support developments of this kind that are important to our nation, State and community?

Mrs. Fiebrantz, our State President has chosen a splendid motto this year: "Unity and strength in our Federation." Let us all work with her to achieve this goal.

Georgia Cushman, President

Dear Members of the Sheboygan District:

The coming of the new year brings to us the chance of doing something new and different. It brings another year of golden opportunities.

To serve as your district president is a happy privilege and an honor which I deeply appreciate. I will do all I can to make our ideals and our year's work a success. No one person can accomplish this big job alone. It is only by close co-operation and hard work that we can reach our goal.

Last year Seeds of Peace helped feed over a half million hungry people of western Europe. This year we can help preserve a primeval forest; a Redwood grove in California. The National Council is purchasing 40 acres of primeval Redwoods. Each of our clubs and individual members have an opportunity to take part in this conservation program, either through individual or collective donations. Conservation is the all important topic of today: Our wild flowers, our trees, soil, water, wild life, our children and ourselves.

May I wish you all a happy and prosperous year.

Elizabeth G. Curtiss, President.

white gladioli against a background of white cross and white candles, a speaker's table, conservation and florist displays.

In September the group embarked on a project which their secretary, Margaret Neill, writes will keep them busy "for many seasons." With the city park board we are planning to landscape one of our beautiful parks bordering the Rock River. Our committee is working on diagrams for fall plantings of shrubs and trees. We have found that having a member of our garden club on the park board of our city gives us more opportunity to help and enjoy making Horicon a beautiful city."

The Baraboo Garden Club is hostess each year to a Christmas Fair, held this season on December 14th.

A colorful array of Christmas decorations, potted plants, terrariums, home-made candies and gay stuffed animals were among the many items sold at this entertaining event.

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J. H. Phillips, Manager

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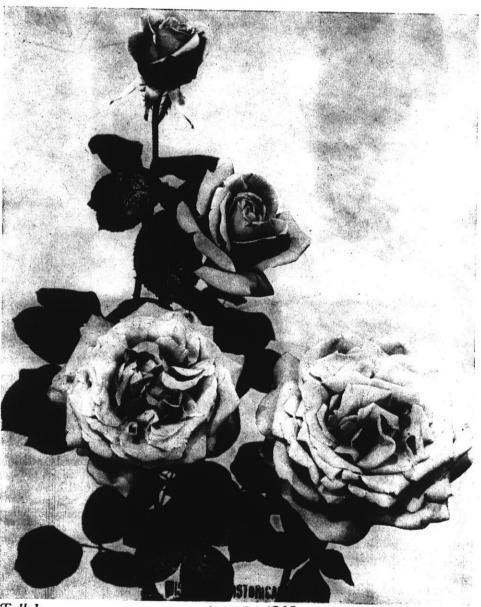


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> H. J. Rahmlow, Editor 424 University Farm Place Madison 6, Wisconsin

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ANNUAL MEETING WISCONSIN BERRY AND VEGETABLE GROWERS ASSOCIATION

Waupaca — Armory Friday, April 1.

9:30 a. m. — 4:30 p.m.

Excellent program Display of tractors and other garden machinery; irrigation equipment. Luncheon served in Armory. All growers invited

Control of the Codling Moth in Door County—1948

By C. L. Fluke

The codling moth continues to be a major pest of apples in Door County. The life history of the moth was interpreted by a study of the emergence of the moths caught in fermenting bait traps.

Bait Trap Catches

Twelve traps located in the Griffin Orchard collected a total of 905 moths. The catches are given in the attached graph. The first moths were taken June 24 and the last September 10. There were four large peaks of emergence: July 15, 52 moths; Aug. 16, 57 moths: Aug. 20, 45 moths; and Aug. 25 and 26, 270 moths. Since 55 to 65 days are needed for a complete generation of the moth the enormous emergence late in August is difficult to explain. About 60 days had elapsed from the first emergence June 24, but these few early moths would not account for the large population of Aug. 16 to 27, 524 moths. This period is also too early for moths from the July 15 peak. The majority of these August moths were also only first brood moths! This was determined by caging infested apples that came from this same orchard. The very first wormy apples were picked up and the larvae reared to maturity. All the apples from 16 trees were caged and from these only two moths emerged into a second generation. Where then did the August moths come from?

A New Problem

This has opened up a new problem. There is a possibility that during certain favorable fall and winter weather, the worms which did not succeed in maturing in the fall lived over successfully and continued development the following summer. Such conditions would occur only occasionally and if the immature larvae could live over and mature the following year this would explain the large flight in late August.

The only other way to explain this flight is unusual large egg batches and favorable development from the few moths appearing in late June and early July, but this does not explain the failure to get moths from caged infested apples.

Lead Arsenate vs. DDT

The Griffin orchard was also used to



compare the control of codling moth secured with lead arsenate and DDT. Five codling moth sprays were applied, one calyx and four covers as follows:

Cal	yx	June 8 and 9
1st	cover	June 22 and 23
		July 6 and 7
		July 16
		July 27

Summary of the Control of the Codling Moth with Lead Arsenate and DDT. Door Co. Wisconsin, 1948.

COMBINED HARVEST AND CROP DATA

		Total	%
Treatment	Total fruit	sound fruit	sound fruit
Lead arsenate	1730	1176	68%
DDT	1284	1118	87%
Lead arsenate	1345	1148	85%
DDT	1915	1796	94%
	Lead arsenate DDT Lead arsenate	Lead arsenate 1730 DDT 1284 Lead arsenate 1345	Treatment Total fruit sound fruit Lead arsenate 1730 1176 DDT 1284 1118 Lead arsenate 1345 1148



Bait traps will help in codling moth control.

Dow's Mike Sulfer 5-100 was the fungicide. Lead arsenate 22/3-100 was applied to four rows and DDT 2-100 to the other four rows. All apple drops from twenty trees were collected every three or four days and the infested fruit counted. At picking time the harvest data were taken from 8 trees only, four from each treatment. The results are summarized in the following table. On the Dudley variety DDT increased the sound fruit from 68% to 87% and on the Wealthy from 85% to 94%. This control with DDT is below that anticipated and is undoubtedly due to the heavy moth flight in August.

Politeness by Request—Mistress— "How was it, Ophelia, that you raised three such well-behaved boys?"

Ophelia—"Well, Mis' Mary, I raised 'em with a barrel stave, and I raised 'em frequent."

Progressive Education—Teacher—
"Now, Johnny, where is Cleveland?"
Johnny—"Cleveland is in Washington today, and Bob Feller's pitching."

Experiments With Mulching Cherries and Apples

Charles F. Swingle, Sturgeon Bay

Charles F. Swingle, Sturgeon Bay

In Door County a great deal of mulching of young apple and cherry trees is done, also some mulching of mature but sick trees; however I know of an apple orchard, and only one cherry orchard, where healthy, full-sized trees are mulched. I realize this differs from what is common elsewhere, but we look at mulching primarily as a means of conserving moisture, rather than adding fertilizer. Under our conditions, with our generally low-branched trees, there is so much shade under mature trees that the small amount of grass able to grow here does not constitute a serious moisture loss problem. Also, the grass we do get to grow is usually enough to prevent erosion, even in the steepest orchards.

Mulch Young Orchards

Though we forego mulch on healthy old trees, we do a lot of mulching on young orchards. In fact this has proven so satisfactory that several orchardists, including Sid Telfer of Ellison Bay, have found it feasible to establish orchards in sod or cleared woodland without plowing at all. Under this system the trees are planted with no more culture than is required to make the hole. Then a good mulch is put on, preferably extending some 4 feet out from the tree and deep enough to smother all weed growth.

This system is in common use after the trees are planted—mulching wide and deep, with no cultivation around the trees from planting until they are 8 to 12 years old, and big enough to cast enough shade that mulch or cultivation is no longer required.

The mulch can be of whatever is available—grass, straw, manure, sawdust, or even paper fertilizer sacks. Nitrogen is added as required, usually ignoring the mulch completely unless this is rich manure or other high nitrogen fertilizer.

"Curl Leaf"

Probably half the growers in the county prefer to cultivate young orchards, in which case the only mulch used is that applied to sick trees. This is especially true with cherry trees suffering from "curl-leaf." It has been found that the addition of potash fertilizer is helpful in this



case, but probably more important is mulch, which not only adds a little fertility and humus, but makes the orchardist stay away from the tree when he cultivates. In this connection it is interesting to note that orchards in sod do not have curl-leaf.

Sod vs. Culture

This brings me to the question of sod vs. culture. I don't have time to go into this here, but I do want to say that all the old apple orchards in Door are now in sod and the tendency i.; for the cherry orchards more and more to be put to sod. I can sum up this controversy in a few wordssome of the best orchards in the county are in sod, some of the best under cultivation. Personally, I feel this is just one part of the whole orchard management question. If as with some orchards, especially on the Sawyer side of the county, they have deep soil, (for Door County), 12 inches or more over the rock, the orchardist has a choice, and can either cultivate or use a definite system of sod management. However, if as is common throughout the county, the soil is shallow or underlaid with sand or gravel, I feel there is no choice and the only way to get satisfactory production is in sod. Of course sod management does not mean an abandoned orchard, as some people still think. Not only must spraying and pruning be cared for as usual, but a definite increase in the amount of nitrogen fertilizer is needed since the grass eats at the first table, and what is enough under cultivation, will wholly or mostly be taken up by the grass, leaving none for the tree.

SELLING FRUIT IN CONSUMERS'. SIZE PACKAGES

Prepackaging Has Many Advantages But Some Unsolved Problems

More and more fruits and vegetables are being sold in consumer-size packages, as is obvious to everyone. The trend now is towards prepackaging fruit and a number of advantages are listed in a bulletin titled Prepackaging Fruits and Vegetables by Cooperatives issued last October by the Farm Credit Administration of the U.S. Department of Agriculture.

Advantages

The principal advantages listed are: Increases quantity sold per consumer. A housewife may decide to buy a large size package of fruit if she thinks she is making a good buy. Having purchased the larger quantity she is likely to use more liberally in planning her menus.

Makes better retailing. Prepackaging places the fruit into a self-service item and makes shopping easier and speedier and reduces sales costs.

It permits brand identification and advertising. The grower can build up a reputation on his own brand and get the benefit of any advertising he has paid for.

Makes a cleaner and neater display. Packaged produce has a greater eye appeal. Especially for items such as cooking apples. Of course we know that the fancy fruit looks best if neatly arranged in layers and rows.

Cuts down rate of shrinkage by reducing bruising through handling and squeezing by the purchaser.

Principal Problems

Container costs and style are problems which must still receive considerable attention. Such matters as the container costs, size and type, visibility, durability and protection in transit have not been solved. Consumers are reluctant to pay additional costs of unit packages and the producer is already getting little enough.

The Farm Credit Administration suggests continued research on the problem of size and type of container; container visibility; cost of different materials and how these additional costs can be obsorbed.

To be a good politician you have to be able to straddle the fence and still keep both ears to the ground.—Cumberland Advocate.

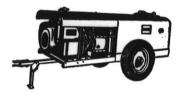
Fruit Growers Supplies

Order Your Spray Materials for 1949 Now!

Price Lists Available After Feb. 1st. If You Do Not Receive One — WRITE FOR ONE.

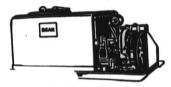
Dealer for

John Bean Sprayers



7 gal per min. Pump 400# Pressure — 150 gal Tank — Trailer Type.





SKID TYPE

7 gal per min. Pump. 150 gal tank — 400# pressure

We Handle All Models And Sizes, Few Of Which Are Illustrated. Write For Complete Catalogue. — If You Contemplate Purchasing A Sprayer In 1949 — Place Your Order Early. — So Delivery Will Be Made In Time For Your NEEDS.



SKID MODEL 15 Gal per minute Pump. 600# Pressure. 200 gal tank.





TRAILER MODEL
15 gal per minute Pump. 600#
Pressure — 200 gal tank.

Sprayers Repaired

WE WILL OVERHAUL YOUR SPRAYER AND REPAINT SAME, DURING THE NEXT TWO MONTHS. — DO NOT WAIT UNTIL SPRING TO HAVE THIS JOB DONE. . . .

Southeastern Wisconsin Fruit Growers Cooperative, Inc.

227 CUTLER STREET Waukesha, Wisconsin

Lester F. Tans, Manager

Telephone 4107

USE DU PONT spray and dust chemicals

See Your Dealer Now for supplies of these and other Du Pont pest control products. Ask him also for free Du Pont booklets containing detailed information, or write to Du Pont, Grasselli Chemicals Dept., 1503 W. Canal St., Milwaukee 3, Wis., or Wilmington 98, Delaware.

Du Pont Chemicals for the Farm Include:

Fungición — PARZATE", FERMATE", ZERLATE", Copper-A Fixed Copper, SULFORON* and (SULFORON*-X Wettable Sulfurs; Insecticides — DEENATE* DDT, MARLATE*, LEXONE* (Benzene Hexachloride), KRENITE* Dinitro Spray; Wood Killers — AMMATE*, 2,4-D, TCA and Dinitro Wood Killers; Also Du Pont Spreader Sticker, PARMONE* Fruit Drain Inhibitor and many eithers.

**REG. U. 8. PAT. OFF.

FERMATE fungicide for scab, leaf spot. Ideal control for apple and pear scab, cherry leaf spot, brown rot of stone fruits, black rot of grapes, berry anthracnose.

Outstanding disease control as either dust or spray.

Greener foliage, no stunting of leaves.

Safe . . . no burning in either hot or cold weather.

Cleaner fruit . . . no russeting.

Higher yields result from more vigorous foliage.

ZERLATE fungicide for brown rot. Excellent for peaches, apricots, light-colored cherries and plums.

Effective in control of brown rot on the tree and in shipment.

Light-colored residue does not show.

MARLATE new methoxychlor insecticide.

Effective against many important insect pests on vegetables, fruit, livestock and in farm buildings.

Long-lasting . . . residues remain effective for two or three weeks or more.

Mild on plants . . . does not burn even on cucurbits, beans or tomatoes. Tests thus far show it also has unusually low toxicity to warm-blooded animals.

Works well as dust or spray. Comes as concentrated wettable powder.

DEENATE DDT for codling moth and many other major insect pests.

Du Pont's proved formulation gives outstanding performance wherever DDT is called for.



BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

Apple Promotion — Where Do We Go From Here?

By Minard Farley, Michigan, State Apple Commission

Growers of Washington State have been operating under a state law by which they now collect two and onehalf cents per box for advertising their apples. In Michigan our assessment is one cent per bushel collected on all apples except those used in manufacture of fresh cider or vinegar. The Appalachian growers have a combined program which is financed by assessments of one cent per bushel, or more in the states of Maryland, Virginia and West Virginia. Pennsylvania remains as the one state in the Appalachian program that does not have a statutory assessment. Their contribution continues to be on the voluntary basis, but growers there expect to ask for a state assessment in the next assembly of the Pennsylvania Legislature.

The New York-New England Apple Institute continues as the one large producing group which is still 100% on the voluntary plan of raising funds for apple promotion. Growers there are going through much the same experience we have seen with the voluntary plan in other sections. They become quite dissatisfied with the numbers who do not contribute in a program where all are benefited. They are taking stock of the possibilities for statutory collection. Ohio, Wisconsin, New Jersey continue with voluntary institutes or horticultural societies. But even in these states there is growing sentiment for the statutory method.

Collection Methods

The two collection methods open to choice in the case of a state law are (1) the use of revenue stamps at the time of shipment, or (2) the so-called "bookkeeping method" which involves making periodic reports of apple sales with payment of the assessment to a state agency. The former method is used in Washington State and with our own Michigan program. The latter is common to the Appalachian states and appears to be working with reasonable success for them. I would say the bookkeeping method has the greatest merit for a state such as Wisconsin where a high percentage of sales are direct to retail stores or through the grower's own roadside stand. We actually employ

this bookkeeping system to a limited extent in our own Michigan program, permitting growers to make a periodic report on retail sales. The major portion of income, however, is on the truck and carlot shipments where revenue stamps purchased from official agents of the Commission are affixed to shipping documents.

These various state promotional programs have made steady growth over a period of ten or fifteen years to the point that we now have a strong over-all program, and our Natonal Apple Institute supplements very nicely the amount of local advertising we are able to do.

The National Apple Institute

A word about the National Apple Institute and its secretary, Mr. Truman Nold, is appropriate at this point. That organization, of which we are all a part, has done some outstanding work in soliciting cooperative advertising with such firms as General Mills, Pillsbury, American Dairy Association, American Cranberry Exchange, and others. The full color advertising in national women's magazines which has featured apples with the products of these concerns is noteworthy. There is also the much heralded event of a full-page color ad in the Saturday Evening Post which ran last February through sponsorship of the National Apple Institute. It carried the joint signatures of all local promotional groups including your Wisconsin Apple Institute. Another crowning achievement for our joint national effort has been the current Walt Disney film "Melody Time" which includes the musical cartoon "Johnny Appleseed." This production was inspired through suggestion of the National Apple Institute. Details of production were carried out by the Walt Disney Studios in consultation with Mr. Truman Nold and others interested in apple promotion.

Progress In Wisconsin

I am particularly gratified with the progress the Wisconsin Apple Institute has made since I was privileged to be present at its organization meeting five years ago. Our Commission now feels the job is being carried on here effectively enough so we are glad to concentrate our own advertising effort back in Michigan

where it belongs. A Wisconsin organization can have much greater appeal with Wisconsin editors and food merchants than can outside grower groups. Whatever you do in the name of your own state apple producers helps the entire apple industry. So we are glad to see the Wisconsin Institute flourish in its locality.

Talk given at Annual Convention, Wisconsin State Horticultural

Society, 1948.

FRUIT GROWERS MEETINGS County Associations To Hold Annual Meetings

The 8 county fruit growers associations which have held annual meetings during February and March for many years, have this year selected the dates listed below for their meetings. All will have noon luncheons, an excellent program with several speakers, and invite all fruit growers to attend.

February 22—Racine County Fruit Growers Association at the School of Agriculture, Rochester.

February 23 — Waukesha County Fruit Growers Association meeting in Waukesha.

February 24 — Milwaukee County Fruit Growers Association in Greenfield Town Hall.

February 25 — Jefferson County Fruit Growers Association, Municipal Building, Fort Atkinson.

March 1—Washington County Fruit Growers Association in Jackson Village Hall.

March 2 — Ozaukee County Fruit Growers Association.

March 3—Manitowoc County Fruit Growers Association in the Court House, Manitowoc.

March 4—Sheboygan County Fruit Growers Association in the City Hall, Plymouth.

FINE FRUIT FARM, 10 MILES from Milwaukee, 43 Acres, 1300 bearing trees, elegant home, 2 baths, 3 fire places, good tenant house with bath and hot water heat. Large apple storage, cider mill, road side stand. One of finest orchards in area.

ZANDER BROS. 849 N. 10th Street, Milwaukee 3, Wis.

Eradicate Apple Scab

Puratized* AGRICULTURAL SPRAY

Pat. No. 2,423,262

RESEARCH workers and commercial growers acclaim this patented formulation as an outstanding contribution for the control of scab and other plant diseases.

PURATIZED AGRICULTURAL SPRAY doubly safeguards your trees. It offers fast, effective protection before in-

fection occurs and acts to eradicate infections after they start.

This unique inactivating power, plus the usual protectant action, makes PURA-TIZED AGRICULTURAL SPRAY an invaluable weapon for combating scab. Consult your local dealer or write today for further details.

Puratized Agricultural Spray

- A low cost spray program one gallon makes 800 gallons of spray.
- Instantly water soluble
- Leaves no visible deposit
- Can be applied with common insecticides and fungicides
- Effective too, for brown rot blossom blight of cherries and peaches

*Trade Mark

Distributed by:

NIAGARA CHEMICAL DIVISION FOOD MACHINERY & CHEMICAL CORP. Middleport, New York GENERAL CHEMICAL DIVISION
ALLIED CHEMICAL & DYE CORP.
40 Rector Street, New York City

Manufactured by:

GALLOWHUR CHEMICAL CORPORATION

New York, N. Y.

ORCHARD OBSERVATIONS

COMPLETE FERTILIZER FOR THE ORCHARD. "Give the entire orchard floor an application of complete fertilizer for better growth of the cover crop" is the trend of advice given to apple growers in a number of states. Observations in Wisconsin orchards leads to the opinion that a fair percentage of them would be greatly benefited by more fertilizer—not only complete fertilizer for the cover crop but by more nitrogen for better tree growth. The advice to apply fertilizer in varying amounts between rows of trees, as a test is good.

THE "DELICIOUS ONLY" TREND on the part of the distributors, whole-sale and retail trade in our cities who are asking for Delicious only is deplored by Carroll R. Miller, secretary Appalachian Apple Service in an article in the Packer. He says this tendency strangles the cooking-apple market which in past years has used almost half the national crop. It has an adverse effect upon good varieties

like McIntosh which many people prefer. He calls this trend a blind alley.

BEWARE OF TOO MUCH DDT is the warning in a report by the Onio Experiment Station. It was found that amounts of DDT in the soil equal to those that might be deposited after several years of spraying have seriously effected the growth of some grains and vegetables. No injury to fruit trees has been reported but it may be wise to use no more than absolutely necessary to control insects.

COWS MILK IS IMPROVED BY APPLE JUICE according to research work done in Virginia. Babies cannot easily digest the curd in cows milk because of the size and degree of toughness of the particles. Human milk forms a soft almost fluid mass in the babies stomach while cows milk forms a medium-tough, compact mass. The Station suggests addition of 1 part of concentrated apple juice to 15 parts of whole milk or 19 parts of evaporated milk. (Report in the Packer, Sept. 11, 1948)

BUMBLE BEES RECEIVE HIGH PRAISE AS POLLENIZERS in an article in the Farm Journal, (Aug. 1948) by E. J. Rasmussen, University of New Hampshire, fruit expert. He says the bumble bee squats on the blossoms at least 1,800 times per hour or 30 squats per minute. The fly in the ointment of course is how to get the bumble bees. Only young queens of the preceding year will overwinter and be the pollenizers early in the season when apples are in bloom. Many of these are destroyed by rodents because they nest near the surface in the soil.

Mr. Rasmussen gave Dandelions some blame for small sets of fruit. "When Dandelions and apples bloom at the same time, the Dandelions get the bees and the apples get neglected," he wrote.

There is plenty of evidence that honey bee colonies, if placed near the fruit trees, do an excellent job of pollenizing.

USED SPRAYERS AND PUMPS

Completely overhauled and guaranteed in good running order

BEAN SPRAYER — 500 gallon tank, 35 gallon per minute pump, powered by Continental Engine. ..Sprayer used only 4 seasons. On a 2-wheel trailer or can be mounted on truck.

BEAN SPRAYER $_$ 200 gallon tank, 10 gallon per minute pump, powered by LeRoi Engine.

MYERS SPRAYER — 200 gallon tank, 2-cylinder pump, running in oil, engined powered.

FRIEND SPRAYER — 300 gallon tank, engine powered with self starter, mounted on 4 rubber tires.

BEAN PUMP _ 7 gallons per minute.

MYERS PUMP_10 gallons per minute.

SAM GOLDMAN,
Sturgeon Bay

We Guarantee every outfit sold.

Write, Wire or Phone

for up-to-the-minute prices on:

Bean Sprayers, Garden Tractors, Lawn Mowers, Arsenate of Lead, Lime, Sulphur, D. N. 289 Spray, 50% Wettable DDT, Mike Sulphur.

in fact, all your garden or orchard equipment and supplies,

- to -

G. A. DUNN & COMPANY, Inc.

POSTOFFICE BOX 2069

MADISON 5, WISCONSIN

24 hour phone service -- (Fairchild 2840)

ONE HARDIE

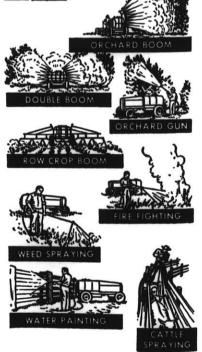
meets every need!

Orchard spraying, row spraying, weed spraying, cattle spraying, 'boom' or 'mist' spraying, hand gun spraying, DDT spraying, water painting, white washing, fire extinguishing — you do them all with the same Hardie.

Hardie gives you a big volume, high pressure, rugged sprayer which easily can be fitted with inexpensive Hardie engineered accessories that adapt the sprayer to any one of many specialized spraying jobs. The widest range of sizes in the market — from 4 GPM at 300 pounds pressure to 80 GPM at 1000 pounds pressure. Write for the 1949 Hardie Catalog.

THE HARDIEMEG. COMPANY, HUDSON, MICH.





New Machinery and Equipment for Orchard Operations

By H. B. Tukey, Michigan

There is no mistaking the great interest all over the country in new machinery and new equipment for orchard operations.

Sprayers

This urge to mechanize is being met in two ways. (1) It is being met by American ingenuity, that is, individuals here and there are taking old automobiles and other odds and ends and are devising the most fantastic and yet the most efficient and useful sort of contraptions. There is a machine in operation, for example, in southwestern Michigan which will plant twenty-five acres of strawberries a day. It has been fashioned by an American with ingenuity and mechanical skill and is cutting the cost of operations tremendously. (2) It is being met by custom operations, that is, by individuals securing expensive equipment which they can loan or share with others. An example of this is the application of spray materials from the airplane. Where an individual has operations of sufficient size, he of course carries on his own "custom operations."

The most critical and most expensive operation in orcharding is spraying. In this field the one-man outfit is here. You have heard Mr. Reynolds speak of putting on 50-60 tanks of spray material in a day at the rate of 60 gallons a minute. We remember a number of years ago when we were carrying on spray operations in southern Illinois with a horse drawn rig and where we put on 1800 gallons in a 9-hour day and thought we were really doing something.

This whole field is developing very rapidly. There are the large outfits that run down through the row throwing spray in both directions and giving very thorough coverage. They may incorporate an air blast with the spray or they may use concentrated materials. Also there are machines which use dust which is wetted as it is thrown from the machine. Then there are devices which are made especially for a particular situation. For example, a man may have a uniform orchard of low-growing trees for which he will construct booms overhead and vertically which can he moved down the row attached to the spray machine and give very good coverage. Other devices include vertical booms which are movable, some which are stationary, and so on. The ingenuity and inventiveness being shown in this field is most interesting.

In the operation of pruning, we now have the compressed-air pruner. Other mechanical devices will undoubtedly emerge. There is some suggestion of an electric saw—perhaps rotary in nature—which may be used effectively. Then there is the brush rake, and the large-size brush cutter which goes down the row and chops the prunings very fine and leaves them on the ground to be worked into the soil.

Planting

Even in the planting of an orchard, there are changes taking place. In some sections there are contractors who take the order to plant a given acreage. An augur is mounted on the rear of a tractor and goes down the prospective row stopping for a moment or two to bore a hole into which the tree is set by those who are following.

In the general orchard management field we are all familiar with the modern mowing machine, the side-delivery rake, the hydraulic lift which is attached to tractors, and so on. All of these devices and many more to come are speeding up farm operations and are lessening the labor requirements. It should be mentioned that the pneumatic tire and the road gear which has been added to the tractor have done a great deal to make operations in the orchard much more rapid and efficient.

Orchard Heating

Several devices are now on the market to reduce the frost hazard. One of these is a new principle involving the development of radiant energy by burning oil in a large machine which throws out heat into the orchard or down onto the desired area. It operates much as the old oil burner installation in the old coal range. There are metal fins which are heated to cherry red by the oil and which will throw out as much as a million B.T.U.'s an hour. It is estimated that this apparatus may be operated at a

cost of 75c per hour. It is much better to have a good site and not to depend upon this apparatus, but for low growing crops where it is impossible to find another site, such as muck and some strawberry plantings, the apparatus may find usefulness.

Irrigation

Irrigation, too, is coming ahead steadily. As the cost of energy is lowered, and there seems every reason to believe that it will be steadily lowered, it is possible to pump water and to transport it economically. There are wells and ponds and lakes here and there which have never been thought of as possible sources of water for irrigation. The use of lightweight portable pipes and the growing efficiency of wells and pumps all tend towards a greater use of irrigation.

(To be continued)
Condensed from paper presented at
Annual Convention, Wis. Horticultural Society.

Topics of the Day—Maid—"All the guests came in beautiful cars and wore gorgeous clothes and the most wonderful jewelry."

Cook—"Gracious, what did they talk about?"

DN-289

(A non-oil dormant spray)

DN-289 is the new dormant spray that every orchardist should get acquainted with. This new material made by the Dow Chemical Co. marks the beginning of a non-oil dormant spray program for apple and cherry growers.

To be convinced of its exceptional merit, we recommend its use on at least a trial basis in your orchard spray program this coming season.

For most of the dormant spray recommendations 1 quart to 100 gallons of water is used.

Packaged in 50 and 5 gallon drums. For further information and prices please write or contact —

GLENN A. DUNN,
Pest Office Box 2069
Madison Wisconsin

(Paid Ad)

Berries and Vegetables

For the Wisconsin Berry and Vegetable Growers Association

GARDEN TRACTORS AND
GARDEN PLOWING
Questions About Tractors and Cultivation Methods Answered
By Growers

Five questions about favorite tractors and methods of cultivating the soil for growing berries and vegetables were sent to members of the new Wisconsin Berry and Vegetable Growers Association. Letters in reply were received from the following members. 1. Roy Rasmus, Waupaca. 2. Ivan R. Schrader, Eureka. 3. Marlin Steinbach, Clintonville. 4. Mrs. Chas. Wood, Shawano. 5. Elmer Whitby, Chilton, 6. E. L. White, Fort Atkinson. 7. John F. Swartz, Kenosha. 8. N. A. Rasmussen, Oshkosh. 9. Kermit Seehawer, Appleton. 10. Chris Olson, Berlin. 11. C. H. Braman, Waupaca. 12. Frank J. Long, Clintonville. 13. Dwight Hensel, Waupaca. 14. Frank Kuehnhold, Waupaca.

The replies to each question are listed in the same order as the above names. QUESTION 1. What kind of tractor do you use for growing berries and vegetables?

ANSWER: 1. None. 2. Ford Ferguson. This is just the tractor for our type of garden. All implements mounted and hydraulically controlled. It being a four wheel tractor I can straddle rows up to 76 inches. Fine for berries, melons, tomatoes, peppers, cabbage, etc. 3. Have 31/2 H. P. Simplicity and 1 H. P. Simplicity made at Port Washington, Wis. Disadvantage-has no reverse gears. Repair service good. 4. Farmall B by International Harvester Co. It is a small tractor. Advantages: More thorough cultivation, speedier than hand nonpowered tractor. Easier to handle than large tractor. 5. Have Bolens Huski garden tractor 21/2 H. P. Advantages: Economical, easy to handle. Disadvantages: Hard to steer on side hills. 6. Have Ariens Roto-tiller, 20 inch cut. Simplicity tractor 11/2 H. P. 7. Allis Chalmers Model B, M & E 16 inch Rotary-tiller and Choremaster garden tractor. 8. Use small size Allis Chalmers; does very efficient work in short time. Also Bolens power cultivator for narrow rows. Cultivator far enough ahead so can watch rows with tractor. Use large McCormick Deering for plowing. 9. None. 10. Do not have



"Dear, would you mind waiting until the baby wakes before eating your celery?"

tractor. All work done with a horse. 11. Use Planet Jr. 1½ H. P. for light cultivating, seeding, discing and mowing. Also Ariens Model B, 9 H. P. Tiller for preparing soil and thorough weeding in raspberries, cabbage and tomatoes. 12. Bought first roto-tiller in 1937 with 17 inch cut. Traded it for new B1-2 in 1941 of same type. Used for 7 years then bought new Ariens, tiller of Brillion, Wis. with 24 inch cut last September 13. None. 14. Am using Shaw garden tractor with 1½ H. P. Briggs Stratton motor. Does good work.

QUESTION 2. If you were to purchase a new tractor today, what kind would you buy?

ANSWER: 2. I would buy the same —Ford Ferguson. It does everything

we ask for. 3. Same. 4. Same size Farmall B. It is efficient yet plenty large to do satisfactory work for this type of gardening. 5. Would buy garden tractor and Simplicity-more than one speed ahead, belt driven. Also would buy larger tractor for heavier work such as plowing, preparing ground, hauling, etc. 6. Would buy roto-tiller for heavy work and cultivating where there is space between rows and for mixing manure. both green and barn yard, into the soil. It is fine for clearing quack grass when soil is dry. For smaller one prefer Simplicity for light weeding and cultivating when rows may be straddled. 7. Would probably rather have 3 inch rotary-tiller in place of Choremaster but would keep 16 inch for cultivating late in season. 8. Would buy same unless one with new

(Continued on Page 150)



Write now for trial planting of 150 eyes from Wis.
Certified Stock. Will be mailed post paid in time for planting.

ASK FOR FREE SEED BOOK

L. L. OLDS SEED CO.

Berry Plants . . Rhubarb . . Gladiolus Bulbs

Strawberry plants; 21 varieties
Raspberry plants; all leading varieties.
Rhubarb; MacDonald and Chipman's Canada Red.
Gladiolus bulbs, both standard and new exhibition varieties.

BERRY BOXES

Metal rim standard quart berry boxes. Send card for complete list.

COPELAND NURSERY, Platteville, Wis.

Wisconsin Beekeeping

OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPERS
ASSOCIATION — OFFICERS

Robert Knutson, Ladysmith President Lawrence Figge, Milwaukee Vice-President H. J. Rahmlow, Madison, Cor. Seey. Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer

DISTRICT CHAIRMEN

S. C. Fox, Pewaukee Robt. Knutson, Ladysmith Newton Boggs, Viroqua Guy Sherman, Seymour E. Schroeder, Marshfield Ivan Whiting, Rockford

When Does Broodrearing Begin?

When does broodrearing actually begin in the new year?

Returning from a 3 week vacation trip on January 10, I asked Dr. C. L. Farrar how the bees were getting along. He said, "Fine and there is quite a lot of brood present for this time of year."

That statement was intriguing. Did we have colonies which were rearing brood in early January. I decided to find out on the very next day the temperature was high enough to inspect brood nests without loss of bees from chilling.

Brood on January 14

That day came quite soon—January 14, a bright clear day with the thermometer up to 40°F. I called a young veteran. Frank Skott of Middleton to help. He is one of our inspectors and so interested in bees he is usually ready to drop whatever he may be doing to work with them. We drove to our nearest yard, set up the camera, and opened the first colony at the end of a row. It was strong; there were bees in the upper brood chamber, plenty of stores and two combs with empty cells in the center, but no brood. Noticing a large number of bees in the second or middle chamber. we took out several frames and found one with eggs. This colony had not established its brood nest in the upper brood chamber. We quickly put that frame into the center of the upper brood chamber to establish the brood nest there and closed the hive.

In the next colony we found what we were looking for—two frames with patches of brood as shown in the picture. As this brood is from 2 to 3 weeks old, the eggs were laid the last week in December. Checking with the Weather Bureau, we found temperatures at that time about normal for a Wisconsin winter. Minimum temperatures were: Dec. 26, —4°F;



Tip up upper brood chamber for quick inspection.



Two frames with patches of broad found. Note amount of pollen and honey in combs near broad.

Dec. 27, 15°F; Dec. 30, 2°F.

Checking a few more colonies, we found several with about the same amount of brood and one more in which the queen had just started to lay.

Why do some colonies begin brood rearing earlier than others? Dr. Farrar says it is due to the activity of the bees—some bees are just more active than others, just as is the case with a flock of pullets all hatched at the same time and raised in the same way. Some will start to lay earlier than others. In going through a large number of colonies he has always found this variation in the time and amount of brood rearing at the beginning of the "season."

Egg laying begins early in the year regardless of the amount of food available but the amount of brood which will be produced and whether or not the bees continue to raise brood during February and March will depend entirely upon the availability of pollen and honey. A long cold spell will cause the bees to cluster tightly about the brood. If the pollen is out of reach, brood rearing will stop.

Feeding pollen-soy bean flour cakes right on top of the frames a few weeks before natural pollen comes in will enable the colony to continue rearing brood so there will be a reduction in the colony population during April when a large population is so important.

Brood Below Its Food Supply

What shall we do with colonies rearing brood in a lower brood chamber? Its most important to move all brood to the upper chamber where it will be next to frames of honey. If colonies are properly prepared for winter in October and November only a few will need any attention later. It isn't necessary to take out frames to locate the brood. Simply tip up the top hive body as shown in the picture. If the bees are clustered tightly in the upper chamber, with only a small percentage in the second one,

HONEY MAGAZINE

The Honey Salesman, Falfa, Colorado, a sixteen page magazine devoted to honey marketing and improvement. \$2.00 per year. — Write for sample copies.

we know everything is all right. At the same time we can determine, by the weight of the upper chamber, how much honey is still present.

We certainly don't want to give the impression that we are advocating frequent winter inspection of the brood nest. On the contrary, we believe in leaving them alone as much as possible, and to do only what is necessary for their welfare. However, a quick check-up on mild days in January or February may save some of them from starvation and therefore be worthwhile.

We can learn a great deal about the condition of all colonies by examining a few when the weather is favorable. However, anyone who neglects colonies in the fall with the idea of feeding or making up for poor management by working with them during midwinter is headed for trouble. Here in Wisconsin there may be years when not a single day in either January or February would be suitable for brood nest inspection.

The value of midwinter brood rearing lies in replacing with young bees those which die normally during winter.

We have found it most interesting to study bees in winter.

- H. J. Rahmlow.

FROM THE PRESIDENT

Today (January 13th) the temperature reached 40° above and though the sunshine was quite general our bees made no attempt to fly. This would seem to indicate they were not distressed in any way. So far they are wntering very well but I am afraid some yards are a little short of available pollen for best out door results.

So far this winter we have had little snow and at present the ground is almost bare except for patches of ice. This won't do the clovers any good.

Would appreciate getting notice of any local beekeepers meetings and we will try to attend if roads, weather and the doctor will let us.

-Robert I. Knutson, President.

HIVE BODIES WANTED

Wanted — 10 modified Dadant shallow supers or 10 standard hive bodies. — George Bassford, 1118-7th Ave, West., Ashland, Wisconsin

THE HONEY INDUSTRY PRESENTS ITS CASE By Mrs. Laura Shephard, Calexico, California

It was my pleasure and duty to appear before the Committee on Agriculture of the House of Representatives at Fresno, California, November 19, and to present the case of the honey industry for price support. I found the Committee interested in pollination, aware of the insecticide problem, and friendly to beekeepers.

Want Equality

Throughout the hearing, there was a parade of witnesses representing the specialty crops such as raisins, nuts, citrus fruits, dried fruits; and all demanded equality in stabilization with wheat, tobacco, and other commodities. These producers are critical of their third-class economic citizenship; first the basic commodities with mandatory stabilization: then the Steagall commodities with the same deal; and finally honey, raisins, and other commodities with assistance only at the discretion of the Department. It was pointed out that only those commodities that can be easily plowed under are given a good marketing deal, while those commodities like honey and fruit which require permanent investment are kept at 60 per cent of parity or below. It was noted that this policy has backfired against the Department with the result that there is over-planting of cotton, potatoes, and other protected commodities, while orchards are pulled out, and bee hives are neglected.

While I listened to this revolt of California producers, it became increasingly clear that honey producers should request mandatory stabilization of their industry by legislation, and this request I placed before the Committee on Agriculture. Whatever the action of the USDA on the request of the industry committee, such mandatory legislation must be our longrange objective. All witnesses before the Committee on Agriculture spoke confidently of what they wanted in new farm legislation; therefore, it seems logical that we should join them.

BEES AND SUPPLIES FOR SALE

100 colonies bees in 3 stories, 400 extracting supers with combs, all 10 frame. 2 honey tanks, and 1 Root uncapping tank. All good condition and disease free.

— Herman Feenje, Monticello, Wis.

IDAHO BEEKEEPERS VOTE FOR HONEY ADVERTISING

Excise Tax Law Will Provide Funds

A law to levy an excise tax on colonies of bees to provide a honey advertising fund was voted by Idaho Producers Association and the Idaho Legislature passed the law. The Association has sent copies of the bill to other states with the suggestion that similar action be taken.

The object of the plan is "to promote the prosperity and welfare of the honey industry of Idaho through conducting a publicity, advertising, sales promotion, mercandising and research campaign to increase the use of honey and by-products."

The administration of the act is in the Idaho Honey Advertising Commission which is appointed by the Governor upon recommendation of a state committee.

We congratulate Idaho upon this step. However, their tax of 5c per colony may not be adequate. Wisconsin already has a tax of 10c per colony. Half of this remains in the locality or county treasury where it is of no values to the beekeeping industry. Then the amount that goes to the state treasury is small because the system of collection is not fool proof.

The funds obtained from the Wisconsin excise tax (that part which goes to the state treasury) is used to increase the funds for AFB control and to pay the indemnity of \$3.00 per colony for all diseased colonies burned.

Money For Honey Promotion

We also need money in Wisconsin to promote the use of honey. We all know how difficult it is to raise this by popular subscription. The burden always falls upon those who are willing to work. If the Wisconsin excise tax were properly collected and all of it turned in to the state treasury, the amount would be adequate to provide for the indemnity on colonies burned and leave a substantial amount each year for honey promotion. We suggest, therefore, that the Wisconsin Beekeepers Association have the law changed to provide that some of the funds may be used for honey promotion and to create machinery to bring into the state treasury the tax collected on every colony in the state.

A lot of men say they are the boss of their families and wear the pants. But I bet their wives tell them which pair to wear.—Cumberland Advocate.

COMING BEEKEEPERS MEETINGS

Meeting of Districts of the Wisconsin Beekeepers Association

February 23—7:30 p,m. Greenfield Town Hall, Milwaukee County. Meeting Southeastern District.

March 17—Janesville, YMCA. 10:00 a.m. to 4:00 p.m. Cafeteria lunch in YMCA. Meeting Southern District.

March 22—Brillion, Village Hall. 10:00 a.m. to 4:00 p.m. Meeting Fox River Valley District.

April 7-Marshfield, Basement Central State Bank. 10:00 a.m. to 4:00 p.m. Northern District.

Program includes talks by officers and County Agents; short business meeting and election of officers. Talk on "what we learned about beekeeping during the past year and plans for 1949," by H. J. Rahmlow, Madison. Discussion on the new grading law and the work of disease inspection and control by Mr. John Long, Madison.

THE NATIONAL MEETING By H. A. Schaefer, Osseo

The meeting of the National Federation of Beekeepers Associations at St. Louis was one of the best ever held with an attendance over 350 registered. Enthusiasm was at a high pitch and discussion centered on many problems confronting our industry.

A new constitution was adopted; main changes—to give local and state associations greater voice in Federation affairs and more direct representation on the Board of Directors. Each state association selects from its membership one director. The Board of Directors chooses five of their membership to act as an Executive Board. Dues were reduced to \$5.00 and minimum 5c per colony.

Officers Elected

The officers elected for 1949 are: Mr. Roy Grout, Hamilton, Ill., president. Mr. Charles Hoffman, Janesville, Minn., vice president. Mr. Glen Jones, Atlantic, Iowa, remains as secretary.

Beekeeping Equipment Display

The display of beekeeping equipment and novelties was excellent. A large automatic uncapping machine was demonstrated. Also shown were vibrating uncappers and hand uncappers, extractors large and smalleven miniatures; capping melters and honey clarifying equipment. The hive manufacturers displayed their makes of hives and hive furniture. There was a new queen cage demonstrated and a display of old and new honey serving dishes. Custom jewelry, real bees, queens and drones sealed lifelike in plastic squares were on sale as were ties decorated with bees and flowers.

Some of the problems considered H. A. Schaefer.

were: poison sprays for insects and weeds—a very serious problem. Many have had their bees killed by insect spray. Education is needed. Also discussed were bee pastures in land conservation programs; pollenation for legume seed production and for fruit; moving bees from one state to another — stricter control in the issuing of moving permits; a floor price for honey.

Mrs. Harriet Grace gave an excellent outline of her work and displayed some of the results of advertising. Publicity campaigns are giving beekeepers a great deal of advertising—but beekeepers who need the publicity most support it least.

Research Needed

A representative of a large Kansas City baking concern gave that industries reaction to use of honey for baking. The lack of uniformity in honey on the market is the stumbling block to its wider use. The honey industry must sponsor research to find ways and means to get a uniform product on the market.

Mr. Gordon Crump of Wisconsin gave an excellent talk on selling honey. His formula was: 1st, have a good product well packaged, 2nd, obtain good distribution, and 3rd, provide good advertising. A point stressed was: the grocer must receive a profit on his sale. While telling us how to sell honey, Mr. Crump sold us on Wisconsin cheese.

Those present from Wisconsin were:
Mrs. Harriet Grace, Madison; Mr.
Steve Parks, and Mr. A. W. Kehl of
Watertown; Mr. R. Neises, Marshfield;
Mr. Charles Zellner, Green Bay; Mr.
Joe Mills, Ripon, and Mr. and Mrs.
H A Schaefer.

HONEY CONTAINERS

We now have a good supply of 60 lb. cans, 5 and 10 lb. pails. Also the 5 lb., 3 lb., 2 lb. and 1 lb. and 8 oz. glass jars. We can make immediate shipment.

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

WRITE FOR COMPLETE PRICE LIST

Order through your State Beekeepers Association.

HONEY ACRES

Menomonee Falls, Wisconsin

NEED BEE SUPPLIES?

WE HAVE

Everything the Beekeeper needs.
Sections

Supers with fittings
Hives and frames
Foundation

Wire

and

all other supplies

WRITE FOR PRICES.

August Lotz Company
Manufacturers and Jobbers

BOYD

Wisconsin

HONEY WANTED

Carloads and less than carloads.
Mail sample and best prices in all

C. W. AEPPLER COMPANY
Oconomowoc, Wisconsin

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F From the Editor's Desk

EXECUTIVE COMMITTEE MEETS

Acts On Important Business

The Executive Committee of the Wisconsin State Horticultural Society met in the offices of the Society in Madison on Tuesday, January 18, 1949. After several weeks of pleasant weather and good roads, it would start to snow heavily just before the close of the meeting making the roads somewhat difficult for members to return home. A few of the important items considered follow.

Decided to purchase a Crown Graphic 4 x 5 speed camera so we can take more and better pictures for illustrating Wisconsin Horticulture.

Voted to accept dates selected by the directors of the Minnesota Fruit Growers Association for the annual joint meeting of fruit growers at La Crosse. Prof. J. D. Winters, secretary, Minnesota Association, has suggested November 7-8.

Appointed Mr. Arnold Nieman to contact Mr. Jack Reynolds, manager of the Wisconsin State Fair in regard to having fruit and vegetable exhibits at the fair which will do justice to the importance of the industry.

Recommend to the board of directors that the annual convention of the Society be held at Fond du Lac in the Retlaw Hotel on Tuesday and Wednesday, November 15-16.

Voted to accept the invitation of Mrs. Arthur Bassett, Jr., to hold the next meeting of the board of directors at Bassett's Ski Hi Orchards, Baraboo, on Friday, July 8.

Voted that an orchard and machinery demonstration be held in either Door County or southeastern Wisconsin on September 1, 1949, if proper arrangements can be made.

The secretary was authorized to speak at coming meetings of County Fruit Growers Associations on the Wisconsin Apple Institute's motion to ask the legislature for a law to finance apple promotion and obtain a vote on the proposal from growers. It was pointed out that full discussion of this plan is very important and the vote will enable the board of directors of the Institute to determine what course to follow.



EXECUTIVE COMMITTEE, WIS-CONSIN STATE HORTICULTURAL SOCIETY

Seated, from left, Arnold Nieman, Cedarburg, vice president. Gilbert Hipke, New Holstein, president Mrs. Arthur Bassett, Jr., Baraboo, board appointee. Standing, left, E. L. Chambers, Madison, treasurer. H. J. Rahmlow, Madison, secretary.

EASTERN FRUIT GROWERS ASK GOVERNMENT HELP

Government support for the fruit and vegetable industry was requested by the fruit and vegetable growers of New Jersey recently.

A copy of the recommendations of the New Jersey fruit growers was sent to Mr. Milton Button, Director of Agriculture by Mr. W. H. Allen, Director of Agriculture for the state of New Jersey as follows:

Recommendations Of Fruit Committee

- To be economically sound, the fruit industry in America needs a program of support by the Federal Government.
- 2. The committee recommends the suggested amendment which will make possible a Federal program for the fruit growers upon their request.
- 3. Acreage released from fruit production must be planted to soil-con-

serving crops, unless an increase of some other crop in short supply is requested by the Secretary of Agriculture.

- 4. A balanced production program should involve the Federal Government only to the extent of administrative costs and purchases of surplus crops due to unusually favorable weather. When production is in line with market needs, Government price support must be at the 90 per cent of parity level.
- 5..Fruit should be made a staple commodity in all school lunch programs, and authorities should give preference to locally grown fruit in making up their menus.

EVERGREENS

Colorado Blue Spruce — \$1.00 each and up. Pyramidal Arbor Vitae—\$1.75. Mugho Pine—\$2.00. Black Hills Spruce, Koster Blue Spruce. Write for lists. Quincy Nurseries Friendship, Wis.

MRS. E. A. ST. CLAIRE RECEIVES MERIT AWARD

"The Goldenrain-tree (Koelreuteria paniculata) is my favorite flowering tree" wrote Mrs. E. A. St. Claire, Wauwatosa, Wisconsin, past president of the Wisconsin Garden Club Federation in an article which received a merit award from the magazine, "The Home Garden". The article was published in the November issue.

Mrs. St. Claire makes these comments about her favorite tree. "Because the blooms appear after the blossoms of Lilacs, Crabs, and other early flowering trees are gone, I find them more spectacular....The pods remaining on the tree ripen to a lovely chocolate-brown and can be treated in the same way and combined beautifully with other dried material."

The Goldenrain-tree is being grown successfully in cities in southern Wisconsin. It is however not entirely hardy and should be planted only for trial in the colder sections. It is known to be somewhat short-lived but a very ornamental small tree for the backyard.

TREE TAGGING PROJECT RECOMMENDED

Have you ever walked through a park in which the trees had been tagged with their proper names? If you have, no doubt you appreciated learning the names of unfamiliar ones.

Garden clubs may well include a tree tagging project in their plans. Aluminum tags about an inch wide and 3 or 4 inches long with the common and botanical name embossed in the metal are desirable.

TEASEL SEED AVAILABLE

Seed of Teasel described by Mr. C. P. Holway, Route 1, Evansville, Wis. in the November issue of Wisconsin Horticulture (Pabe 87), may be obtained from him.

In a letter on November 23, he states: "Early this month I harvested a fair amount of Teasel seed, which I shall be glad to give to any member who wants it—as long as it lasts. Members should send a self-addressed envelope to my address."

Mr. Holway adds: "In spite of my wry remarks about the ladies' arrangements of dry weeds, I have right now in my living room at Cooksville an arrangement of dry Teasel heads and a red-leaved branch of Euonymus alatus. It is very handsome!"

OUR COVER PICTURE

Our cover picture this month shows the new hybrid tea rose, Tallyho, which together with Forty-niner was awarded the title, "All-America Roses for 1949."

The color of Tallyho is unusual. The outside of the petals fluctuates from crimson to cardinal red, while on the inside surface are shades of pink. Photo courtesy Armstrong Nurseries, Ontario, California.

NORTHERN GROWN FRUIT TREES

General line nursery stock Trees, Plants, and Shrubs



Send for our descriptive Price List.

COE, CONVERSE & EDWARDS CO.

Fort Atkinson, —•— Wis.
Write for our full or part time
selling plan.

WANT THE BEST NEW MUM

New U. S. Department of Agriculture, Hardy Chrysanthemums for 1949 —

We tested these for hardiness; find them much hardier than most varieties.

ANN (U.S.D.A. Pure white double, flowers 2 inch to 3 inch in diameter. Makes compact plant; blooms later part of September. MARGIE (U.S.D.A.) Darkest of all red mums, fully double, early blooming. Good cut flower.

IVORY GLOW (U.S.D.A.) A fine ivory-white double pompon, admired by all who saw it in bloom in our nursery.

TAMPICO (U.S.D.A.) Beautiful bronze, with long stems, very good cut flower, fully double.

TERRY (U.S.A.D) An early lemon-yellow decorative duplex. Growth very uniform, Dwarf with good compact form. Flowers 2 inch or more produced in profusion. Flowers early September. FLEUR (U.S.D.A.) This is an early double amaranth-purple. Flowers 2 inch or more in large numbers. Medium to dwarf in habit. Blooms from mid September on.

PRICES ON ABOVE 65c EACH; 3 FOR \$1.64. ONE EACH ABOVE VARIETIES \$3.00.

Bristol's New Hardy Chrysanthemums for 1949

GOLDEN CARPET. (Bristol) Imagine a rug made of glowing golden pompons. A creeping mound, 2 feet across, glittering in the fall sun — only 1 ft. high. A startling new plant destined for fame. \$1.00 each, 3 for \$2.75. Blooms September 15 on.

TAPESTRY. (Bristol) Another new shade, or shades, brought into larger garden mums. Opening a gleaming rich pink, gently softening to a final lovely ashes-of-roses, with golden flush in the centers; always gorgeous. Flower 3 inch across; perfect double. Stocky 2 ft. plants, full bloom by September 20. Winters nobly. — \$1.00 each; 3 for \$2.75.

POWDER PUFF. (Bristols) You mum lovers have long been seeking a pure white cushion mum. Here it is. Neat, compact, spready 1 foot plant covered with $1\frac{1}{2}$ inch pure white flowers from early September on. Very hardy. Summer bloomer second year. This splendid white cushion surpasses all others.

75c each; 3 for \$2.00.

WRITE FOR OUR NEW 1949 catalog on Roses, Phlox, Buddleias, perennials and 140 varieties of hardy Chrysanthe-

GARTMAN'S GARDENS

Route 1, Fond du Lac, Wisconsin



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PRESIDENT'S MESSAGE

Prof. Leland Shaw, Milton, has accepted the chairmanship for the 1949 Seedling and Recent Introduction Show which will probably be staged July 31st. Tentative prize schedule will be available for discussion at the important spring meeting, Hotel Retlaw at Fond du Lac on Sunday April 3.

To bring out greater competition, trophies are needed for the seedling show. Who will donate a trophy? Write to me about it.

Prof. Shaw has announced that Mr. Frank Bayer and Mr. Walter Kurtz will assist him at the bulb auction at Fond du Lac.

My letters for auctioneers at the bulb auction remain unanswered. Perhaps the next mail will bring acceptances.

The work of the Wisconsin Gladiolus Society requires considerable money for staging a successful show, for services to our members and speakers of recognized authority for our meetings. A bulb auction seems to be the best known method of raising the necessary money. So please consider this an invitation to bring bulbs to Fond du Lac for the spring meeting. (If you can not ge in attendance at the spring meeting send your bulb donations to Prof. Leland Shaw, Milton, Wisconsin.) If you plan to bring your bulbs, send a list of your contributions to him.

Bulletin number 350, Diseases of Gladiolus—Nelson, Michigan State College, East Lansing, Michigan is worth its weight in gold! 25c will bring it to you.

Walter C. Krueger, President.

ANNUAL SPRING MEETING Wisconsin Gladiolus Society Retlaw Hotel, Fond du Lac Sunday, April 3—1:30 p.m.



Mr. Ted Woods of Madison, originator of Connie G holding a spike grown by Roger Russell of Madison at the seedling show at Sun Prairie. Connie G won top honors in a number of shows this year.

THE BULB AUCTION

The bulb auction to be held in connection with our annual spring meeting will provide members with an opportunity to help themselves and to help the Society. It is fun to share in the friendly rivalries of a lively auction. It is fun to pick up some bulbs that we wanted, but hadn't gotten around to order. And it is worthwhile to support the Society in this, its only real way (except for membership dues) of financing its expanding program. So, plan to attend the meeting and to buy some bulbs.

But! There will be no bulbs there to buy unless you—and I'm writing now to all members—send or take them! Our commercial members

know this. Several of them have been contributing up to \$50.00 each in bulbs annually; bulbs they raised to sell, and then have paid cash, at the auction, for some of their own donations. There are a lot of us amateur growers who could donate more liberally than we have. Please help to make this year's auction a successful one. Let some member of the committee know, well in advance, what bulbs you will donate.

Frank Bayer, Milwaukee Walter Kurtz, Chilton Leland Shaw, Milton, Chairman

WHAT WE LEARNED LAST YEAR Arnold Sartorius, Porterfield

Our bulbs appear to be in good condition with only a trace of storage rot in a few varieties that were hard to dry. My storage is cold enough so thrips did not give any trouble.

There appears to be a definite relationship between soil fertility and bulblet increase—the size and qaulity of the bulbs dug. Had a small test plot this past year in which I used as follows: first, Milorganite; second, 3-12-12; third, 20% Phosphate and fourth, Borax. The 3-12-12 plot gave the best bulbs and best increase in bulblets. No. 1 and 3 gave almost as good, but Borax seemed to cause severe leaf burn and bulb and bulblet production suffered accordingly.

Another plot was treated as follows: No. 1, manure plus 20% Phosphate; manure plus 20% Phosphate plus 3-12-12; No. 3, compost plus 3-12-12; No. 4. compost plus Borax. Again the plots with 3-12-12 proved to be the best. They were on land already in good condition with a good amount of humus. It would appear the added amount of Potash may have had a big part in the larger bulb and heavy bulblet production.

Favorite Varieties

Grew about 200 varieties of Gladiolus this year and still like White Magic as well as any. It's a beauty and hard to beat. Has purity of color, ruffling, blooms very good from all size bulbs and a good reproducer. Connie G is very nice though a creamier color. Alpine is a real seauty too. The Purple-Paymaster looks very promising and also Mountain Gem and Spic and Span.

A project we are neglecting is the promotion of Gladiolus growing among our young people. We should have a definite part in our shows and our Society meetings for the juniors for they are the coming Galdiolus growers and lovers. They should be given an important part in our Society. What do you other members think of this?

SHEBOYGAN CHAPTER HOLDS SURPRISE PARTY

A surprise party honoring August Bogen's birthday, (80 years old, January 15th), was held after the regular meeting of the Sheboygan County Chapter, January 11th. A large beautifully decorated birthday cake with 80 tiny candles was the highlight of the party.

Following the business meeting a talk was given by Mr. H. E. Halliday, from the State Department of Entomology, Madison.

During the business meeting these committees appointed for the coming year were announced. PROGRAM: Mrs. Chester Harrison, Waldo, chairman; Mrs. A. J. Radloff, Mrs. L. C. Dietsch, Plymouth: Mrs. Peter De-Pagter, Cedar Grove; Miss Shirley Jaschinski, Sheboygan, SHOW: Mrs. Arthur Piepkorn, Mrs. Leonard Wightman, Plymouth: Chester Harrison. Clarence Martiny. Harold Hahn, A. O. Kapschitzke, Jr., and Harvey Pierce, all of Sheboygan. AUDITING: Walter Sprangers, Waldo, chairman; Peter DePagter, Walter Kurtz, Chilton, BANQUET; W. Axel, chairman; Kenneth Klug, Wm. Ploetz, all of Sheboygan. NOMINA-TION: Dr. L. C. Dietsch, chairman; Leonard Wightman, both of Plymouth and Henry Baltz, Chilton. MEMBERSHIP: Emil Jaschinski, Sheboygan, chairman; Arthur Piepkorn, Plymouth; Dr. Geo. Scheer, Gustave Schultze, Edw. Tetschlag, Wm. Schoenning and Henry Wolfert, all of Sheboygan. PICNIC: Alfred Hinz, Sheboygan, chairman; Leonard Wightman, Milford Lange, Plymouth; Mrs. Harvey Pierce and Mrs. Walter Axel, Sheboygan. PUBLICITY: Mrs.

The Rose Gladiolus

By Walter C. Krueger, Oconomowoc

One of the most interesting color classes, the rose class of Gladiolus, now offers many excellent varieties, a condition that did not exist a few years ago. No color class has given us so much added beauty.

It is to be regretted that show schedules do not separate this color range. From the pale hues to the deep tones is too much of a spread for one color class.

Burma, by popular consent, is the top exhibition variety in the giant class; a dandy to impress the neighbors, excellent for roadside sales and local commercial use.

Also, in the opinions of others, Miss Wisconsin is a good exhibition and a top commercial variety. Its unique color appeals to the florist.

Miss Vermont, a unique pale rose, with color intensified in vaguely distinct pin paints, is a beauty. It will keep longer when cut than any other Gladiolus, and its color is excellent for floral work. It's too bad that such a fine variety is dropping out of many catalogues, because of slow sales.

Dream Girl grows here in clay soil with a pH of 6.3. Out-produces any other Glad in spike formation in dry growing conditions. Slow propagation is the handicap it must overcome. It is pale rose with a small deeper rose spot.

Silvery rose, Tralee, with its extra early blooming season, judging by grower comment (not cataloguers or fans), is heading for success. The winning new introduction basket of this variety at Sun Prairie revealed its floral adaptability.

Astrid, a medium rose with light ruffles, has excellent color and spike formation. It needs good growing and under such conditions it is excellent.

In light rose, Topflite is a good bet to gather a ribbon. It opens many giant florets but lacks tip finish.

In shiny deep rose Sioux City Sue has possibilities. The color of this 400 size Glad is best under weak daylight.

Personality is the giant of this color

George H. Scheer. WAYS AND MEANS: Walter Kurtz, chairman; Mrs. L. Wightman, A. J. Radloff, Arthur Piepkorn, all of Plymouth and Walter Sprangers. SUNSHINE: All members.

-Mrs. Mary Scheer, Sheboygan.

class, in both plant and flower. The color is not weak, but lacks saturation; but in spite of this lack of color intensity it is a fine Gladiolus.

The best new rose for commercial purposes I am familiar with is Mauvie Rose, an extra early; color a bit lighter and with more lavender influence in the inner floret areas than Burma. It does not open more than 5 florets, but will please growers of bulbs and flowers.

Tivoli is a great commercial prospect in pale rose. It makes beautiful spikes (8 open). It is too bad that most cheaper stock of it is mixed. The higher prices in some lists reflect "cleaning up the stock."

Like Tivoli, **Treasure Island** is very beautiful. It is sharp toned light rose of much promise commercially, a tentative opinion based on a few dozen bulbs.

Venida will please both the exhibitor and show fan. It is a medium rose with cream inner petal area, superb in floral work and field habits.

(Continued on Page 151)

PLANT GLADIOLUS

The King of Summer Flowers!

- for your artistic arrangements!
- for your cut flowers!
- for a real garden thrill!

Our 19 years of growing experience may be called on for your guidance in arranging for a purchase of satisfaction.

Our current catalogue is free. It lists about 100 varieties.

Our bulbs, so our customers say, are of the highest quality.

RELIANCE GARDENS

657 E. Washington St.

Oconomowoc, Wis.

BULBS BULBS BULBS

Best Quality — Best Varieties —
S T A T E I N S P E C T E D

WRITE FOR PRICE LIST Thanks to last years

we will entertain offers on large quantities in all sizes and bulblets of SNOW PRINCESS, LEADING LADY, ELIZABETH THE QUEEN and ETHEL C. COLE.

Minneiska Gladiolus Gardens
Willis T. Miller, Prop.
1016 Highland Street
WHITEWATER WISCONSIN

Garden Tractors work

(Continued from Page 142) improvements. Believe roto-tiller fine machine for cultivating but think there is much to learn about it, as to when and how deep, how often and what kind of soil best to use it in. 9. Would buy roto-tiller appears to do a good job for our neighbors. 10. Think tractor which could be used for all necessary purposes might be ideal. 11. Would buy same, as is satisfactory, 12. Would still prefer original roto-tiller as much easier to handle, better balance, light, does not clog easily with roots and weeds in tiller section. Only objection is complicated 2 cycle motor which is very hard to start at times, 13. Would buy small sized roto-tiller as one can maintain mulch and work-in humus. On my small garden would not pay to have large size to be able to plow. 14. Would get about 5 H. P. motor and perhaps Gravely. Price is reasonable and 1 like makes on which you can have attachments in front of tractor.

QUESTION 3. If you use a rototiller, will you state if it does a good job of incorporating organic matter into the soil or is a plow better for that purpose.

ANSWER: 1. I hire my ground roto-tilled and prefer it to plowing. It does a good job of incorporating organic matter in the soil. 2. I used a tiller for cutting down strawberry rows and found it to do a perfect job on year old beds. I think the tiller has a place in the garden as well as the plow. 3. I believe plowing is better. You get the organic matter down where the roots are. You have a nice clean job when done plowing with no plugging up of cultivator.

4 and 5. No opinion, 6. With proper times the roto-tiller chews up organic matter and mixes it with the soil. Will not leave a hard bottom as the plow does. 7. Believe tiller superior to plow for this purpose. 8. We use a roto-tiller. It does a very efficient job of incorporating organic matter in the soil if material is not too coarse. For coarse material prefer a plow. Would use plow for last operation in fall, 11. I believe in a tiller and would not use a plow for preparing my soil. 12. Roto-tiller does very good job of incorporating organic matter providing you use proper tines for the

Berries and Vegetables

work. I ordered three sets of times with each machine: regular deep pointed, curved knife and wide weeding times. 14. Have had work done with roto-tiller which does swell job of incorporating organic matter — better than plow but price high.

Note: Answers to questions 4 and 5 on the kind of cultivating and seeding machinery and type of irrigation systems used by these growers will be published in our March issue.



PELLETIZED SEEDS FOR

GARDENERS

The picture shows, left, ordinary sugar beet seeds. In the hand on the right sugar beet seeds after they have been Pelletized.

Pelletized seeds are available from several seed companies. The process was developed "years ago by Dow Chemical Company in conjunction with the sugar beet industry.

Seeds of various kinds of flowers and vegetables are now being Pelletized, including carrots, lettuce and flower varieties. Hard to handle seeds can be space planted thereby eliminating much of the back-breaking chore of thinning and transplanting.

The coating is said to protect the seeds against cold, excessive moisture and extreme dryness.

A California lettuce grower recently made test plantings with coated and uncoated seeds. Only 5 ounces of coated seeds were used per acre compared with 2 pounds of uncoated. The coated seeds produced 40% more premium heads per acre and the saving in labor from thinning averaged from \$15 to \$20.

While Pelletized seeds are still in the experimental stage, many of our Wisconsin gardeners may wish to try them.

THE ROBINSON STRAWBERRY

"As I have a fine market for berries, I am trying the Robinson variety," writes Miss Freda Schroeder of Evanston, Illinois. "I spent 5 days in Michigan last year during the picking season in the fields with research men from General Foods Freezing Plants. I find that Wisconsin growers are not growing this berry correctly. It is a fine freezing berry but must remain on the plants four to five days before picking."

The Frost Guard

"The strawberry grower is often badly hit by late spring frosts. When I heard about the new Frost Guard from Michigan State College I followed it closely. It is now being put on the market."

"The Skinner irrigation people have on the market a sprayer that can be attached to a power spraying tank, or a city water main, where the acreage is not large. Such an irrigation system works fine and many a small grower in Michigan was using this setup last year. I used it in my nursery last summer and saved my strawberry crop."

STREAMLINER STRAWBERRY

What have been the experiences of strawberry growers in Minnesota with the new Streamliner strawberry?

Reports vary. Some like this variety while others do not feel that it is any better than Evermore and Gem. Most agree that the quality is good but the habit of producing the fruits on short stems near the crown of the plant seems objectionable.

By L. C. Snyder in The Minnesota Horticulturist.

The easiest way to check Communistic aggression is to stand firm and give the people enough to eat.—Fond du Lac Commonwealth Reporter.

Prevent Potatoes Sprouting

By R. E. Vaughan

Sprouting of potatoes in midwinter and spring causes a shrinkage, loss of weight and poor appearance. This has long been a source of loss and annoyance to farmers and dealers in potatoes, and often to consumers.

This can now be prevented or retarded for several months with a synthetic chemical. It has a long name, methyl ester of alpha naphthaleneacetic acid. It is sold to the trade under the names "Barsprout," "Nosprout," and "Storaid."

This chemical is sometimes referred to as a hormone and is related to the weed killers. Luckily it does not hurt the appearance or cooking qualities of the potatoes treated.

Little of Chemical Needed

Only a little of the chemical is needed to hold back sprout development. Ten grams are mixed with a pound of suitable dust which is ordinarily enough for eleven bushels of potatoes. It is a slowly volatile material. Some of the dust on each tuber will do a fair job. Eut complete coverage does a better job. The cost of treatment will, of course, vary with the qualntity treated but will be about 10 cents for a bushel.

When to Apply Chemical

Application of the inhibiting chemical should be made before natural sprouting starts. It may be done as the tubers are sorted for storage or when bagged for sale. Mid-winter or early spring treatment is satisfactory if the natural dormant period has not been broken.

How to Apply the Dust

The easiest way to apply the dust is to arrange a dust distributor over the grader just before the tubers roll into the sacks or bins; for small quantities a hand garden duster will do the work. The chemical is usually sold in 12-ounce sifter cans (enough for 8 bushels), 5-pound cans and 20 or 100-pound drums. You can spread out a layer of potatoes in the bottom of a bin or box and dust lightly. Repeat layers until finished. Overdosing is a waste and may cause injury.

Used on Other Vegetables

The sprout delaying chemical has been successfully used in some states

on the storage of beets, carrots, turnips and rutabagas as well as potatoes. The chemical should be applied before growth starts to get best results.

Do Not Use on Seed Potatoes

Do not use the sprout delaying chemical on any stock that is being held for seed purposes. Treated potatoes are not good for seed.

Condensed From Stencil Circular 281, Extension Service,

College of Agriculture, Madison.

THE ROSE GLADIOLUS

(Continued from Page 149)

For my money (I paid it) Miss Chicago is the most beautiful of all. Its lavender rose blend and its unique inverted crescent cream yellow throat mark make it distinctive. Very adaptable in floral work.

Looking for a fragrant Glad? Try Gwen. When I took some spikes of it to a show two years ago, 6 out of 10 people who acted as "sniffers" said it was fragrant. Its color is like Oregon Rose (a pretty good rose) but it is taller. The latter fact together with its early bloom habit makes it an important 1949 introduction.

The omission of Evangeline in this

list is because I do not consider it to be of rose color. As always,I reserve the right to an honestly formed opinion.

Also I have omitted in this summary any variety I do not consider beautiful in color, and some I did grow and found wanting. Of course I have omitted those I have never seen.

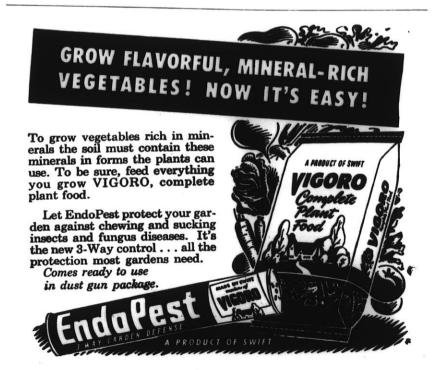
WATERMELON FOR THE NORTH

Is there an early variety of watermelon suitable for northern Minnesota?

Reports on the New Hampshire Midget watermelon were very good this year. It appears to have ripened in all parts of the state and although it is rather small, its quality is very good.

By L. C. Snyder in The Minnesota Horticulturist.





What Vegetable Varieties in 1949

By O. B. Combs

Questions and Answers About Varieties For Our Wisconsin Gardens
Question: What variety of aspara-

gus are you recommending this year?

Answer: We still prefer Mary
Washington. The new variety Paradise appears to grow more rapidly and
perhaps the spears are larger but
we're still concerned about asparagus
rust. Paradise apparently isn't as resistant to rust as is the older, standard
Mary Washington. Market gardeners
and canners are especially subject to
serious losses if the wrong variety is
planted.

Beans

Question: What about lima beans? Do we grow any pole limas in Wisconsin?

Answer: Not very many and the few that are grown are planted entirely in home gardens. Even home gardeners, however, grow mostly bush limas. My own suggestion to home gardeners is that they grow either the standard, small-seeded, Henderson Bush or one of the newer, large-seeded varieties such as Fordhook 242, Early Market, Pierless or Triumph. Our trials thus far indicate Fordhook 242 and the very new variety Triumph, are superior to the others in yield and eating quality.

Question: Snap beans come next. What variety do you recommend?

Answer: Let's discuss the green snap beans first. I prefer the round types Logan and Tendergreen. Many of the seed catalogs this year will be listing a new variety, Rival. We've had Rival in our trials and it's just as high in quality and production as Logan. The plants are somewhat taller so the beans are not so likely to touch the soil. For my own garden, I expect to use either Logan or Rival. For wax beans, I still like Round Pod Kidney (sometimes called Brittle Wax) or Pencil Pod Black Wax. Of the new wax beans. Cherokee and Cooper both look very promising.

Question: Would you suggest that home gardeners grow pole snap beans, and if so, what varieties?

Answer: Yes, I certainly would suggest that home gardeners grow pole snap beans. And I'd use Kentucky Wonder. Decature is a very good new pole snap bean but I still prefer the old Kentucky Wonder. In my opinion,



Prof. O. B. Combs studies characteristics of vegetables grown in 1948.

some of the wax varieties of pole beans are worth growing in comparison with the better bush varieties.

Question: What beets would you suggest we grow?

Answer: My own preference is for Early Wonder for both early and late plantings in the home garden. Detroit Dark Red and Perfected Detroit, of course, are very popular as later varieties in home gardens and especially for commercial canning. Market gardeners generally plant both early and late varieties.

Question: There are certainly plenty of varieties of cabbage to choose from. What suggestions do you have on cabbage varieties?

Cabbage Varieties

Answer: For the home garden, use one of the early Golden Acre types such as regular Golden Acre or a yellows-resistant strain like Resistant Detroit, Racine Market or Wisconsin Golden Acre. If a second early variety is desired, use Marion Market and for late, use Wisconsin All Seasons or Wisconsin Ballhead. For a late red cabbage use Red Hollander. Market gardeners will use about the same varieties only they are even more careful about getting yellows-resistant strains wherever there's the remotest chance that the yellows disease is in their soil. Those who provarieties?

duce cabbage for kraut commonly use such heavy-yielding, yellows-resistant varieties as Marion Market, Globe, Wisconsin All Seasons and Bigner. Question: We find a long list of carrot varieties in most seed catalogs. What carrot varieties do you prefer?

Answer: For my soil, I still stick to Nantes or Coreless as an early carrot and Red Cored Chantenay for late. If my soil were a little lighter and looser I'd likely grow at least a few Imperators or Marsea Eunching.

Cauliflower

Question: What about cauliflower? It's not easy to grow in most gardens.

Answer: That's true, but if the plants are handled carefully and kept growing rapidly it shouldn't be too difficult to get good heads. That is, if the cabbage maggots don't get the early planting and we protect both early and late plantings from cabbage worms and aphids. I'd suggest that only late cauliflower be planted unless



A crate of Great Lakes head lettuce grown in Racine County in 1948.

the gardener is prepared to do something about the maggots. We'll say something about pest control at a later time. Use either Early Snowball or Super Snowball, whether planted early or late as far as varieties are concerned.

Question: What variety of Chard do you suggest? What about that red chard we've been seeing in gardens the past few seasons?

Answer: It's all right, but aside from the color difference I see no real reason to use it instead of such varieties as Fordhook, Large Ribbed White or Green Plume. In my personal opinion, incidentally, Lucullus one of the commonest varieties avail-

able, is the least desirable of the whole group from the standpoint of appearance and eating quality.

Question: Do we have anything new in Chinese Cabbage varieties?

Answer: Yes, we do. The standard variety has been Chihli. We now have an improved strain of this variety. Michihli.

Question: What about eggplant varieties?

Answer: When earliness is important I'd use Badger State. For maincrop and late harvest Black Beauty is

Question: Next we come to four relatively unimportant vegetables, Endive, Kale, Kohlrabi and Leek. What varieties of these crops would you suggest?

Answer: I'd use Deep Heart endive, Dwarf Green Curled kale, either Purple or White Vienna Kohlrabi and American Flag leek.

Head Lettuce

Question: What variety or varieties of head lettuce would you suggest?

Answer: For the home garden, I'd plant both Crisp As Ice or White Boston and Great Lakes. The market gardener should use Great Lakes or New York 456. New York 456 is a little smaller than Great Lakes and therefore might perhaps be a little better for muck soils. Great Lakes, however, gave excellent crops on at least two muck areas of Wisconsin during the past season. Those interested in super-new varieties might be interested in trying two new strains this next season. At least a few seedsmen will be listing Pennlake and Progress. Both strains look promising but they haven't been tested sufficiently in this state to justify definite recommendation at this time.

Question: Do you recommend any new varieties of leaf lettuce?

Answer: Yes, Slowbolt and Bronze Beauty. Slowbolt is similar to Black Seeded Simpson and is fairly satisfactory. Bronze Beauty is an attractive reddish-bronze Oakleaf type but the eating quality is not as good as might be desired. My own preference is still for a good strain of Black Seeded Simpson. Grand Rapids or Oakleaf, Bibb, which is really a semihead lettuce, is excellent eating but it goes to seed very readily as the days get long and the weather gets Warmer

Condensed from radio talk over Station WHA given January 4, 1949.

HARDY WOODY ORNAMENTALS FOR OUR GARDENS

W. R. Leslie, Director, Modern Experiment Station, Canada, Makes Recommendations

At the annual short course for nurserymen and landscape gardeners held at Ohio State University in cooperation with the National Shade Tree Conference, Mr. W. R. Leslie, director of the experiment station at Morden, Man., Canada, gave an illustrated lecture on "Some Hardy Woody Ornamental Plants"

Some of the newer varieties he suggested were Almey, Sundog and Strathmore crab apples; the Prairie Sailor. Prairie Wren and Betty Bland roses; prairie and Russian almond; Manchurian pink weigela; tidy caragana, prestoniae lilacs, particularly Coral, Redwine, Freedom and Swanee varieties; Carleton and Valencia honeysuckles; Redman elder; red Amur tamarisk; Aurora false spiraea; Schubert chokecherry; Morden elm, and Morden spruce.

The Morden Experiment Station is southwest of Winnepeg, Canada, in a severely cold climate. While varieties growing there are hardy, they must first be tested in milder climates to determine what they will do.

The above items appeared in March 15 issue of American Nurseryman magazine.

EXPERIENCE WITH EASTER LILY BULBS

Mrs. Arthur N. Kruse of Iola writes that she was able to keep over her Easter Lily bulbs given her last Easter and had them bloom again this last fall. Here is the way she did

"After the Easter Lily was through blooming, I kept on watering it and giving it good care. Eventually the tops died down. Then in spring when there was no more danger of frost, I set the bulbs in the flower garden where they developed two new shoots. I had three stalks with flowers this past fall. I then potted the plant in a 9 inch pot, took it in the house and kept right on watering it. The shoots died down and three new ones came

"I would like ot know how to divide them. Shall I divide them while they aregrowing or wait until spring?"

Answer: Keep right on watering the plant and giving it good care until the tops again dry down normally. Then store it away in the basement until spring when it should be divided before setting in the garden. Each bulb is planted separately.

The white man's burden seems to be a lot of other white men.

Be sure to send for your copy of the all-new ANDREWS 1949 catalog. It's full of helps for northern gardeners. It also brings you color pictures and descriptions f the best varieties of many fruits and

See Andrews

Hardy Fruits For Northern Plantings

the NEW FREE '49 Color Catalog

perennials.



CHERRIES Luscious pie cher-ries from hardy, ornamental bushes only 3-4 feet high.

perennials.

Below are some of the items we believe you'll like best, because they are all bred to withstand cold Wisconsin and Minnesota winters, yet sacrifice none of the luscious, fruity goodness and bountiful yields usually expected only in the south. BLUEBERRIES Delicious fresh or in pies. Fragrant blooms, brilliant red fall foliage.

RASPBERRIES Many varieties for the home gardener from the largest from from the largest grower in the U. S.

NEW VARIETIES of selected plant-ing stock introplant breeders

3021 Orchard Crest Faribault, Minn.

ANDREWS NURSERY

Garden Gleanings

PLANTS LIKE COOL WATER

REST

Heating the water used for watering house plants or plants in the greenhouse, is unnecessary and in some cases undesirable according to research work done for Roses, Inc., at Ohio State University.

Although applying warm water raises the temperature of the soil, the effect wore off in a short time and top growth of Rose plants was best where ordinary cold water was used. Flower production was as good or better with cold water. When the solution used in gravel culture was heated to 80 degrees a definite inhibiting effect was noticed in less than 3 weeks and the treatment was discontinued.

TOP DRESSING THE LAWN

WITH MANURE is such an unsightly practice. Furthermore weed seeds may be introduced in the grass and weeds continue to come up for years. Unless the maure is cleaned off early in the spring, the grass may become spotty in appearance. We can see no beneficial effects from manure that cannot be obtained with a dressing of peat moss and fertilizer in the spring.

"Set the Christmas tree in a bucket of moist sand," was the recommendation given to a friend in December. Not having any sand available, and thinking the object was to give a solid foundation for the tree and having a bag of water softener salt available, she filled a bucket with that and set in the tree. You can imagine the rest—the needles of the Spruce dropped off in a very short time.

SUCCESS WITH CRATH CARPATHIAN ENGLISH WALNUT

In April 1936 you sent us some seed. We now have two good trees; one 25 feet tall and nearly a foot in diameter. The larger tree produced a hundred pounds of shelled walnuts this year. We are very much pleased with them.

Signed-Charles Miller, Pateros, Washington



Floribunda roses make an excellent showing in the garden. This is Floribunda Summer Snow.

ROSES UNDER 1948 DROUGHT CONDITIONS

C. P. Holway, Evansville

The summer of 1948, as "Garden Gleanings" department has noted (Wisconsin Horticulture, Oct. 1948), was extremely difficult for roses that could not be watered. Following the rigorous winter of 1947-48, the past year has been as trying a period as roses have to endure in our region.

Yet five roses in my garden in Rock County, with no watering whatsoever, performed so well in both growth and bloom that—on a drought--resistance basis alone—they merit recommendation to Society members.

Poulsen's Yellow, a hybrid polyantha, blossomed almost continuously from June 22 until the hard freeze on October 17. Donald Prior bloomed from June 11 on, and was still carrying buds on October 17. Both roses were in good flower the week of September 5 during the worst part of the extended drought. Poulsen's Yellow had a compost top dressing; Donald Prior, a straw mulch.

A hedge planting of Summer Snow, a polyantha descendant of the old multiflora climber Tausenschoen, flowered from June 24 until the mid-October freeze took the last flowers and buds. This planting was side-dressed in early summer with compost.

Another good performer was the polyantha Rosenelfe. Set last spring, it did not blow until July 3, but it continued then, under straw mulch, to flower into September.

GOOD HYBRID PERPETUAL

Finest performance of all — and there may be a lesson in this for Wisconsin gardeners—was staged by the hybrid perpetual Paul Neyron, the 50-petal pink rose that was introduced back in 1869. They went through three periods of heavy bloom beginning June 17. Some canes carried as many as seven blossoms at one time. The evening of the October 17 freeze the plants were still in flower and bud. They were given a liberal dressing of compost but no mulch.

TUBEROUS BEGONIAS

Fancy TUBEROUS BEGONIA
BULBS. Camellia type. All colors.
Hanging type Begonias, Gloxinias.
All large bulbs. Imported from
Belgium. 25 cents each. \$2.50 per
dozen.

MRS. J. CABARET 2133 North 36th St., — Milwaukee 8, Wisconsin

MORE ABOUT ST. PAULIAS

Here are some more suggestions for growing St. Paulias as gleaned from writings of leading authorities on house plants.

The St. Paulia or African Violet is not a Violet at all but related to the Cloxinia.

It seems to like a warm room best and does well where the temperature does not go below 60° F. In winter it prefers a west or east window and stops blooming when cooking gas is used-at least until the weather allows freer ventilation and less artifical heat.

If planted in good soil, it need not be fertilized all winter but should be re-potted annually.

The plant should be kept constantly moist at the roots. Spraying the leaves with warm water is fine but cold water will cause "ring spot".

It is easily propagated by putting leave cuttings in moist sand or in water or by division.

It does not seem to require a resting period.

WHERE DID THESE VINES COME FROM ORIGINALLY?

Look these up in your books and catalogs and see what you can find out about each one.

- 1. Wistaria
- 2. Silverlace vine
- 3. Clematis coccinea
- 4. Clematis paniculata
- 5. Clematis jackmani
- 6. Boston Ivy
- 7. Woodbine
- 8. Porcelain Ivy
- 9. Akebia
- 10. Bittersweet

ANSWERS TO-WHERE DID THESE VINES COME FROM?

- 1. Japan and China-also native in Southern U. S.
 - 2. Western China and Tibet
 - 3. Texas
 - 4. Japan
- 5. A hybrid, parents from Eastern China and Europe
 - 6. Japan, China
 - 7. U. S.
- 8. Japan, Northern China, Manchuria
 - 9. Japan, Korea, and China
- 10. U. S. but also Asia and Aus-

By Victor Ries in Country Gardeners Program Service



Lester Tans, Manager

NU-ERTH

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NU-ERTH grows a healthy plant, color bright day and night. This material is a Natural Worm Manure. It WILL NOT burn the plants, nor can you overfeed. 100% natural organic plant food.

Nothing added. Ideal for house plants, flower boxes, flower beds, shrubbery and vines.

> Price — 3 cans for \$1.00 Postpaid. Satisfacton guaranteed or money refunded.

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BLUE BOY — Deep Blue Flower With Yellow Centers. — 74 Cents each.

DOUBLE DUCHESS — Same as Blue Boy but flowers are double, \$1.89 each

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PINK BEAUTY — Esquisite pink flowers with yellow stamens, 89 cents each.

WHITE LADY — Large, Perfect white flowers. — The best white, 93 cents

PRICES ARE ALL POSTPAID

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FLOWER

Scientifically designed pots which feed water from storage base direct to roots of the plant, by means of a glass-fibre wick. Ideal for African Violets and Gloxinias especially.

Made of strong, durable light weight plastic. Available in 6 colors. Ivory, yellow, coral, pink, green or marble. — \$1.10 each; 3 for \$3.00, post-



SUB-ZERO ROSES

A distictive strain of hybrid tea roses that unprotected, has been wintering through 15 degrees below zero for years and win slight protection will withstand 50 degrees below zero. They have all the other qualities of a good rose such as size doubleness, fragrance, vigour and disease resistance. They are everblooming. Try these roses if you are having trouble wintering the ordinary hybrid tea varieties.

LILLY PONS. — White RED DUCHESS. — Beautiful red

LILLY PONS. — White PINK PRINCESS. — Rose Pink

RED DUCHESS. — Beautiful red \$1.85 each; 3 for \$5.25 postpaid.

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PRESIDENTS MESSAGE

Dear Fellow Members:

By the time you read this message our addressograph plates will be well on the way towards completion. Then you can soon have your first "every member" letter from your federation; and won't it be fun? If you don't receive this first letter it's because you have not yet sent to me 10 cents with your name and address for your addressograph plate; for this is the only way we will have of getting that first message to you.

The day these letters go out will be a red-letter day in our state federation and with it will come a solution to many of our difficulties and administrative problems. To reach each garden club member directly and not merely through notices sent to your presidents, as has been the case through the years the Wisconsin Federation has existed, will be a step forward in unifying and strengthening our federation which is our No. 1 project. Many good ideas and notices can be sent to you through this medium and, in a short time, you will not only be fully aware of your federation's usefulness to you and your club but you will also feel that you really "belong."

The second project that is well under way is our 4th Judging School-or shall I say a School for Exhibitors and Judges-to be held at Lake Geneva May 17-18-19, Judging Schools in Wisconsin are compara-156

No man is born into the world whose work

Is not born with him. There is always work.

And tools to work withal for those who will:

And blessed are the horny hands of toil

James Russell Lowell.

tively young and, so far, they have not been financially successful. When Miss Wertsner of Pennsylvania lectured in Wisconsin in November she gave us the following advice: "Do in Wisconsin as is done in many eastern states; have patrons." This simply means that the first 100 persons (whether they are members of our federation or not) who buy a course ticket for \$5.00 become patrons-with all of the privileges of the entire course or any part they wish. Incidentally the names of these 100 patrons will be printed on the back of the school program.

Since Ancient times there have always been "Patrons of the Arts" and our 100 people can feel, with some pride, that they are endorsing the fine art of Horticulture and Flower Arranging. For it is just that. Moreover our government considers these schools, sponsored by our National Council, of such high calibre from an educational standpoint that they have permitted them to be classified as nontaxable. And not only does government recognize Schools, but the British Ministry of

Education, as well, has acknowledged their great worth. Hence if you subscribe to this excellent project as a patron you can be very proud of yourself. However, in so doing, you are really getting much more than you are giving, for the very finest instructors are engaged by your Federation to give these courses to you. You will get a very good return for your \$5.00 investment.

Finally - your state chairmen are now ready to serve you in any way you need them. The general procedure for state chairmen is this: They get all the information they can possibly get, relative to their particular field or subject, transmit this information to the district chairmen and so inspire and fire the zeal of the district chairmen with excellent ideas and projects that they, in turn, will inspire the chairmen in the individual clubs to carry on worthy, valuable and constructive programs and projects throughout the year.

Each club can do much to help its members learn the hows and whys of better gardening, gain a better understanding of conservation problems and acquire better ideas for beautifying our communities, our highways and, above all, our homes. In short-we want each club to do some definitely creative and useful work in order to bring more beauty into our lives and the lives of others.

> Sincerely yours. Gretchen Fiebrantz, President.

Highlights—

from THE NATIONAL COUNCIL.

As Wisconsin was not represented at the October meeting of the National Council at Tucson, we have no first-hand report. However, from minutes of business sessions and from the National Gardener we have gathered events that transpired:

Approval of purchase of Redwood Grove (mentioned last month) as twentieth anniversary gift to the nation. The Twenty Years History of National Council (now being written) to be published before the Annual Meeting to be held at Portland, Oregon in May, 1949.

Esther Grayson Rockwell secured as editor for the revised Handbook of Flower Show Judging.

Mrs. Lewis M. Hull (N. J.), President reported that Seeds of Peace raised \$40,000.00, purchased 980,000 packages of seeds. Mrs. Nicholas J. Mertons, Treasurer, reported 900 tool kits sent to Germany.

Mrs. Hull read excerpts from letter sent by British Ministry of education in appreciation of help rendered by National Council in establishing, under the British government, a course in Flower Show Judging.

Mrs. Spillers (Okla.) presented plans for a post-convention trip to Alaska in May.

Mrs. Fish (Colo.) urged that all members be given a chance to subscribe to the National Gardener. She offered a prize of \$25.00 to the state exceeding, by the largest number, it's quota of two Volunteer Members per club, (as of March 31st, 1949.)

From resolutions submitted at Regional Directors' breakfast: That each state be invited to subscribe a minimum sum of ten dollars annually to "National Council Horticulture Scholarship Gift Fund."

The meeting provided thrills and unforgettable experiences.

Seven miles south of Tucson, on an open stretch of desert, stands the old Spanish Mission of San Xavier del Bac, one of the most beautiful old missions in the United States. No visitor to Tucson ever leaves without seeing this historic edifice. Delegates were given this privilege.

A thrill was provided when they (Continued Page 162, Col. 1.)

Winter Garden-Planning

George W. Simmons, Jr., Landscape Architect

The winter mails are filled these days with an endless assortment of nursery catalogs offering numerous varieties of trees, shrubs, and flowers. These gay catalogs come from all parts of the country. The prices for the same variety may vary as much as the distance from whence the catalogs came. Unless you are informed in the arts of gardening, or have had a wide experience in buying nursery stock, you are probably quite bewildered. "Let the buyer beware" is the motto of too many business concerns. Consequently this is written to help you to "beware efore buying" nursery stock. Many dollars are spent for bright colors in winter catalogs that never reappear in summer gardens. It is not always the seller's fault, but quite generally the buyer who selected plants for his garden without considering a few fundamentals of plant life and the environment to which he brings the new plant.

Before you order, consider the following fundamentals that determine the success of your investment in nursery stock:

1. Hardiness or Adaptability. Is the plant hardy in Wisconsin, or in your locality? Will it survive our cold winters and dry summers without special care? The most hardy plants are those that are native to the woods and fields in your vicinity. The plants that are grown by well-established nurseries in your latitude or northward are usually grown for your climate. Lists of plants that are hardy or adaptable to your locality are generally available from the State Experiment Station or University Horticultural Department on request.

2. Soil. In what type of soil will the plant grow best? Do you have that type of soil in your yard? Have you had any samples of your soil tested? Every plant produces its best growth and keeps its health vigorous if it is planted in the soil of its liking. If you know the type of soil in which the plant is growing wild, then you will know what it needs. Some varieties of plants do well on sandy soils, others on clay loam soils. They mayprefer acid or alkaline soil, wet or well-drained soil, peat bogs or woodlands, or soils that are richer in various soil elements. Be sure the plants you order will find a suitable soil in which to grow when you plant them. Many of the nursery catalogs indicate the soil preference of each type of plant. Remember to place liberal quantities of the proper soil around the roots of each plant at the time of planting if you want the plant to grow and produce strong branches with an abundance of flowers or fruits.

3. Sunlight Preference. Will the plant endure a full day's bright sunshine, or will it do better in a halfday's direct sunshine? Have you checked the place where you intend to plant for the length of time and intensity of sunlight? Nearly every reliable nursery catalog indicates the ability of the plant to survive in full sun, a part day's sun, or shade of varying density. If you have a heavily wooded lot, you had better plant shade-loving varieties, or early springflowering species. Selection of the wrong plant may lose you your plant. your money, and another growing sea-

4. Size and Price. Be sure you know what size plant you are ordering, for prices vary considerably with the size and quality of the plant. Size is not always an indication of the rate of growth of the plant, either. Some plants grow very slowly and may be listed in the nursery catalog by age instead of actual size. Many evergreens and hardwood trees are in this class. The softwood trees and the larger growing evergreens are more rapid growing. If you wish to plan an attractive group of shrubs or evergreens, the rate of growth of each plant should be considered; otherwise the more rapid growing will overshadow the slow growing species and perhaps stunt their growth in a very short time. Generally you may order smaller sizes in quick growing plants and larger sizes in slow growing materials to save money and time,

In selecting a shade tree or evergreen, be sure you know how large it will ultimately become before planting it too close to the house or to your flower garden. Most callogs will state the correct planting distance between plants of the various species. These figures cannot always be relied upon to fit your particular

(Continued Page 162, Ca. 1)

How Good is Your Soil

Mrs. Eloise S. Vaughan

During the past two years garden minded people have been growing confused over the wide variety of headlines of articles appearing in our current magazines.

Probably the most startling was "You can starve on three meals a day" by Ed. Rupp describing nutritional research at the U. of Missouri-"Our Nitrogen is Going West" by Dr. W. A. Albrecht of the same institution. "The water table in many of the Food Belt States of U.S. A. is dropping from 1 to 3 inches every five years" comes as a warning of Depts. of Soil Conservation - "Poor teeth caused by food grown on poor soil." On the more hopeful side is a recent article by Louis Bromfield "Take good care of your soil and it will take care of you."

Space is too limited to point out present day soil deficiencies and because of this it seems wisest to discuss first what is good soil. Secondly how can good soil be produced and maintained.

Many of us have asked ourselves what soil is, and have probably laughed and answered "Oh the dirt under our feet," and let it go at that.

But my friends it is much more than that. Most folks think of it as a dead, inert substance. Few of us realize that good soil is alive and ever changing. It is teeming with the life and activity of millions of minute organisms known as bacteria, fungi, yeasts, molds, algae and hundreds of other related forms.

This population and activity is largely confined to the upper four or five inches of our soil. A single gram of good soil contains literally thousands of these different types of organisms. So long as their requirements of food, moisture, air and temperature are met they live and work in perfect harmony in a balanced relationship carefully controlled by nature. These organisms with their food and by products are commonly known as humus. The other kind of so called humus, is where legumes and pasture land is plowed under just before planting corn, grain or other field crops. The amount of humus to be found in a good kind of soil may vary from four to ten percent by bulk.

The remainder of this good soil is largely minerals, decomposed rock and moisture, and the visible organism called the earthworm.

By this time you are asking why do we need humus. Its benefits are many and varied. The two which are most frequently recognized and discussed are retention of moisture or prevention of soil erosion on cultivated ground. Secondly the organisms contained in humus have the ability to break down organic matter into simplified elements which can be obsorbed as food by growing plants. In the case of the mycorrhiza fungi they go even farther and feed these simplified elements to plants and trees. It has been discovered by research workers only in the last few years that these so called decay bacteria secrete a mucus which glues fine particles of soil into masses which in turn are able to resist washing away of open soil which results in erosion. Other bacterial forms have the ability of taking nitrogen from the air and incorporating it into the roots of leguminous plants. In other words each organism has a special job to do in a well regulated society with many other kinds of organisms.

The good soil is porous enough that it is well areated because moist soil bacteria need oxygen for existence and growth. It is rather porous or loosely formed to aid in the movement of both air and bacteria. The next requirement of importance is moisture but not so much as to make the soil heavy. Where a soil becomes hard packed you have a condition known as "desert-like" where bacteria and related forms cannot live or work. On the other hand if it is too heavily saturated with moisture it encourages anaerobic bacteria which cause putrifaction rather than the normal fermentation processes.

The members of this microscopic society thrive best at temperatures ranging from 70° to 100° F. Here we discover another of nature's rules, in that a soil which is continually built up with humus grows darker in color year by year and has the tendency to become workable much earlier in the spring. Experiments have long shown that the temperature may vary as much as ten degrees in the same

field between the light yellowish soil and the good black loam.

When mother nature sets the proper stage for maximum bacterial growth we find the soil neutral or only slightly acid.

There are a few harmful factors which retard and finally destroy the bacterial growth and their ability to benefit the surrounding soil. The most common of these is the use of antiseptics, strong chemical fertilizers and sterilization, by heat, of the soil. When anyone of these upsets the ability of the soil to break down or digest the green material when it has been plowed under, it causes a lack of necessary nitrogen and natural activators.

On the other hand the late Sir Albert Howard of Great Britain describes soils which are so fertile and densley populated with active organisms—that they can soon convert gunny sacks, twigs and corn stocks into sweet-smelling, humus-filled soil.

In other words we can say that the degree of fertility of our soils is in direct proportion to the number of harmonious organisms working under favorable conditions and upon an adequate food supply.

When we have produced a soil having a spongy crumbly feel when handled and an earthy woods soil smell we have provided the proper habitat for the lowly earth worm. Sooner or later he arrives with all of his relatives and together they go to work to further pulverize and digest the soil. They produce a kind of soil which is more easily and completely used by the root system of any plants growing there. So don't think that when this good fortune arrives in your garden that you should dig them up and feed them to the birds or take the day off and go fishing.

Sir Albert Howard started the practice of intensive production of this quality humus in piles or pits. When all organic form had disintegrated into good black soil it was spread over land soon to be planted and plowed or disked into the soil.

To make such a pile for the production of humus dig out about four inches of top soil and about four by eight feet. Into this put six inches of leaves, weeds and all discarded vines, green garbage, etc. Over this spread an inch of fresh cow or horse stable manure and some bone meal or

(Continued Page 162, Col. 2)

From One Gardener to Another Genevieve C. Dokin

Although the garden is sound asleep under a carpet of snow, the gardener keeps wide awake trying to keep up with the catalogs which come in each day's mail. With the coming of nursery lists winter days do not seem to stretch so far ahead. Gay covers may be filled with pages of selling phrases and somewhat hackneyed descriptions but with all of these there is a fund of information. Catalogs serve as plant dictionaries, in many instances to be studied along with reference books. After all what purchase gives as much pleasure to as many people as an investment in good seeds or plants? Through careful study and comparisons of catalogs one may buy wisely keeping a fairly balanced relation between supply, demand and purse.

Last summer I received a catalog which interested me. It came from Barnhaven Gardens, Gresham, Oregon, where I have obtained many fine primulas. As a companion to primroses they are selling lilies from the nearby Oregon Eulb Farms. There Jan de Graaf hybridizes and grows acres of lilies. I have not started to collect lilies but if I do I shall surely want some of those described.

Other sources for lilies recommended are Esperanza Lily Gardens, Langley Prairie, British Columbia, Canada, Sandyloam, North Springfield, Vermont and Lilydale Bulb and Flower Gardens, Milwaukee, Oregon. Mr. Eckstein of the last-named Gardens has been commended for his perfect packing of live-plant material. If you send for lists now you will be able to place early orders this summer for fall delivery.

Henry Kohankie and Sons' lists come in fall for spring orders. They are at Painesville, Ohio. They carry types of less common planting stock sometimes not available locally. Ohio's milder climate tempered by Lake Erie enables them to ship freshly dug material. Their lists contain no pictures nor descriptions other than botanical and common name, ultimate height, size and price.

Vetterle and Reinelt, Capitola, California sent their interesting list of begonias, delphiniums and polyanthus primroses in good time. The dozen primroses ordered last spring were beautiful, arriving as they did in full bloom. In July I received seed or-

dered. Be sure to send in your seed order for July's fresh crop before the limited supply is exhausted. Most of you have grown Vetterle and Reinelt's begonias.

Before Christmas the mail brought Burpee and Vaughan catalogs. About the same time Harris Seeds, Rochester, New York, put in an appearance. We should have no trouble making a selection of vegetable seeds.

On the January cover of The Flower Grower is an arrangement of seven of Burpee's flower introductions for 1949. Included are snapdragons Giant Skyscraper and Lemonade, Petunia Silver Medal, aster Heavenly Blue, calendula Orange Quills with two sweetpeas, June Lockhart and Margaret O'Brien. The All-American Winner Silver Medal Petunia is rich salmon pink. I wonder if it will be substituted for First Lady or Cheerful which many of us use.

Vaughan's cover features New Princess Asters. Several specialties claimed my attention. Among them was Golden Cleome. A white Sweet William, Polar Bear Centaurea and Cherry Rose snapdragon sounded attractive. Then there was Ipomaea Blue Mound described as "a bush of breath-taking blue."

We are urged to try the double petunias. One amateur mixes soil as follows: one third rich soil, one third sand, one third peat to which add

two parts hardwood ash. In early February seed is pressed gently into the surface of the soil, the seed boxes are placed in a dimly lighted, warm room and the soil kept moist at all times until the seedlings appear. Then the boxes are moved to a sunny window. When three or four true leaves appear they are transplanted into a flat, kept moist with weak liquid manure and given plenty of sunlight. In Mid-April the flat is put into the cold frame. In May sturdy plants are ready to be set in place.

Interstate Nurseries, Hamburg, Iowa, uses the winners, Forty Niner and Tally Ho on its catalog cover. Inside is Golden Giant Apricot-two luscious for words! Mollis Azaleas are featured on one page. Ours from Bobbink and Adkins several years ago have been a source of pleasure each May. They do well in peaty soil with some added acid-aluminum sulphate or sulphur serve. This spring I am adding some native flame azaleas from Gardens of the Blue Ridge, Ashford, North Carolina. This nursery carries a great variety of wildflowers and ferns.

Get Olds' catalog from Madison if you are interested in Wisconsin Golden 800 Sweet Corn, Wisconsin 55 Tomato or Olds' Lakleaf Lettuce.

When it comes to beautiful catalogs we all concede Wayside Gardens is really tops. The 1949 edition is true to form. In it I promptly found a plant to order—geranium subcaulescens splendens — "five or six inches

(Continued Page 162, Col. 3)



Winter Comes to the Garden

Colorful Winter Material From Your Garden

Mrs. Garrison L. Lincoln

With the wealth of unusual things to be gathered from the garden for winter, there is little excuse for the single vase of brownish, dried material left in a corner until it is dusty and dull. Almost any color desired may be found in cultivated material if it is planned for in the spring and picked at the proper time during the summer and early fall. Change winter arrangements as often as you change fall ones, swish the more valuable ones through a Dreft suds and they will have no chance to become too familiar, uninteresting and dirty.

From the farm or vegetable garden you may gather many grains such as rye, millet, oats, Sudan grass, etc., that are exceedingly good with other material. Millet picked while still green will retain it's color for a season and after that will be tan. Sudan grass comes in shiny black (see illustration with birds) and many shades of brown and tan no matter what the color of the seed you plant. It grows taller than the average person so plan accordingly. Green sprays may be obtained by picking when still immature. Ordinary corn stalk tassels, picked early while green, are good and some popcorn tassels are even better. Don't wait until fall to pick them, as their form may become wild and their color dirty. Small, dark red strawberry popcorn (Vaughans) is wonderful with tan grains (see illustration). Okra seed heads may be picked when gray-green but mature or when brown. after frost.

Biennials and annuals from the flower garden offer still more variety and color. There is celosia, in variety, and a red ricinus (castor bean) to supplement the red strawberry popcorn. Statice is lacy in form and pastel or white in color. Nigella pods are tan and Job's-tears are tan, white and gray. The biennial Lunaria, usually seen in florist shops in the fall, is a cluster of crystal white discs. It is easy to grow. Helichrysums are colorful, daisy-like flowers but I have found them difficult to grow. They should be picked when coming out of bud, before fully open. Green Bells of Ireland (Vaughans) make unusual cut flowers which dry a pale green or, if very mature, a cream color.

Perennial seed pods that are good in arrangements are dull black Bap-



A pair of birds in white, black and gold on a black base add charm to a graceful arrangement of Sudan grass and Lunaria.

tisia sprays; the shiny black and tan seed cluster of blackberry lilies (Belamacanda chinensis); black, round clusters of the vine smilax herbacea, also seen at the florist's in the fall, and the flat-headed yellow yarrow (Eupatorium Filipendula). The seed clusters of dictamus or gas plant are tan or dark red depending upon the color of the flower. Orange Japanese lanterns are familiar to many. For a variation from the orange, they may be picked while green or even in a paler tone. The gray blue of the

globe thistle (echinops ritro) is lovely to use but it must be picked before too mature and before the sun can fade the color. Pick while still in flower. Various plants will be found to differ in intensity of the blue.

There are other seed pods, too numerous to mention, such as the heads of oriental poppies, but the above mentioned are those I enjoy the most and use the most frequently.

In the planned shrubbery border many colorful sprays will add to your enjoyment winter and summer. A little session with the seed catalogues now may bring unexpected dividends for a second season next year, when the garden is frozen and dull.



Red popcorn in striking contrast to tan oats and cream colored maple block base.

Our Great Heritage

The crucial problem of our generation is to safeguard, maintain, develop, increase, and wisely use, for the benefit of mankind, the natural resources of this earth. Conservation means the wise use and renewal of these resources so that our generation and succeeding generations may continue to derive benefit from them.

If we prevent soil erosion; protect now—standing forests and reforest by planting seedlings; prevent pollution of our streams and lakes so aquatic life may exist and the water be usable, and protect wild life, those that are still with us, so that they can multiply their species, we will be striving to preserve the balance of nature. Conservation will increase food, fiber and fuel and will be the economic saving of our country.

Mrs. Co

It is our duty and purpose, therefore, to put an end to practices that injure or destroy the renewable natural resources and substitute for them practices that accord with nature's order. We must repair, insofar as possible, the damage already done; safeguard and increase the land's productivity by every means that science can devise; bring about proper equilibrium between population and productivity; protect flora and fauna and protect and maintain scenic beauty at all times.

Conservation is on the move. Please ride with us as it is getting late. But do not think of Conservation in terms of limitation. Think of it, rather, as the renewal of the great natural resources which are our heritage.

Mrs. Conrad Biebler, Conservation Chairman.

BOOK REVIEWS

Learning to Garden, by Olive Mason Gunnison, is a primer for inexperienced gardeners. Each of its chapters is filled with detailed instructions on how to proceed in planting the home grounds and in maintaining them properly. At the end of each chapter is a list of suggestions on what the good gardener does and one on hints of what the smart beginner avoids. Appendices list gardening books and magazines, plants suitable for various purposes, and addresses of the state agricultural experiment stations. The line drawings by Anne Seaman are not as clear in every instance as seems desirable. Funk and Wagnalls Company published the book in 1948.

In an Herb Garden, by Annie Burnham Carter, was issued by the Rutgers University Press, New Brunswick, New Jersey, in 1947. The author became interested in herbs through reading Shakespeare and in studying the horticulture of the sixteenth and seventeenth centuries in England, including Shakespeare's garden Stratford on Avon. She is fortunate in having an Italian gardener, familiar with most herbs commonly grown, the native habitat of many of which is in the countries bordering the Mediterranean. Beginning with March, and continuing into November, the author writes of what appears and is harvested in her garden, month by month, in a leisurely fash-The chronicle is interspersed with descriptions of the herbs, directions for culinary or other uses, as well as bits of lore gleaned from old herbals. Perhaps not of particular interest to others than herb enthusiasts.

The Everglades, by Marjory Stoneman Douglas, is the thirty-third volume in the Rivers of America series, published by Rinehart & Company, Inc., in 1947. The subject of this volume is unique in being the only region of its kind in the world. A condensation of the book appeared in the Reader's Digest in May, 1948. The December, 1948, issue of the National Geographic Magazine contains a brief article on the area, which is now a national park, with illustrations in color. Before writing the book, the author familiarized herself thoroughly with the territory, traveling extensively throughout the region interviewing large numbers of people. The tale of how the Everglades changed from a wilderness inhabited solely by Indian to a paradise for exploiters of one kind or another, and now has been saved for posterity, is a dramatic and exciting one.

Alfred G. Etter writes beautifully of an experience which made a deep impression on him in "A Day with Aldo Leopold," in the Autumn, 1948, issue of the quarterly magazine. The Land. The author, who was at that time a student of wild life management under the Professor, tells of his overnight visit to Leopold's "Shack," after a field trip one spring to the Wisconsin River valley. While Leopold's dog, Flick, was delighting in his own pursuits, the two men, with a common bond of interest, enjoyed observing the sights and sounds of nature.

A special Wildlife Research News Letter (Circular No. 35) has been issued in memory of Professor Leopold by his associates at the University of Wisconsin. His son, Dr. L. B. Leopold, is supervising publication of a manuscript entitled Great Possessions. which the Professor had completed before his untimely death.

An intriguing advertisement in the January, 1949, issue of Better Homes and Gardens announces that trays of mushroom spawn are obtainable at nominal prices, and merely need to be watered and kept at the proper temperature before bearing over a period of several weeks.

In reviewing Our Plundered Planet, by Fairfield Osborn, the Conservation Chairman of the National Council states that it is her conviction that every club conservation chairman should read the book, persuade as many members as possible to read it. and report on it for the benefit of those who are not persuaded. A movie illustrating this controversial book will be available. Another equally controversial book on the same subject is the Road to Survival, by William Vogt, Louis Bromfield's Malabar Farm also treats of it.

People and Plants, the 1947-48 Annual Report of the Brooklyn Botanic Garden, includes a touching story of how a bequest of more than seven thousand dollars was left to the Garden by a garment worker in the city. During the twenty years she had lived in furnished rooms she had never made known to the personnel of the Garden the pleasure she found there, which served as an acceptable substitute for the Danish gardens she remembered from her childhood. But Emmy Kamilla Olsen willed the contents of her bankbooks to help millions of other visitors to the Garden continue its enjoyment.

St. Francis of Assissi, hoeing his garden was asked what he would do if he were suddenly to learn that he was to die at sunset that day. He said: "I would finish hoeing my garden."

If ivies are being grown indoors in water, it is best to use earthenware containers which exclude the light.



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LAWNS

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WISCONSIN TREE SERVICE

DeForest Club Host to the Madison District

The following program will be presented to garden clubs in the Madison District when they gather for their first meeting of the year at the Legion Hall in DeForest, Friday, February 25th, at one o'clock.

1.00—Demonstration and Talk on Flower Arrangement — Mrs. R. O. McLean

3.00—Symposium:

Soil Preparation for Annuals or Perennials — Prof. J. G. Moore, Chairman of Horticulture Department, University of Wisconsin.

Primroses — Mrs. Walter Dakin Hemerocallis — Mrs. George F. Harbort

Chrysanthemums — Mrs. Sam Post

Tea will be served by the DeForest Garden Club following the program.

Mrs. McLean, a former pupil of Mrs. Caroline E. Peterson, Hawaii, is particularly skillful in working with exotic materials. She is an artist both original and daring in her use of color and line.

tomatoes, cabbage, etc. or placed in the bottom of a trench before planting seeds in your garden will truly surprise you and your neighbors. The size of fruits and vegetables grown with the aid of humus will be of only secondary importance as compared with flavor, nutrition and quality of the products of your garden.

This is only the beginning of thrilling new experiences in gardening of all sorts.

We have tried it and sincerely recommend it to all who have been patient and read thus far.

One Gardener To Another (Con't.)

It ought to fit well into my collection of low geraniums. If you want a ground cover for a sunny spot read about the new one which Amos Perry, famous English plantsman introduced. It is Polygonum Reynoutria, a dwarf lace plant bearing pink sprays of bloom. Its buds are deep coral and salmon.

Rose fans will delight in Waysides' color plates. If you are interested in crabs colored pictures will help you choose. Only Bechtel's is susceptible to juniper rust. It is a double form of the native crab. Mr. Bechtel found it on an Illinois farm nearly 100 years ago. Don't miss the pages of hybrid mockoranges and patented lilacs. When one can purchase such handsome specimens why not replace outdated, ordinary shrubs?

Our garden is over ten years old and shows signs of age. Contours are fuller, lines are longer; shade has come where we needed it. With this growth has come change in design. larger colonies of favorite perennials bringing a desired unity to the whole Overgrown, leggy garden plan. plants and shrubs have been discarded in favor of better things. With the maturing of the garden the gardener also has grown in an appreciation of the fine art of gardening and in a broader knowledge of the needs and uses of better plant material. Each day brings its projects and problems. As one writer puts it; "The gardener is an artist perpetually at work, not with brush or chisel, but with saw and clippers, spade and trowel, for he must be thinning, pruning, dividing and replacing his plants.

Highlights (Concluded)

drove out to the Tucson Mts., close to town, where the moving picture "Arizona" was staged. As cars neared the location, they were halted by bandits, Mrs. Hull was forced to alight, pistols were fired in the air and, in true Western movie style, guests were treated to a near-abduction thwarted only by the timely arrival of the Vigilantes!

A Desert Luncheon, Mexican Dinner, Chuck-Wagon Dinner and Western Flower Arrangement Luncheon put on by Pacific Region, lent native color and unique decorative effects to the meeting. The Blue Star Memorial Highway Luncheon, attended by Arizona highway officials and engineers, ended with presentation of certificates to states having established the highway within their borders.

As a final courtesy, delegates were taken in groups, into homes of local garden club members for farewell buffet suppers.

Incidentally, in her youth, your editor spent four pleasant years in that colorful state, one of them on the University campus in Tucson. So it was with understanding and some longing that she read descriptive accounts of the Arizona meeting. Nor is there a doubt in her mind that the delegates, inspired and invigorated, returned to their homes with sand in their shoes.

Winter Garden Planning (Con't.) area, since the catalog may be especially written for the area within a short range of the nursery. Remem-

ber that every one hundred to two hundred miles north or south makes a great deal of difference in the ultimate size and rate of growth of the same plant. The most reliable information is generally found in the catalogs of growers who do business in your locality or region.

(Concluded in March)

How Good Is Your Soil (Concluded) ground limestone. On top of these two layers spread a half inch or so of as good quality black loam as you can find. As you start building up the pile insert vertically a 6 inch flue made from sand screen wire or boards with holes in them. If you have enough materials on hand you can complete your pile at once until it is three sections deep. Use the soil which was removed to cover the pile which should be slightly higher at the edges than around the flue. Thoroughly wet it down and leave from three to six weeks according to temperature and season. Carefully watch the pile and when the top crust becomes dry and hard give it another wetting. The bacterial action within the pile may run high enough to cause steam to rise. If this happens loosen the compactness slightly with a spading fork. When this reaction has run its cycle, it is time to fork over and thoroughly recap with an inch of good loam and let stand until it becomes dark and crumbly. Do not allow it to become too dry. This second stage generally requires another four weeks. It is now ready to put through a coarse sieve and use. A couple trowels-full of this in the bottom of the hole where you transplant

Flower Shows

are

In The Air

The Green Tree Garden Club of Milwaukee will hold a spring flower show on Friday and Saturday, May 6-7. Further details will be printed in our next issue.

YEARBOOK SUGGESTIONS

Again we are nearing the time when each garden club should send its year-book to the state yearbook chairman. Last year nearly 50 lovely books were received, judged, and later put on display at our state convention for all to see and study. I hope that the clubs who sent in their books last year will do so again, and that those who did not will decide to submit theirs this year.

The method used last year in judging will be used again and the scale of points will remain the same. Scoring will be as follows:

Excellent—Elue Ribbon; Very Good—Red Ribbon; Good—White Ribbon.
Scale of points considered in judging:

- 1. CLUB INFORMATION—25%
 - Considered here will be such items as officers, committees, club directory, meetings, date of flower shows and special events, pertinent or seasonal garden items, etc.
- ARTISTRY and FORMAT—25%
 Effective cover design—Good type
 styles; readability; interest catch ing devices; appropriate size and
 binding; materials used, etc.
- 3. THE YEAR'S PROGRAM—50%

 Does the club present a consistent plan for the Year's study?

 Is there a balance between the recognized fields of Garden Club activity, such as practical gardening, flower arrangement, conservation, bird study, garden aesthetics (color and design in the garden), community projects and services, book reviews, etc.

The deadline for receiving your books is May 1st. Last year 2 of them arrived late so could not be judged. Please mail your books soon after they are completed. Wrap and address them carefully and include return address so an acknowledgement may be sent to you. Copies submitted for judging become Federation property and are filed for reference.

DISTRICT MAIL BOX

A notice of considerable interest has been relayed to this department from Edgerton. A pre-Christmas lecture by Miss Ann Wertsner sponsored by the Edgerton Garden Club, drew a capacity crowd to the Masonic Temple in Edgerton to hear suggestions on beautifying homes with the Christmas spirit.

Miss Wertsner, author of Make Your Own Merry Christmas and a member of the Pa. State Horticultural Society, used inexpensive, easily obtained material and demonstrated as she talked. Her friendly, constructive manner, coupled with her novel ideas for table decorations, mantle arrangements, favors and Christmas tree ornaments, delighted her audience.

Mrs. George Hagen, president of the Edgerton group at that time, felt the educational appeal of the lecture was particularly valuable. In addition to the lecture there were holiday table settings and displays prepared by members of the Edgerton Garden Club. Miss Wertsner was impressed with the fact that a club of only 25 members in a small city attempted such a project. Good advance publicity and the fact each member was responsible for selling tickets contributed to the financial success of the undertaking. Mrs. L. J. Lein and Mrs. Melvin Brenhaug were co-chairmen of

Edgerton's fruitful experience is one to remember. Miss Wertsner will be in Wisconsin again in May when she will teach at the Judging School, held at Lake Geneva.

The Lake Geneva school finds additional reference in the January bulletin of the Kenosha County Garden Club, where there is a growing demand for a group which would make a

thorough study of flower arrangement. It is felt such study will promote assistance at District and State Flower Shows and encourage participation in the Judging School courses.

Cherries in a thoroughly new way will feature the February 22nd meeting of the West Side Garden Club of Madison. Cherries for the program, cherries for the decorative theme and cherries for dessert is the plan. The well known varieties of cherry trees as well as ornamental varieties will be discussed during the program.

A lecture on Historic Sites in Wisconsin by Dr. Clifford L. Lord, Director of the State Historical Society of Wisconsin provided the West Side Garden Club with an outstanding program at their annual dinner meeting in January. The meeting was held at the University Club and husbands of the garden club members were guests. Mrs. C. A. Sakrison, Middleton, is president of the club.

A paper on soil conservation, a subject closely tied to the interests of La Crosse County, where pioneer work in soil erosion was accomplished, opened the year's work for the La Crosse Garden Club. The topic also sets the theme for the year. It was emphasized that the problem of soil conservation is not simply a farm problem, but a city problem, too. Dovetailing the conservation topic was a study of winter birds native to La Crosse.

The La Crosse Garden Club has utilized effective means of publicity with a newspaper account of their year's program. Particularly interesting should be their November meeting which has as its subject matter, "Coulees and Valleys in La Crosse County."

Some Details Looked For By Judges

COVER

Name of club on cover.

Design fitting but not elaborate.

Paper must stand a year's handling.

Binding should allow easy opening. and must blend with cover.

Size neither large nor bulky.

Printing legible and tidy; often well to match cover in color.

DIRECTORY

State and District officers.
Club officers and chairmen.
Club members and phone numbers.

PROGRAM

Should be varied. (If not, the reason for same should accompany your book to avoid penalizing in judging.)

Should include study of birds, conservation, dirt gardening (with up to date ideas gained from horticultural research) flower arranging and practice, garden tours, participation in district and state affairs, community projects. (Too many social events not directly related to garden club work count against year books.)

> Mrs. H. G. Harries, Yearbook & Awards Chrm.

SISSON'S

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> H. J. Rahmlow, Editor 424 University Farm Place Madison 6, Wisconsin

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Oyster Shell Scale Control

By C. L. Fluke

The calyx spray of DDT was the most important application of this insecticide to control Oyster shell scale in the 1948 experiments. A cover spray of DDT two weeks following the petal fall gave fair control and killed young scales even after they had stopped crawling. This stage is shown in the accompanying picture.

The Griffin orchard in Door County was used for the tests. This orchard is a block of eight rows, five of the Dudley variety and three of Wealthy with a few Dutchess mixed in. The sprayer was a tractor drawn Friend machine with 15 gallon a minute capacity and produced 450 to 500 pounds pressure. The spray was applied with a single spray gun. The trunks, larger limbs, and branches were all sprayed from two sides.

Plot number one was sprayed at petal fall with lead arsenate 2½3 pounds and lime sulfur 2 gallons to each 100 gallons of water. The four cover sprays were lead arsenate with Dow's mike sulfur (5 pounds) as a fungicide.

Plot two was the same except DDT wettable powder two pounds was substituted for the lead arsenate in the calyx application.

Plot three was DDT in all of the sprays.

Plot four was DDT in the calyx spray and lead arsenate in the cover sprays. Mike sulfur was the fungicide in plots three and four.

These sprays were applied as follows:

Calyx—June 8 and 9
First cover—June 22 and 23
Second cover—July 6 and 7
Third cover—July 16
Fourth cover—July 27

* John Parsons helped in mak-



Young oyster shell scales (two weeks old) formed under a flake of bark on the trunk of a Dudley apple

ing the spray applications and in taking the records.

The controls were determined by counting the number of scales found on 50 new growth twigs in each plot. Only the first six inches of each twig were examined since most of the scales were found near the base of the twigs. These counts were made August 26.

The results of these counts are given in the following table. They show that the calyx spray was the important application but they also show that DDT applied about two weeks after hatching will also help to control oyster shell scale. June 8 and 9 was warm and the young scale crawlers were very numerous on those days.

tree. The flake of bark removed to show the scales. This indicates very thorough coverage is needed to reach these protected scales.

Photo by Eugene Herrling, Dept. of Plant Pathology, Madison.

Oyster-Shell Scale Control With DDT Sturgeon Bay, Wisconsin, 1948

Plot	Rates per	Treatment Rates per 100 gallons of water						
1	Calyx Lead arsenate Lime sulfur 4 covers Lead arsenate Mike sulfur	2 ² / ₃ lbs. 2 gals. 2 ² / ₃ lbs. 5 lbs.	1416					
2	Calyx Lead arsenate Lime sulfur 4 covers DDT Mike sulfur	2 ² / ₃ lbs. 2 gals. 2 lbs. 5 lbs.	107					
3	Calyx and 4 cove DDT Mike sulfur	2 lbs. 5 lbs.	1					
4	Calyx DDT Mike sulfur 4 covers	2 lbs. 5 lbs.	0					
	Mike sulfur	Lead arsenate 22/3 lbs. Mike sulfur 5 lbs.						

Studies of The Pollination of Apples—1948

By Dr. B. Esther Struckmeyer

Some of the problems on pollination investigated in 1948 were (1) the effect of weather conditions on the set of apples; (2) the results obtained from hand pollination during periods of unsatisfactory weather; (3) the dates at which early, medium and late blossoming varieties had the center blossoms open, were in full blossom, and the time at which they were out of blossom; (4) the common varieties of apples serving as pollinizers for other varieties; (5) and the viability of pollen over a period of two weeks.

Effect of Weather Conditions On Set

This year some varieties of apples made a good set in Southern Wisconsin while others were light. The reason for this can be explained, in part, by the weather conditions during the blossoming season. McIntosh especially had a light crop in and around Madison. When McIntosh was in full blossom the weather was too cool for satisfactory bee activity in the orchard. This period of cool weather lasted for eight days.

It has been reported that bees work best at 65°F and above, that there seems to be not much activity below this temperature. The center blossom opened on McIntosh and Wealthy at about the same time. However, McIntosh has a much shorter blossoming period than Wealthy, as McIntosh was in full blossom three days before Wealthy, and by the time Wealthy was in full blossom, McIntosh was out of blossom. During the period McIntosh was in blossom, the temperature was considerably below 65°F, in fact, the highest temperature reached during the eight-day period was 53°F. During this period there was very little bee activity observed in the orchard. The blossoms that were pollinated probably took place at the early and late part of the blossoming period. When Wealthy was in full blossom the temperature was above 65°F for the remainder of the blossoming period.

Varieties that had blossoms before or after the eight-day cool period set fruit. Bee activity was satisfactory for Delicious, Golden Delicious, Wealthy and Northwestern Greening, and in the late blossoming stages of Dudley, Jonathan and Transparent. Following is a graph showing the blossoming dates of the different varieties of apples.



Dr. B. Esther Struckmeyer, Dept. of Horticulture, U. of W. observing blossoming of green house plants.

Hand Pollination

Tests of hand pollination were carried out last spring. We are grateful to Mr. Spencer Eames for the permission to collect data on hand pollination in his orchard. For Delicious the percentage of blossoming spurs with fruits from chance pollinated trees was 1.4 and 27.0 for trees that were hand pollinated. For McIntosh, the percentage of blossoming spurs with fruit was 17.6 for chance pollinated trees, and 35.5 for "hand pollinated" trees. These results indicate that hand pollination made the difference of a crop, especially for Delicious.

The importance of having a good pollinizing variety close to the Delicious tree has been discussed. The following figures point out the significance of this need. Delicious beside Northern Spy had a percentage set of blossoming spurs with fruit of 17.0. Beside Northwestern Greening, Delicious made a percentage set of 43.8%. We have in previous years stressed the importance of Northwestern Greening as a good pollinizer for Delicious. Dudley proved to be a satisfactory source of pollen for Delicious as it made a percentage set of 41.0%. Delicious trees that were three rows from Dudley had a set of only 13.7%, and when five rows from Dudley, it dropped to 2.9%. McIntosh also requires a close source of pollen for cross-pollination. This is conspicuous in the figures where Snow was beside McIntosh which made a percentage set of 27.8%, yet McIntosh three rows away from Snow dropped to 11.6% set.

It has been mentioned in previous reports that proper pollination can be provided by:

- (a) Grafting a good pollinizer into at least one-half of the Delicious trees and one-third of the McIntosh trees.
- (b) Interplanting another variety with Delicious.
- (c) Placing bouquets in the orchard is a practice which can be used when the above mentioned methods have not been carried out.
- (d) Hand-pollination is a procedure which has not been followed here to any extent. It might be worth considering under certain circumstances. It would be especially advantageous to hand-pollinate when the temperature is too cool for bee activity. For example, had we hand-pollinated McIntosh around Madison this season when the temperature was below 65°F for eight consecutive days and which overlapped the blossoming period of McIntosh, we no doubt would have had a better crop of McIntosh.

Another factor to keep in mind is the receptivity of the stigma to pollen. In the case of Wealthy, stigmas were receptive for about four days. After that time, even though pollen was applied to the stigma, chances that it would germinate were no longer so great. When Dudley pollen was applied to the stigma three days after the flowers opened, there was a 68.0% set. When pollen was applied to the stigma six days after the flower was open, there was a 20.0% set. During a spell of bad weather, it would be profitable to hand-pollinate, since by the time the weather would be warm enough for bee activity, the receptivity of the stigma may have been lost.

Where hand pollination is being carried out and weather conditions are favorable, it might be sufficient to pollinate the lower half of the tree, or as far as one can reach comfortably without using a ladder. Foreign pollen or pollen of another variety would be applied to the lower blossoms and with satisfactory bee activity, the bees would work the lower blossoms and distribute pollen to the tops of the trees. This would especially apply to solid blocks of a single variety and where the temper-

(Continued On Page 172)

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Apple Pollination

(Continued From Page 170) ature was satisfactory for bee activity. Attention should be given the shady side for in many orchards, native insects or bees work best in the warmest and protected parts of the tree.

Effectiveness of Varieties As Pollinizers

Last year studies on pollinizers that were good, fair and poor were made for some varieties of apples. This year the list was extended for Cortland, Dudley, Jonathan, Snow and Golden Delicious. Good pollinizing varieties for Cortland are Dudley, Wealthy, Snow, McIntosh, Jonathan, Golden Delicious, Northwestern Greening, Duchess, Transparent, Grimes and Whitney. Fair pollinizers are Winter Banana, Grimes, Delicious and Haralson. Poor ones are Virginia crab, King, Winesap and Hibernal.

Good pollinizers for Dudley are Mc-Intosh, Snow, Cortland, Jonathan, Delicious, Golden Delicious, Northwestern Greening, Winter Banana and Tolman Sweet. A fair pollinizer is Wealthy, and Winesap is poor. Jonathan sets well with Dudley, McIntosh, Golden Delicious and Winter Banana; fair with Wealthy, Snow, Cortland, Delicious and Duchess; and poor with Haralson, Winesap, Gano, Grimes and Whitney. Snow sets well with most of the common varieties except Winesap. Golden Delicious sets well with Dudley, Wealthy, McIntosh, Snow, Jonathan, Delicious, Northwestern Greening and Winter Banana. Cortland, Wolf River and Tolman Sweet are fair pollinizers and Winesap is poor.

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EFFECTIVENESS OF DIFFERENT APPLE VARIETIES AS POLLINIZERS

*A-annual; B-biennial; I-intermediate; M-medium; E-early; L-late

Variety	Good	Pollinize Habit*	r Fair	Poor			
	Dudley	A-E	Winter Banana	Virginia			
	Wealthy	B-M	Grimes	King			
	Snow	I-E	Delicious	Winesap			
	McIntosh	A-E	Haralson	Hibernal			
Cortland	Jonathan	I-M					
	Golden Delicious	B-M					
	N. W. Greening	I-L					
	Duchess	B-E					
	Transparent						
	Whitney	B-E					
	McIntosh	A-E	Wealthy	Winesap			
	Snow	I-E					
	Cortland	A-M					
	Jonathan	I-M					
Dud ley	Delicious	I-M					
	Golden Delicious	B-M					
	N. W. Greening	I-L					
ė).	Winter Banana	A-M					
	Tolman Sweet	B-M					
	Dudley	A-E	Wealthy	Haralson			
	McIntosh	A-E	Snow	N. W. Greening			
onathan	Golden Delicious	B-M	Cortland	Winesap			
	Winter Banana	A-M	Delicious	Gano			
			Duchess	Grimes			
				Whitney			
	Dudley	A-E		Winesap			
	Wealthy	B-M					
	McIntosh	A-E					
	Cortland	A-M					
Snow	Jonathan	I-M					
	Delicious	I-M					
	Golden Delicious	B-M					
	N. W. Greening	I-L					
	Winter Banana	A-M					
	Tolman Sweet	B-M					
	Dudley	A-E	Cortland	Winesap			
Golden Delicious	Wealthy	B-M	Wolf River				
	McIntosh	A-E	Tolman Sweet				
	Snow	I-E					
	Jonathan	I-M					
	Delicious	I-M					
	N. W. Greening	I-L					
	Winter Banana	A-M					

NUMBER OF FRUITS PER 100 BLOSSOMING SPURS-1948

	DELICIOUS	McINTOSH					
Chance Pollinated	1.4	17.6					
Hand Pollinated	26.5%	35.5%					
Beside Northern Spy	17.1						
Beside N. W. Greening	43.8						
Beside Dudley	41.4						
Three rows from Dudley	13.7						
Five rows from Dudley	2.9						
Beside Snow		27.8					
Three rows from Snow		11.6					

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What We See in The Orchard

By Fred Sacia, Galesville

I am continuing with the clover leaf pattern of pruning. This year I am making the V shaped openings from the ground to the very top of the tree-no overhanging branches. This makes for ready placing of ladders as well as admitting light and spray. In addition I make a ladder opening in each of the remaining quarters of the tree. This opening gradually fills in with new growth and it is this that we depend on for renewal. In time one moves over a bit for new ladder placement and in turn, renewal. (I did this with King David many years ago.)

Heretofore with Delicious, we have depended on plenty of space and terminal growth. With winter injury, terminal growth practically stops, as it did the past season and the tree goes into a cycle of over bloom and poor set.

In western Wisconsin on clay soils, apple trees become oversized at an early age and then it is brush, brush, brush, compared to the production of fruit. Especially is this true of Delicious. We find ours outsized at 20

years—no matter what we use for a stock.

Innovations are overdue for the production of a smaller and a renewable tree, along this line. I am especially observing some young Delicious that were entirely girdled and repaired by bridge grafting These trees, without exception, have borne satisfactorily. We have a few Delicious that were clipped back two feet over all; that is, from the ground and up and over the top. This was done as soon as blossoms dropped with no set because of frost. These trees have borne one good crop and came through last winter exceptionally well. Then there are a few Delicious grafted on Virginia Crab that proved compatible and that have developed the proper sized fruit spurs with early maturity. And again there are the medium sized trees with no branch that is dominant and all properly subdivided.

I suggest that all apple growers keep an observing eye out this coming season, that we may have something interesting to report at next fall's meeting. I also respectfully suggest that someone report on the efforts being made in Virginia and the Northwest to grow smaller trees.

AN APPLE JUICER NOW PERFECTED

"An apple juicer machine has now been perfected," writes Mr. Carroll R. Miller, secretary Appalachian Apple Service. "We have been working since 1941 on such a machine which should open new markets for several million bushels of apples." They have found the machine to be practical and members of Appalachian Apple Service are asked to finance the introduction of 40 machines and keep them under the control of apple growers.

"It is planned to have the juicer in wide use for next fall's crop which now stands to be big," writes Mr. Miller. Any Wisconsin grower interested in a machine should write to Appalachian Apple Service, Martinsburg, West Virginia.

"Look heah, Rastus, you all know what you're doin'? You goin' away for de week-end and there ain't a stick of wood cut for de house."

"Well, what you all whinin' about, womin? I ain't takin' de axe am I?"



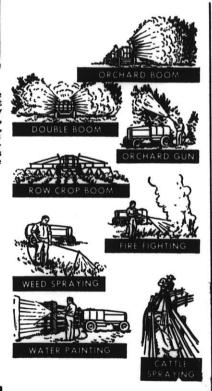
e The sprayer used to stand in the sheduntil time to spray the orchard or the potato field. But not any more. Today there are a dozen different jobs for the sprayer on every farm. To spraying of fruit trees and vegetable crops is added weed control spraying, cattle, sheep and livestock spraying, DDT spraying, flushing out pens, water painting, white washing and fire extinguishing.

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APPLES AND WEATHER

Pomologists at Cornell University's Agricultural Experiment Station believe that climate during the growing season provides a clue to how well apples will stand up in storage. Here is what Prof. R. M. Smock and G. E. Mattus have to say about sugar content, "Plenty of sunshine during the growing season means that the sugar content of the fruit is likely to be high at harvest time. And this means better eating quality." Data showed that the sugar content of Mc-Intosh has varied from a low of 11 per cent to a high of 131/2 per cent. The amount of sunshine at Ithaca throughout the growing season was twice as much during the year that the sugar content was high as during the year it was low.

On both McIntosh and Rhode Island Greenings the correlation was good between the temperature during the last six weeks before harvest and the amount of scald on the fruit in storage, the pomologists reported. High outdoor temperatures usually were followed by a high amount of scald.

The research men, however, did not find close relationship between any of the climatic factors studied and fruit firmness but the data did suggest that fruit was more likely to be firm after a growing season of high light intensity. Nor did the climatic data give them any help on the likelihood of brown core in storage. When actual shade was produced experimentally, however, the amount of brown core increased.

1948 DROUGHT EFFECTS STILL EVIDENT IN DOOR COUNTY

By Chas. F. Swingle, Sturgeon Bay

As Door County cherry growers got at their pruning this winter, it was evident that the combined effect of the largest crop in their hisory along with one of the most severe droughts, had taken its toll. Growers are reporting 2 or 3 times the normal amount of dead wood this year, making the pruning operation just that much more of a chore.

With so much dead wood necessary to remove, many trees are being left more open than usual, without the need or opportunity for any selective pruning. Some of this opening up is probably a good thing for many orchards of the county, though of course it is a lot better to take out the branches the

Orchard News

grower wishes to remove, than to have this decided for him by winter killing.

As we come to the end of January, with our coldest official temperature thus far -10°, the prospects for the 1949 crop are just about perfect, based on soil moisture and the present condition of the buds. However the large number of dead branches tells us that everything is not quite right, and few are looking for another bumper crop this year. And of course, the groundhog notwithstanding, we still have plenty of opportunity to be hit by winter freezes or spring frosts.

Apple trees apparently have not suffered unduly from the drought and the moderately heavy crop, and seem to be in tip-top condition at this time.

CORTLAND APPLE IS 50 YEARS OLD

The Cortland ranks No. 2 and, in the opinion of some growers, No. 1 as a variety for planting in Wisconsin. We consider it a new variety yet it is 50 years old this year.

Just 50 years ago the Cortland was one of 11 seedlings produced in a cross between McIntosh and Ben Davis at the Geneva, N. Y. experiment station. It is now 3rd in volume of production in New York with McIntosh being in first place and R. I. Greening in second. There were 1,410,000 bushels of Cortland produced in New York last year. From Horticulture. (Mass.)



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Berries

GLEANINGS ABOUT STRAWBERRY PLANTING

Summarizing the results of experiments in growing strawberries in several northern states, these findings seem to have become conclusive.

- 1. Plants that have not fruited are best for establishing a new bed.
- 2. Varieties vary greatly in the rate of increase from parent plants. In Ohio, Senator Dunlap averaged 20 new plants while Premier averaged only 10. Of course this varies greatly and often 50 new plants are obtained from one parent plant of Senator Dunlap.
- 3. To obtain a good matted row, Premier must therefore be planted closer together than Dunlap.
- 4. It is very important that varieties such as Premier get a good start in the spring by early planting, well prepared soil and vigorous planting stock.

Early Planting

Here are some reasons why it is important to plant strawberries early in Wisconsin:

- 1. The soil usually has a greater supply of moisture early in the spring which benefits the plants.
- 2. Strawberry plants respond and grow well in cool temperatures and so should be given the benefit of the early spring months.
- 3. Early spring planting promotes the formation of a larger number and more productive runner plants. In fact it is one of the secrets of successful strawberry growing.

There are of course some difficulties which may be encountered in early spring planting such as wet soil and injury from a late freeze. However the benefits from early planting greatly exceed the objections. Plants set out in dry hot weather have a poor chance of doing well.

What Is A Good Plant

A good plant for spring setting will have a well developed fibrous root system; light colored roots; a crown free from winter injury as indicated by brown tissue when the crown is cut; a plump

Do not set out old plants. They may be recognized by their dark brown roots and thick neck.

Varieties such as Premier spaced at 3½ feet between rows and 18 inches between plants require 8,300 plants per acre.

RASPBERRY AND STRAWBERRY PLANTS

RASPBERY AND STRAW-BERRY plants for gardeners and growers. Strawberry garden offer. All for \$4.00: 25 Evermore, 25 Gem, 15 Streamliner, 15 Wayzata.

Raspberry garden offer. All for \$4.00 2 year plants: 15 Chief, 10 Indian Summer, 10 Latham, 15 Sunrise. Above two offers sent postpaid.

Prices by the 100: Strawberries—Beaver (June) \$2.00, Evermore \$3.50, Gem \$3.50, June Rockhill \$7.50, Streamliner \$4.50, Wayzata \$6.50.

Raspberries — Chief \$5.00, Indian Summer \$8.00, Latham \$6.00, Sunrise \$5.00.

Plants in lots of 100 will be sent express collect. We have 2000 divisions of peonies in mixed colors at 30c each and 300-3 year Boysenberry plants at 50c each. Cash with order. Write for prices per 1000.

Vine Street Gardens, 622 Congress St., Eau Claire, Wis.

STRAWBERRY PLANTS

Beaver's — 1,000 at \$15.00; Dunlap at \$12.00; Premier's at \$20.00; Catskill's — 1,000 at \$20.00; Robinson's 1,000 at \$20.00 All plants Government inspected.

H. H. Pedersen Warren, Wis. R.

RASPBERRY AND STRAW-BERRY PLANTS — Raspberries: Strong, disease-free, two year plants. Excellent fruit this season. 25—\$3.00; 50—\$5.00; 100—\$7.80 postpaid. Strawberries: Well rooted plants. Dunlap, Premier, Robinson. 50 — \$1.50; 100—\$2.35. Thomas 100—\$3.50 postpaid. E. J. Bryan, Washburn, Wisconsin.

PLANTS FOR SALE—Streamliner, Gem and Mastodon everbearing strawberry plants. Also Premier, Catskill, Dorsett, Fairfax, Beaver, New Robinson and Dunlap. Latham and June red raspberry plants. All plants state inspected and fresh dug. H. R. Kinney, Route 3, Baraboo, Wis.

STRAWBERRY - R A S P B ERRY PLANTS—Evermore, Gem, Webster everbearing strawberry plants. Premier, Dunlap, Arrowhead, Robinson, Catskill June bearing strawberry plants. Latham, Indian Summer, Taylor raspberry plants. Fruit trees, shrubs and evergreens.

Hall Nursery, Elmwood, Wis.

STRAWBERRY AND RASPBER-RY PLANTS. Taylor raspberry. Premier, Robinson, Beaver, Fairfax and Temple strawberry plants. Temple is resistant to root disease. All plants shipped same day dug. Albert Kruse, Route 2, Baraboo, Wis.

STRAWBERRY PLANTS—Dunlap, Beaver, Warfield — 100—\$2.00; 250— \$4.00; 500—\$7.00; 1,000—\$12.50. Fresh dug, double inspected, moss packed. Postpaid. Haberlie Nursery, Lancaster, Wisconsin.

RASPBERRIES

Latham and Viking. \$30.00 per 1000. 5 cents each up to 100. — Over 300 plants at 1,000 rate.

OLAF SELFORS

Bayfield Wisconsin

STRAWBERRY PLANTS FOR SALE

 Robinson, Premier, Tennessee
 Shipper, Dunlap and Blakemore.
 Shipper, Blakemore.

 10,000 or over
 \$13.00 per m

 5,000 or over
 14.00 per m

 1,000 or over
 15.00 per m

 500
 8.00

 100
 2.75

Everbearing — Gem (evermore Minn, 1166)

25		٠			٠					٠	٠			\$2.25
50														3.75
100			•											5.00
Streamlin	10	r												
25	-	_												\$2.25
50						٠		٠						3.75
100				٠										6.00

MISS FREDA SCHROEDER KRAHN-SCHROEDER NURSERY

Loyal, Wisconsin

Fruit Growers Attention

Spray easily, spray thoroughly. Spray and drive your tractor. Save money with new patented swivel gun.

Write for free literature to

LEONARD HAAS

R. R. 1, Box 67

South Milwaukee, Wisconsin Also spray guns of all types.

Vegetables

For the Wisconsin Berry and Vegetable Growers Association

Answers To Questions on Seeding, Cultivation, Irrigation

In our February issue we gave the answers to questions about garden tractors as given by members of the Wisconsin Berry and Vegetable Growers Association. This month we give the answers to questions on seeding, cultivation and irrigation.

The names of the members and the order of their replies are:

1. Roy Rasmus, Waupaca. 2. Ivan R. Schrader, Eureka. 3. Marlin Steinbach, Clintonville. 4. Mrs. Chas. Wood, Shawano. 5. Elmer Whitby, Chilton. 6. E. L. White, Fort Atkinson. 7. John F. Swartz, Kenosha. 8. N. A. Rasmussen, Oshkosh. 9. Kermit Seehawer, Appleton. 10. Chris Olson, Berlin. 11. C. H. Braman, Waupaca. 12. Frank J. Long, Clintonville. 13. Dwight Hensel, Waupaca. 14. Frank Kuehnhold, Waupaca. 15. E. A. Rosenberg, Clintonville.

Cultivation and Seeding

Question 4. What kind of cultivating and seeding machinery do you use?

Answer: 1. We do not grow vegetables. Cultivating is done by hand. 2. We use Ferguson cultivator and weeder and they do the job well. Use Planet Jr. seeder and New Idea transplanter. They are good standard implements. We find transplanter a time and labor saver as the plants are set, watered and fertilized all in one operation. We set all plants this way. 3. We use a cultivator made for our machine which does a very good job. 4. Cultivate with large size tractor. This does much more thorough job than a man powered tractor which many small gardeners use, especially on heavy soils. 5. Use large and small garden tractor cultivator and wheel hoe. Use wheel hoe seeder and plant seed by hand. 6. We have no seeding machinery. For cultivating use 6 inch duck feet. For weeding 6 and 12 inch weeding hoes. Above will not work if weeds get very high because tools get clogged up. This satisfactory when weeds are small. A 11/2 H.P. tractor will not pull one 4 inch plow in our soil which is heavy clay loam. 7. Use New Idea one-row planter. Fertilizer applied in first cultivation. First two or three cultivations done with Allis Chalmers then Choremaster used and late in season Rotary Tiller. Rotary Tiller used to re-build old beds. 8. Often use roto-tiller for cultivation and find it good. For seeding use Planet, Jr. seed

SPRING MEETING

WISCONSIN BERRY AND VEGETABLE GROWERS ASSOCIATION

Waupaca — Armory Friday, April 1

9:30 a.m. View exhibits of machinery and gardening supplies.

10:00 a.m. Call to order by Charles Braman, Waupaca, president. Building up our light soils for berry and vegetable production. Prof. A. R. Alberts, Department of Soils, U. W., Madison.

11:00 a.m. Our 1949 insect and disease control program. E. L. Chambers, State Entomologist, Madison.

11:45 a.m. Business meeting.

12:00 M Luncheon. Plans to be announced.

1:30 p.m. Pictures of vegetable farms at Homestead, Florida. Pictures and discussion of marketing displays of fruit and vegetables. H. J. Rahmlow, Madison.

2:00 p.m. Vegetable crops and varieties for local market. Prof. O. B. Combs, Vegetable Specialist, U. W., Madison.

3:00 p.m. Berries for local market. Prof. C. L. Kuehner, Madison.

3:45 p.m. Panel discussion of grower problems. Conducted by Charles Braman, Waupaca.

drill and find it adequate. 9. Use hand hoe and wheel hoe. 10. Use 1 horse cultivator, plow, drag and disc. 11. Use Planet Jr. 2 row seeder with double disc, small duck feet, large duck feet and wide hoes. We found these very satisfactory on narrow row crops-in wider rows we use Ariens Rotary Tiller with wide weeding tines which does excellent job. 12. Depend on our roto-tiller for all cultivating and seeding because team and plow cannot be used in our small nursery and berry growing. With deep pointed tines, we can work up ground deeper than we would dare to plow and still loosen up some of the sub-soil. 14. Use shovel cultivator on tractor to throw a little dirt over some of the weeds, 15. We raise few vegetables except tomatoes. We plant by hand.

(Continued on Page 189)



The tiller is popular with many fruit growers, vegetable growers and nurserymen.

Berry Plants . . Rhubarb . . Gladiolus Bulbs

Strawberry plants; 21 varieties

Raspberry plants; all leading varieties.

Rhubarb; MacDonald and Chipman's Canada Red.

Gladiolus bulbs, both standard and new exhibition varieties.

BERRY BOXES

Metal rim standard quart berry boxes. Send card for complete list.

COPELAND NURSERY, Platteville, Wis.

Wisconsin Beekeeping

OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPERS
ASSOCIATION — OFFICERS

Robert Knutson, Ladysmith President Lawrence Figge, Milwaukee Vice-President

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

DISTRICT CHAIRMEN

Newton Boggs, Viroqua Wm. E. Gross, Milwaukee Robt. Knutson, Iadysmith E. Schroeder, Marshfield Guy Sherman, Seymour Ivan Whiting, Rockford

Brood Rearing in February

On the morning of Saturday, February 5, Frank Skott, my assistant in a hobby of observing winter brood rearing, called from Middleton. "Looks like a good day for inspecting bees" he said, "do you think we could look at that colony we took the picture of on January 14?"

We replied that it did look like a promising day and if the sun was shining and the temperature around 32° F. or above at 1:30 p.m. would call for him.

"I'm anxious to see how that colony is getting along." Frank said. "I told a friend that we had opened up some colonies and taken pictures of brood on January 14 and he said those sure would all be dead by now."

We were just as curious as Frank, to tell the truth. The weather had changed after January 14; we had some real cold weather and about 6 inches of snow. There were 3 really cold periods during that time. On January 20 a minimum of 19° below zero; on January 30, 16° below and on February 2, 16° below zero. Couldn't remember a single day since that time when it was suitable for taking pictures. We had planned to take pictures of brood in the same colony on the same date each month but from a practical standpoint that might be impossible; therefore the decision to go out on February 5.

We arrived at the yard about 2 p.m. and found the snow quite deep—at least 10 inches in the lane to the colonies. While we prepared the camera Frank lit the smoker and put on his veil. Then he slowly lifted up the outer cover; bees were clustered around the escape hole. Next he raised the inner cover and immediately the bees started flying out—but the smoke was ready and quieted them. They seemed to respond well to smoke. We were thrilled to see bees covering almost every frame.

We began to take pictures at once, while Frank slowly took out an outside

frame, which was full of honey, and then carefully moved frames into that space, watching for brood in the meantime. "Here is some" he said, as he came to the 4th frame.

"See how many more there are," We urged, getting into position for a picture. Frank found 2 more frames, gently shook the bees off, and set them on top of the other combs so we could take the picture shown here. Three frames, with large patches of brood in each, on February 5! This indicated continuous brood rearing since January 14 when there were only 2. The large amount of pollen and honey present in the combs, readily available to the winter cluster, a large population and a vigorous queen were the answer. Frankly we

were a little nervous about exposing the brood to a temperature at around freezing without protection and certainly do not recommend it.

At this rate of brood rearing, how long before some colonies will be short of both honey and pollen, especially the latter. We plan to feed soy bean flour cakes after the middle of March. How we wished we had some pollen to mix with it! If such colonies as these have an ample supply of honey and pollen constantly available, how many bees will there by by spring, when we really want to start building up for that clover honey flow in early June. They should be very strong unless something happens to prevent it. Early in March we shall take another picture of the same colony.



Mr. Frank Skott, Middleton, one of our inspectors, holds up 3 frames of brood in a strong colony on February 5. There have been three periods between February 5 when the temperature dropped below zero. Some pollen can still be seen in these brood combs.



Merchandising honey, A special display of jars with an attractive label. Mr. Edward Barris tells a customer about the good quality of honey. Special service can only be given items profitable to the merchant.

How not to display honey. Have you seen your honey displayed for sale in this way. If honey is in the same class as syrup should it sell at the same price—in this case 39c?



BEEKEEPERS RECEIVE INDEMNITY

Wisconsin beekeepers during 1948 received \$1,596 in indemnity for 533 colonies of bees condemned because of American foul brood.

It will be remembered that a law providing this indemnity was passed by the Legislature at the request of the Wisconsin Beekeepers Association. Beekeepers in this state are probably the only ones in the United States receiving any compensation for bees burned due to disease.

Before any beekeeper can obtain indemnity, he must certify that he has paid the occupational tax on bees and complied with other state regulations. Since the law went into effect in 1947, indemnities have been paid on 811 colonies.

HONEY MARKET

The demand and trading for honey continued sporadic. Most highly advertised good quality white honey was moving in good volume from bottlers to wholesalers, but unadvertised stock or darker colored honey was meeting with a slow demand. Prices for a percentage of bottled honey advanced slightly partly to offset increased freight rates and an increase in prices for glass jars and tops. The inquiry for large lots of bulk honey improved in several areas but continued slow in others. Apparently light colored honey is moving at a rapid enough rate in several states to assure a cleanup before the 1949 crop becomes available. On the other hand, beekeepers in a few states report that they still have much of their individual holdings from the 1948 crop on hand and are receiving very little inquiry.

—From Semi-Monthly Honey Report, USDA January 17.

We Can Sell More Honey

In January we visited a local selfservice store. Mr. Edward Barris, an expert on merchandising, had made the special display of honey shown in the picture. At the time we took the picture, we asked Mr. Barris some questions about improving sales of honey. Here are the questions and his answers.

Question: What do you think is the best color for a label?

Answer: Red is very good and you will notice all through the store there are many packages in red. Honey in a 5-pound jar looks somewhat dark so a light colored label would make the honey look still darker.

Question: Which do you like the better; the 5-pound glass jar or the tin pail?

Answer: The glass jar by all means. The honey can be displayed to much better advantage and will sell better, especially if it is of good color and good quality.

Question: Do you think the 5-pound size will sell as well as the 1, 2 or 3 pound sizes?

Answer: The smaller sizes sell faster but it seems to me you can make more users by pushing the 5-pound jar. Take this 8-ounce jar—it becomes a luxury item in the eyes of the housewife. They use it only in very small quantities. Get them to take a 5-pound pail and they will use more honey.

Question: What do you think of the lithograph cover as furnished by the Wisconsin Beekeepers Association? (This cover is on the jars shown in the picture.)

Answer: It's an excellent idea. Sometimes the label comes off a jar and then you still have the label on the cover. Also it looks fine from the top. Honey is often displayed on a lower shelf.

Question: What is a common fault in merchandising honey?

Answer: Overloading the merchant. Last fall a beekeeper sold our manager a large quantity of comb honey. We took in too much. It didn't sell. It was moved around—began to leak and finally a lot of it went out the back door. Result: An order to quit buying comb honey. The same applies to extracted honey. If it is on the shelves a long time, it granulates and doesn't sell. We can't afford to have merchandise on our shelves that doesn't sell.

Question: Does it help if the beekeeper comes around regularly and helps you keep up the quality of merchandise?

Answer: It certainly does. That is what many firms are doing now. They even make a display of free recipes and circulars in which we gladly co-operate. If the beekeeper takes back any of his honey that granulates or won't sell, we will certainly go along in trying to sell more of his merchandise.

Question: What is the best kind of advertising?

Answer: Tie in ads—tied in with other food items. Also local advertising of a certain brand. We are always glad to handle a well known brand of goods that sells well.

BEES FOR SALE

Sixty colonies of bees and standard 10 frame equipment, excellent condition.

Herbert Reim, 924 Labaree St., Watertown, Wisconsin

HONEY MAGAZINE

The Honey Salesman, Falfa, Colorado, a sixteen page magazine devoted to honey marketing and improvement. \$2.00 per year. — Write for sample copies.

BEEKEEPERS MEETINGS

District Meetings of the Wisconsin Beekeepers Association

THURSDAY, MARCH 17. 10:00 a.m.-4:00 p.m. Southern District meeting. Janesville, YMCA.

TUESDAY, MARCH 22. 10:00 a.m.-4:00 p.m. Fox River Valley District meeting. City Hall, Brillion.

THURSDAY, APRIL 7. 10:00 a.m.-4:00 p.m. North Central District meeting. Central State Bank rooms, Marshfield.

TUESDAY, MAY 3. Northwestern District meeting. At Menomonie, Wis. (Subject to change.)

10:00 a.m. Meeting called to order by the district president. Discussion of the new honey grading regulations. Plans for bee disease control for the coming season by John F. Long, chief inspector, Madison.

11:00 a.m. The bee and honey situation in Wisconsin. Topic discussed by Robert Knutson, Ladysmith, state president, or Walter Diehnelt, Menomonie Falls, past president, or the district president.

11:30 a.m. Business meeting.

12:00 m. Luncheon. (If you have any bees with symptoms of nosema bring in some for examination. If you have new equipment bring it for display.)

1:15 p.m. What we learned about beekeeping in 1948 and what we can do for better honey production in 1949, by H. J. Rahmlow, Madison.

2:30 p.m. Discussion by County Agents. Topics: How spraying effects beekeeping. Dangers from irresponsible spraying with killing chemicals. The clover situation in this section. County Agents R. T. Glassco, Janesville; Donald Rowe, Wisconsin Rapids; Orrin Meyer, Chilton and Archie Johnson, Menomonie.

3:00 p.m. Beekeepers forum. Discussion on marketing and production problems by beekeepers present.

FROM THE PRESIDENT—

February 5

We went out to two of our yards today and found 1 dead colony which had apparently been queenless In one of the yards every colony had brood areas larger than a saucer in three frames. There were ample stores of both honey and pollen but at the other yard some colonies were short of pollen and brood areas were much smaller. In general the bees seem to be wintering about as usual and consumption of stores is average.

I just returned yesterday from a meeting of the Douglas County Beekeepers Association. They had a very good crowd and a nice meeting. Meeting regularly every month or two, as they do, helps to keep a local association up and coming.

May I suggest that every one read and digest the first article in the February issue of Gleanings in Bee Culture by Harold J. Clay. His article draws a very good picture of today's conditions of the honey market. We should all be able to profit by what he says.

Robert I. Knutson.

CAN YOU ANSWER THIS QUESTION?

To the editor: "I wish somebody could answer this question for me. The average production of honey in Wisconsin this past pear was 35 pounds per colony. The best honey is bringing 12c per pound wholesale. That makes a total of \$4.20 for each colony. Now I see by the bee journals that the southern breeders are asking \$4.50 for a 2 pound package—express extra. How can we come out on that?" L. G. S., Wisconsin.

Editor: We don't know the answer. Perhaps some of our members can suggest something.

EMPLOYMENT WANTED

Amateur beekeeper, willing to work desires to learn commercial beekeeping. Has small family. Jos. C. Du Chateau. Route 4, Box 265½, Oshkosh, Wis.

Strong Colonies of Bees for Pollination. Mercier's Greenvale Produce Janesville, Wisconsin

HONEY CONTAINERS

We now have a good supply of 60 lb. cans, 5 and 10 lb. pails. Also the 5 lb., 3 lb., 2 lb. and 1 lb. and 8 oz. glass jars. We can make immediate shipment.

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

WRITE FOR COMPLETE PRICE LIST

Order through your State Beekeepers Association.

HONEY ACRES
Menomonee Falls, Wisconsin

NEED BEE SUPPLIES?

WE HAVE

Everything the Beekeeper needs.
Sections

Supers with fittings Hives and frames

Foundation

Wire

and

all other supplies

WRITE FOR PRICES.

August Lotz Company

Manufacturers and Jobbers

BOYD

Wisconsin

HONEY WANTED

Carloads and icss than carloads. Mail sample and best prices in all grades.

C. W. AEPPLER COMPANY
Oconomowoc, Wisconsin

From the Editor's Desk

RED MELBA APPLE TREES AVAILABLE

Recommended For Trial

The Red Melba apple is said to have a much brighter red color than the standard Melba planted by many of our orchardists years ago. In other respects it is exactly the same. The Red Melba is a bud sport originated in Canada. (The original Melba is an open pollinated seedling of the McIntosh by the Experiment Station at Ottawa, Canada.

We have been able to get a few Red Melba trees for trial from a Canadian nursery and will send them to our members in Wisconsin under our fruit testing project set up some years ago.

The trees will be 1 year old whips, which are easy to send by mail and just as good as larger trees for planting.

The cost will be \$1.00 per tree postpaid. All orders must be in by March 18, 1949.

Address: Wisconsin Horticultural Society, 424 University Farm Place, Madison 6, Wisconsin.

A PAGE OF SHRUBS

In this issue we publish "a page of shrubs for Wisconsin." It is our first effort along this line and we will appreciate your comments.

The pictures were furnished by the McKay Nursery Company of Madison. They recommend these varieties as suitable, hardy and ornamental for Wisconsin home grounds.

Prof. Wm. Longenecker, professor of landscaping of the University of Wisconsin very kindly helped with the recommendations and description of the shrubs.

AN ERROR

In our February issue a printer's error appeared which changed the meaning of an entire paragraph. In the article, "When Does Brood Rearing Begin" the statement should have appeared "feeding pollen-soy bean flour cakes • • • will enable the colony to continue brood rearing so there will be no reduction in population during April."



Mrs. Lucille Ehlers, office secretary of the Wisconsin State Horticultural Society, is proud of her success growing African Violets. These plants were growing in the office window for several months and were blooming nicely in January.

FOR MORE FUN IN GARDENING

My Dear Gardeners:

Are your garden club meetings a little too stiff and formal? Does anyone ever laugh or is everything very serious at all times? Yes, I believe in taking garden club work seriously but at the same time the program need not be so serious that the meetings are dull. Possibly the kings of olden times had something when they selected a court jester, for a lot of garden meetings I have attended could well have used one, if for no other reason than to make the chairman unbend and take herself less seriously. And I have known quite a few garden club and garden club federation officers who were just a little too grim and stiff to get the most out of their organizations.

Neither can I see any need of bothering the entire membership with long drawn-out business sessions that could be handled so much easier by the executive committee. And to make guests and a guest speaker sit through it all before his talk! As a speaker may I say, please don't.

That is why in all of my meetings I try to inject a little humor so folks can laugh or at least chuckle occasional-

THE OLD ASH IS GONE By John J. Traudt, Wauwatosa

'Twas eighteen hundred and forty-eight, The year Wisconsin became a state.

Far from man made, loud, noisy din, Still another birth was ushered in.

Quietly from the damp rich moist earth, A tiny Ash tree now claimed its birth.

And the sun carressed, the rain and dew, Both combined their care. the ash tree grew.

Came eighteen hundred and sixty-one, That year Civil War was begun.

These were troubled times for the nation's men. Thirteen years old was this Ash tree then.

Came nineteen hundred and nineteen ten. This Ash towered high 'bove a world of men.

It threatened to fall and men knew then, The old Ash must leave this world of men.

With the ring of an axe and hum of saw At this giant's base the men did gnaw.

With a tired groan and one last sigh, Fell this mighty Ash, no more to meet the eye. (Condensed)

ly. I like to let folks know there is a light side to gardening.

So let's have a chuckle once in a while.

Yours for more fun in life, Victor H. Ries in Country Gardeners Program Service

EVERGREENS

Colorado Blue Spruce — \$1.00 each and up. Pyramidal Arbor Vitae—\$1.75. Mugho Pine—\$2.00. Black Hills Spruce, Koster Blue Spruce. Write for lists. Quincy Nurseries Friendship, Wis.

KURT STOCK

Kurt Stock of Fish Creek, Door County has the distinction of being one of the few horticulturists in Wisconsin to be honored by the University of Wisconsin for his achievements in this field.

Mr. Stock was born in Germany and educated there as a metallurgical engineer. He came to this country in 1900 and worked in the zinc smelting industry before buying an orchard in Door county in 1918.

Since then he has run experiments in soil improvement and in soil deficiencies that ruined the storage quality of cherries. He at once became an active member of the Door County Fruit Growers union and within three years was chosen to represent the union in improvement and marketing work. In 1939 he became president after serving in several lesser offices.

His lead in the cooperative movement grew, and in 1941 he took over full management. He is wholly responsible for developing the process of brining cherries which has saved many cherries that would have been wasted otherwise. At 75 he still carries a heavy responsibility in the run ning of the Door County cooperative.

His citation is to one "who has served an industry by applying scientific findings and sound business principles to the production, handling, and merchandising of cherries and who has widened the market for the crop."

CITY OF THE BEES

A new book about bees is just off the press, written by Frank S. Stuart. The marvels of a society older than man, and almost unknown to him, are revealed in this book. The exquisite prose of a gifted writer created a classic which will be read and read again for the sheer delight and scientific information it contains.

The City Of The Bees is a beautifully told story of a colony of wild bees living in the heart of a forest oak; their adventures, disasters, triumphs, fears and hopes. It is the story of one year in its life; of birth and death, tragedy and joy, victory and defeat, prodigious labor, and pure enjoyment of life which transcends human experience.

May be obtained from Whittlesey House, McGraw-Hill Book Company, Inc., New York City. Price \$3.00

Kurt Stock, Fish Creek

"Who has served an industry by applying scientific findings and sound business principles to the production, handling, and merchandising of cherries and who has widened the market for the crop."



NORTHERN GROWN FRUIT TREES

General line nursery stock Trees, Plants, and Shrubs



Send for our descriptive Price List.

COE, CONVERSE & EDWARDS CO.

Fort Atkinson, —•— Wis.
Write for our full or part time
selling plan.

GLOXINIAS — BEGONIAS

GLOXINIAS-Emperor Wilhelm, Roi des Rouge, Mont Blanc, Emperor Frederick, Etoile de Feu, Tigriana. Large sound bulbs, your choice, three for \$1.10, twelve for \$4.00. SAMPLER OF TU-BEROUS BEGONIAS - The Show Flowers for shady gardens. Six big tubers, all different, labelled, \$1.25. GLORIOSA rothschildiana, the beautiful climbing Lily. Extra large tubers, \$1.50. OXALIS — Adenophylla (scarce) 10 for \$1.00. LASIANDRA 12 for 60c. HYBRID AMARYLLIS, jumbo bulbs 85c each, three for \$2.25. All orders postpaid. HAROLD LYKE, Box 272, RD 2, Gibsonia, Pennsylvania.

SELECT PATENT ROSES

FORTY-NINER. Probably the most brilliant hued bi-color ever introduced. An all American award winner for 1949. ____ \$2.50 each.

TALLYHO. The color on the inside of the petal is a varying but always a delightful and unique shade of pink, outside petals rich crimson. ______ \$2.50 each.

ROSE OF FREEDOM. Winner City of Portland award. A beautiful 60 to 70 petaled, long stemmed, currant-red blooms, true rose fragrance. \$1.50 each.

TAFFETA. Dozens of beautiful color combinations throughout the entire season are yours with the new 1948 All American winner. \$2.00

NOCTURNE. Cardinal-red with shadings of chrysanthemum-crimson, one of the finest red roses of today. 1948 award winner ---- \$2.00

AMERICAN FLAGSHIP. Well formed double flowers of velvet-textured crimson-red, deeply shaded with rich ox-blood tones. -- \$1.50.

PEACE. Golden canary yellow, high centered bloom of deeper yellow. Tips of the outside petals are delicately tinted pink. A winner. \$2.00 each.

ORDER NOW . . . QUANTITIES ARE LIMITED.

Order the above from this ad, as they are not listed in our catalog. For other roses see our catalog. It's free. Write for it.

HARDY CHRYSANTHEMUMS AND PERENNIALS

GARTMAN'S GARDENS

Route 1 Fond Du Lac, Wis.

Did you see our ad listing new Chrysanthemums on page 147,

February issue of Wisconsin Horticulture?



For the WISCONSIN GLADIOLUS SOCIETY

WALTER KRUEGER President Oconomowoc

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PRESIDENT'S MESSAGE

Remember April 3, 1949! It is the date of our important spring meeting and bulb auction at the Retlaw Hotel, Fond du Lac.

To be a financial success, an auction must have bulbs and buyers. Send your donations or listing to Prof. Leland Shaw, Milton, Wis.

The auctioneers will be Walter Sprangers and Archie Spatz. If their voices wear out, we shall draft help.

Frank Bayer and Walter Kurtz are to assist Prof. L. Shaw with the necessary accounting.

At this meeting it will be our endeavor to clarify:

- The manner of adding new members to our Society as provided in our articles of incorporation.
- 2. To make a final step in changing from 14 to the 15 directors. The first provision dates back to 1942. The second to the 1947 fall meeting.

The state law provides that more than one half of the members must approve changes in our Constitution. In this issue you will find a proxy form. It is your duty, if you cannot be present at the meeting in person, to sign this proxy in favor of someone whose judgement you trust who will be authorized to cast your vote. Thus the above mentioned tasks may be completed promptly.

Will the presidents of our chapters assist in getting enough proxies so we

ANNUAL MEETING WISCONSIN GLADIOLUS SOCIETY

Retlaw Hotel, Fond du Lac Sunday, April 3, 1949

10:00 a.m.-12:00 m. Meeting Board of Directors.

1:00 p.m. Business meeting. Changes in Constitution. Annual shows. Report of delegates.

2:00 p.m. Demonstration. How to package cut Gladiolus. Paul Ravet, Menomonee, Mich.

2:30 p.m. Bulb auction Auctioneers Walter Sprangers, Waldo and Archie Spatz, Wausau.

can conduct our business legally?

At this meeting Mr. Paul Ravet will demonstrate packaging of cut Gladiolus.

Our delegate to N.E.G.S. and N.A.G.C. conferences Mr. Ed. Lins, found he could not attend. We named Mr. Roger Russell as our delegate.

Our 1949 show committee, D. L. Sleezer, Leland Shaw and Harold Janes inspected facilities at Beloit. A report will be ready for us at Fond du Lac.

At the suggestion of one of our directors all directors were polled by mail if they favored inviting the N.A.G.C. to hold its 1950 conference in Milwaukee. Thirteeen approved, one disapproved, two did not reply. The invitation was extended. Unofficial news reveals

that the conference will be held in the "east."

Don't forget to make your proxy vote useful!

Walter C. Krueger, President

NORTH AMERICAN GLADIOLUS COUNCIL MEETS

About 200 Gladiolus growers from the United States and Canada attended the meeting of the NAGC at Toronto, Canada January 21—23.

New officers elected include Dr. H. W. Stevens, Waterbury, Conn.. president; W. J. Dittman, New Castle, Ind., vice president; Leo Matthews, Indianapolis, Ind., secretary and Ray Moss, Waterloo, Ia., treasurer.

Some of the highlights of the program brought out these facts: delegates reporting stated that supply of No. 1 and No. 2 bulbs was short due to weather conditions this past summer.

Growers were urged to maintain a reasonable price for the bulbs. Certain marketing practices and types of advertising appearing in trade papers were criticized severely

Prof. N. Truman Fossum in speaking to the commercial section said that the retail florist's dollar volume has been stable through the years. Flower sales represent about onehalf of one per cent of each dollar spent by our people. Gladiolus production, he said, is much more flexible than greenhouse production. Marketing problems include the appearance of the product, the publics' desire for the product and the quantity required by the public. He stressed the fact that Gladiolus growers are not receiving their just proportion of research.

WISCONSIN GLADIOLUS SOCIETY PROXY VOTE

ı,	tne	undersigned	member	or	tne	vv isconsin	Gladiolus	Society,	ao	nereby	y

as my proxy and attorney in fact, to represent and vote for me at the regular meeting called for the transaction of all business that may come before this meeting or any adjournments thereof, and do hereby ratify and confirm all my said proxy may do or cause to be done in the premises.

I hereby admit that I have had due notice of this meeting in the March issue of Wisconsin Horticulture.

Dated this day of March, 1949.

Signed:....

2,4-D

The most spectacular of the new weed killers 2,4—D according to Dr. Leo Klein of the experiment station at Guelph must be used with caution. He said any concentration of 2,4—D

which is strong enough to control weeds should be used with caution as a foliage spray on Gladiolus. Preplanting and pre-emergence soil application will do a good job of weed control for a period of six to eight weeks

Prof. E. F. Palmer suggested two projects—a variety symposium similar to the biennial symposium conducted by the Canadian Gladiolus Society and a variety name registry. He emphasized the need of stressing garden dependability rather than show bench perfection.

When asked to name the best varieties of Gladiolus in his opinion, he recommended these: Angelus, Betty Nuthall, Connecticut Yankee, Essa Marie, Ethel Cave Cole, Galore, Marlene Both, Mystery, New Era, Picardy, Rosa Van Lima, Susannah and Wings of Song.

The bulb auction netted \$1200 and proceeds were given for the work of the Council. An advertising and publicity budget of \$750 was approved. A NAGC medal will be given to one show in each state. Dues for growers having less than \$100,000 investment will be \$5.00; for more than that sum, \$10.00. It was voted to hold the 1950 convention on the east coast.



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Port Washington, WisPhone 107



A section of R. B. Russell's bulb house. Contains about 600 trays—an above ground insulated house with automatic hot water heater which keeps temperature about 35° F.

BULBS BULBS BULBS

Best Quality — Best Varieties — STATE INSPECTED

WRITE FOR PRICE LIST Thanks to last years customers

We will entertain offers on large quantities in all sizes and bulblets of SNOW PRINCESS, LEADING LADY, ELIZABETH THE QUEEN and ETHEL C. COLE.

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Gossip travels fastest over the sour grapevine system.

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The King of Summer Flowers!

- for your artistic arrangements!
- · for your cut flowers!
- for a real garden thrill!

Our 19 years of growing experience may be called on for your guidance in arranging for a purchase of satisfaction.

Our current catalogue is free. It lists about 100 varieties.

Our bulbs, so our customers say, are of the highest quality.

RELIANCE GARDENS

657 E. Washington St.

Oconomowoc, Wis.





What Vegetable Varieties for Wisconsin

Questions Answered By Prof. O. B. Combs

Best Melons

Question: We discussed a number of vegetable varieties last month. This month we would like to ask about muskmelons. What suggestions do you have for Muskmelon varieties?

Answer: For the home garden I like the early variety, Delicious. Honey Rock is good, of course, and so is Pride of Wisconsin. For the commercial grower both Pride of Wisconsin and Honey Rock are commonly used, but Schoon's Hard Shell and Craig are increasing in popularity. Craig doesn't hold up in handling as well as we would like but its quality is very good. Fortunately, improved strains of Craig are now available. Schoon's Hard Shell is sometimes a little larger than might be desired but it has good quality and handles well.

Question: We notice such names as Queen of Colorado, Market King and Jersey Queen in the seed catalogs. What about those varieties?

Answer: Those names generally refer to a melon of the Pride of Wisconsin type. Craig in its present form is quite similar to Pride of Wisconsin, for that matter.

Question: What about our old standby, Milwaukee Market?

Answer: At its best, Milwaukee Market is a fine melon. Unfortunately it's next to impossible to get seeds of a good true-type, old-fashioned Milwaukee melon. Milwaukee Market doesn't hold up too well in handling but it can be excellent eating.

Question: New Zealand Spinach is next on our list. We don't grow that very commonly, either, do we?

Answer: No, New Zealand Spinach isn't as common as it should be in home gardens. Its food value, like that of mustard is very good and it will furnish

Squash

Question: What about squash varieties?

Answer: Buttercup is my preference. Green Gold is good and so is Sweet Meat. Red Banana is also very good.

Question: What about the Butternut Squash we hear so much about?

Answer: It's not really a squash, but a Cushaw. That's nothing against it, but I still prefer a true squash and especially Buttercup for good eating.

Question: We're down now to one of my favorite vegetables, sweet corn. What varieties do you prefer there?

Answer: Briefly, I'd say use at least one early variety chosen from Our Choice, Karcross, Golden Rocket or North Star. I'd also grow either Gold Rush or Carmelcross and either Golden Cross Bantam or Golden Bounty.



Buttercup, Wisconsin's most popular squash. Cut section on right illustrates thickness of flesh and relatively small seed area.

greens throughout the entire summer and fall.

Question: Another uncommon vegetable in Wisconsin is OKRA. What would you suggest as a good variety of OKRA?

Answer: Perhaps our best bet for Wisconsin is the new early variety Clemson Spineless. Perkins Long Pod is all right but it's a little later and not quite as productive under our conditions.

Buttercup squash at left, Green Gold squash at right and Golden Table Queen pumpkin top center. Buttercup is a leading favorite but Green Gold is also popular. Golden Table Queen pumpkin is similar to Green Table Queen except in color. These pumpkins are not as good eating as the true squashes.

Onions

Question: Now about sets for green onions. Does it make much difference what color sets we use?

Answer: Not very much. If available, I prefer the longer, bottle-neck type. Golden Globe, but either the regular short, yellow variety, Ebenezer, or the white type, Silverskin, is all right. Buy the smaller sets, rather than large ones, because you'll get more sets per pound and fewer of the resulting plants will form seed stalks.

Question: Now what about onions from seeds sown directly in the garden?

Answer: I prefer not to sow seeds in the home garden but to use sets and transplants instead. For those who do use seeds, I'd suggest either Early Yellow Globe, Yellow Globe Danvers or Southport Yellow Globe. For the commercial grower I'd suggest Early Yellow Globe and the Brigham strain of Southport Yellow Globe.

Question: You say that you favor small green transplants rather than seeds for the home garden. What varieties would you suggest when plants are to be used.

Answer: For late summer and fall use, I'd suggest Bermuda seedlings, but for late fall and winter I'd use Sweet Spanish, because they store longer than Bermudas.

Question: What about Parsley varieties?

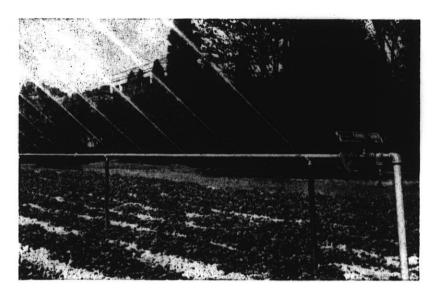
Answer: Parsley varieties aren't very numerous. Use either Moss Curled or Paramount. Very little root parsley is grown in Wisconsin, but those who like root parsley usually grow Hamburg.

Question: We understand you suggest only one variety of parsnip, Hollow Crown.

Answer: That's right. Other varieties such as Guernsey, Improved Guernsey and All American are listed in seed catalogs, but they are all very similar in the garden.

Peas

Question: Now what varieties of peas would you suggest?



Wisconsin vegetable growers are interested in over-head irrigation. Many successful growers say irrigation is absolutely necessary in order to be sure to have a good crop.

Answer: Pea varieties certainly are the most common variety at present. plentiful, but I still think that Little Marvel leads the list for all-round performance in home gardens. World's Record is a little earlier and very productive. Greater Progress is also an excellent pea. A new variety called Wando is finally appearing in some of our seed catalogs. Wando is an excellent variety of dwarf pea and is recommended especially for freezing. Incidentally, many of the pea varieties considered best suited for freezing fail to produce satisfactorily in Wisconsin. Thomas Laxton, for example, is one of the best varieties for freezing but is generally a very poor yielder under our conditions.

Question: Do we grow pole peas in Wisconsin?

Answer: Not very commonly. The support problem is a disadvantage. Alderman is still one of the best varieties of pole peas.

Question: And now for Peppers. What varieties would you suggest there?

Answer: Early Giant and Ruby King are still good but I'd suggest that home gardeners consider changing to some of the newer varieties like Pennwonder and Merimac Wonder. Commercial gardeners might also be interested in those two varieties. The California Wonder type peppers, of course, are the most popular with housewives. The early strains of California Wonder are generally earlier and more productive than the regular strain here in Wisconsin. Some of the early strains are listed by different seedsmen as Harris' Wonder, Calwonder, Oakview Wonder and Fordhock.

Question: What about Hot Peppers? Answer: Hungarian Wax is perhaps

Long Red Cayenne and Red Chili are less common and considerably hotter.

Potatoes

Question: What varieties of potatoes do you prefer?

Answer: In general Red Warba and Cobbler are suggested for early potatoes. Chippewa for second early and Russet Rural for late. Commercial growers will also grow such other varieties as Katahdin, Sebago and Pontiac.

Tomatoes

Question: And what about Tomatoes? Answer: For all-round use Stokesdale is still preferred. If moderate lateness is not a serious disadvantage, Rutgers would be my second choice.

Question: That leaves Watermelons. What varieties would you suggest.

Answer: Purple Top White Globe and Golden Ball are still the most popular turnip varieties. Klondike and Klokley's Sweet are good watermelon varieties. The little Honey Cream is early and excellent flavor but it's quite seedy. Most of the small early melons are of only fair to poor eating quality.



You don't gamble with crops when a Gorman-Rupp Irrigation Pump is on the job. WATER WHEN YOU NEED IT -- pumps month after month entirely trouble-free, with little mainte-nance. There's a Gorman-Rupp Pump for every pumping job. Send for complete information on Pumps, Portable Irrigation Pipe, Rain Heads or ask for a representative to call.

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See Andrews

Hardy Perennials

For Gardens and Cut Flowers

in the NEW FREE '49 Color Catalog



ROSES Sub Exquisite Zero Hybrids, bred northern garlittle care.

ANDREWS 1949 CATALOG. It's full of color illustrations, factual descriptions of the best varieties of many fruits and perennials, and helpful hints for northern gardeners. Below are some of the items we believe you'll like best because they are all bred for hardiness . . . bred to withstand cold Wisconsin and Minnesota winters, yet display all the color and fragrance southern gardeners enjoy with less hardy varieties.

Be sure to send for your copy of the all-new

MUMS Hardy, Minnesota Minnesota Municipal for a riot of gar-Mums till August

PHLOX Early late, Ever-blooming varieties to fit every gar-dener's pleasure.

BUDDLEIAS Enjoy lovely red. lilac-blue and pink blossoms vour this garden

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ANDREWS NURSERY

Shrubs for Wisconsin Gardens

Good for Home Ground Planting

CORNUS PANICULATA Gray Dogwood

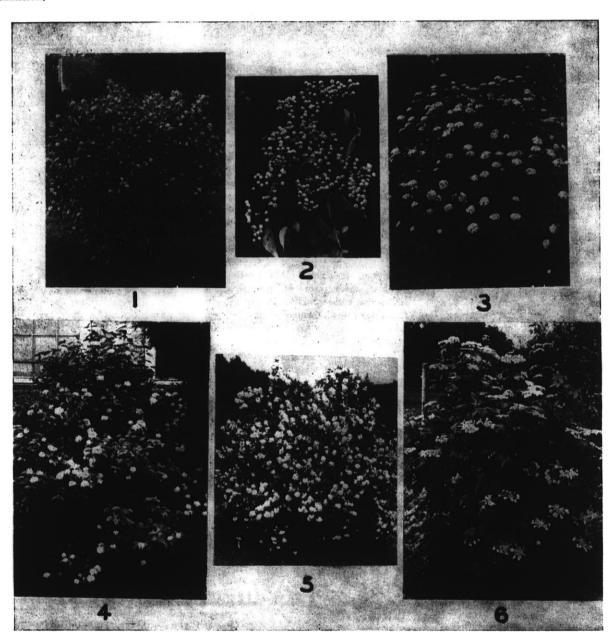
Likes part shade, fine foliage. Birds fond of fruit. Variable in height; 6-8 ft. . Excellent for backyard border and corners of foundation.

GRAY DOGWOOD BERRIES

White berries; very atractive. Liked by many species of birds.

VIBURNUM LANTANA Wayfaring tree

Grows 10-14 ft. Flowers in June. Fruit red changing to black: very attractive. Good large shrub borders.



VIBURNUM DENTATUM Arrowwood

Grows 8 to 10 ft. Leaves purple and red in fall. Birds like the black fruit, ripe in September. Grows in part shade; hardy. Good for shrub borders and corners of detion of large house

BOQUET BLANC

Mockorange

like flower clusters. Excellent for Low growing; 5-6 ft. Bouquetfoundation planting and middle or front of shrub border.

* Pictures Courtesy of McKay Nursery Co., Madison, Wisconsin PHILADELPHUS, 6. VIBURNUM TRILOBUM American Cranberrybush

Fruit large, edible, remain on plant all winter. Excellent for backyard border. 10-12 ft.

(Continued From Page 178)

Irrigation

Question 5. Do you use irrigation? If so, what kind?

Answer: 1. We have a Skinner irrigation system and are well satisfied. 2. We have portable rotary sprinkling system. We have used this on 14 acres since 1939 getting our water from a river. For quality and quantity, we believe in irrigation. 3. None. 4. Not necessary as we have heavy, level and low ground. 5. None. 6. Have city water and use garden hose. 7. Irrigation not available but use Skinner system for nursery propagation bed. 8. In past, we have irrigated strawberries and found it very beneficial, many times saving almost an entire crop. At present time, we use almost none. We expect to install overhead irrigation on early vegetables in spring if material is available. 9. We use city water at city pressure, with small sprinkler head for sweet corn. strawberries and raspberries. 10. Use Buckner portable rotary irrigation system. 11. Use Skinner permanent overhead system with automatic ossillators. Also we use few part circle rotary sprinklers on parts where the permanent type is not adaptable. Pump water from lake. 12. We have been using osscillating Skinner system for last ten years. Now we find city water rates have increased so we will have to fix up our own well again. 13. We have overhead skinner system placed above each row of raspberries. We use Rainbird circular sprinkler for small plots of ground. Water is pumped from river with 25 G.P.M. centrifegal pump powered by 1 cylinder air cooled engine but are replacing with electric motor which costs less to run and maintain. 14. Use Skinner irrigation system and it is good paying proposition. Use some Nelson sprinklers in odd corners. 15. We use overhead irrigation where our land slopes slightly and let the water run down hoe-made depressions.

WILLIAM ROBINSON'S PAPER

"GARDENING ILLUSTRATED" is the second oldest gardening paper still being published in England. This year it celebrates its seventieth birthday for the first issue appeared on March 25, 1879. It was founded by William Robinson, most colorful of British horticultural journalists who started life as a gardener in Ireland.

"Gardening Illustrated" has as its mot-

to "to help forward progress." It is concerned with all kinds of gardens, large and small, and has even extended its interests to the special requirements of overseas readers particularly in the U. S.A. The immense growth of scientific research provides a new field undreamt of by William Robinson and his coworkers. Nevertheless we feel that he would still approve the policy of this progressive and enlightened journal, for in his first editorial, he goes on to state that "the greatest care will be taken to publish only the most practical and in all ways trustworthy advice and directions and that the illustrations are such as will be helpful to all readers. Those words apply as much to the present issues as they did to those of seventy years ago.

NEW MOCKORANGE Minnesota Snowflake

(Plant Patent 538)

Blooms profusely with very double, fragrant, white flowers. Bushes better than other varieties.

2 to 3 ft. plants _____ \$1.50 postpaid EVERGREEN TRANSPLANTS

White Spruce — 8-10 in. ___ 4 for \$1.00 Black Hill Spruce — 10-12 in.

(heavy) _____ 2 for \$1.00

American Arbor Vitae —

12-18 in. _____ 3 for \$1.00

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Nature grows TREES wachtel saves

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- Tree Removal
- Bracing
- Wound Treatment (Surgery)
- Evergreen Care
- Large Tree Planting
- Effective Weed Control with Specialized Equipment



Garden Gleanings

Red Jacket tomato is a new variety developed by the New York experiment station at Geneva. It is said to be outstanding for juice, catchup and chili sauce because it has a very good red color. Red Jacket differs from other tomato varieties because the leaves resemble those of the potato plant and are thick and large.

Seeds may lose their viability unless properly stored according to the U. S. Department of Agriculture. The department has issued a report on the effects of temperature and humidity studies on the storage of seeds in which 15 kinds of vegetable seeds were tested. None of the seeds decreased noticeably in germination at 50° temperature and 50% humidity after 36 weeks. However, when stored at 80° and 80% humidity, nearly all seeds showed a complete loss of viability. Tomato seed was the most resistant to unfavorable conditions and onions the least. Seeds stored in closed glass vials retained their viability better than those exposed to the air.

Plant disease control studies continue and are bringing us interesting information. At Michigan State College en antibiotic material, actidione, a byproduct in the manufacture of streptomycin was used to control mildew on red kidney bean leaves. Within 48 hours after the application of actidione the disease had completely disappeared from the upper surface of the leaves whereas the usual sulfur treatments had failed.

The material also showed great promise on chrysanthemums, hydrangeas and roses-roses so treated remained mildew free from four to six weeks. It will be interesting to follow further experiments in this field.

IT'S TIME TO PLANT **GLOXINIA BULBS**

It's fun to grow Gloxinias and the flowers are most beautiful. They are stemless plants with tuberous rhizomes and showy bell shaped flowers. Their native home is in Brazil. Their culture is very much like that of the Tuberous Begonia.

With a little care and patience they will do well in an ordinary living room. Just plant the bulbs in 4" pots. Use a rich potting soil containing some leaf mold and sand. If you don't have any good soil on hand buy some from your florist.

The bulbs are now on the market and if planted in March they will bloom during the summer. The plants should never suffer for want of water. They are much like the Tuberous Begonia in that they must be grown in shade.

WHEN TO UNCOVER ROSES

ROSES MAY BE UNCOVERED as soon as the frost is out of the ground under the mulch. We have never seen any injury that could really be attributed to early uncovering but have seen injury in cases where the covering was left on too long- the buds begin to grow under the mulch forming slender, spindly, yellowish shoots which failed to grow.

It is not the late cold we get in

April that kills our roses, its the severe cold, the 20 below zero that we get in mid-winter that injures the cells of the cambium layer. This type of injury does not show up when the roses are uncovered because the bark of the cane still looks fresh and green. Shortly after uncovering however, the tissues dry up and many gardeners mistake this for injury due to late, light frosts.

WHAT'S YOUR GARDEN I. Q.?

Are These Statements True or False?

- 1. The Washington Hawthorn holds its fruit all winter.
- 2. The buds on peony roots should not be more than 2" beneath the surface of the soil.
- 3. Commercial fertilizers may be used on any kind of plant.
- 4. It is necessary to have earthworms in the soil for satisfactory growth of plants.
- 5. The cornelian cherry is really a dogwood, Cornus mass.
- 6. There are annual hollyhocks that bloom the same year you sow the seed.
 - 7. There are climbing nasturtiums.
- 8. A yard with a steep slope is always well drained.
- 9. There are dwarf morning glories.
- 10. Poison Ivy and Poison Oak are both sumacs.

ANSWERS TO-WHAT'S YOUR GARDEN I. Q.?

True-1, 2, 3, 5, 6, 7, 9, 10.

False-4, 8.

SPECIAL ANNOUNCEMENT

If you are interested in a small Greenhouse for your Private use or for Commercial purposes, be sure to see OUR Exhibit at the annual "BUILDER'S & FLOWER SHOW" at the Minneapolis Auditorium March 26th. to April 3rd 1949, inclusive. OUR exhibit is the only one of it's kind in the world, and is annually the HIT of the SHOW.

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GROWS IN A

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GREENHOUSES

CONSERVATORIES

Minneapolis, Minn.

SOLARIUMS

A SPRINGTIME ARRANGEMENT FOR THE LIVING ROOM By C. P. Holway, Evansville

The first day the sun is able to coax the temperature up above freezing, take your pruning shears into the garden and cut a vase of Springtime for the house. How well we remember the first time we saw a great jar of Forsythia in full flower on a cold, dreary day in February! The jar sat at the end of a wide fireplace mantel-shelf, and the goldenstarred branches were beautifully splayed against the chimney breast. Here was Spring, so elusive out of doors, shining brightly in the living-room.

The Golden Bell is just one of a good many spring-flowering shrubs whose branches you can bring into the house and force into early bloom. But be sure you select shrubs whose flower buds were former last summer. Don't expect a vase of water and a little warmth to create a bouquet of lilacs. While you wait for the lilacs to come in their own sweet way, in the garden, compose your spray bouquets of apple, crab, pear, flowering peach, Japanese quince, honeysuckle, the spiraeas, cherry, dogwood, redbud, Philadelphus.

Have you a red maple (A. rubrum) or a Siberian pea tree (Caragana arborescens)? Bring in their branches and watch their red and yellow flowers un-

Bouquet of Green Leaves

If you can be satisfied with green leaves-the delicate, pale green that is Spring's alone-gather a few boughs of horsechestnut and birch. If you have neither, steal out to the edge of town and clip a bundle of willow wands, any kind of willow, big or little. In just a few days you will have a weaving, delicate vase of airy green no florist's piece can equal.

Whatever shrubs or trees you choose, cut the boughs when the weather is warmer than freezing. With a hammer, smash the bottom inch or two of each branch, to help speed the intake of water essential to the buds' development. Then immerse the whole bouquet, over night, in a bathtub of tepid water. In the morning, transfer the branches to a vase of water and put the vase in a cool room or cellar. (The slower the buds develop, the bigger the leaves and flowers.) Spray every few days with luke-warm water.

When the buds begin to break, carry the vase into the living-room and, no matter what the calendar or the weatherman says, you will have Spring.

TUBEROUS BEGONIAS

Jumbo size fancy Tuberous Begonia bulbs. Camellia type. Eight colors. Hanging type Begonias, Gloxinias. All large bulbs. Imported from Belgium. 25 cents each. — \$2.50 per Dozen.

MRS. J. CABARET

2133 North 36th St., Milwaukee 8, Wisconsin

P. T. Barnum had the reputation of outwitting anyone with whom he dealt. But a man from Vermont once turned the tables on him. The Vermonter wrote a letter to Barnum, saying he had a cherry-colored cat which he thought should be added to the Barnum Museum, for the price of only \$200.

Barnum immediately sent a check for \$200 for the cat. In return he promptly received a large, coal-black cat, with this note attached to its neck: "I neglected to tell you that Vermont Cherries are always black."

A Conference is a group of men who individually can do nothing, but, as a group, can meet and decide that nothing can be done.

FLOWER GROWERS

trv

NU-ERTH

Worm Casting Compost Natures Best Plant Food

NU-ERTH grows a healthy plant, color bright day and night. This material is a Natural Worm Manure. It will not burn the plants, nor can you over feed. 100% Natural Organic Plant Food. Nothing added. Ideal for house plants, flower boxes, flower beds, shrubbery and vines.

We want dealers to distribute this material. We have a good offer for church organizations and clubs. Write for our prices.

3 cans for \$1.00

Postage 20 cents extra.

SOUTHEASTERN SUPPLY COMPANY Gerry W. Tans Waukesha, Wis. 227 Cutler St. Telephone 8716

AFRICAN VIOLETS

SAINTPAULIA

BLUE BOY — Deep Blue Flower With Yellow Centers. — 74 Cents each.

DOUBLE DUCHESS — Same as Blue Boy but flowers are double. \$1.89 each

LAVENDER LADY — Light lavender. Free Blooming. — \$1.50 each.

PINK BEAUTY — Esquisite pink flowers with yellow stamens. 89 cents each.

WHITE LADY — Large, Perfect white flowers. — The best white. 93 cents

PRICES ARE ALL POSTPAID

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FLOWER. POTS

Scientifically designed pots which feed water from storage base direct to roots of plant, by means of a glass-fibre wick. Ideal African Violets and Gloxinias especially. Ideal for

Made of strong, durable light weight plastic. Available in 6 colors, Ivory, yellow, coral, pink, green or marble. — \$1.10 each; 3 for \$3.00, post-



SUB-ZERO ROSES

A distictive strain of hybrid tea roses that unprotected has been wintering through 15 degrees below zero for years and whithstand 50 degrees below zero. They have all the good rose such as size doubleness, fragrance, vigou

r qualities of a

Try these roses if you are having trouble wintering the ordinary hybrid tea varieties

LILLY PONS. — White PINK PRINCESS. — Rose Pink

RED DUCHESS. - Beautiful red \$1.85 each; 3 for \$5.25 postpaid.

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 2227 Van Hise Avenue, Madison, Wis
 Mrs. Paul Hammersmith, 2755 N. Stowell Editor Madison, Wis. Parliamentarian -Avenue, Milwaukee 11.

DIRECTORS

Flower Show: Mrs. Ervin Kulow R. 2, Box 441, Waukesha. Garden Tours: Dr. Ralph A. Norem, 466 Elmwood Avenue, Oshkosh Charmen

CHAIRMEN
Auditor: Mrs. Clarence Kasdorf,
736 Ridge Street, Baraboo
Birds: Miss Elsa Lautenbach, 135
Smith Street, Plymouth
Conservation: Mrs. Conrad Biebler,
2027 E. Olive St. Milwaukee, 11.
Historian: Mrs. Walter Roehrborn
1922 Georgia Ave., Sheboygan
Horticulture: Mrs. Herbert Chaffin,
543 Scott Street, Ripon
Junior Gardens: Mrs. Earl F. House,
421-8th Ave., Baraboo
Judging Schools: Mrs. George J.
Portman, 306-12th Street, Wausau
Membership: Mrs. George E. Flanders, 806 West Wisconsin Street,
Portage

Portage
Nominating: Mrs. Harold C. Kallies,
723 No. 8th St., Manitowoc
Program: Mrs. M. C. Spence, Williams Bay, Wisconsin.
Publicity: Mrs. Fred C. Marquardt,
R. 1., Box 63 Hales Corners, Wis.
Road side Beautification: Mrs.

Malvin Schneider, Hales Corners

Wisconsin Scholarship: Mrs. Alfred J. Kieck-hefer, 1250 W. Dean Road, Mil-waukee 11

Year Book and Awards: Mrs. H. G. Harries, R. 1, Box 31A, Hales Corners, Wisconsin

PRESIDENT'S MESSAGE

Dear Garden Club Members:

"How does your garden grow?" Of course winter is still with us, but even now, the snow is nourishing the soil, the tender roots and shoots opening up their "eyes" and growing strong and, in your minds or on paper, you are making plans for the balance of the garden. By the time we are ready for flower shows and tours we will have a symphony of exquisite beauty in our gardens to exhibit!

We think so much of organization, notices, programs, chairmen we may forget the vital part of our Garden Club activity is in our gardens. For here we get the rich experience of what and how to grow. It is there we reap our rewards in a panorama of gorgeous colored, sweet scented beauty which we may point to with pride when we open our gardens (whether they be large or small), for a garden tour: there we find our choice blooms for exhibition at our flower shows as well as for beautifying our homes.

In order that all of you may participate in the tours and flower shows we are holding 5 district shows and 5 district tours in place of a state show and a state tour, as I have previously stated. This breaks our state into smaller areas so everyone can be represented in both a tour and a show and thus gain experience.



In the deep heart of every forest tree The blood is all aglee, And there's look about the leafless bowers As if they dreamed of flowers. Yet still on every side we trace the hand Of winter in the land, Save where the maple reddens on the lawn

Flushed by the season's dawn; Or where, like those strange semblances we find That age to childhood bind,

The elm puts on, as in Nature's scorn, The brown of autumn corn. - Henry Timrod.

This gives the districts a chance to acquire some money of their own (since these affairs are district and not state projects). This should be an incentive to making these tours and shows a tremendous success.

One other feature of district shows is that many of our members have asked for shows run under the standard system of judging, wherein 1 blue ribbon is given for each class. However you may have as many classes as you wish, and anyone may enter in as many classes as he chooses. In the merit system, which is at present a state ruling, the judges give as many blue ribbons as they see fit on any exhibits they believe are in a 90 to 100 per cent class. This latter system, the merit system, does attract many entries, however the standard system tends to make for higher quality in exhibits.

What is most important of all is the fact that National Council of State Garden Clubs does not recognize any blue ribbons earned under the Merit system. They require that blue ribbons earned for the Judges and Exhibitors school courses be earned under the Standard System of Judging.

Hence, we wish to give our "potential" accredited judges (our Exhibitors and Judges school "pupils") an opportunity to earn these blue ribbons that are required by the school. As long as we use the merit system of judging they have no opportunity to earn them. Therefore we are letting the directors choose the system of judging they wish. We have found many members are happy to have this opportunity of using the Standard System.

Finally if your district is large and very enthusiastic vou may have more than one tour or show. Additional projects lie entirely at the discretion of the district. Do what you see fit. The state has appointed a Tour Director, Dr. Norem, and a Flower Show Director, Mrs. Kulow for you to consult with for help or council, when, and as often as you wish.

The very best of success to all of

Your president. Gretchen Fiebrantz

Highlights —

from THE NATIONAL COUNCIL.

If you are a Wild Flower fan and would like to know more about spring flowers in the south, go to your club president and borrow the Jan-Feb. issue of the National Gardener so you can read the article "Colorful Southern Wildflowers" by Richard A. Howard, Ph. D., Assistant Professor of Botany of Harvard University. Hand drawn illustrations add much to Dr. Howard's article.

If you would also like a glimpse into the famed "Cypress", "Magnolia" and "Middleton Place" Gardens of South Carolina you will get it, too, when you read this issue much of which is devoted to gardens in the

"deep" south.
"Swan Lake Iris Gardens" at Sumter, is one of the finest and most notable gardens in the world. Developed from an apparantly irredeemable bog into gardens of exquisite beauty by Hamilton G. Bland of Sumter, this vast project won for Mr. Bland a white ribbon for special achievement at the National meeting at Lexington.

In February we mentioned the 20-Year History of National Council of State Garden Clubs to be printed before the annual meeting in May. The following details have been taken from a statement on the book and it's contents by May Duff Walters, Aide-to-the-Historiam:

What Will The History Contain

- 1. The story of the ten administrations written by the National Presidents. A full page picture of each president, and a list of her officers and chairmen.
- 2. The condensed history of each state, emphasizing its outstanding projects and achievements.
- 3. The story of each National Council Committee. (more than 20)

Also a treasury of invaluable reference material, which will make this a handbook for organization, administration and procedure.

Who Will Want The History

We are confident that each one of our almost 6,000 member clubs will wish to have a copy for its own files, a copy for the local Garden Center, and one for the local Library.

It would make an ideal gift to any garden club member, but would be especially welcome to an incoming or outgoing president.

In Our State

GARDEN TOURS

The first conducted garden tour for the 1949 season will take place in Oshkosh on Saturday, April 23. We shall meet at the Public Museum on Algoma Boulevard at 2:00 p. m. The tour will include a visit to the Paine Art Center and Arboretum, which is one of the show places in Wisconsin today. It will also include a visit to the flower garden of Mrs. Glen Fisher. This date was chosen in the hope that daffodils will be in bloom. Mrs Fisher is perhaps even more enthusiastic over her African Violets than over her garden. Her plants will be on display, and she will answer questions on the culture of this flower. Other interesting features are being planned. What could be finer than a garden tour in the crisp days of April with daffodils in full bloom?

The Oshkosh tour is sponsored by the Fox River Valley District at the suggestion of its president, Mrs. Warren Jenkins. The local club will act as host, conduct the tour, and serve tea. A registration fee of fifty cents will be charged, the proceeds of which will apply to the scholarship fund at Central State Teachers College. The Oshkosh club would like some idea of how many to plan for. If you plan to come, assuming the weather is favorable, will you let us know?

The garden club at Washington Island is inviting us up there on a date still to be set. It will perhaps be in late May or early June. This tour will include the ferry ride over and back, the wilderness beauty and wild flowers of the island, and refreshments.

They are given to bragging, the folks up there in Washington Island. Mrs. Synnve Baasch is president of the club, and, being a native of Norway, thinks she knows scenery when she sees it. The island has something to offer, she says. Rumor has it that the islanders like company and that their guests will be treated in the grand style. Details of the tour are still to be worked out, and will appear in these columns next month. Meanwhile anyone interested in investigating the matter could write to Mrs. Clara Jessen at Washington Is-

JUDGING SCHOOLS

The National Council of State Garden Clubs, aware of the need for a standard of Judging Course Schools, has drawn up a plan to be used by the Garden Clubs seeking the National Council's approval. This plan incorporates the planning of a Show through the various stages to the actual judging. Those whose aim is the title of Accredited Judge should be well trained in both the science of Horticulture and the art of Flower Arrangement with an understanding of the factors which make up successful flower shows and their Judging.

The complete plan covers a series of five schools for the Flower Show Judging, each school comprising specified lectures and written tests. Forty credits are required of a successful applicant, earned as follows:

The state of the s	
Credits (5 for each of	
the five schools)	
Credits for the required	
reading	5
Credits for 5 Flower Shows	
\mathbf{Judged}	5
*Credits for 3 blue ribbons	
received	5
_	

Total 40
Details are given in the Hand Book.

*Under the standard system of judging.

land, who is chairman of the local committee on arrangements.

There are beautiful gardens everywhere throughout the state. We all like to see what they are doing in other places. Let's have lots of tours this season.

Any district or club projecting a tour should set the date well in advance. If the tour it to take place in May, announcement to that effect should appear in the April issue of Horticulture. In projecting a tour do not overlook back yard or pocket handkerchief size gardens. These are frequently of greater inspiration to most of us than the big show places.

We should have a fall garden tour with which to end the season. Can anyone offer us such a tour?

-Ralph A. Norem, Director of Tours

JUNIOR GARDEN CLUBS

The article referring to the growth of Junior Clubs in the West Virginia Federation, printed in our November issue, was meant for a challenge to Wisconsin Garden Clubs and is so being accepted, if letters of inquiry are any criterion.

It would be hard to match West Virginia's record. Nevertheless the following reports from two of last years Junior Garden Club leaders, Mrs. Herbert Chaffin of Ripon and Mrs. Lawrence Skilbred of Fond du-Lac show us that much has been accomplished in their communities.

Mrs. Chaffin sent me this description of their Junior Garden Club:

"We started by getting gardenminded scout leaders who helped us organize an interested group. Later they called themselves a Junior Garden Club. The Ripon Garden Club gave three money prizes for the best gardens at three different times during the summer. A party was held in the fall when awards were given. Valentines were made in February. They also made dish gardens, Easter favors for the hospital, and made their own garden plans. Seed packets were usually given as prizes. An outstanding speaker spoke to the girls about birds and had articles for demonstration. Shrubs, flowers, trees and birds were studied by means of field trips.

Mrs. Skilbred writes: "We begin our year's work in March when a call is sent to all scout and brownie leaders for girls interested in gardening. At this meeting we serve refreshments and present each girl with a National Council Junior pin and a little money bag for a donation from the troop for activities of the Junior club. The entertainment is usually a film.

"Fond du Lac has established a wild flower sanctuary of about an acre and a half where the girls work every Saturday beginning in April and continuing through the summer and fall. They come at ten o'clock and stay until two, bring their lunches and cook food over the fire-place. Every girl scout receives a felt leaf to wear on her uniform for every ten hours work while a brownie receives one for every five hours work. We have a "Garden Day" in May and "Rally Day" in October

ROADSIDE BEAUTIFICATION .

We in Wisconsin know that we have lagged behind many other states in the matter of roadside development. Proper picnic areas, beautiful trees and shrubs, and absence of disfiguring dumps and billboards add greatly to our own enjoyment of travel about the state and help attract visitors.

As garden club members, anxious to promote the development of natural beauty, why not (1) Take steps to prevent the destruction of beautiful hedges of native plant material which have grown up along roads in your locality? (2) Be on the lookout for likely wayside and picnic areas, and consider ways of promoting their development? (3) Give consideration to the planting of groups of native shrubbery in appropriate spots? (4) Use your influence to prevent the erection of disfiguring billboards? (5) Influence local governments to prevent dumping near roadsides? (6) Urge farmers and country home owners to consider the appearance of their roadside fences and some planting along them?

If each garden club undertook just one of these projects how many beautiful roadside spots there would be for all of us to enjoy!

— Mrs. Malvin W. Schneider, Chairman of Roadside Beautification when awards are given, along with treasure hunts, folk dancing, songs and fun. We have about 75 girls. Twenty to twenty-five work each week in the sanctuary."

I would like to repeat with Mrs. Skilbred the words at the end of her letter: "I hope no one will say, 'I have no time for Junior Garden Club work."

I have received and studied the pamphlet "Outdoors and Indoors" with the Juniors by Mrs. Miriam G. Dickinson, Bluefield, West Virginia which was a great incentive to the organization of Juniors in the West Virginia Federation. Every leader and every child will find this booklet useful. It may be secured from the author for one dollar.

Let us work together to make this a noteworthy year in Junior Gardening in Wisconsin.

Mrs. Earl F. House,
 Junior Garden Club Chairman

HORTICULTURE

Horticulture is a constant challenge to us, as gardeners. Can we meet this challenge? Do we have a genuine interest in plants? Is our knowledge of plant material adequate? Do we know the soil and moisture requirements; climatic conditions; enemies and their control affecting the plant? Do we try new plants and find improvements over the old ones? Are they suitable to our locale and to others? Will the plant be an asset to our garden? Do we share our results with others?

Therefore, let us study the plants involved, and make our horticulture program a progressive one, raising our horticultural standards at the same time.

This year, will you, as a Federation member, try growing a plant new to you or one which you have not previously grown in your garden? Study it; know its growing habit and enemies; and ways to improve it. If it helps to beautify your garden or home, making your own surroundings more attractive the community will be more beautiful as well.

I feel an exchange of horticulture ideas would be a profitable aid to our members. If you have any helpful suggestions will you send them to me so that they may be published?

Mrs. Fiebrantz contributed the following ones.

"Wherever you happen to live, sow flower seeds when the trees are in bud."

"Trim hedges early. The new growth will cover the stumps. Hedges make a bushier growth if trimmed a little narrower at the top than at the bottom to insure the entrance of sunlight below."

"Uncover perennials gradually."

"Bordeaux Mixture can well be used on peonies and delphiniums when they start spring growth."

"As soon as freezing weather is over — Roses may be pruned. Plant new roses as early as ground is in condition. If all clippings and fallen leaves from your rose beds are burned, you will help to prevent the spread of black spot."

Will you contact your district chairman for more information on program suggestions, available speak-

(Continued on Page 197, Col. 1)

SOIL CONSERVATION

Why should we be interested in Soil Conservation? Because soil is the basis of our wealth. The welfare of our people both rural and urban depends, to a great extent, on the way our soil is managed.

Wisconsin is outstanding for its promotion of proper soil practices. In 58 of our 71 counties we have organized soil conservation districts in which farmers are receiving help in solving their erosion problems. Among commonly recommended methods of eroson control are:

- 1. Shelterbelts of trees (preferably evergreens) and cover crops for prairie land.
- 2. Tree planting, contour plowing and strip cropping for hills and slopes.

As the teaching of Conservation is compulsory in our Wisconsin schools it is fitting that detailed information on Soil Conservation can be obtained either from U. S. Soil Conservation, Milwaukee, or from the University of Wisconsin College of Agriculture, Madison.

> - Mrs. Conrad Biebler. Conservation Chairman

A PLEA FOR HISTORY

Very often the duties of the historian seem minute or insignificant. and apparently neglected until the end of the term. However, material must be gathered throughout the year if we are to have a complete and up-to-date history book.

I am asking the historian of each club in the state, and also the district historians, to send me any publicity or any account of your outstanding accomplishments from time to time. If each historian will contribute a brief summary of the projects and achievements of your club through the year, we will have a book that will contain much valuable information for reference.

Newspaper clippings, programs, pictures, pamphlets, or magazine articles pertaining to gardening (all properly dated), is the material we are looking for. Won't you please help?

I shall be looking forward to receiving your contributions, and please feel free to write me if I can be of any further assistance.

- Mrs. Walter Roehrborn,

ARE WE FEEDING OUR FEATHERED FRIENDS

One of the most fascinating hobbies that I can think of is feeding and caring for our little feathered friends. If you are a gardener, you know what friends they really are.

Why not think of them when you plant shrubs, and get some that supply berries the birds need? Among the best shrubs for this purpose are the Shadblow or Juneberries.

Bluebirds, Cardinals, Flickers, as well as some finches, orioles, and tanagers can be found at some time or other at the Juneberry festival. Red Mulberry, bearing fruit in July and August is a most satisfactory tree for the summer months and is patronized by many species of birds. Red-yellow-twig Dogwoods, bearing fruits in July and August are very much appreciated when young birds are being reared. The bright red berries of Flowering Dogwoods attract many different species of birds also fruit of flowering crab or honeysuckle or Russian Olive.

Chinese Corkbark or Euonymus is a haven for flocks of Robins in early spring, as are Hornbeams for Cardinals.

The Junipers are not only satisfactory for food, but furnish shelter as well. Mountain Ash, with its beautiful, heavy clusters of bright orange berries, is a favorite of wintering Robins, Waxwings and Purple Finches. Raspberry and Blackberry bushes, whose fruit is eaten by enumerable species, also furnish nesting places for Indigo Buntings, Catbirds, and Cardinals.

A piece of suet fastened to a tree or hanging from a limb is a grand treat in winter. Chick feed, sunflower seeds, apple pealings and bread crumbs, are also welcome.

It has been found that it is dangerous to use wire mesh to fasten food to a tree or feeding station, for in very cold weather birds have been known to become blind when their eves came in contact with the metal.

If you start to feed birds in the fall, be sure to follow through. All too many people interrupt the natural flight of birds to the south by fall feedings, and as the snow gets deep, forget to carry on when the food is needed most. This practice is often fatal to numbers of our migratory birds. Water must be available at all times, for a bird must drink as well as eat. A pan of sand or gravel, when the snow is deep, is necessary to round out the birds diet.

In closing let me say just a word about our lowly grackles and starlings. They are our first line of defense against the ever increasing hordes of Japanese beetles.

> Elsa M. Lautenbach State Bird Chairman

Programs

Our garden club programs for 1949 are well on their merry way by now, but about this time of the year, most of us are bubbling over with expectancy - the expectancy of spring! Many have brought twigs of spring blooming shrubs - forsythia, pussy willow, flowering crab and the apple, pear, etc. indoors to be forced. A gay addition to a March or April meeting would be the making and judging of these arrangements by the club members. It is surprising what a lift they give us, not to mention the pleasure to be had in arranging them with the flowers and foliage of house plants or in combination with dried materials.

For the garden clubs who have not State Historian as yet sponsored Junior Garden

Clubs, this might be an interesting and worthwhile project. Children are wonderful to work with - their love of beauty, of working and creating with their hands, their tireless energy and eagerness to learn can be a real inspiration. Teach them why we conserve our forests, our wild flowers, our soil; study the birds and insects, the native foods to be found in our great land and other related subjects. You will be happily repaid for the effort expended in the pride of accomplishment enjoyed by the children participating and in the fruition of that training as they reach maturity.

> - Mrs. M. C. Spence, State Program Chairman

Winter Garden-Planning (Cont. from Feb. issue)

George W. Simmons, Jr., Landscape Architect

5. Color. Beware of gaudy colored catalogs that have been gaily tinted with the printer's brightest inks. If you expect the flowers to be the same color in your garden, you may be greatly disappointed. Compare the colors of various pictures in different catalogs and check them with reliable descriptions if you wish to know more exactly what the colors will be when they appear in your garden.

Color in masses, or large groups of one color, is the most effective in the foundation planting or flower border. A large variety of different colors planted in small clumps presents a rather spotty appearance, and produces a sense of restlessness. Make a series of plans of your flower border to indicate the time of bloom of various colors in order to avoid clashes of colors and inharmonious groups. Choose flower colors that add to the color scheme of your house outside, and for the cutting flower border select colors to decorate the interior of your home.

6. Season of Bloom. When does the plant blossom? How long will it continue? The time of bloom and the duration will greatly affect your enjoyment of the plants chosen as well as the effectiveness of the color. If you are on vacation in other parts of the world during much of the summer, then you would do well to choose only those varieties which produce during the spring and fall, or are attractive in winter. The time of bloom for various plants may greatly vary from year to year, and again in different places in the same locality. This phenomena is the result of many factors. It may be the weather, the soil, the location, or the species. An early or late spring, wet or dry soil, the exposure and slope of the land in relation to the sunlight, or the depth of frost-all affect the season of bloom. Be sure you check the time of bloom for the particular variety you wish to buy, for there may be a wide variation in the different spe-One example is the peony, which may bloom very early, in midseason, or late - depending on the type. Arrange your plants accordingly to avoid too many bare spots without color when you want it.

7. Texture. The color may be right, but what about the general appear-

ance of the plant? Does it have a coarse leaf with heavy, stiff branches presenting a dense structure? Or is it the opposite, with finely cut-foliage and willowy branches giving a light, airy, feathery effect? When arranging your planting, it will generally appear more attractive and pleasing if similar types are grouped together. or placed in contrasting rows or masses. This may be done by planting tall, dense material in the background and the smaller, feathery types in the foreground. Or the procedure may be reversed if desired, by placing the taller, finely cut varieties in the rear and edging the group or mass with dwarf, dense, heavier-leafed plants. Such planting arrangements may be designed with different species of evergreens only, or flowering shrubs, or a mixture of both evergreens and shrubs. Perhaps the most attractive of the many kinds of foundation plantings are those made up of a combination of evergreens and flowering shrubs or small trees. A combination planting of shrubs and evergreens is less sombre in summer than an all-evergreen planting, and more attractive in winter than a planting of shrubs alone. This type of planting reflects the changes of the seasons, thereby inviting interest the year through in color, texture, and general appearance.

8. Form or Shape. The form of the tree, shrub, or flower has much to do with the fitness of the plant to its surroundings. The form of a plant chosen for a given purpose ought to harmonize with its background, or reflect the character of the architecture of the house near which it is planted. Low, horizontal building lines call for similar planting forms. If tall accent specimens are used, they may dwarf the structure and lessen its architectural repose. Every variety of plant has a different natural form into which it grows, if properly planted in relation to its surroundings.

In addition to the common form of our native shade trees, there are a number of varieties which may be bought in the upright form. This form is much narrower in branch spread, and presents a columnar shape. They require less space for street trees and less pruning as well. Rather than plant two trees too close together, it is better to buy one large tree which will grow into a well shaped beautiful tree sooner. It will be less expensive in the long run, too, since pruning maintenance will be reduced. The appearance of your yard will be more restful and attractive if you limit the number of varieties and shapes of trees. Otherwise you need acres of lawns to set off the various tree forms effectively.

There are trees with upright branches that are inspirational, and trees with horizontal branches that are peaceful, and trees with drooping branches that express sorrow. All forms may be beautiful if they are planted where they can develop properly, and fit in with the over-all picture of your house and garden.

If you have considered these basic fundamentals carefully in your winter garden-planning, then your investment in nursery stock should pay big dividends in garden pleasures in the many seasons to come. If you will carefully plan your garden with half the energy you spent in planning your house, you will not only increase the value and attractiveness of your property, but will be rewarded with years of enjoyment instead of tears of disappointment. A wellplanned garden takes less effort to maintain than a poorly-planned oneand is it not more enjoyable?

Editor's Note: Mr. Simmons is the Landscape Architect of the State Planning Board.

A FUND RAISING PROJECT

This fund raising project is endorsed by your state officials. The Wild Flower Notes and calendars are prepared under the direction of garden club officials and have been authenticated by the American Nature Association. The Audubon Notes and calendars are reproduced through the courtesy of the National Audubon Society. The price to the state and local garden groups is the price customarily paid by the distributor and local store. The difference between this cost and selling price is divided between the State Federation and the Local clubs.

Order one of the introductory packages today for exhibition at your next club meeting!!! This introductory package contains 2 wild flower note boxes, 2 Audubon bird calendar boxes. Price \$5.00. Resale value \$10.00.

Miss Elsa M. Lautenbach

BOOK REVIEWS

Dagny Borge

Perennial Harvest, by Philip Hillver Smith, is a unique account, published last year by Harper & Bros., written by a man who for the past twelve years has chosen to live alone on a remote farm on the hilly boundary between New York and Connecticut. He did not have an agricultural background, nor did he purchase the run down place to till its acres or raise livestock. It was rather selected as a refuge from the city. Occasionally he has guests or workmen with him, but for the most part he has grown his own food, cooked and canned it, cut firewood, drawn water, washed clothes, and cleaned house, and in all ways carried on a nearly self-sufficient life." He has been extremely busy restoring the neglected house and fields, but he has enjoyed himself thoroughly doing it. He tells in detail of reclaiming fields and practicing forestry in the woodlands, and also found opportunity to practice conservation in his garden. The most exciting chapter is the one about the fire that spread when he was cleaning up an old berry patch.

One Day at Teton Marsh, by Sally ('arrighar, is a companion volume to the author's deservedly popular One Day on Beetle Rock, published a few years ago. Both books were issued by Alfred A. Knopf, the more recent one in 1947. The older one treats of animal life in the Teton Mountains, the other of the low-lands near by. The tale is of what happened to the inhabitants of the marsh, from the mouse to the mosquito, when the terrain was suddenly changed because the equinoctial wind

HORTICULTURE Continued

ers, book lists, etc. and help to make this year a horticulture success? May we do as Mrs. Harry S. Gordon of Ruthven, New Hartford, N. Y. wrote, "Let us, as Garden Clubs, encourage and be interested in the growing of more and better plants — that we may make every small hamlet and great city of this land, each — a beautiful garden in which to dwell."

- Mrs. Herbert Chaffin, Horticulture Chairman one autumn blew down a dead tree at one end of a beaver dam. No human beings are present, but the effects of earlier use of traps and shot are related.

An article in Collier's for January 22, 1949, "Let's Feed Mr. and Mrs. Hungry Bird", by Helen Gere Cruickshank, encourages winter feeding of birds in the open country as well as in city back yards. It is suggested that one or two pounds of bird food be sent to rural mail routes in the parts of the country having much snow and ice, addressed to "Mr. & Mrs. Hungry Bird." Since the Post Office Department is cooperating in this new venture, the carriers will open the packages and scatter the food in suitable places.

In Collier's for January first an article on Mrs. Rose M. Knox of the gelatine company who is now in her eighties but still active in the business, tells how she has found time to ride her hobby of growing orchids so hard that it has become a profitable sideline.

Gardening Made Easy, the Illustrated Guide to Growing Better Flowers, Vegetables, Trees and Shrubs, by Dean Halliday, is a 128 page pamphlet published in 1948 by the Popular Library, New York. The author is garden editor for King Features Syndicate. The contents of this publication seem to be reprinted from his column, "The Gardengraph," appearing in many news-papers. The top half of each page carries an illustration of the subject matter treated of in the lower half Advice is given on numerous topics, arranged chronologically from March to December.

It would be interesting to know if any readers of the February, 1949,

issue of the Flower Grower were able to solve the crossword puzzle in it without peeking at the answers.

Roses for Every Garden, by R. C. Allen, Executive Secretary of the American Rose Society, published by M. Barrows and Company, 1948, is the first book honored as a Selection by the National Council of State Garden Clubs. More than thirty full page illustrations in color have been supplied through the courtesy of five leading horticultural firms. The first third of the book is devoted to varieties, the remainder to care and culture. There is a chapter on propagation and hybridization, another on exhibiting. The last is entitled "Fun With Roses" and includes arrangements, corsages, and visiting famous gardens.

SPRING TIME IS GARDEN TIME.

One of the recommendations made at the Conference of Garden Leaders held in Washington January 10-11 was that a long-time program of urban, suburban, and rural home gardening in the broader sense be developed for America, because experience has shown that gardening can:

— Help feed the family better by providing more protective foods...

Help feed the family economically.. Give healthful recreation... Furnish valuable educational and esthetic interests for youth and adult alike.

Stimulate the year-round use of fruits and vegetables in the diet, purchased as well as home grown. . . Help feed the Nation in time of emergency. . . . Improve community surroundings and develop better community life.

School and community gardens are of special interest to workers in school lunch programs. They know that such gardens can contribute the essential green and yellow vegetables and tomatoes.

U. S. Dept. of Agriculture
 Nutrition News Letter, March, 1949.

-SAVE TREES-

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A Line Arrangement Mrs. F. C. Middleton

About this time of the year many of us are weary of cold and snow and are longing for spring.

If you really want to hurry Spring along it is up to you to 'force the issue.' But I have a suggestion or two on how to do it..

Look up your pruning scissors, go out into your garden (or your neighbor's) and do a little "early prunng." While you are cutting, have in mind the future of your bush or tree and do a good job. Don't discard the twigs or branches but take them into the house and place them in deep warm water. If they are willow branches or forsythia, this is enough. If, however, you have chosen fruit branches such as quince, apple or peach, because their bark is heavy, you will have better success if you wrap them in thick newspaper and emerse them in deep warm water. After a few days remove the paper and put them in the sun. You will enjoy seeing these dormant branches burst into full leaf, and, if you have good luck, into blossoms long before they are in evidence out of doors.

You may wish to do this just for the pleasure of having Spring come early to your living room. Or you may prefer to go into this more seriously and do something in the way of arranging this material when it comes to life. Branches are excellent "line arrangement" material but you must keep this in mind: a flat container of dull, earthy pottery or metal is most pleasing for them.

I could give you a definition of "Line Arrangement" but you will get a much better understanding of the term from the beautifully illustrated books you will find in the Public Library. Forget the term if you are not interested in it. But if it means something to you get busy, when the branches show life, and make an arrangement. Then go to the Library and get some books on Flower Arranging. Study the picturés and decide why you like some and not others. Pick them to pieces, form your own ideas and then read the text to see how you rate.

What I am trying, above all, to do is to arouse your interest. If you haven't been interested in arrangements until now, I am sure you will be by the time your material is ready to make use of.

These efforts will not only hurry Spring but, with this little study, you will be better prepared, when Spring does come, to use the material in your gardens to better advantage.

My first introduction to a line arrangement, as such, was the first Spring I spent in Japan, when we had a young Japanese lady living with us. I had become much interested in the Japanese way of arranging flowers and, as the girl had taken lessons from one of the famous arrangers, I was anxious to have her "do" an arrangement for me. She consented and we went shopping for our material.

The Japanese floral shops, like all shops in Japan, were very small. They were not filled with flowers by the dozen. Instead there were bunches of branches, gnarled and knotted, some bare, some with leaves and flowers, and several bundles of twigs. There were flowers of every description, to be sure, but not more than a few of a kind.

I was bewildered and wondered what we could choose. To me most of the material was colorless and didn't seem to fit into my idea of something beautiful.

When I ran onto a small bunch of about 2 dozen willow twigs with fat pussy willows showing, I was at case again. I suggested buying them and she set to work choosing her material. She took her time, and as her English was too limited for conversation I merely stood and watched. After about an hour we departed with nine willow twigs.

At my suggestion she agreed to use a basket we had recently purchased. (The basket shops in Japan were as strange and fascinating as the flower shops. I know, now, that a tall basket wasn't the proper thing and that a low flat container would have been much easier to use and far more appropriate.

When I tell you that after she had assembled all of her material she spent some few hours with these twigs before she completed the arrangement you will know that right then and there I got my first insight into "line arrangement", to say nothing of an insight into Oriental patience.

PRAISE AND APOLOGY

First may I salute the Ravens wood Garden Club as the first club in the federation to send in their contribution to the scholarship fund. Four others, Edgerton, Ripon Garden Club, Wausau Federated Garden Club and the Manitowoc Study Club followed in the order named.

I appreciate these clubs paying up so promptly. Not only does it save the chairman much inconvenience but it is encouraging to see that clubs are beginning to consider this a vital part of their club program. I know little about these clubs and only a few of the members personally, but I am sure they take an active part in their community work and can be counted upon to support anything worthwhile that may come up. More power to them.

Now the apology: Eugene Peterson, the veteran who won our Scholarship award last year, wrote the federation in which he expressed his thanks to us for recognizing his interest and aims in forestry and horticulture. I had planned on quoting a paragraph or two from his nicely worded letter, but it has just disappeared.

I am sorry. However it is gratifying to have the young man who won our award, feel so deeply the responsibility and honor which were his. For us it was a privilege to have been able to help him.

Mrs. Alfred Kieckhefer.
 Scholarship Chairman

THE PASSENGER PIGEON

The Wisconsin Society For Ornithology encourages the study of Wisconsin Birds. To do this, it publishes a quarterly magazine, The Passenger Pigeon, in which bird observations, bird news, and illustrated feature articles are published. It also conducts a supply department and holds Convention each year. The next convention will be held in Madison about the middle of April.

To order supplies and equipment address N. R. Barger, 4333 Hillcrest Drive, Madison 5 Wisconsin. To join the Society (and receive The Passenger Pigeon) address Harold C Wilson, Ephraim, Wisconsin.

A REQUEST

We are sorry to learn this week of the prolonged illness of Mrs. Max Schmitt, Wauwatosa, a former State Conservation Chairman and a past president of the Wauwatosa Garden Club. With the information came a request that we print a message from her to her garden club friends and we are happy to do it.

Mrs. Schmitt, due to her illness, is not able to write replies to the many kind cards and letters she has received. But she is most appreciative of them and wishes that we acknowledge them for her and express her thanks.

Members of the Wisconsin Federation sincerely hope that we shall soon hear of Mrs. Schmitt's recovery.

MAY WE HOPE?

That your spring plans include three days of study with Ane Wertsner and Mrs. J. Lloyd Berrall at Lake Geneva May 17, 18, 19?

For location — this fourth school can't be beat. For teachers — Anne Wertsner (who visited Edgerton and Milwaukee in December teaches Flower Show Practice and Horticulture. Mrs. Berrall, Upper Montclair, New Jersey, (a consistent and popular prize winner in New York and New Jersey shows) lectures on Design In Flower Arrangement and Color In Flower Arrangement.

We hope — but maybe you are a patron already. Futher details in the April issue.

The Chinese lantern plant, which is grown for the orange-colored seed pods used for house decoration in Winter, is easily grown from seeds, but these seeds should be sown in some inconspicuous spot, because the flowers have no value an the foliage is not ornamental. A beetle attacks the leaves almost every Summer and will riddle them unless the plants are frequently sprayed or dusted with arsenate of lead.

-The Gardener's Almanac

ANNOUNCEMENT!

Mrs. Tomoko Yamamoto, first woman in Japan to be given the title "flower master" will be at the Milwaukee Art Institute April 22, at 2:15 P.M. to lecture on Flower arranging. Tickets 50 cents plus 10 cents tax for non-members of the Art Institute Garden Club.

- Miss Emma C. Schipper, Secy.

DISTRICT MAIL BOX

Conservation, its study, its stress and importance, is the theme running through news from the various districts. More news of this subject will be coming in as the year progresses. Here are the fine efforts of two clubs.

The Elm Grove Garden Club, which last year sponsored the establishment of nature libraries and an essay contest in the schools, this year is continuing its work with the young people of the community. have been made for the development of a wooded corner of land on the public school ground. The spot, where clearing and extensive spraying was done to ready it for use, will be planted with wild flowers this spring. Boy and Girl Scout troops will have a local place for their outings. This project, linked with the club's support of conservation material in the school libraries, is an encouraging step toward the Junior Gardening movement.

The Kenosha County Garden Club designated its March meeting as "Conservation Night." Every male member in the club was asked to participate in the meeting. Merle Borneman, general chairman of the program, procured the services of Mr. Vico C. Isola of Milwaukee. The latter, connected with the Forestry service of the U.S. Dept. of Agriculture, had at his disposal two films, "Realm of the Wild" and "Everyman's Empire" to present to this conservation-minded group. It was felt this was one of their finest programs dealing with this subject.

Particularly interesting to rose enthusiasts should be the film "How to Grow Roses," which the Kenosha County Garden Club presented at its February meeting. The film shows Mr. C. Eugene Pfister of Mundelein, Ill. at work in his rose garden, demonstrating his recommendations for planting, pruning, fertilizing and giving proper care in growing prizewinning roses. Mr. Pfister is past President of the Men's Garden Club of America. "Flower Arrangements" featuring Miss Eve Porter of Montclair, N. J. in a demonstration of practical flower arranging for the home, was a second film selected for this meeting.

THE GREEN TREE GARDEN

During the recent war the Annual Flower Show of The Green Tree Garden Club was discontinued in favor of other activities connected with the Red Cross and hospital work and raising of funds for these and other patriotic purposes. Now we are once more ready to resume our pre-war work and announce a Spring Flower Show to be held on May 6 and May 7, 1949.

The program will be:-

1. Tour of the Daffodil Bank at Mr. and Mrs. Edmund Shea's residence, Fox Point.

2. Flower show at River Hills Village Hall, Pheasant Lane, River Hills and at the residence of Mr. and Mrs. Edwin Bartlett, Dean Road, River Hills.

Time: — Friday, May 6th-1.00 p.m. to 9:00 p.m.

Saturday, May 7th-10.30 a.m. to 5:00 p.m.

Tickets — \$1.20 — tax included.

SYMPOSIUM ON ROSES

The spring meeting of the Milwaukee District, to be held at the Milwaukee Y.W.C.A., 610 N. Jackson St., Friday, April 29, has been announced by Mrs. Stephan M. Cushman, district president.

Following registration at 9:30 there will be a "Symposium on Roses" with members of the Milwaukee Rose Society and garden club members participating. This symposium will be the district's horticultural project for the year. Printed copies will be sold both at the meeting and later.

The afternoon program will include a Chalk Talk on Landscape Gardening by Dudley Crafts Watson of the Chicago Art Institute.

Admission for the day will be \$1.20 (including tax) and tickets may be obtained from Mrs. John Nyl of Brookfield, Wisconsin; members will have guest privileges and the meeting will be open to the public.

Mrs. Fred Marquardt

District Publicity Chairman Note: "Shrub Symposiums" may still be obtained at 55 cents each, from Mrs. Marquardt or Mrs. Robert S. Wilson, District Treasurer, Burlington, Wisconsin.

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April 1949



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chard experience; consult us on your fruit spray problems.

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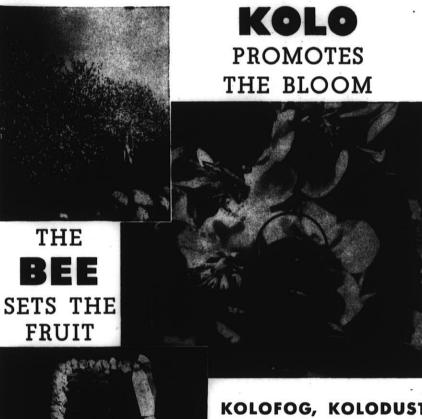
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Results of Recent Experiments for Control of Leaf Spot of Sour Cherry in Wisconsin

J. Duain Moore and G. W. Keitt

Bordeaux mixture continues to be the most effective fungicide for cherry leaf spot control, but has the disadvantage of causing foliage injury and reducing the size of fruit. In recent years, certain mixed schedules of Bordeaux mixture and milder copper fungicides have given satisfactory control of leaf spot and at the same time have resulted in larger fruits and less foliage injury than programs of only Bordeaux mixture. For the last three years certain programs have been used on the same trees each year in the experimental block of Montmorency at Horseshoe Bay Farms, Egg Harbor, Wisconsin, and cumulative results have been taken.

In these spraying experiments at Horseshoe Bay various 4-spray programs and one 3-spray program have been used. The 3-spray program was one of Bordeaux mixture, 6-8-100,applied (1) at petal-fall, (2) about 2 weeks after petal-fall, and (3) just after harvest. In the 4-spray programs an additional application was made about 4 weeks after petal-fall. The 4-spray programs included (1) some concentrations with various Bordeaux mixture in all applications, (2) others in which Bordeaux mixture was used in the petal-fall and after-harvest applications with an insoluble copper or an organic fungicide in the second and third applications, and (3) some with an insoluble copper or an organic fungicide in all three applications before harvest and Bordeaux mixture after harvest. The insoluble coppers used included Tennessee "26" and "34" and C. O. C. S. (Copper oxychloride sulfate), and the organics included Fermate and Compound 341. The program recommended to Wisconsin growers in recent years has been a 4-spray one of Bordeaux mixture, 6-8-100, in the petal-fall application, and 3-4-100 in the other three, and this program has been used as the standard in the experimental work.

There has been considerable variation in the experimental conditions the last three years. The most leaf spot occurred in 1946 with less in 1947 and practically none in 1948. The 1946 crop in Door County of about 40,000,000 lbs. was larger than any



crop previous to that time by almost 10,000,000 lbs., and the 1948 crop of about 45,000,000 is the record. The 1947 crop totaled only about 19,000,000 lbs. Good data on fruit size were obtained in 1946 and 1948 but not in 1947 because of large tree to tree variations. There was opportunity for data on foliage injury in all three years, but defoliation due to injury occurred quite late in 1947.

It is not yet possible to evaluate completely all of the programs used in these tests, but certain general conclusions can be reached.

The 4-Spray Programs Best

The 4-spray programs have given better leaf spot control than the 3spray one.

The recommended program of Bordeaux mixture has given better control than the other programs in years in which much leaf spot is present, but this control has not been significantly better than that afforded by certain other programs.

More foliage injury and resultant defoliation have occurred on plots that received a copper fungicide than on those that were sprayed with only an organic fungicide. Plots that received only copper had more injury than those that received a mixed program of copper and an organic fungicide.

The largest fruits were obtained on plots that received 3 applications of either Fermate or Compound 341 before harvest, but these plots usually had less control of leaf spot in the years that favored leaf spot development. It should be mentioned, however, that the use of Fermate in interplanted blocks of cherries and ap-

ples has given excellent control of leaf spot when applied at times called for in the after-blossom apple spray schedule. With this schedule at least 4 and sometimes 5 sprays have applied to the cherries before harvest.

A mixed schedule of Bordeaux mixture in the first and the after harvest applications and either Fermate or Compound 341 in the other two has given satisfactory control of leaf spot and a reduction in foliage injury and an increase in fruit size compared to the full copper programs.

Recent experiments both in England and in the United States have shown that there is some question about the keeping quality of certain canned fruits that have been sprayed with some of the newer spray materials. Until some of these questions can be clarified in relation to sour cherry, it is suggested that no major change be made in the spray program for cherries in Wisconsin.

Recommendations For 1949

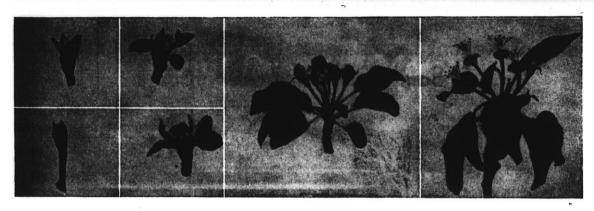
The recommended program for solid plantings of sour cherries in Wisconsin in 1949 is a 4-spray one as follows:

- 1. Bordeaux mixture, 6-8-100, at netal-fall.
- 2. Bordeaux mixture, 3-4-100, 10 days to 2 weeks after petal-fall.
- 3 Bordeaux mixture, 3-4-100, or 11/2-2-100, about 4 weeks after petal-fall.
- 4. Bordeaux mixture, 3-4-100,, immediately after harvest.

Follow the entomologists' recommendations on the use of lead arsenate in the first two applications. It is recommended that in interplanted blocks of apple and cherry Fermate, 1½-100, be used as the fungicide for both crops. Begin the use of Fermate at petal-fall and follow the apple spray program until the cherries begin to color. After harvest spray the cherries along with the apples.

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A 35 acre fruit farm, one mile west of Bayfield. House, barn, and 520 apple trees, half of them bearing. A 6 acre pasture and 2 of broken land. Spring water. Price \$2500. Must sell this spring. A. J. Blakely, P. O. Box 421, Bayfield, Wis,



Green Tip

Closed Cluster

Open Cluster

Calyx

When to Spray Fruit Trees

Green-tip or delayed dormant spray-Use liquid lime sulfur, two gallons in water to make 100 gallons of spray. If aphids (plant lice) are numerous, add one pint of 40 per cent nicotine sulphate to each 100 gallons of spray.

Closed cluster or pre-pink spray-The period between the delayed dormant and open cluster sprays is very critical for scab control. In general it is unwise to apply sprays at longer intervals than 7 to 10 days during this period. Use liquid lime sulphur, 2 gallons, and lead arsenate, 2 pounds, to make 100 gallons of spray. (If two closed cluster sprays are applied use the lead arsenate only in the first one.)

Open cluster or pink spray-Apply just before the blossoms of early flowering varieties are open, and preferably after the blossom buds have separated in the clusters. Use liquid lime sulfur, two gallons, to make 100 gallons of spray.

If the blooming period is exceptionally long, a spray in bloom, about 7 to 10 days after the pink spray, is recommended for scab control. Use either liquid lime sulfur, seven quarts, to make 100 gallons of spray, or a good miccronized wettable sulfur at five pounds per 100 gallons of spray, or a good microof hydrated lime per 100 gallons, or ferric dimethyl dithiocarbamate, (formate, Karbam, etc., at one pound per 100 gallons. Do not use any insecticide in this application.

In many seasons injury to both leaves and fruits may be caused by after-blossom sprays if a combination of liquid lime sulfur and lead arsenate is used. This injury can be largely avoided by use of a good micronized wettable sulfur or ferric dimethyl dithiocarbamate as the fungicide instead of liquid lime sulfur in the after-blossom applications.

Since these milder materials do not give as good protection against apple scab as lime sulfur, it is unwise to leave a longer interval than 10 days between applications.

Calyx spray-Apply when most of the petals have fallen and before the calyx is closed. Use lead arsenate three pounds and a micronized wettable sulfur five pounds or ferric dimethyl dithiocarbamate (Fermate, Karbam, etc.) one pound to make 100 gallons of spray.

If scab is not well controlled by calyx time, use liquid lime sulfur seven quarts to 100 gallons as the fungicide.

If oyster shell scale or leaf rollers are a problem, use the three pounds of lead arsenate and two pounds of DDT in the spray.

First Cover Spray—Use a good micronized wettable sulfur five pounds or ferric dimethyl dithiocarbamate, one pound, and DDT two pounds, to make 100 gallons of spray. Make this application about 10 days after the calyx spray.

Second Cover Spray-Apply about 10 days after the first cover spray. Use the same materials as in first cover sprav.

Third Cover Spray-Apply about 10 days after the second cover spray. Use the same materials as in the first cover

Fourth Cover Spray-Apply about 10 days after the third cover spray. Use the same materials as in earlier cover sprays.

Fifth Cover Spray-Apply about 10 days after the fourth cover spray, and use the same materials.

The fourth and fifth cover sprays are primarily for apple maggot control. The fifth cover is also necessary for control of the second brood codling moth.

When Spraying Other Fruit Trees

In home orchards, the number of fruit

trees other than apples is usually so small that it is scarcely worthwhile to follow a special spraying program for them. They are commonly sprayed, therefore, at certain times when the apple trees are being sprayed. If this plan is followed, the following modifications of the apple spraying program is suggested:

Cherries

Satisfactory results will usually be obtained in home orchards if the calyx, first cover and second cover sprays are used and an additional spray made after the cherries are harvested.

Plums

Aphids are best controlled by spraying just as the buds begin to swell, with nicotine sulfate, three-fourths pint to 100 gallons of water, plus one to two pounds of dissolved soap. This spray should be applied each spring whether aphids are seen or not.

Spray as soon as the petals have fallen, using either wettable sulfur or liquid lime sulfur and arsenate of lead. Wettable sulfur is prferable. Other applications should be made at each spraying of the apples until about two weeks before plum harvest. If lime sulfur is used, make additional applications at the time of the calyx spray on apples, first cover, third cover and about two weeks before harvest.

Spraying is protective, not curative. It is effective only when the part of the plant that is subject to attack is covered with the protective material or when, in the case of certain insect pests, the insect is destroyed before it lays its eggs or penetrates the tissues of the plant.

Condensed from Bul. 157; Spraying Farm Orchards, by the University of Wisconsin.

Wisconsin Horticulture

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Fruit Growers Meet

Growing Interest in Fruit Growing Shown by Excellent Attendance at Meetings

Eight County Fruit Growers Asociations met the last week of February and the first week of March. They were from: Waukesha, Milwaukee, Jefferson, Washington, Ozaukee, Manito-

woc and Sheboygan Counties. Attendance was excellent, reaching more than 125 at several of the meetings. Attendance was always best at those meetings at which the ladies served "pot-

luck" dinners. Some of the dinners were delicious and no doubt promoted the good will and friendly feeling which prevailed. Furthermore serving the dinners brought out two members of many families.

Speakers were Prof. Conrad Kuehner who gave his usual excellent talks on various phases of fruit production including varieties, relation of growth to fruiting, disease and insect control. Mr. Lester Tans, manager of the Southeastern Co-op appeared at most of the meetings to tell about the plans of the organization. Mr. H. J. Rahmlow, secretary of the Wisconsin Horticultural Society spoke on the apple advertising and promotion project. After discussing the law, proposed at the annual meeting of the Wisconsin Apple Institute, ballots were passed out and those growing more than 200 bushels of apples per year were given an opportunity to vote on the proposed law.

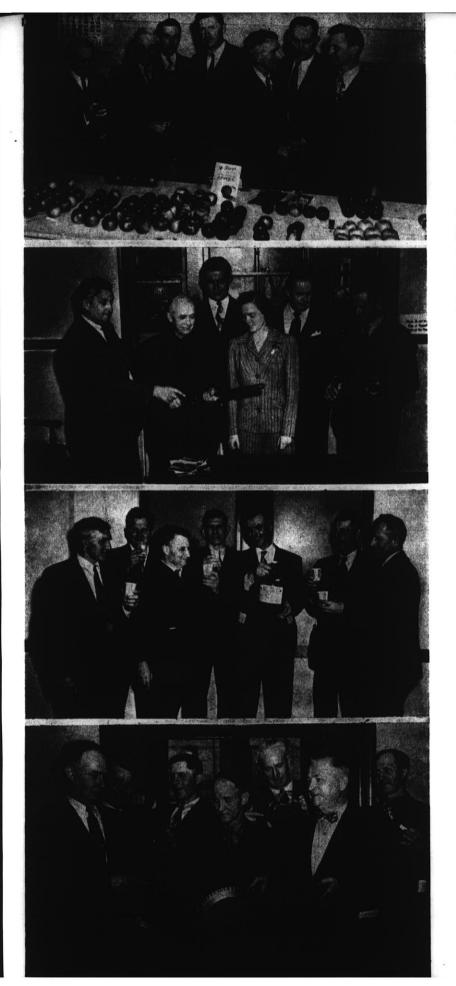
On the question, "Do you favor asking the Legislature to pass a law assessing apples to raise money for apple promotion," the votes were as follows: Racine County: 20 yes, 6 no. Waukesha County: 10 yes, 2 no. Milwaukee County:

Officers Racine County Fruit Growers Association study apples displayed during annual meeting at the County Agricultural School in Rochester. Left to right: Secretary Ben Ela, Rochester; Vice-president Marvin DeSmet, Racine; President Wm. Verhulst, Franksville and Instructor Hugo Klumb, Rochester.

At Waukesha County Fruit Growers meeting Vice-president Frederick Gygax, Waukesha; County Agent J. F. Thomas and Secretary Herbert Hasslinger, Nashotah, look at apple promotion material and the apple recipe booklet, "36 Ways To Use Wisconsin Apples."

Officers Washington County Fruit Growers Association inspect some of the excellent apples on display at meeting in Jackson Village Hall. Left to right: Vice-president John Kopp, West Bend; President Joe Morawetz, West Bend; Secretary and County Agent Earl Skalisky holding a new type apple package.





ty: 19 yes, 9 no. Jefferson County: 11 yes, 1 no. Washington County: 1 yes, 9 no. Ozaukee County: 9 yes, 14 no. Sheboygan County: 7 yes, 3 no.

The small vote on the question is due to the fact that only growers of more than 200 bushels were asked to vote.

(Continued on Page 213)

Retiring officers congratulate new officers at the Ozaukee County Fruit Growers meeting in Mequon Town Hall. Left to right: County Agent C. C. Gilman admires one of the fine apples. Retiring Vice-president B. J. Otting congratulates new Vice-president Roland Nieman with Secretary Armin Frenz, Cedarburg. Retiring President Martin Wiepking, Cedarburg, congratulates new President Armin Barthel, Thiensville, with Prof. C. L. Kuehner looking on..

At Shebyogan County meeting in Plymouth. Left to right: President Arno Meyer, Waldo, points out advantages of spray gun to County Agent G. W. Lycan. Looking on are Secretary Bernard Holbig, Sheboygan Falls; County Home Agent Zella Goodwell; State Horticultural Society President G. J. Hipke, New Holstein, and Vicepresident Hugo E. Wunsch, Sheboygan,

Apple cider was enjoyed at the Milwaukee County Fruit Growers Association meeting at Greenfield Town Hall. Left to right: Secretary Alfred Meyer, Milwaukee; Leonard Haas, South Milwaukee; Anton Hartl, Milwaukee; Vice-president Herman Pittelkow, Milwaukee; Frank Meyer, South Milwaukee; Albert Schreiber, Milwaukee, and County Agent S. S. Mathisen, Milwaukee.

Not enough apple pies. It was just too good to last, was complaint of officers of the Jefferson County Fruit Growers Association, looking at the empty pieplates following a fine luncheon. Everyone was delighted with the meal. Left to right: President William Leonard, Fort Atkinson; Secretary Carroll Krippner, Fort Atkinson; Max Punzel, Lake Mills; T. H. Ward, Fort Atkinson; Lawrence Sherman, Edgerton; Vice-president Wm. Boese, Fort Atkinson, and Oscar Kreiziger, Johnson Creek.

Eradicate Apple Scab

Puratized* AGRICULTURAL SPRAY

Pat. No. 2,423,262

RESEARCH workers and commercial growers acclaim this patented formulation as an outstanding contribution for the control of scab and other plant diseases.

PURATIZED AGRICULTURAL SPRAY doubly safeguards your trees. It offers fast, effective protection before in-

fection occurs and acts to eradicate infections after they start.

This unique inactivating power, plus the usual protectant action, makes PURA-TIZED AGRICULTURAL SPRAY an invaluable weapon for combating scab. Consult your local dealer or write today for further details.

Puratized Agricultural Spray

- A low cost spray program one gallon makes 800 gallons of spray.
- Instantly water soluble
- Leaves no visible deposit
- Can be applied with common insecticides and fungicides
- Effective too, for brown rot blossom blight of cherries and peaches

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Apple Pollination Studies

By Dr. B. Esther Struckmeyer Continued From March Issue

Blossoming Time of Different Varieties

The time at which some varieties come to flower, full blossom and the end of blossoming prove interesting. This data was compiled for last spring only, so these results are still preliminary. Duchess is one of the first to come to flower. The blossom period is short for this variety, lasting approximately eight days. Snow comes to blossom shortly after Duchess, but the blossom period is almost twice as long as Duchess. Transparent, Cortland and Melba blossom at about the same time and parallel Snow. The varieties mentioned so far would not be satisfactory with Wealthy, Delicious, Golden Delicious or Northwestern Greening since their time of full blossom is four to five days previous. Their blossoming period is almost past by the time the later varieties are in full bloom.

Dudley serves not only as a good source of pollen for several varieties, but it also has a long blossom period. Last spring, the blossom period extended through sixteen days. This means that some of the earlier blossoming varieties

as well as the later varieties could benefit from the pollen of Dudley. McIntosh has a short blossoming period of about eight to nine days. This short blossoming period resulted in a poor crop last year since during this period the temperature was too low for adequate bee visitation. Several of the other varieties also were in blossom during this cool period, but they continue to have blossoms for a long enough time during the warm period to be pollinated. Wealthy, Delicious, Golden Delicious and Northwestern Greening are later varieties and serve as good sources of pollen for each other.

Viability of Pollen

Each year the percentage of germination for the different varieties of apples is tested. After the pollen has been collected and dried, a trace of it is sprinkled on a solid medium containing agar, sugar and water. Within three to four hours after seeding the pollen, grains that will germinate have already grown pollen tubes. The pollen is tested at different intervals of time from collection to observe how long the pollen remains viable. It was found last spring that

pollen of Duchess, Dudley and Northwestern Greening germinated 50% or better two weeks after collection. Jonathan, Delicious, Gano, Snow, Cortland, Wealthy, Melba, Winter Banana, and Haralson made a 50% or more germination one week after collection. Transparent, McIntosh, Golden Delicious and Northern Spy made less than 50% germination one week after collection.

GERMINATION OF POLLEN—1948 OVER 50% GERMINATION Two Weeks After Collection

Duchess Dudley Northwestern Greening

One Week After Collection

Jonathan Delicious Gano Snow Cortland Wealthy Melba

Melba Winter Banana Haralson

LESS THAN 50% GERMINATION One Week After Collection

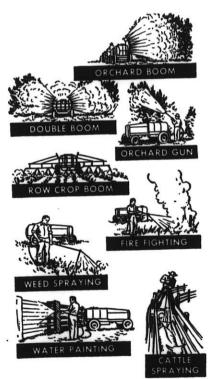
Transparent McIntosh Golden Delicious Northern Spy

MANY SPRAYERS IN

• One 1949 Hardie will do all your spraying no matter how many different spraying jobs there may be. Amazing spray booms for mass application in orchard and field, weed booms, spray guns for trees, for livestock, for water painting, for fog fire extinguishing, and a device that converts the High Pressure Hardie into a low pressure weed sprayer are among the inexpensive accessories developed by Hardie Engineers. These enable one Hardie to meet the many and diversified modern spraying jobs. Write for complete data and the Hardie 1949 Catalog which shows the largest variety of sizes and models in todays market.

THE HARDIE MFG. COMPANY, Hudson, Michigan





Recommended Fertilizers for Apple and Cherry Trees in Door County

1. For orchards under cultivation, with the trees making satisfactory growth. So far as we know, no fertilizer beyond nitrogen is needed. From about ½ lb. of ammonium nitrate per tree per year for trees just planted, up to about 4 pounds for mature trees, seems to be about all that is required. Of course there are many other ways to add nitrogen besides ammonium nitrate, and the amounts used of the different materials would need to be adjusted accordingly. Nitrogen, for both apples and cherries, should be

to tell from the bloom what kind of a crop is to be expected.

Observe Effect of Fertilizers

applied between late fall and blossom-

ing time in the spring, and every

every effort made to avoid late summer growth. With apples, Dr. H. R. Roberts, of the College of Agriculture.

Madison, recommends that fertilizer application should be relatively light in the "on" year, heavy in the "off" year and for this reason he prefers to delay application until it is possible

2. For orchards under cultivation. with poor or questionable growth. For cherry trees suffering with 'curl-leaf", potash applications have been found to be helpful in Door County. However, equally good results in correcting this condition have been obtained from mulches of various materials, especially straw or manure. Apparently such mulches do various things; add some potash themselves; make potash in the upper soil more available to the roots; make more water available; prevent further injury to the roots by too-deep cultivation. Beyond this one case, there are no general conditions known in Door County when potash or phosphate applications have been definitely found to be immediately beneficial to fruit trees. However, it is recommended that whenever there is any question about the need for these two fertilizer elements, each orchardist should use a few sacks of 0-10-20, 0-9-27, or similiar material, spread 2 to 10 lbs. per tree, and carefully observe the effect. Future fertilizer application should then be based on these results in one's own orchard. (In general in Door County it is recommended that fertilizers be used with 2 or 3 times the amount of potash, as phos-

By Chas. F. Swingle, Sturgeon Bay.

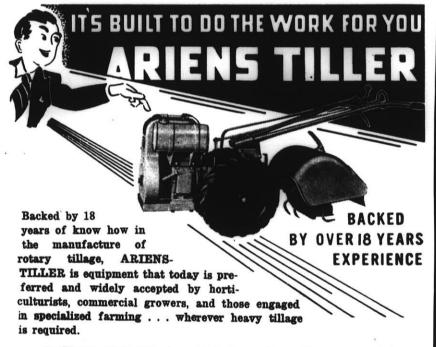
phate, notwithstanding it is much easier to obtain fertilizers the other way around, with the phosphate the highest.)

Feed the Grass

3. For orchards in sod. There is no exception here to the information given above that in general, we know of no immediate need by the trees, for any fertilizer except nitrogen. However, we do know that both in establishing a grass sod, and in maintaining it over the years, 200 to 400 pounds per acre of something like 0-10-20, or still better 0-9-27, is very helpful to the grass. For the grass,

such fertilizer should be broadcast over the entire area and not just around the tree itself. Here again, even with healthy trees, and certainly with ones in poor condition, small tests with 2 to 10 pounds per tree of one of the above fertilizers should tell whether or not your particular orchard is short of these elements.

It must be remembered that with sod, the nitrogen needs to be stepped up or the trees will suffer for its lack. The grass will surely take the first nitrogen, so that the amounts used must include enough for both the tree and the grass. Applying the



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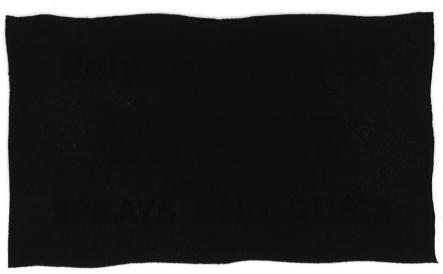
nitrogen in a ring a foot wide and in the area of maximum root development (roughly under the tips of the outer branches) will give relatively more to the tree and less to the grass, but in general, we wish to encourage grass development; also, particularly with the older trees, roots occupy most or all of the entire area. Under sod. depending upon the age of the tree. from 1 to 8 lbs. per tree of ammonium nitrate, or its equivalent in other materials, has been found by most growers to give satisfactory growth. If your trees are suffering for lack of nitrogen, they will tell you by showing less than satisfactory amounts of new growth. For example, with cherry, it is felt that under sod, new growth on mature trees should be 6 to 8 inches each year; under cultivation 8 to 10 inches.

We know of no place in Door County where any of the so-called minor elements are needed for fruit trees. Also not only is lime not generally needed, but its application to our strongly alkaline soils would usually be detrimental.

County Fruit MeetingsCont. from page 209
Mr. Lester Tans reported considerable decrease in the business of the Southeastern Fruit Growers Co-op due to the fact that there was a decrease in sales of nursery stock and that very few growers bought spray machines during 1948. Every effort is being made to cut overhead costs. He pointed out that as a new catalogue would cost obout \$800, it was decided to issue only a price list.

The Racine County Fruit Growers Association voted to hold an orchard tour in September.

All of the organizations voted to contribute to the fund of the Wisconsin Apple Institute for apple promotion, in amounts ranging from \$25 to \$50.



County where any of the so-called FOR OUTSTANDING CONTROL OF INSECTS & DISEASES

FERMATE®—Ideal fungicide for apple scab, cherry leaf spot, brown rot of stone fruits, grape black rot, berry anthracnose. Keeps foliage green—no burning of leaves, no russeting of fruits. Safe even in hot weather.

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see your dealer now for supplies of these and other Du Pont pest control products. Ask him for booklets containing detailed information, or write to Du Pont, Grasselli Chemicals Dept., 1503 W. Canal St., Milwaukee 3, Wisc.; or Wilmington 98, Del.

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USED SPRAYERS and PUMPS Priced for Quick Sale

Completely Overhauled with New Sprayer Guarantee SAM GOLDMAN, Sturgeon Bay, Wis.

Strawberries and Raspberries

RASPBERRY AND STRAWBERRY PLANTS FOR SALE

Latham raspberry plants. 1,000 at \$40.00; 500 at \$22.50; 100 at \$5.00. Strawberry plants: Premier and Catskill — 1,000 at \$15.00; 500 at \$8.00; 100 at \$2.00. Beaver and Robinson — 1,000 at \$12.50; 500 at \$7.00; 100 at \$1.75. Gem Everbearing — 1,000 at \$20.00; 500 at \$11.50. 100 at \$2.00.

I. H. BOWEN

Alma Center

Wis.

STRAWBERRY PLANTS

FOR SALE

Beaver, Premier, Dunlap and Improved Robinson, June and Progressive everbearing.

L. W. SCHILD West Salem

Wis.

STRAWBERRY PLANTS

Beaver's — 1,000 at \$15.00; Dunlap at \$12.00; Premier's at \$20.00; Catskill's — 1,000 at \$20.00; Robinson's 1,000 at \$20.00 All plants Government inspected.

H. H. Pedersen Warren, Wis. R. 1.

RASPBERRY AND STRAWBERRY PLANTS — Raspberries:
Strong, disease-free, two year plants.
Excellent fruit this season. 25—\$3.00;
50—\$5.00; 100—\$7.80 postpaid. Strawberries: Well rooted plants. Dunlap,
Premier, Robinson. 50 — \$1.50; 100—
\$2.35. Thomas 100—\$3.50 postpaid.
E. J. Bryan, Washburn, Wisconsin.

PLANTS FOR SALE—Streamliner, Gem and Mastodon everbearing strawberry plants. Also Premier, Catskill, Dorsett, Fairfax, Beaver, New Robinson and Dunlap. Latham and June red raspberry plants. All plants state inspected and fresh dug. H. R. Kinney, Route 3, Baraboo, Wis.

STRAWBERRY - R A S P B ERRY PLANTS—Evermore, Gem, Webster everbearing strawberry plants. Premier, Dunlap, Arrowhead, Robinson, Catskill June bearing strawberry plants. Latham, Indian Summer, Taylor raspberry plants. Fruit trees, shrubs and evergreens.

Hall Nursery, Elmwood, Wis.

STRAWBERRY AND RASPBER-RY PLANTS. Taylor raspberry. Premier, Robinson, Beaver, Fairfax and Temple strawberry plants. Temple is resistant to root disease. All plants shipped same day dug. Albert Kruse, Route 2, Baraboo, Wis,

STRAWBERRY PLANTS—Dunlap, Beaver, Warfield — 100—\$2.00; 250— \$4.00; 500—\$7.00; 1,000—\$12.50. Fresh dug, double inspected, moss packed. Postpaid. Haberlie Nursery, Lancaster, Wisconsin.

RASPBERRIES

Latham and Viking. \$30.00 per 1000. 5 cents each up to 100. — Over 300 plants at 1,000 rate.

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Fruit Growers Attention

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South Milwaukee, Wisconsin Also spray guns of all types.

GOOD STRAWBERRIES PAY, LET'S KEEP IT THAT WAY

- 1. Don't try to grow too many. A planting of one-half or even one-fourth of an acre up to three or four acres is the solid type of investment. For a part-time grower (full time in picking season) or for the man who uses strawberries as a main money crop along with poultry, vegetables, or other farm or fruit crops, this size planting will mean real money with a minimum of risk.
- 2. Have some berries every year. Don't try to out-guess nature, economic conditions, the plans of thousands of other growers by trying to hit the good years. It just doesn't happen that way. Have some good berries every year. Good beds can be carried over one year rather successfully if prospects are bright. Don't skip setting some plants every year. Remember no matter how prices are, you can't make any money unless you have some berries to sell.
- 3. Use common sense methods. Select your best land and get good plants of the best varieties; give them good care, hoeing, fertilizing and cultivating.
- 4. In marketing follow the plan which looks as if it will give you the greatest net return; shipping to wholesale markets, selling to processors, small town markets, truckers, roadside market, or letting consumers come to your patch and pick the berries themselves. For "at the farm" sales sometimes an ad in the local paper or a radio spot announcement will bring customers to you in crowds.

From Allen's Book of Berries

STRAWBERRY FERTILIZER TESTS

In 1931 and 1932 the Wisconsin Horticultural Society co-operating with the Department of Soils, University of Wisconsin and the County Agent at Sparta, set up a fertilizer experiment to determine what fertilizers would increase the production of strawberries. This experiment was in answer to requests of strawberry growers at both Sparta and Warren. The results were published in the September 1932 issue of Wisconsin Horticulture.

Since 1932 we have watched for reports of similar experiments in other northern states to see if results would indicate any changes. So far we have found none.

Soil Preparation Most Important

Prof. A. R. Albert then in charge of the Hancock Experiment Station supervised the tests. What are Prof. Albert's conclusions. He said, "I am more than ever convinced that organic fertilization through green crops and manure or leaving out the manure and using 2 or 3 green crops, fertilized as needed (non-legume with nitrogen, legumes with phosphate and potash), will be the safest and cheapest way out."

In plain words this simply means that if the soil for strawberries is prepared a year or two in advance, using commercial fertilizers to improve the green crops or by using plenty of manure, the grower will get the best crops at the lowest cost.

Results on Sandy Soil

Consider the report Prof. Albert makes on the results of the test on Chris Laursen farm at Warrens. Here the unfertilized plots had 21½ quarts more than the control plots. (The control was fertilized with 4-16-4 fertilizer at 500 lbs. per acre.) Neither additional nitrogen, either as milorganite or ammonium sulfate, nor additional potash was effective on this Boone fine sand. In fact the heavier the application of potash the poorer was the yield. The dry hot season of 1931 must be recalled. Without enough organic matter and water the fertilizers had a depressing effect.

RASPBERRY PLANTS FOR SALE

"Hardy, early bearing Viking raspberry plants." Heavy producer of large, firm, finer flavored berries. Good shipper—well rooted and State Inspected healthy plants. \$40.00 per 1,000; \$5.00 per 100.

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Bayfield,

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NEW OUTSTANDING VARIETIES
STRAWBERRIES GLADIOLUS

Midland Patrician Sparkle Blue Ice

Temple Connecticut Yankee
Fairspeak Spic and Span
Fairland Heart's Desire
Streamliner Everbearing Ladrone

Evermore Everbearing Ladrone

Evermore Everbearing Venida

STRAWBERRY BOXES

Metal Rim Standard Quarts _____ \$15.00 per 1,000

COPELAND NURSERY.

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Strawberry and Raspberry Plants For Sale

ARROWHEAD (new) \$3.00 per hundred. \$18.00 per thousand. Proved to be very good.

ROBINSON (new) \$3.00 per hundred. \$18.00 per thousand. Also fine.

PREMIER \$3.00 per hundred. \$18.00 per thousand. Our Premier are fine large plants and a good buy.

IMPROVED DUNLAP \$2.50 per hundred. \$15.00 per thousand. Proven very good with us.

GEMZATA (everbearing) \$3.50 per hundred. \$20.00 per thousand. Bear both spring and fall.

EVERMORE (everbearing) \$4.00 per hundred.

ARROWHEAD and ROBINSON mixed plants. \$2.00 per hundred. \$12.00 per thousand.

LATHAM RASPBERRY \$8.50 per hundred. \$75.00 per thousand. No. 1.

JUNE RASPBERRY \$1.50 per dozen. _\$9.00 per hundred. Extra good.

MORRISON (new) Blackcap. \$8.50 per hundred. Very good.

We have a nice supply of extra fine plants. A trial order will prove this to be correct.

H. B. Blackman,

Richland Center

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The New Hale Centrifigal Sprayer

With 500 gallon tank, 10 nozzles, 60 gallon per minute at 600 pounds pressure. The high pressure pump has only 2 moving parts. No valves.

Also complete irrigation systems, 50 to 1500 gallons per minute.

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FRANK J. LEACH, REPRESENTATIVE

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Green Bay, Wisconsin

Experience With Fertilizers

Many good strawberry growers hold to the principle that commercial fertilizers should not be relied upon for best results with strawberries. Instead the land should be prepared ahead of time with plenty of manure or organic matter and if this is done, the commercial fertilizers will not appreciably increase the strawberry crop.

The W. F. Allen Company, Salisbury, Maryland is among the oldest in the country in point of strawberry growing. In their annual "Book of Berries' they make this observation:

"Applications of horse, cow, hog or sheep 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. Poultry 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



Mowing grass or weeds is only one of many jobs you do quickly at low cost with a new Page. New "big tractor" features. Headlight and equipment light for night work. New quick-change hitch. Balanced for easy handling. Direct drive, worm-gear transmission, using cut gears and ball bearings. No cheap belts or chains. Gears and clutches in dust-free case. Adjustable wheels. Individual wheel clutches make turning easy. 1½, 2, 3, and 4 H.P. Backed by 20 years' experience.

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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.

"SHOULD CHEMICAL FERTIL-IZERS BE USED? On very fertile garden soils none is needed. On most good soils fertilizers will not prove beneficial if plenty of stable manure of any kind has been applied. On some soils chemical fertilizers will be very helpful. Six hundred pounds per acre of any fertilizer containing 3 to 6% of organic nitrogen and 5 to 10% of phosphorus may be used. This may be stirred into the soil down the row before the plants are set or applied as a side dressing in one or more applications after growth starts. Inorganic nitrogen like nitrate of soda or sulphate of ammonia should not be used in these applications as they will injure either roots or leaves if they come in direct contact."

A SMOKE SCREEN IS NO PROTECTION AGAINST FROST

At the annual meeting of the Maryland Horticultural Society a fruit grower asked the question. "Would it be practical to get some of the Navy equipment that is used to lay down a heavy smoke screen and produce a heavy smudge over my orchard to protect it from frost?"

Answer: No. In California a number of carefully controlled experiments were made. It was found that even the densest "smudge" or smoke screen would not raise the temperature by more than one degree, under the most favorable circumstances. It takes heat and lots of it to raise the temperature in an orchard. Smoke alone will not do it. Heavy clouds do keep temperatures from going as low as they would go on a clear night but it is difficult for man to reproduce nature in this respect.

EXPERIENCE WITH A GARDEN TILLER

By E. A. Rosenberg, Clintonville

We have had our "tiller" for two seasons and can speak from experience that it is excellent. Last spring, we tilled about 40 gardens, of clay soit, sand, stony and some with quack grass, with good results.

We plant our strawberries in rows 42 inches apart. We stack a row, till it and leave a space between the rows. so we can always walk on solid ground. There is no hurry to till this path in the middle of the row—it can remain until the weeds are fairly high and then they make good green manure. Where there is heavy clay we just go over the ground twice. It is best to till early and roll after tilling as the tilled ground is very mellow and soft and should settle before planting.

We have no fear of weeds and even "till" right down our corn rows in the fall. We rack up the tomato and potato vines as they will wind around the tiller shaft.

We have planted strawberries in land full of quack grass. The first time we cultivated, the quack was higher than the plants. You should have seen that strawberry patch three weeks later—it was clean.

We had a piece of ground 30 by 40 feet and the quack was so thick a plow would hardly tip it or cut it. For eight years we tried to grow beans, cucumbers, potatoes, etc. but then gave it up because in those years we had a standard cultivator powered with a garden tractor. Then we got our roto-tiller and went through it in early spring. Again in 10 days and again 2 weeks later. We put in cabbage and last spring strawberry plants. There was no quack left.

In past years cultivating was a job now it is fun. We tilled a garden with 4 to 6 inches of leaves on it and mixed it with the soil and we tilled ground with manure 4 inches thick in a solid carpet. After tilling you could hardly see a bit of straw.

We have had very little expense. Three gallons of gas runs it all day and the machine has plenty of power with 2 speeds. Our berry growers should be told about these tillers.

OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPERS ASSOCIATION — OFFICERS

Robert Knutson, Ladysmith President Lawrence Figge, Milwaukee Vice-President H. J. Rahmlow, Madison, Cor. Secy. Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer

DISTRICT CHAIRMEN

Newton Boggs, Viroqua Wm. E. Gross, Milwaukee Robt. Knutson, Iadysmith E. Schroeder, Marshfield Guy Sherman, Seymour Ivan Whiting, Rockford

APRIL IN THE APIARY

It's April again! The beginning of spring in Wisconsin. A month that can give us joy or despair depending so much upon the weather and our beekeeping management.

If we have a large number of nice days with sunshine and warm weather so that the bees can gather pollen from the maples, willows and other early blooming plants—then brood rearing is a joy to behold and the colonies build up rapidly.

Watch Out

But it is also a month in which the beekeeper profits by being constantly on guard. There will come a week of warm weather and activity-the brood rearing area expands—the queen may have laid almost a thousand eggs per day. In three days time there will be a similar number of hungry larvae which must be fed constantly with food prepared by the nurse bees. They can do this only if they themselves have access to honey and pollen. There may suddenly be a period of cold wet weather with no bee flight and no pollen available from the field. The stores are used up rapidly but the hungry larvae must still be fed. Unless honey and pollen is available to the cluster so nurse bees can feed liberally, they must slow down in brood rearing. If that happens, then three weeks later there is a decrease in population-just at the time when we can ill afford it.

Need A Balanced Ration

And so it becomes just as important in April to watch and feed needy colonies as it does the dairy farmer to watch his dairy cows and feed them a balanced ration daily so they will maintain milk production.

Well we remember the old saying. "The eye of the master fattens his cattle." It means we cannot follow a schedule or go according to rules in keeping bees or raising livestock. We must watch them constantly and give each the care it needs.



BROOD ON MARCH 12

Colony photographed in January and February shown in February and March issues continue to have brood in March. Note that supply of honey and pollen has been exhausted. There was, however, plenty of honey on frames adjoining brood combs but soybean flour was fed beginning March 5 and kept constantly over brood combs, Colonies not fed had decreased in brood.

Feed Pollen Supplement

Soybean flour should be fed throughout April and May, whenever the available supply of pollen runs low.

Dr Farrar states it well in U. S. Circular No. 702, "Colonies unable to rear brood from lack of pollen may not collect sufficient nectar to maintain their weight during early honey flows and they seldom reach maximum productive strength by the time the main honey flow begins.

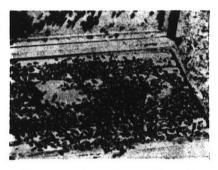
"To be available for brood rearing winter pollen reserves must be within the cluster. Once they have stored pollen in the comb the bees do not move it as they do honey.

"Beekeepers are inclined to take for granted their pollen reserves are ample when as a matter of fact colonies deficient in these reserves are found throughout most of the honey producing regions."

Not all colonies will have the same amount of pollen by any means. Individual attention is necessary. The polien supplement should be fed over the brood nest for best results because inclement weather when bees cannot gather pollen occurs rather frequently in April and also in May.

In fact it is a good plan to keep a cake of soybean flour on top of the frames over the brood area throughout April anl May. Most beekeepers are surprised at the amount the bees will use even when it looks as if pollen is coming in. Make a sugar syrup of 2 parts of sugar to 1 part of hot water. Stir in soybean flour until it forms a soft cake.

A good soybean flour is Special X made by Spencer Kellogg Co., Decatur, Illinois. Price \$5.93 per 100 pounds. In 200 pound drums \$6.03 per 100 pounds. Three bags or more at \$5.43 per hundred



Feed a soybean flour-pollen mixture or soybean flour alone if pollen is not available. Remains of a pollen cake after it has been on the frames over the brood-nest for several days.

NOTICE

Dr. K. Von Frisch Lecture
University of Wisconsin, Madison.
Biology Buildng

Monday, May 9, 8 P. M. Lecture in English. topic: The Language Of The Bees. — Beekeepers invited, admission free.

MESSAGE FROM THE PRESIDENT

(March 7)

Have recently checked all of our yards except one and find the bees in exceptionally good condition. Even though we did very little culling last fall the loss to date fill not exceed 1% in number of colonies.

Have checked most of our yards for nosema disease but so far have found none. Last season was ideal for the elimination of this malady and I would not expect to see much of a build up this winter.

Last month John Long and myself assisted in organizing local associations in Barron County and Polk County. Plans are underway to do the same in Ashland, Bayfield and Burnett Counties. Would like to see all counties where there are a number of beekeepers, not now having an active association, get together and organize a county local. If beekeeping is to stay on the map in these days of keen competition, we must have a strong organization representing a high percentage of the industry.

Have had several reports of heavy consumption of stores this winter, so watch out for starvation now. When a good populous colony starves in April or May, you have suffered a heavy loss.

Robert I. Knutson, President.

SOUTHEASTERN DISTRICT OF STATE ASSOCIATION MEETS

The Southeastern district of the Wisconsin State Beekeepers Association met at Greenfield Town Hall in Milwaukee County the evening of February 23. There was a good attendance. H. J. Rahmlow, Madison, discussed winter broodrearing and the problems of feeding colonies for continued broodrearing and successful wintering. He pointed out that this year broodrearing began in January and that colonies were in excellent condition in late February but that the bees were using up their stores of honey and pollen rapidly. If the weather in March was cold, there might be considerable starvation. He urged beekeepers to watch colonies carefully during March.

Mr. Walter Diehnelt, Menomonee Falls, discussed the honey market situation. Mr. A. W. Kehl of the G. B. Lewis Company, Watertown, spoke on some of the problems confronting beekeepers.



DON'T LET THEM STARVE

A good way to feed sugar syrup in spring. Use 2 parts sugar to one part water. Keep hot to touch—but beware of melting combs. Place empty combs over brood combs so drip will not be wasted. It takes only a few minutes to feed colony.

Officers elected at the meeting are: Mr. Wm. E. Gross, president, Milwaukee; Mr. John B. Kallas, vice-president, Milwaukee and Mr. Wm. Wilcox, secretary-treasurer, Milwaukee.

AGE AT WHICH YOUNG QUEENS BEGIN TO LAY

Experiments in England and reported in the Bee World indicated that the age at which laying commenced varied from 5 to 21 days. One-fourth of the queens were laying by 7 days, one-half of them by 10 days and three-fourths by 12 days after emergence.

The amount of the honey in the hives seemed to have no effect on the age of laying nor did the number of drones present.

No queen whose laying was delayed until after she was 10 days old gave a very high performance during the first year of life.

The frequency of examinations had no effect on the age at which laying commenced.

OWNER OF LAND OWNS BEES

Some fellows found a bee tree on my farm.. Now they claim that they own the tree. Have they a legal right to cut the tree or to claim the honey and bees?—H. A. L., Waushara County.

No one has a right to cut a tree on your land, whether bee tree or any other kind without your permission. These fellows probably are bluffing you. There is no law which allows them to cut or keep a tree on the land of anyone else. From Wisconsin Agriculturist and Farmer.

WHAT THE COUNTIES ARE DOING

Here Is The Amount of Occupational Tax Paid By Beekeepers In Your County And Reported To The State Treasury.

ury.		
County	Occup. Appro. 1948	County Tax Paid 1949
Adams\$	3.89	
Ashland	3.75	\$ 0.00
Barron	77.59	0.00 200 .00
Bayfield	6.79	0.00
Brown	0.79	200.00
Buffalo	82.88	100.00
Burnett	0.00	0.00
Calumet	83.95	200.00
Chippewa	197.75	200.00
Clark	137.65	250. 00
Columbia	43.20	200.00
Crawford	34.83	200 .00
Dane	147.64	375. 00
Dodge	104.68	200.00
Door	13.27	200.00
Douglas	3.45	0.00
Dunn	58.38	50.0 0
Eau Claire	66.41	200.00
Florence	0.00	0.00
Forest	0.00	0.00
Grant	0.00	0.00
Green	100.20	0.00
Green Lake	0.00	200.00
Iowa	31.32	0.00
Iron	0.00	0.00
Jackson	26.97	200.00
Jefferson	95.03	200.00
Juneau	77.10	0.00
Kenosha	0.00	150.00
Kewaunee	11.81	0.00
LaCrosse	38.30	150.00
Lafayette	30.50	130.00
Langlade	5.27	0.00
Lincoln	11.00	50.00
Manitowoc	93.97	200.00
Marathon	99.31	
		Funds
		Availa ble
Marinette	242.41	200 .00
Marquette		
Milwaukee	53.12	40 0.00
Monroe	98.60	150.00
Oconto	147.00	150.00
Oneida	0.00	0.00
Outagamie	102.07	200 .00
Ozaukee	44.92	100.00
Pepin	29.45	50.00
Pierce	98.35	100.00
Polk	0.00	0.00
Portage	26.45	0.00
Price	2.05	0.00

Racine

Richland

Rock

40.33

45.61

58.19

250.00

350.00

0.00

NORTHWESTERN DISTRICT BEEKERPERS MEETING WISCONSIN BEEKEEPERS ASSOCIATION

Menomonie, Wisconsin-City Hall, on Hv. 12

Tuesday, May 3, 1949

Program

10:00 a. m. Meeting called to order by state and district president Robert Knutson, Ladysmith

Discussions. The bee and honey situation in Wisconsin.

- 10:30 a.m. Plans for disease control for the coming season. By John F. Long. Chief Inspector, Madison.
- 11:30 a.m. Business meeting.
- 12:00 m. Luncheon. If you have any bees with symptoms of nosema bring some for examination. If you have new equipment bring it for display.
- 1:30 p.m. What we learned about beekeeping in 1948 and what we can do for better honey production in 1949. By H. J. Rahmlow, Madison.
- 2:45 p.m. Observations of interest to beekeepers. By County Agent Archie John-
- 3:15 p.m. Beekeepers forum. Discussion on marketing and production problems by beekeepers present.

36.07 453.11 50.85	150.00 0.00
50.85	
	0.00
48.76	150.00
87.61	150.00
66.10	100.00
81.55	??
137.32	100.00
0.00	0.00
44.49	250.00
13.00	0.00
91.84	100.00
?	0.00
62.30	150.00
63.64	100.00
175.84	0.00
43.79	250.00
	87.61 66.10 81.55 137.32 0.00 44.49 13.00 91.84 ? 62.30 63.64 175.84

Total\$4,138.15 \$7,375.00 *No report filed is left blank.

The above list is furnished by Mr. John F. Long, Chief Division of Bees and Honey. The list included the amount of indemnity paid during 1948 in each county but we did not have room for this column. The following received the largest amounts of indemnity.

Racine County \$108.00; LaCrosse \$105.00; Chippewa \$93.00; Polk \$93.00; Eau Claire \$93.00; Dane \$90.00; Brown \$84.00 and Sauk \$84.00.

Strong Colonies of Bees for Pollination. Mercier's Greenvale Produce Janesville, Wisconsin

DON'T FORGET

Have you made your contribution to the American Honey Institute, Madison, Wisconsin. Looking over the names of Wisconsin beekeepers who contributed to the Institute in "Who's Who In The American Honey Institute" for 1948, we find Wisconsin did very well but there are just hundreds of names missing from the list.

We seriously need honey promotion throughout the nation from now on. The Institute cannot function without money. If they are handicapped through lack of funds, it is our fault.

BEES FOR SALE

Three brood chamber hives with bees and brood on drawn comb. Painted. Shallow, square type as used at the University of Wisconsin. — WILL BE STATE IN-SPECTED before permit to move is given.

Extra supers available completely assembled with wired foundation. — Three body hives each \$20.00 — Extra supers each \$4.50

Home Sundays only except by appointment.

M. H. LYONS

Box 192

Hustler, Wis.

EMPLOYMENT WANTED

Amateur beekeeper, willing to work desires to learn commercial beekeeping. Has small family. Jos. C. Du Chateau, Route 4, Box 2651/2, Oshkosh, Wis.

HONEY CONTAINERS

We now have a good supply of 60 lb. cans, 5 and 10 lb. pails. Also the 5 lb., 3 lb., 2 lb. and 1 lb. and 8 oz. glass jars. We can make immediate ship-

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

> WRITE FOR COMPLETE PRICE LIST

Order through your State Beekeepers Association.

HONEY ACRES

Menomonee Falls, Wisconsin

Make this year a Comb **Honey Year**

INCREASE your profits by raising honey in our clear, basswood Mill Run Sections.

....We have a complete line of sections, section supers and fittings. Also hives, foundations, tools, containers, and all beekeeping supplies of the highest quality at prices that are right.

WRITE FOR OUR 1949

PRICE LIST

August Lotz Company

Manufacturers and Jobbers of Bee Supplies

BOYD, WISCONSIN

HONEY WANTED

Carloads and less than carloads. Mail sample and best prices in all grades.

C. W. AEPPLER COMPANY Oconomowoc, Wisconsin

From the Editor's Desk

DUTIES OF THE WISCONSIN

STATE HORTICULTURAL SOCIETY

QUESTION: What are the duties of the Wisconsin State Horticultural Society?

ANSWER: Chapter 94 of the Wisconsin Statutes, entitled "Promotion of Agriculture" assigns the following duties to the Wisconsin State Horticultural Society:

94.01 Horticultural Society; corporate powers: duties. The Wisconsin State Horticultural Society is a body corporate by that name, with the general powers and privileges of a corporation so far as applicable. It shall be the duty of the society to aid in the formation and maintenance of county and local horticultural societies: to promote the horticultural interests of the state by holding meetings for discussion thereof; by the collection and dissemination of information in regard to the cultivation of fruits, flowers and trees adapted to the soil and climate of this state: the harvesting, packing, storing and marketing of fruits and vegetables, and in other proper ways to advance the fruit and tree growing interests thereof; and for such purposes only it may take, hold and convey real and personal property, the former not exceeding five thousand dollars in value.

GOOD BULLETINS TO READ

GROWING ONIONS IN WISCON-

SIN by J. G. Moore and O. B. Combs is a Stencil Circular No. 283 issued in December 1948. It is available from the College of Agriculture, University of Wisconsin, Madison. It covers the subject very thoroughly.

FIGHT WEEDS—Stencil Circular No. 284 is another bulletin which every gardener will find valuable. It describes the method of using chemicals such as 2-4D in weed control.

LAWNS also written by Prof. J. G. Moore is another good Stencil Circular No. 244 revised in December 1948.

MR. W. H. VOLKMANN JOINS REYNOLDS BROS.

Don W. Reynolds, president of Reynolds Brothers, Incorporated of Sturgeon Bay, Wisconsin, pioneer packers of red cherries and fruit juices, has announced that William H. Volkmann is joining the Reynolds organization in an executive capacity early in March. Mr. Volkmann has been with Booth Cold Storage Company for over twenty years, the last twelve years as manager of Booth's Chicago warehouse.

GARDENING ILLUSTRATED

In this issue will be found an ad for "Gardening Illustrated", second oldest gardening magazine published in England. We suggest you read the ad and subscribe if you find it will meet your needs.

OUR COVER PICTURE

"Spring Is Here" is the title we chose for our cover picture this month. A housewife puts her hips to a new type of cultivator which should make gardening easier. Notice how the body helps push the cultivator.

THE APPLE PROMOTION LAW

Wisconsin Apple Institute Board of Directors Meets. Decide To Postpone Action Because of Grower Opposition

The Board of Directors of the Wisconsin Apple Institute met at the Retlaw Hotel, Fond du Lac on March 10. Most important action before the Board was the question of whether or not to introduce a law at this session of the legislature asking for an excise tax to promote Wisconsin apples.

After considerable discussion the following resolution was unanimously adopted.

Resolution

"Whereas the proposal for an excise tax program to advertise Wisconsin apples has met with considerable opposition by growers:

Be it hereby resolved by the Board of Directors of the Wisconsin Apple Institute in annual meeting assembled, to recommend postponement of the introduction of a tax bill to the legislature until such future time as sentiment of growers may make reconsideration advisable."

Members of the Board of Directors are: Arthur Bassett, Jr., Baraboo; Arthur Brunn, Hales Corners; Wm. F. Connell, Menomonie; H. A. Dvorak, Casco; Martin Fromm, Cedarburg; Dawson Hauser, Bayfield; Alfred Meyer, Milwaukee; Arno Meyer, Waldo;



Wisconsin Apple Institute Board of Directors met in Fond du Lac to decide on 1949 program of publicity. Left to right: Arno Meyer, Waldo; Alfred Meyer, Hales Corners; H. A. Dvorak, Casco; Art Brunn, Hales Corners; C. J. Telfer, president, Green Bay; Arnold Nieman, rec. sec-treas., Cedarburg; Martin Fromm, Cedarburg and H. J. Rahmlow, cor. sec., Madison.

Arnold F. Nieman, Cedarburg; D. W. Reynolds, Sturgeon Bay; Charles D. Rosa, Madison; C. J. Telfer, Green Bay, and H. J. Rahmlow, Madison, Exofficio.

The officers were re-elected. They are: President C. J. Telfer, Green Bay; Vice President Arthur Eassett, Jr., Baraboo and Secretary-Treasurer Arnold F. Nieman, Cedarburg.

Finances

The financial report submitted by Treasurer Arnold Nieman indicated that unless more dues are paid, the amount available for 1949, when many growers expect a big crop, will not be enough to carry on a satisfactory publicity program. The balance on hand March 10, 1949, was \$1332.91.

The Board decided not to take any action on the 1949 publicity program until next July. The invitation of Mr. Arno Meyer, Waldo, to hold the meeting at Waldo Orchards at a time to be set by the president was accepted.

Need Long Range Program

Mr. H. A. Dvorak of Casco brought out some important points for consideration by all apple growers. He said we need a long range program to keep the public interested in apples; that Door County grows almost one-half of all the apples produced in Wisconsin and at present there are only 5 growers in the County who belong to the Wisconsin Apple Institute. Relative to certain objections raised to the excise tax law he said it should contain a clause that not more than about 10% of the income could be used for administration. The estimated income in Wisconsin would be from \$6,000 to \$8,000 per year which would certainly not be enough to pay salaries for permanent employees. The program would have to be carried on much as during the past when nothing was spent for salaries and only a very small amount in wages for publicity workers.

Publicity Throughout Wisconsin

It was pointed out that apple publicity from other states such as Washington is centered in the larger cities such as Milwaukee which receives carload lot shipments distributed by brokers and commission men. What we need in Wisconsin is a program during the months of September, October and November in all parts of the state, especially the smaller towns to help increase the use of apples everywhere. Such a program would cost at least \$5,000 per year.

An Invitation To Join

All Wisconsin apple growers are now invited to join the Wisconsin Apple Institute under the voluntary program. Send your dues to Arnold F. Nieman, treasurer, Route 2, Cedarburg. Dues now payable are \$5.00 membership plus 50c per acre of bearing orchard.

IMPROVE YOUR PLANTING

New Hardy Sorts

Each Lot \$2.00 Postpaid

- 2 Apples, Plums, or Pears
 25 Raspberries, best red
 4 Rhubarb, best red
 4 Peonies, all different
 6 Chrysantheums or Phlox
 7 Iris, Lilies, or assorted
 50 Paradise Asparagus
 50 Everbearing Strawberries
 75 Standard Strawberries
 50 Gladiolus, best assorted
 2 Spruce, or Arbor Vitae
 - Price List on Request

STRAND NURSERY CO.

Taylors Falls

Minn.

NORTHERN GROWN FRUIT TREES

General line nursery stock Trees, Plants, and Shrubs



Send for our descriptive Price List.

COE, CONVERSE & EDWARDS CO.

Fort Atkinson, —•— Wis.

Write for our full or part time selling plan.

CHRYSANTHEMUMS

Over 75 choice hardy early blooming mums. All types and colors.

Also other new and choice perennials. Potted Tuberous-rooted Begonias, all types.

SEND FOR COMPLETE LIST NOW.

Sheboygan Perennial Garden

926 Custer Ave. Sheboygan, Wisconsin

CHRYSANTHEMUMS



KING OF THE FALL FLOWERS

The new hardy Chrysanthemums range in size from tiny buttons to huge flowers rivaling the finest indoor sorts. The color range too, is amazing. Whites, yellows, reds, bronze, pinks, purples, and all intermediate shades. S m all plants set out in the spring furnish fine flowering clumps at blooming time the first year. The following groups are each made up of ten different sorts in a wide color range. They are separately labeled and prepaid to your door.

	10 Early flowering English sorts, spray type\$4.00
10	Double Korean hybrid chrysanthemums\$3.00
	10 Most popular cut flower varieties\$3.00
	10 Summer Blooming cushion type\$3.09
	ALL 50 PLANTS (INCLUDING 10 GIANT ENGLISH MUMS
	\$5.00 value) \$16.50

GARTMAN'S GARDENS

Route 1

Fond du Lac, Wisconsin

Order Blank	
Please send to my address, items from above list, postpaid.	
1949 Catalog. Chrysanthemums and Perennials	Pree
10 Giant flowered English chrysanthemums	
10 Early flowering English, Spray type \$	
10 Double korean hybrid chrysanthemums \$.
10 Most popular cut flower chrysanthemums \$	
10 Summer blooming cushion chrysanthemums \$	
All 50 above chrysanthemums plants \$	
I am enclosing\$	
Name	
Address	
These prices apply only to orders from this ad.	

WALTER KRUEGER President

Oconomowoc

For the WISCONSIN GLADIOLUS SOCIETY

DR. GEORGE SCHEER Vice-President Sheboygan MRS. A. E. PIEPKORN Secretary 613 N. Mil. St., Plymouth

F. M. BAYER
Treasurer
4668 No. 41st St. Milwaukee 9

Hugo Krubsack, Peshtigo Arnold Sartorius, Porterfield Dr. Geo. Scheer, Sheboygan A. F. Scholtz, Wausau Val White, Wausau

Dr. L. C. Dietsch, Plymouth Walter C. Krueger, Oconomowoc E. A. Lins, Spring Green Walter Miller, Sun Prairie Archie Spatz, Schoefield H. J. Rahmlow, Madison, Ex-Officio

F. M. Bayer, Milwaukee Harold Janes, Whitewater Mrs. A. E. Piepkorn, Plymouth D. M. Puerner, Milwaukee Paul Ravet, Menomonie, Mich.

PRESIDENT'S MESSAGE April 1949

Prof. James Torrie did a fine piece of work in getting the necessary changes for our spring meeting. Many thanks, Jim!

The first donators of trophies for the 1949 Wisconsin Seedling and Recent Introduction show are Geo. C. Morris and Theo. (Ted) Woods, of Madison. Thanks to both of you.

Our remarks at the directors meeting, last fall, relative to an added Wisconsin Gladiolus Society show at the state fair, enlarged by a visit to Mr. E. L. Chambers, brought forth a very fine proposition from the State Fair. It includes a \$300 cash subsidy, 1/2 to be expended in cash premiums to prize winners. Show dates are August 23-24-25, (Tues.-Thurs.) Fair officials required acceptance or rejection of the offer prior to March 15th, hence the necessity of polling our directors in order to obtain a vote. The vote was unanimous in favor of the show. This clearly reveals that much of the business of the society should be done by our directors. An added advantage would be that if routine business is conducted by the board our meetings would allow time for more speakers, and very probably an increased attendance.

Who will volunteer to serve on the premium list committee of the Wisconsin Gladiolus Society State Fair show?

Here is an opportunity to serve in the interest of growing gladiolus. An increasing market is needed if more bulbs are to be sold. This requires promotion. If all of us do something to interest new buyers "things gladiolus" can grow, and many persons will learn the joy and satisfaction of growing the "King of Flowers." You can promote gladiolus in many ways, but a few suggestions might not be amiss. Support the gladiolus shows—show at county fairs; volunteer to talk on the subject at garden club meetings; give of the bounty of your



Mrs. A. E. Piepkorn, Plymouth, secretary of the Wisconsin Gladiolus Society, examines some of "Oh-Oh" which will be introduced next year. It is a beautiful light yellow with deep yellow or gold throat and lower petals; in the medium sized glass. It stands up well, says Mrs. Piepkorn who obviously has the "Green thumb" as indicated by the beautiful house plants in the window.

garden to others. There are but a few suggestions to which others may be added. Walter C. Krueger, president.

GLADIOLUS SOCIETY DUES

- Dues Wisconsin Gladiolus Society and Wisconsin State Horticultural Society (including magazine) per year\$1.25
- 3. No. 1 plus membership in NAGC and publications 2.00
- 4. No. 1 plus membership in NEGS also NAGC 3.50
- 5. If you are already a member of the Wisconsin State Horticultural Society then dues in Wisconsin Gladiolus Society are

Send dues to F. M. Bayer, 4668 N. 41st St., Milwaukee 9, Wis.

VIRUS DISEASE IN GLADIOLUS

By Geo. H. Scheer, Sheboygan

One lives and learns. We learned something this past year of utmost importance to anyone who grows gladiolus—whether few or many. It is that one cannot grow gladiolus anywhere near plantings of peas or beans without running a big chance of getting them infected with a virus disease.

Several years back, gladiolus growers on the west coast, mainly in Oregon, were greatly alarmed by the spread of virus diseases. The spread was so rapid and extensive it was feared the gladiolus industry was doomed. At that time very little was known either about the source of the diseases or how they were spread. It was generally believed they were caused by soil-borne infection and once present in the soil, impossible to destroy.

The danger to industry became so great that plant pathologists began an intensive study of the situation.

Study of Virus

The study of viruses presents a far more difficult problem than that of plant diseases caused by fungi or bacteria which can be cultured and studied under the microscope. Viruses are eerie, invisible and intangible things which no one has ever seen, either under the microscope or by means of the most modern electronic devices beiause they apparently have no visible or demonstrable bodies. Their presence is manifest only by the symptoms they produce in the plant or animal infected. The scientists therefore devoted their efforts to determine the sources of the viruses and the means by which they were disseminated.

They learned that contrary to the belief generally held, viruses do not propagate in the soil—and are unable to exist or remain viable in the ground for any length of time. These findings are very important.

Virus From Legumes

It had been noted for some time that virus diseases were much more prevalent among gladiolus plantings in regions where various legumes: peas, beans, alfalfa. sweet clovers, etc. were extensively grown. Taking their cue, the scientists reasoned there must be some connection. They began with macerating the tissues of virus infected pea and bean plants and rubbing them over the rasped surfaces of healthy gladiolus plants. By this very direct method of transmitting legume viruses to gladiolus, infection resulted in rare instances, proving that the theory was correct. The difficulty experienced in conveying the infection even by this very direct method proved it is highly improbable that virus infection can be transmitted by air currents, or even by being close to virus infected plants in the same row.

The problem was then to determine precisely how the virus infection was transmitted to gladiolus. Since peas and beans are commonly infested with aphids, or plant lice, it was logical to study first the role they might play. It did not take long to definitely establish the fact that they were the vectors, or carriers that transmitted the virus from legumes to gladiolus.

In the light of our present knowledge, it is obvious that gladiolus must never be planted anywhere near planting of peas, beans, or other legumes (Continued On Page 224)

SHEBOYGAN CHAPTER MEETING

The Sheboygan County Chapter of the Wisconsin Gladiolus Society held its annual bulb acution on March 6th. During the business meeting an invitation was extended by Mr. Gilbert Thompson, president of the Manitiowoc County Chapter, to join them in holding a Wisconsin regional show at Two Rivers. The invitation was accepted and a regional show will be held in the Two Rivers Community Hall, Saturday and Sunday, August 20 and 21. Manitowoc, Sheboygan and Calumet Counties will be represented.

Among the delegates from Manitowoc County were: Mr. and Mrs. Gilbert Thompson, Mr. and Mrs. J. L. Hamilton, Mr. and Mrs. Joe Rezick, and Paul Nelson, all of Manitowoc; Mr. and Mrs. John Gates, Mr. and Mrs. William Hachmann, and John Bayless, all of Two Rivers.

A pot-luck supper, buffet style, was followed by the bulb auction.

Reported by Mrs. Mary Scheer, Sheboygan.



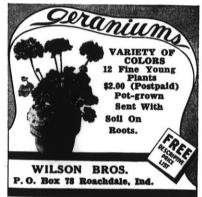
An arrangement of gladiolus at the Madison Gladiolus Show, 1948, Photo by R. B. Russell, Madison.

AMERICAN IRIS SOCIETY TO HOLD ANNUAL MEETING

The annual meeting of the American Iris Society will be held in Portland, Oregon on May 14, 15 and 16, 1949.

Iris fans will gather from all parts of the country to visit outstanding Iris gardens and take part in the program on Iris culture. In charge of the arrangements is Dr. M. C. Riddle, 2557 S. W. Vista Ave., Portland 1, Oregon.

She was sick in bed, and her husband, who was fixing her a cup of tea, called out that he couldn't find the tea. "I don't know what could be easier to find," she answered. "It's right in front on the pantry shelf in a cocoa tin marked 'matches'!"





virus inGlads (continued from P. 223) susceptible to virus and which act as hosts for aphids that carry the virus—or, vice versa, that peas or beans must never be planted near gladiolus.

Gladiolus

There are different viruses and each produces its own characteristic effect. Local conditions of climate, such as temperature, rainfall, and season, as well as type of soil, all exert an influence. Important, also, are the varieties of gladiolus, their degree of resistance, the age and health of the bulbs. It is our conviction that no variety of gladiolus is immune to virus disease, when fully exposed to it.

Symptoms

While the milder types of virus may produce no symptoms other than breaks in color, the ultimate result of infection is complete destruction of the plans. As a rule, virus infection produces no recognizable changes in the bulbs themselves, but the symptoms produced in growing plants are generally unmistakable, varying from slight to extensive mottling to distortion and perhaps browning of the foliage, retarded and stunted growth, with ultimate death to the plant in severe cases. There are, however, exceptions. Our experience with the type of virus known as "white break" has been that it causes no recognizable changes in growing plants. In fact infected plants were usually healthy and strong appearing until the blooming period, when the presence of the virus became very obvious because of the varying degree of color break in the flower petals. The virus had apparently not affected the vitality of the affected plants in the last as the bulbs were found to be literally covered with bulblets when dug.

Whatever the type of virus the bulblets of infected bulbs also carry the virus.

How To Fight Virus Infection

There is no known method of either checking or eliminating virus from infected stock, either in the bulb or in the growing plant. Once infected the plant must be destroyed. Not only is it possible to eliminate virus completely but the process is not difficult. To destroy an entire planting just because virus has been discovered would entail unnecessary loss. The logical procedure is to destroy each infected bulb, together with all bulblets, as soon as virus infection is diagnosed. To do this it is necessary to carefully scan the rows at frequent intervals, preferably each day. If all suspicious looking plants are



promptly removed and burned, there is little likelihood of sound stock becoming infected. The virus can be carried to healthy plants only by aphids acting as vectors, and this can be virtually eliminated by systematic spraying with an efficient insecticide.

To summarize:

Never plant gladiolus near peas or beans.

Use an effective insecticidal spray systematically.

Scan your planting regularly and thoroughly; remove all suspicious looking plants at once.

Make sure all infected plants are completely destroyed by burning.

If this is done, your healthy stock will remain healthy.

A SPRING PLANTING PACKET

For the price of \$1.00 anyone may obtain from the Superintendent of Documents, Govt. Printing Office, Washington 24, D. C. a packet of pamphlets on planting which have been carefully selected to help decide what to plant. When to plant and how to plant. Especially valuable for beginners. These are the titles:

Growing Vegetables in Town and City Farm Garden

Vegetable Gardener's Handbook on Insects and Diseases

Production of Carrots Culture of Table Beets

Growing Peas for Canning and Freezing.

Production of Radishes
Growing Annual Flowering Plants
Herbaceous Perennials
Pointers on Making Good Lawns

WISCONSIN GIRLS RANK HIGH IN CHERRY PIE BAKING CONTEST

In the annual state cherry pie baking contest sponsored by the National Cherry Growers Association, Mardelle Clarksen of Brown county won first place; Jean Stern, Waupaca county, second and Alice Mullen, Chippewa county, third. The state contest was held in Milwaukee on February 12. Mardelle then went on to the national contest in Chicago and won second place.

The Winning Recipe

Mardell used this recipe for making the prize winning cherry pie.

Pie Crust

1% cup flour

% cup shortening

1 teaspoon salt

Cut shortening into flour until it is consistency of coarse cornmeal. Add salt.

Mix one-third cup flour and onefourth cup water to a paste and add to above mixture.

Filling

- 1 can frozen cherries (sugar 5 to 1)
- 1 tablespoon lemon juice
- % cup sugar
- ¼ teaspoon salt
- 1 tablespoon butter
- 3 tablespoons cornstarch dissolved in ¼ cup water.

Method: Drain cherries. Place one cup cherry juice in sauce pan. Add sugar, salt and lemon juice. Heat to boiling and add cornstarch, which has been dissolved in water. Cook to thicken. Remove from fire and add cherries and butter. Put between two crusts. Bake at 425 degrees for 40 minutes.

NEW SWEET CORN HYBRID, WISCONSIN GOLDEN 804

The Wisconsin Agricultural Experiment Station announces the public release of a new sweet corn, Wisconsin Golden 804—a medium early hybrid for canning, truck gardeners and home gardens. In an average season this hybrid matures five to seven days ahead of Golden Cross Bantam and consequently should enable canners to begin operations earlier in the summer. Its yield approaches but does not equal Golden Cross Bantam. It has a long.

slender, 10-12 row ear and excellent quality.

Seed of the parent inbred lines, as well as of the hybrid Wisconsin Golden 804, will be sold by the college.

Address correspondence to R. H. Andrew, Agronomy Department, University of Wisconsin, Madison 6. Wisconsin.

ARE INSECTS BECOMING RESISTANT TO DDT?

Many Wisconsin farmers have remarked that they are not getting as good results from the use of DDT controlling flies as they did the first year or two they used it.

In California, experiment station workers exposed several strains of house flies to DDT. One strain had never been exposed before while the second was collected from areas where the DDT had been used. It was found that the wild flies were highly resistant to the DDT while the flies getting their first dose of it were not. They also found that both of these strains were equally susceptible to such other insecticides as Chlordane and Parathion. The strain which had previously been subjected to DDT was also somewhat resistant to other chemicals in the DDT family such as DDD.

We have not yet seen any experiments proving that codling moth are becoming resistant but some entomolgists feel that long continued use of DDT in an orchard will eventually lead to developing strains that are resitant.

A LITTLE KNOWN PENSTEMON

Penstemon secundiflorus is one of five beardtongues selected by Prof. Longley of Minnesota for its hardiness. Since it is not only hardy but most attractive when in bloom, one would expect to find it planted more often in our gardens.

We have grown it for several years, wet and dry years, years of extreme temperatures such as last winter when without much snow for ground cover the mercury dropped to 43 below, yet this penstemon came through 100 per cent.

The plant is a heavy rosette which sends up spikes of irridescent blue and purple bloom. The flowers are closely set on the stems thus there are many flowers in bloom at one time. In fact the bloom far exceeds that of P. grandiflorus an old standby with which we are so familiar. In this section P. secundiflorus blooms in late June.

N. E. Schmidt, Sarona, Wis.

See Andrews

Hardy Fruits For Northern Plantings

on the NEW F R E E '49 Color Catalog



KOREAN CHERRIES
Luscious pie cherries from hardy,
ornamental bushes only 3-4 feet high.

Be sure to send for your copy of the all-new ANDREWS 1949 catalog. It's full of helps for northern gardeners. It also brings you color pictures and descriptions the best varieties of many fruits and of the

of the best varieties of many fruits an perennials.

Below are some of the items we believe you'll like best, because they are all bred to withstand cold Wisconsin and Minnesota winters, yet sacrifice none of the luscious, fruity goodness and bountiful yields usually expected only in the south.

BLUEBERRIES Delicious in pies. blooms, fresh or Fragrant brilliant red fall foliage.

RASPBERRIES Many varieties for the home gardener from the largest from the largest grower in the U. S.

NEW VARIETIES of selected plant-ing stock intro-duced by northern plant breeders.

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MANUFACTURERS AND DESIGNERS OF

COMPLETE IRRIGATION SYSTEMS FOR PART OF AN ACRE OR FOR 500 ACRES

H. D. ROBERTS

BLACK RIVER FALLS

WISCONSIN

How to Grow Vegetable Transplants

Questions Answered by O. B. Coombs

QUESTION: When should we sow seeds for transplanted crops like early cabbage and tomatoes?

ANSWER: Within reasonable limits, these may be started in Southern Wisconsin about March 15. That would include Broccoli, early cabbage, early cauliflower, eggplant, head lettuce, peppers and tomatoes.

QUESTION: When should seeds be sown for late cabbage?

ANSWER: Ordinarily seeds for late cabbage aren't started until about May 15 in the southern part of the State. That means, of course, that the seeds may be sown directly in the garden if desired or they may be started in a cold frame. If sown directly in the garden, they may be planted three or four seeds to a place where each plant is to stand, or they may be sown in a special row or bed to one side of the garden. If sown in hills where the plants are to stand, thinning will be necessary. If sown in a separate row, the plants will need to be lifted and transplanted.

QUESTION: Would you suggest that late broccoli, Brussels sprouts and cauliflower be handled in the same way as you've suggested for late cabbage?

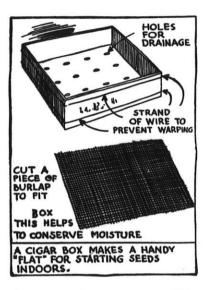
ANSWER: Yes, for fall production all three of these crops may be handled just like late cabbage. We must remember, of course, that the dates we've been mentioning should be one to two weeks later for Central and Northern Wisconsin.

QUESTION: How would you suggest we actually proceed to grow vegetable transplants?

ANSWER: We must get some small boxes or flats about 2½ to 3 inches deep and small enough to be handled conveniently. Cigar boxes will do but they are a little small to suit most gardeners. At least two such boxes will be needed—one for early broccoli, cabbage and cauliflower, and a second one for eggplants, peppers and tomatoes. Gardeners who plan to start celery plants should have a third box.

QUESTION: Why not use a larger box and start all crops together?

ANSWER: These crops differ in their growth rate and temperature at which they germinate and grow properly. Cabbage, broccoli, and cauliflower will not only germinate quite rapidly but they germinate and grow at a somewhat lower temperature than would be best for to-



matoes or eggplants or peppers. Celery germinates and grows still slower, and we must be careful that young celery plants aren't chilled, otherwise we run the risk of having the plants go to seed after they are set in the garden.

QUESTION: How should the boxes be prepared?

ANSWER: Fill each box with clean, moderately fertile, sandy loam soil, level and firm the soil, water it well, and cover it with one-fourth to one-half inch of clean, moist sand.

QUESTION: How deep should the seed trenches be in the moist sand which you suggested we place on top of the watered soil?

ANSWER: Usually the trenches should be around one-fourth to one-half an inch deep and from one and a half to two inches apart. They may be made easily and to an even depth with a piece of thin board which is rounded on one edge and just long enough to reach across inside the box. Sow the seeds fairly thin, say 8 to 10 seeds to the inch for most crops, and cover them snugly by pressing in both sides of the trench with the same thin board used to make the seed trenches.

QUESTION: What else is necessary to finish the job of getting the seeds started?

ANSWER: Cover the box snugly with a piece of glass, cardboard or other material to keep the sand and soil from drying out, and set it in a warm place (around 70 to 75 degrees) until the seeds germinate. As soon as the seedlings be-

gin to appear, remove the cover and shift the box to a cooler location (around 60 to 65 degrees) where there is plenty of light. Additional water will be needed only when it is necessary to keep the seedlings from wilting.

QUESTION: How should these young seedlings be handled so they will be sturdy?

ANSWER: Thinning is all right, but lifting and transplanting will be required for most of them. As soon as the seedlings are large enough to be handled or when the first true leaves appear, they may be lifted and re-set in good soil in the same or other boxes or in a hotbed or cold frame. Seedlings started indoors should be taken outside for at least a part of the day as the weather turns warm. They should be left outside entirely as soon as the danger of frost or chilling temperature is past.

From radio broadcast over State Station WHA

HOW LONG DOES IT TAKE SEEDS TO GERMINATE?

The following list is from the National

Garden Bureau, Chicago, Illinois. Anchusa 10 days Achillea 10 days Anthemis 5 days Campanulas 5 days Carnations 5 days Columbine 5 days Coreopsis 5 days Shasta Daisies 5 days Delphiniums 20 days Dianthus 5 days Foxglove 10 days Hollyhocks 5 days Hesperis 10 days Gaillardias 20 days Linum 8 days Lupine 8 days Physalis 15 days Salvia 15 days Pyrethrum 20 days Stokesia 20 days Trollius 50 days Veronica 15 days

EFFECT OF SOIL REACTION ON VEGETABLE CROPS

Most vegetable crops adapt themselves to a fairly wide range of soil reaction. However, the pH preference (or optimum range) for a number of vegetables is:

pH 6.0 to 6.7,-Asparagus. Beet, Cauliflower, Parsnip, Spinach.

pH 5.5 to 6.7,-Bean, Cabbage, Celery. Lettuce. Onion, Pea.

pH 5.2 to 6.7,-Carrot, Sweet Corn, Tomatoes, Turnip.

pH 4.8 to 6.5,-Potato. (The pH for potato should be 4.8 to 5.4 to control scab.)

While the optimum range for asparagus is given as 6.0 to 6.7, it actually grows very well to pH 7.5.

The beet is classified as acid-sensitive but produces very well on muck soils with a pH as low as 4.6 if its need for copper is satisfied. Beets also produce well on decidely alkaline soils if manganese sulphate and/or boron is applied.

Spinach is also classified as acidsensitive but the injurious effects of acid soils may be due to aluminum toxicity rather than to the H-ion concentration in itself. Spinach is compartively tolerant of alkaline soils but on strongly alkaline soils yellowing of the foliage may occur due to deficiency of iron or manganese, or it also may be deflicient in boron.

The optimum pH for beans is said to be between 5.5 and 6.7 and yet in Southern Alberta many of the irrigated soils have a pH of 7.8 to 8.0 and produce excellent crops of beans. On an alkaline soil at Ottawa beans have been found troubled with managnese deficiency.

The soil for celery should be slightly acid. On alkaline soils, boron deficiency may occur.

With onions, very acid and very alkaline soils cause slow growth and late maturity. The addition of lime and copper sulphate to acid soils and sulphur and managanese sulphate to alkaline soils increases the percentage of mature bulbs.

While turnips may grow well on alkaline soils, such soils may predispose this crop to brownheart.

The potato has a wide range of tolerance to soil reaction pH 4.8 to ver 7.0. At the higher or less acid level, scab becomes a serious menace and scab damage is held at a minimum when the pH is 4.8 to 5.5. The necessity of keeping the soil in such an acid range

for potatoe sto control scab creates a difficulty, since few other vegetables produce their best yields on land sufficiently acid to control the growth of the scab organism.

From paper by Dr. H. Hill, Plant Physiologist, reported in Notes of Experiment Station, Morden, Manitoba, February 12, 1949.

PENSTEMON FOR SALE

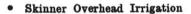
Pentstemon secundiflorus, 3 plants \$1.00; Interesting pot succulents, 3 different kinds for 60c. N. E. Schmidt. Route 1, Sarona, Wis.

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The answer to large area watering. The ideal The answer to large area watering, the ideal system for the Farm (pasture, grains, corn hay) Grower (potatoes, beets, onions, tobacco truck crops) Nursery, Berries, Orchard, Golf Course, Playing Field, Florist. Featuring Flexoseal Portable Pipe in steel or aluminum, Skinner Rain Heads and Gorman Rupp



Water like gentle rain for smaller areas and water like gentle rain for smaller areas and tender crops or new plantings. Many flor-ists berry or truck growers and nurseries prefer the Skinner overhead system. Also ideal for home gardens. An automatic water motor oscilates a long pipe line spraying an area of 50 feet wide and as long as the line.

Portable Hose Sprinklers

Skinner offers a large variety of hose sprin-klers for lawn and garden watering. A sprinkler for every requirement from small home lawn to estate or park. Illustration at right shows popular Spray Wave which waves a gentle fan of spray like rain over a 40 by foot area on ordinary city pressures.

Skinner Underground System

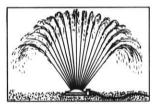
No sprinklers to move, no hose to pull around just turn on a valve and presto, your lawn is watered. Available in sizes for smallest lawns to large areas. Also Snap Valve hose less watering for golf course, estate, park or playing field. No area too large or

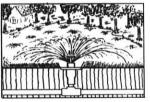
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Gorman Rupp engine driven high pressure pumping units from 50 G. P. M. to 1200 G. P. M. Also all sizes of electric pumps or pumps for tractor drive. Also complete line of pump accessories; suction and discharge hose or pipe, foot valves, strainers etc. Investigate our spray rig tender, spray pumps and handy pumps.

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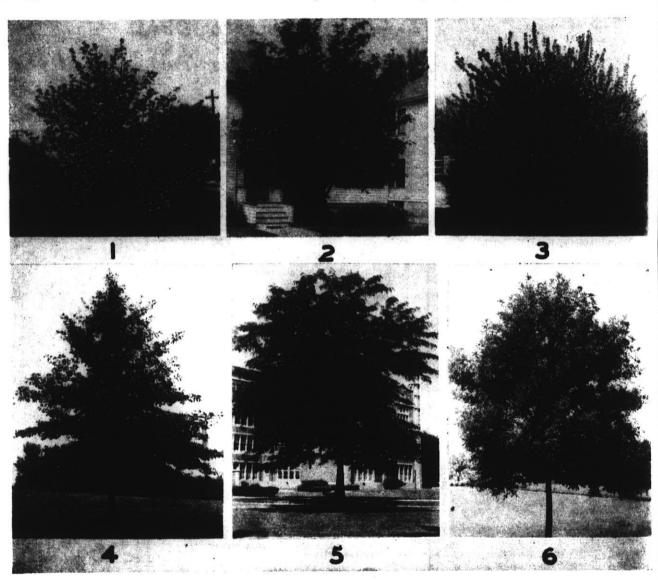
MOUNTAIN-ASH

2. Excellent trees for the medium and small home grounds. Berries are showy and enjoyed by the birds. Its beauty is in the flowers and fruits.

HOPA CRAB

3. One of the rosy bloom crabs with red fruit in fall. Very ornamental and a good small tree for the backyard.

Pictures Courtesy of McKay Nursery Co., Madison, Wisconsin.



PIN OAK

4. Oaks are the symbol of grandeur, strength and durability. It is easy to transplant; good as a street tree and for an ample lawn. Prefers neutral to slightly acid soil.

THORNLESS HONEY LOCUST

5. Excellent for lawn planting. Much preferred to the thorny type which is dangerous to playing children. Roots do not rob plant food and moisture from surrounding flower gardens as do some other species. Filtered shade allows grass to grow.

WHITE ASH

6. Rapid growing tree which develops into broad spreading specimen. Excellent for parks and ample lawns. Its shade does not prevent good sod growing beneath. A good street tree.

WILD FLOWERS OF DOUGLAS COUNTY, WISCONSIN

This is the title of a attractive little bulletin just off the press prepared and printed by Mary Nye Hayes and the Wild Flower Group of the Superior Garden Clubs of Superior, Wisconsin. It is dedicated to Katherine Corcoran DeMars, past president of the Council of Superior Garden Clubs and the Wild Flower Group.

The object of the bulletin is well stated in the first paragraph of the forward:

"One does not need to be a trained botanist to become familiar with the outstanding flora of his own locality. As he wander through fields and woods, picking his way along the banks of lake and stream or slushing around in the bogs and swamps, he soon learns where and when to look for a favorite plant or flower. And the day's pleasure is for him immeasurable increased if he can call these plants by names, returnnig to them year after year as to familiar and beloved friends. Even the vacant lot he passes daily takes on new interest, as do the home garden and lawn with their numerous uninvited plants for whose persistence he may have a wholesome respect even though he may question their right to exist.'

The booklet which consists of 30 pages of botanical and common names of plants in that area will be placed in all the schools and libraries throughout Superior and Douglas County and at the University.

TUBEROUS-ROOTED BEGONIAS ARE EASY TO GROW

If the requirements for growing Tuberous-rooted Begonias were not made so exacting by some writers, perhaps more people would grow them. The minimum requirements for success—and they are not very difficult to attain, are these:

- 1. Plant only where there is light and constant shade. Tuberous-rooted Begonias will burn in full sun during hot weather.
- 2. Since well rotted cow manure is often difficult to obtain and not easy to work with and is often responsible for fungus diseases to bulbous plants, we can safely say that it is not necessary. Instead, dig a hole about 1 foot in diameter and 1 foot deep. Mix about 1/3 peat moss with the soil taken from the hole to which has been added about 1/4 cup of complete garden fertilizer. Mix all together thoroughly and put back into the hole. Set the plants in this soil and water well.

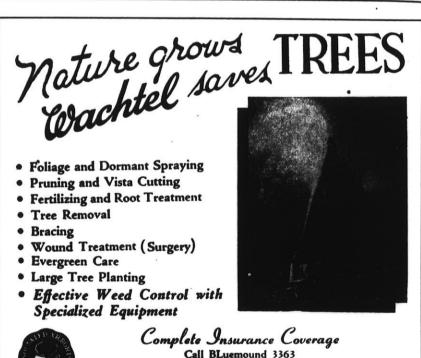
During the hot summer months they will like a daily sprinkling of water any time during the day. Dig down occasionally to a depth of about 6 inches to see if the subsoil is dry if there is competition from the roots of nearby trees and shrubs. If dry water slowly and deeply.

BEGONIA BULBS

Jumbo size fancy Tuberous Begonia bulbs. Camellia type. Eight colors. All large bulbs. Imported from Belgium. 25 cents each — \$2.50 per dozen. Also hanging type Begonias. 50 cents each. — Jumbo size bulbs in rose or red.

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& SERVICE CO.

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Garden Gleanings

WHAT KIND OF FERTILIZER SHALL I USE IN MY GARDEN is an oft repeated question. Don't worry too much about the kind to use, as long as you use some when it is needed. Recently a gardener asked this question. "I was told to use 3 pounds of 4-8-6 fertilizer per hundred square feet in my garden. However, my dealer did not have 4-8-6 but instead had 5-8-7 fertilizer. Can I use that instead?" Well the answer is-most certainly use it and use it in the same amount. The difference is so slight when 3 pounds are used on a hundred square feet that a soil chemist could hardly tell the difference if he analyzed the soil. If you were boiling up a kettleful of potatoes for a party and the recipe called for a level teaspoonful of salt, would it make any difference if you used an additional pinch. Such precise directions for using fertilizers often get tiresome but perhaps they are necessary as a guide for beginners.

PETUNIAS ARE AMONG OUR BEST ANNUALS in the flower garden. Let's use them for planting in front of the house so folks walking or driving by can enjoy more color in our front yards. Many people have difficulty in growing them from seed and the amateur will find it easier to buy plants instead of trying to grow them. If you do wish to grow them indoors, then sow the seeds thinly on top of a flat of soil, sprinkle just a little sand over the seeds and press down lightly with a board. Then cover with a newspaper or glass to keep the soil from drying out, removing as soon as seedlings are up. Water by setting the box in a tub of water.

CLEOME Pink Queen would be our choice for the flower of the month. Now is the time to plant the seeds or order plants from the greenhouse. For the flower border of annuals it is a necessity—an excellent background plant. It has huge heads of delightful and refreshing true pink. Grows about 4 feet tall and will bloom from June until frost. Another good variety is Golden Cleome. The color is a rich gold, approaching orange. These plants like full sunlight.

FERTILIZERS SHOULD BE MIXED WITH THE SOIL according to a report of research in Canada which we found in the interesting "Weekly Notes" by W. R. Leslie, superintendant



BLOODROOT IN GARDEN OF MRS.

E. J. KALLEVANG, MADISON

Common name for Sanguinaria canadensis, of the Poppy Family. Indians formerly used its red juice in decorating themselves for war. Easily transplanted to the wild garden; may be propagated by seed or division.

at the Experiment Station at Morden. Prof. Spinks, University of Saskatchewan reported that, "The uptake of fertilizer by potted tomato plants was greatest when it was mixed in with the whole soil of the pot. Surface application was taken up very little. Fertilizer in the bottom was taken up but slowly."

In growing plants in pots it is well therefore to start with a well prepared fertile soil mixture and not rely on surface application of fertilizer later. Applying this to the garden it means we should prepare our soil in the spring by digging in organic matter and fertilizers before the plants are set out or seed is sown.

HARDY HYBRID TEA ROSES are becoming more and more popular. The Brownell roses—such varieties as Curley Pink, Pink Princess and Vanderbilt, Lily Pons and Red Duchess have become most popular with northern gardeners. Mr. Brownell writes us, "Their popularity has risen to the point where we expect about 15 carloads will be grown this summer."

HERB MAGIC AND WISCONSIN FERNS—WILD FLOWERS by The Tooles of Garry-nee-Dule, Baraboo, Wisconsin has come to our desk again this year. It is a complete catalogue and directory of many varieties of hert plants, seeds, herb products, native ferm and wild flowers and lists varieties not found in any other catalogue published in this state that we know of. We congratulate Mrs. Toole on a fine publication. H.S.R.

FERTILIZERS VS MANURES

The importance of manure as a direct source of organic matter in general farm ing has been greatly exaggerated. User at the 100-tons-or-more-per-acre rate which the back-yard gardener may ap ply it or the compost that he sub stitutes for it, very marked improvement in both soil and crop can be affected But a 10-ton-per-acre application sud as a farmer might have at his disposa would add only about two and one-half tons of organic matter of a readily decomposable type to the 30 tons of organic matter already in the plow depth of the average acre of soil. Any very large and dependable increase in soil organic matter from the use of ordinar amounts of manure will not come fro the manure itself but from the larger crop yields that are produced by the manure, and the greater amounts of roots and crop residues associated therewith.

Value of Fertilizers

Fertilizers can be used to accomplish the same purpose. They grow bigger crops that leave larger amounts of plant refuse on and in the soil. The most conclusive evidence on this point was developed at the West Virginia Agricultural Experiment Station some 30 years ago. During the 15-year period of this test, four clean-culture, five smallgrain and six clover-timothy hay crops were grown. Five tons of purely mineral fertilizer was applied per acre. At the end of the test the soil's content of organic matter, to plow depth, was found to have increased from 42,800 to 60,800 pounds per acre or over 42 per cent. This can be accounted for only by the greater amounts of roots and other crop residues that were left behind on and in the soil by the nearly tripled corn yields resulting from the use of the fertilizer.

From an article in Massachusetts "Horticulture," by Dr. Firman E. Bear, Rutgers University.

A highbrow is a person educated beyond his intelligence,

MANY FALSE STATEMENTS ABOUT "ORGANIC FARMING"

The concepts of those who deal with the various aspects of "biodynamic farming," some of which are expressed and others implied, are as follows:

- 1. Plants, animals, and man are inseparably bound in Nature.
- 2. Disease resistance is conferred on plants, animals, and man by the use of manure.
- 3. Manure must contain both plant and animal by-products to provide these helth-giving qualities.
- 4. Raw organic matter must be composted outside the soil or worked into the surface of the soil and not plowed
- 5. Fertilizers destroy earthworms and microbial life in the soil.
- 6. Earthworms are essential for the production of humus and for digesting the soil.
- 7. Micorrhizal fungi flourish only in manured soils and form a necessary living bridge between soil and plant.
- 8. Crops deteriorate when grown from seed of successive generations of plants produced by the use of fertilizers.
- 9. Disease of man originate largely as a result of the use of fertilizers.
- 10. Fertilizers are only temporary expedients that must ultimately be dis-

Such teachings link the farmer inseparably with the manure pile and peasantry. They set aside some of the most important findings of a century of agricultural science. They decry the work of the agricultural experiment stations. Their proponents skip blithely from fact to fancy and fall back on the supernatural when pressed by the

Plants Are Only Source of Soil Organic Matter

Science came on the organic matter scene about a century ago when Justus von Liebig wrote a new page on this subject. His predecessors had contended that organic matter was the food of plants. Liebig pointed out that plants must have preceded the humus. Originally the earth and all its parts were entirely inorganic. All of the carbon, the key element in organic matter, was in the atmosphere as carbon dioxide. In due time primitive forms of life came into existence. Only through these, and the higher forms of plant life that evolved from them, was the inorganic carbon of the atmosphere combined with water, air, and soil to form organic matter. Animals made use of the organic matter that had been manufactured by plants but they did not construct organic matter from its primary constituents.

Plants Grow In Water

The validity of Liebig's concept has been verified in many plant physiology greenhouses. Luxuriantly perfect crop plants are being widely grown to full fruit production on mineral salts dissolved in distilled water. Soil-less plant culture is now being practiced on a large scale for commercial purposes. It consists in dissolving the necessary chemicals in water and allowing this water to flow through beds of sand, gravel, cinders, or other similar inorganic materials that provide standing room for the plants while they are being fed. The beds contain no humus and no earthworms. Plants grown in this manner are equal in size and appearance to those in the field. Selected seed produced by these plants yield identical plants generation after genera-

By Firman E. Bear in Fertilizers and Human Health.

NEW MOCKORANGE Minnesota Snowflake

(Plant Patent 538)

Blooms profusely with very double, fragrant, white flowers. Bushes better than other varieties.

2 to 3 ft. plants _____ \$1.50 postpaid **EVERGREEN TRANSPLANTS**

White Spruce — 8-10 in ___ 4 for \$1.00 Black Hill Spruce — 10-12 in.

(heavy) _____ 2 for \$1.00

American Arbor Vitae —

12-18 in. _____ 3 for \$1.00

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BLUE BOY — Deep Blue Flower With Yellow Centers. — 74 Cents each.

DOUBLE DUCHESS — Same as Blue Boy but flowers are double. \$1.89 each

LAVENDER LADY — Light lavender. Free Blooming. — \$1.50 each.

PINK BEAUTY — Esquisite pink flowers with yellow stames, 89 cents each.

WHITE LADY — Large, Perfect white flowers. — The best white. 93 cents

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Scientifically designed pots which feed water from storage base direct to roots of the plant, by means of a glass-fibre wick. Ideal for African Violets and Gloxinias especially.

Made of strong, durable light weight plastic. Available in 6 colors. Ivory, yellow, coral, pink, green or marble. — \$1.10 each; 3 for \$3.00, post-



SUB-ZERO ROSES

A distictive strain of hybrid tea roses that unprotected, has been wintering through 15 degrees below zero for years and with slight protection will withstand 50 degrees below zero. They have all the other qualities of a good rose such as size doubleness, fragrance, vigour and disease resistance. They are everblooming.

Try these roses if you are having trouble wintering the ordinary hybrid tea varieties.

LILLY PONS. — White
PINK PRINCESS. — Bose Pink

RED DUCHESS. — Beautiful red

LILLY PONS. — White PINK PRINCESS. — Rose Pink

RED DUCHESS. — Beautiful re \$1.85 each; 3 for \$5.25 postpaid.

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Birds: Miss Elsa Lautenbach, 135
Smith Street, Plymouth
Conservation: Mrs. Conrad Biebler,
2027 E. Olive St. Milwaukee, 11.
Historian: Mrs. Waiter Roehrborn
1922 Georgia Ave. Sheboygan
Horticulture: Mrs. Herbert Chaffin,
543 Scott Street, Ripon
Junior Gardens: Mrs. Earl F. House,
421-8th Ave., Baraboo
Judging Schools: Mrs. George J.
Portman, 308-12th Street, Wausau
Membership: Mrs. George E. Flanders, 806 West Wisconsin Street,
Portage

ders, 8

Nominating: Mrs. Harold C. Kallies,

Nominating: Mrs. Harold C. Kallies, 723 No. 8th St., Manitowoc Program: Mrs. M. C. Spence, Williams Bay, Wisconsin. Publicity: Mrs. Fred C. Marquardt, R. 1., Box 63 Hales Corners, Wis. Roadside Beautification: Mrs. Malvin Schneider, Hales Corners Wisconsin.

Wisconsin Scholarship: Mrs. Alfred J. Kieck-hefer, 1250 W. Dean Road, Milwaukee 11

Year Book and Awards: Mrs. H. G Harries, R. 1, Box 31A, Hales Corners, Wisconsin

PRESIDENT'S MESSAGE

Dear Members:

In order to accomplish things that are worth-while in our Federation, good team work is essential and ours is a fine team. Let me introduce them:

Mrs. Chaffin, Ripon, urges us to grow at least one unusual plant in our gardens, study its habits and share our observations thus advancing Horticulture.

Mrs. Flanders, Portage, is helping to organize new clubs and federate others, also get all clubs into organized districts. A nice crop of "baby clubs" have taken out Membership.

Mrs. Roehrborn, Sheboygan, has started a new club in her town while she is waiting for History to make itself.

Mrs. George Portman, Wausau, has every detail completed for as fine a judging School as will be held in the U. S. this year. As patron checks pile up Mrs. W. Norman FitzGerald, 8590 N. Green Bay Road, Milwaukee 9, who is in charge of tickets sales for Mrs. Portman, is very busy receiving checks, sending out tickets and writing more letters. Of course all 3,300 of you have not received letters (350 have been sent out) but don't let that keep you from sending Mrs. FitzGerald a check for \$5.00 if you would like to be a patron. We shall stop at 100 so please hurry. course if you cannot be a patron and take in all of the lectures you can

buy one single for \$1.75 and two for \$3.00. If you are a patron and find vou can't go, please let someone else enjoy this great opportunity on your ticket.

Mrs. House, Baraboo, has sent a fine letter to Junior Garden Club chairmen. It should inspire them to teach our children the art of gardening and interest them in a serious study of horticulture.

Mrs. Biebler, Milwaukee, is not going to let you take a happy breath until you have "put over" her enthusiastic ideas for Conservation edu-Speaking of Conservation, cation. don't make Mrs. Kieckhefer, Milwaukee, have to beg for Scholarship money.

Miss Lautenbach, Plymouth, has much information for you on Bird lore, bird stationary, bird houses.

If you let Mrs. Harries, Hales Corners, know of important projects and achievements she will let you know to whom Awards are available. Also send Yearbooks to her.

Mrs. Spence, Williams Bay, is standing by with suggestions for your next Programs while Mrs. Schneider, Hales Corners, is thinking of ways to put Wisconsin on the map in Roadside affairs and Mrs. Kallies, Manitowoc, is thinking "who will be our officers for next year." Hammersmith, Milwaukee, will see that all will be done according to Hoyle or, rather, Roberts.

Mrs. Kasdorf, Baraboo, will be

ready to audit our books when the right time comes. Mrs. Wyatt, also of Baraboo, takes our dues and pays our bills. She is the one on whose shoulders has fallen the task of assembling names for the directory.

Dr. Norem, Oshkosh, is ready to give you advice and help with your Tours.

Mrs. Kulow, Waukesha, a double duty officer, will help you immeasurably with your Flower Shows if you need and wish her help. On her fell the big task of cutting the stencils for the directory. Many tasks go to Mrs. Kulow and all are ably handled

Mrs. Marquardt, Hales Corners, another double duty person, beside being a most efficient secretary sees that our federation will have Publicity.

Mrs. Martin, Edgerton, first vice president is not only getting the convention under way but is also serving as our "balance wheel." With her federation experience, her clear thinking and her splendid but exacting judgment she quickly "straightens us out."

Lastly, by scanning these eight pages, you can easily see the hours of work Mrs. Rundell, Madison, is doing for us month after month.

These are by no means the only members of our organization who are working. Ours is a fine team.

> Most sincerely, Gretchen Fiebrantz, President.

Why We Grow Annuals

B. H. Paul, Madison



We began growing annuals sixteen years ago, when our place was new and undeveloped. We were not ready to decide permanent location for flower beds, borders, etc. on a comparatively large working space, so for quick results and flexibility from year to year, we decided to grow annuals. Oh, yes we grow perennials, many of them, but as any gardener knows, the period of blooming once over, you must wait another year for color in that particular spot. So we have worked out a scheme whereby some annuals are among the perennials and a few perennials are among a great many annuals. After we were well started on our plantings. the results were satisfactory and the work no more difficult than with perenials that we continued with this plan for several years.

We have now worked out our own methods which entail a minimum of work, well scheduled, with enough flexibility however to "fit in" with our uncertain spring weather. Our plan calls for about 3,000 plants which are started in flats and transplanted to beds and borders. These include petunias, mostly giant varieties of zinnias, and marigolds for the larger beds and borders, with a few salvia mixed in for late fall; in addition to long lines of Blue Boy (deep blue all double bachelor button or corn flower); planned to blend with pale tints or white; nasturtiums, zinnias in orange and yellow shades are chosen to blend with the gold and darker nasturtiums which flower just after the poppies. In any re-planting or placing of annuals near perennials consider the color motif first; pastels, pink or rose never near red, and use white or pale shades for outline. Other annuals include the old fashioned bush balsam, salpiglossis, scabiosa, annual phlox and rows and rows of Cosmos, beds of all white, and others of mixed white and pink and rose shading to a deep red. One row of cosmos may screen the vegetable garden, another may be along a wire fence while a solid bed of white flanks the evergreens south of the porch; surprisingly, this flower often lasts until after the first light frosts.

Now of course the first question our summer visitors ask is — "How do you do it?"

The answer is — "Once you get started and assembled, it is like pre-



cision work on the assembly line in an automobile factory, — dig, dab, — punch."

Have your kneeling pad or, as is prefered in our family, an old piece of burlap folded so that it can be used as a cushion or pad; it can be dragged along as needed making it more adaptable for different motions and positions.

To start from the beginning —

1. Select seeds that will give you what you want in color, size and adaptability to your conditions. Do not buy just seeds. Select varieties of known color, — not color mixtures; for instance do not buy a package of mixed zinnias, — buy a package of red zinnias, a package of pink zinnias, of rose zinnias, then mix the colors yourself, if you want mixtures.

2. Give plants an early start. It is easier to grow plants in flats and transplant them after two or three inches high than to sow seeds in open beds and thin and weed them during their first few weeks of growth. Transplants can be cultivated with a hoe. It is much easier (on the back) than weeding by hand as is necessary when the seeds are sown in the ground.

We have a demountable home-designed and constructed cold frame, with dimensions of approximately 3 by 16 feet. This holds about twenty seed flats (somewhat smaller than the standard green house flat). In these flats we have been able to

grow more seedlings than we can use (the neighbors appreciate the left overs.) The cold frame has plain board sides, held in place by stakes The cover is of fibre glass, in two frames 3 by 8 feet each. Extra heat is supplied by 10 electric light bulbs onnected to the house lighting current. The cold frame is assembled south of the house during the first week of April.

The seeds are sown not too thickly as the seedlings must remain in these flas until planted in the garden beds. Here is a shortcut in comparison with transplants puchased from florists which are transplanted from the seed flats to other flats before being sold.

Sow seeds in good soil containing enough humus so that it absorbs water readily and does not become hard. Cover the soil surface with paper toweling until the seed geminates. Water daily and keep the temperature within reasonable limits i. e., between 50 and 90 degrees F. On sunny days the coer must be opened to cool it off and at night the lights are turned on and if very cold the whole frame covered with blankets. After 4 to 6 weeks remove the flats from the frame and hold them in any partly sheltered place until the seedlings are transplanted.

Of course transplanting is the real job. We put some plants in rather large beds triangular in shape, 20 ft. or more on a side. We prepare the soil for the whole bed thoroughly and smooth it carefully before transplanting begins.

Transplanting proceeds rapidly; sometimes at the rate of 100 plants an hour. Hence our own system, "dig — dab — punch" moves



along quite rapidly in a quick and untiring rhythm. We make no care-

(Continued on Page 236 Column 1)

The Landscape Architect and the Client

Henry F. Leweling, Landscape Architect

When a new home or another type of a building is to be constructed, the property owner should consult the architect and the landscape architect together in order to have a harmonious relationship between the building and the grounds upon which it will stand. The architect will design a building to meet the needs and the desire of the client. The landscape architect will design the planting of the grounds to create a harmonious setting for the building and to extend the livable area to the outdoors.

The landscape architect must take into consideration the artistic arrangement and its practical application to the home grounds. Just arranging bushes is not landscape architecture. Any planting of the grounds definitely involves precise planning to establish the desired plantings. In selection of material, a four seasonal interest must be taken into account, that of spring, summer, fall and winter. In the four seasonal interest, the naturalistic designer very frequently neglects the winter months and the architecural structures. It is the winter which offers the greatest challenge in the planning because the garden and the outdoors is stripped to its bare skeleton. The outdoor living area does not need to become less attractive but the vegetative structural patterns, bark color, branching and bud habits of the plants create interesting combinations and shadows to be supplemented by architectual garden fea-

Usually the owners of the properties can be classified into four groups. The first group realizes the need for a competent landscape architect to give them information in the artistic and technical phases of laying out home grounds. The second group has never heard of the services offered by a landscape architect or feel that nothing can be gained by engaging his services. The third group feels that even without the technical background they are competent enough to undertake, unaided, this rather technical work. This group may be well read in the garden magazine literature and a few are able to accomplish much. However, the saying, "A little knowledge is a dangerous thing" may be applicable to this group. The fourth group appreciates landscape architecture but feel that they cannot afford the services of a landscape architect yet they truly need the help of one. The quick study consultation will help this group immensely.

In the selection of a landscape architect great care must be practiced. It is probably best to select a man who works conscientiously and who is up to date in his design work. Men in private practice or working for a landscape architectural office are usually competent and best equipped to handle landscape problems.

The landscape architect is entrusted with a very important home development as well as with spending a specified sum of your money. Therefore, he should have a thorough academic training and practical experience. He should be well trained in the three great fields of landscape architecture:

- 1. design,
- 2. engineering,
- plant material.

The training in the above three fields of landscape architecture is the reason why a florist or a nurseryman, in general, is not an ideal choice to plan and organize your home grounds. The landscaping architect is not interested in selling plants but to organize and design your outdoors to provide greater joy of living on your property. He endeavors to express the client's personality through his skill in the art of landscape architecture. This in itself and even under the most ideal conditions is not easy to achieve.

Landscape architecture is a profession, however, its members are not licensed in Wisconsin as are architects. The selection of your landscape architect should be made on the following basis:

- through personal contact or through the assistance of a friend,
- upon the basis of the landscape architect's recent work, especially in modern and contemporary design,
- 3. by writing to a recognized academic institution in landscape

architecture to obtain names of those who practice near your locality or by writing to a landscape architectural society such as the American Society of Landscape Architects or the Wisconsin Society of Landscape Architects.

An agreement should be reached early in the talks with a landscape architect as to how much is to be spent and whether the whole or part of the grounds is to be developed. The talks should cover long term planning (over a period of years), future consultation or quick studies for those who cannot afford complete grounds development at one time but desire technical advice upon the spot.

The landscape architect should be called in before the house is placed on the grounds to avoid costly mistakes. Especially should he be on the grounds when the grading is being done. He will work cooperatively and harmoniously with the architect on the placement of the building for the most desirable effects for light exposure, privacy and in order to take advantage of the natural topographic features.

The landscape architect usually charges a flat fee for a design of a small place. It would not be feasible to work on a percentage basis on a small place. Supervision services may or may not be included in the flat fee basis. Under normal conditions, the client receives the discount allowed the landscape architect on all plant material and structural material.

The plan should be thoroughly discussed while still in the formative stage. Later changes tend to disorganize good planning and cause the enthusiasm to be lost. The plans should include:

- 1. grading,
- 2. construction plans of any garden features,
- 3. planting plans and a planting list on the same sheet,
- 4. brief description for maintenance and care of the place.

The landscape architect usually executes his own plans, hires the labor and supervises the installations. The plan is the result of the expressed ideas of the client as interpreted and artistically planned by the landscape architect.

From One Gardener to Another

Genevieve C. Dakin

As I review my garden plans for spring my mind goes back to the garden I laid out on paper and executed a dozen years ago.

A wild garden called for flowering trees, wild crab, plum and shadbush with such shrubs as viburnum dencanum and blue-berried viburnum dentatum, gray dogwood for a background for wild roses with Jersey tea as a ground cover. Unfortunately March sprays failed to rout aphis and leafcurl on the highbush cranberry. Colloidal sulphur applied on both junipers and crabs at weekly intervals as prescribed did not prevent the leaves of crabs from showing vellow spots that reminded me of a leopard's coat. When the dogwoods and roses seemed bent on taking over the whole area their color effect lost its appeal. Eventually two Viburnum dentatums in the background with shadbushes and wild plum were left. White birch and native evergreens with these make the pseudo-woodland carpeted with wild

All the evergreen descendents of red cedar including Glauca and Connarti, nine in all, were chopped down. Cedar rust was too trying to combat with nearby apple hosts. Luckily our prostrate junipers were hybrids — not the native Waukegan. Deciduous trees and shrubs with spruces were substituted for the loved junipers.

When we made the rock garden it seemed to me that the huge stones stood out like a dozen or more sore thumbs as one looked across the yard toward the raised garden. The stones looked hot for a summer picture. To overcome this undesirable impression we planted a screen of dwarf maples, contoneasters and deutzias a few feet behind the prostrate evergreens set on the crest of the dry wall. A juniper Sabina flanked each side of the steps and back of each was a pyramidal juniper to accent the axis of the whole garden and define the entrance to the upper wild and rock gardens.

As the years went by the stones became less noticeable for low evergreens and shrubs with colonies of low-growing perennials furnished plenty of restful, cool green and growing plants softened the rock margins. The maples became greedy, sapping too much from the soil.

growing so fast it is hard to keep new growth under control with clippers. They were prolific seed distributors. The pyramidal junipers became infected with rust and deutzias were big enough to divide and be employed to face down taller shrubs in the border. So out they all came. The area where nothing would grow under the Ginnala maples is now filled with sun-loving rock plants, converting it into what I call my alpine meadow.

The Savin junipers on each side of the steps were merely trimmed until last summer. Ideal when planted, they had grown rank and leggy. Sunburning last winter hit them badly in their exposed position. July proved an opportune time to take them out and afford me a chance to create a new planting. It is surprising how much broader the steps appear and how much invitation the more open entrance to the terrace gardens extends.

New plantings each side of the steps are clumps of arabis procurrens with grape hyacinths in front of narcissus Roxane and the White polvanthus roses which border the area. Masses of double flowering arabis alpina, delicate alyssum Silver Queen, dianthus Allwoodii in rose and pink, aubrietia for its lavender and violet, iris tectorum in blue and white with campanulas in variety promise pastel pictures for spring and summer. I must remember to add chrysanthemum morifolium to cascade down in autumn. In the shady curve of the wall to the right of the pool, pink primrose Springtime with small ferns and saxifrage caespitosa fill crevices. On the ground at the base, crimson primroses, white epimediums and low veronicas complete the planting. Forgetmenots, while inclined to be ubiquitous, are welcome additions to the color scheme.

As I glance out of the kitchen window while I am doing dishes each day, I find myself studying the garden with an eye to thinning aging material. I can assure you nothing but trimming will be used on that Andorra juniper which lies trim and quite prostrate at two paths' intersection. It has distinction in its decorative value for the winter garden.

Its purplish brown cast is pleasing to the eye. When it is trimmed in late summer I invariably find several branches which have rooted and may be easily removed to develop into good specimens in a few years. A Meyer's juniper, burned last winter, has failed to come back and adds nothing to the picture. No one will miss it if it comes out in spring.

Have you raised shrubs or trees from seed? Some of you are successful with cuttings. A friend has a low hedge made from cuttings of Tom Thumb Arborvitae. Blue honeysuckle, lonicera korolkowi, came readily from seed. My special joy and pride is my Sargent cherry.

Another enjoyable venture has been raising evergreen hedges. Buying at the hundred rate in small sizes evergreen hedges are possible for a moderate expenditure. They give year round beauty. Capitata yew eighteen inches tall made the hedge which separates fifty feet of the perennial border from the vegetable patch. A path divides the hedge made with thirty plants. A row of spindly arborvitae varying from six to ten inches in height was set out along the service walk at the side of the garage. It was but a few years until we had a waist-high hedge. My latest project is a hemlock hedge twenty feet long to make a background for bulbs and peonies and to tie into the group of hemlocks in the adjacent border. Perhaps I may succeed in discouraging those delivery boys and garbage collectors who have no consideration for an out-of-bloom border if the cut-a-cross urge overtakes them.

I wonder if other women like me find a ready appeal in gardening in that in it we may assert that privilege of womankind, the world over, to change the mind. It is quite possible that my plants wonder if I really know my own mind when with spade or trowel I dislodge them from comfortable homes to plant them in new locations. You see they can't realize how much better they may do or look in the new surroundings! Someone facetiously remarked if he were a plant in my garden he would never know at night just where he might be the next morning.

Yes, I move my plants, to improve on soil environment, to give them more Sun or Shade, to try some new combination or to work for better effects in line and color.

SEARCH FOR THE

Out-Of-The-Ordinary Plant

Track down that "out-of-the-ordinary" plant. True, you have selected a new plant to make your garden more lovely, but go further — go plant hunting! Find an out-of-ordinary gem to give added distinction and interest. You will find it an exciting and interesting sport as well as a valuable aid to your plant knowledge.

The best sources are: the specialists' catalogues — those who are primarily in the game for the fun of it; botanical gardens where one can find plants suitable for home owners as well as the "hard-to-grow" varieties; magazine articles naming new things; and local nurseries. Tabulate and write your experiences for an article in our magazine.

I hope many of you will be qualified to win the National Council Purple Ribbon for Horticultural Achievement. The rule governing this award reads: "The Specified requirement for the purple ribbon for Horticultural Achievement is for CRE-ATIVE horticultural achievement, which makes a PERMANENT contribution to horticulture. In the case of a development of a new variety it is requested that a statement from the respective National Plant Society be submitted with the application." Space does not permit its explanation but if you are interested, write to me.

Here are some helpful gardening suggestions:

Tender young plants and chilly nights don't mix well in the garden. Newspapers spread over the rows in late afternoon and left until morning, often end their disagreement if the outlook is frosty. (H. G.)

When new growth in the perennial borders show enough for you to tell what is where, scratch in a little 50-50 mixture of bonemeal and pulverized manure around each clump. (H. G.)

To make my garden a place of floral beauty and a source of health-giving food I alternate with a row or two of vegetables and a row of flowers throughout the entire garden. I rotate them from year to year. (Mrs. H. C.)

Divide Chrysanthemums and Japanese anemonies in May. (Mrs. C. F.)

Time to prune red twig dogwoods, The new growth gives the finest color. (Mrs. C. F.)

To grow large sprays of Lily of the Valley, feed in May with a weak solution of liquid sheep manure. Repeat twice at ten day intervals. (Mrs. C. F.)

Mrs. Herbert Chaffin Horticulture Chairman

WHY WE GROW ANNUALS - Continued

ful measurements, marking the distances by eye. We use a wheel hoe and mark two rows at a time along the edge of the bed. This editorial "we" refers to the "man of the house" when the work concerns transplanting; when we come to cutting, and pruning runners, etc. later in the garden year, the "lady of the house" is included in the "we". We set the plants in these two rows and then make two more. We prefer a small trowel or frequently a putty knife for this work. We take the plants from the flats by a handful and carefully separate each fragile seedling as the planting proceeds. We take care to firm the roots in and leave a watering cup of soil around each plant; then puddle all plants by watering; preferably from a gentle flow of water from the garden hose immediately after setting. A cloudy day in the late afternoon or early evening is the best time to transplant.

Do not allow the plants to wilt. If they are watered thoroughly and survive the first night, they will succeedprovided subsequent watering is not neglected. We use the same technique for all annuals we transplant. Well roughly, that is the "how" of it.

Early cultivation of the plants is easy; use a hand or wheel hoe, and water until July; then before the plants branch too much, mulch the beds completely with leaves, collected the previous autumn. Spread these between the plants to keep down weeds all summer and to conserve soil moisture. Give them some extra

(Continued On Page 237 Col, 1)

LANDSCAPE GOSSIP



April is generally awaited by all who miss the activity of the outdoor living area during the winter months. We begin to hesitantly lift the mulches and hope that the hard freezing weather will not have done too much damage. It is a month when restraint is in order but the urge to see what is coming up is too powerful to resist.

In protected areas, the Crocuses (Croci) are blooming and the Narcissuses (Narcissi) are braving the occasional frigid blasts that retreating Old Man Winter still blows at us.

The planning of what we will do for spring planting is intensified. During the winter months the neighborhood drugstore magazine shelves caught our eye. The pictures and ideas in the garden magazines all seemed wonderful.

One year book, House Beautiful's "Practical Gardener" for 1949 was about the best. The articles by John and Carol Grant, Thomas Church, William Lanier Hunt and many others under the able editorship of Elizabeth Gorden turned out this excellent yearbook. Particularly are the outdoor living areas well designed. "The Home Garden Guide for 1949" was published by the American Garden Guild, Inc. publishers of the Home Garden Magazine. It deals chiefly with plant material. It is a newcomer on the market and I hope no one has missed it. The excellent hand of the editorial staff is self-evident in the "Home Garden Guide for 1949." The "Gardening Guide" by Better Homes and Gardens is a definite improvement over the recent issues but its articles follow the form of preceeding yearbooks. The Popular Mechanics "Garden Book'' does not stand up in comparison with the other garden yearbooks but it has some ideas on garden furniture and bird houses that might appeal to the jack-knife carpenter. — (Con't, page 238)

AN APOLOGY — We are sorry to cheat our readers this month, of Dagny Borge's reviews. Next month there will be more room and Miss Borge, a librarian in the Wisconsin College of Agriculture, with much horticultural reading matter at her finger tips, will be back. — A. P. Rundell, Editor.

An Open Letter

Dear Mrs. Rundell:

May I take a few inches of what I know is precious space on these pages to talk about the scholarship? Oh, no, I don't mean our Fox River Valley scholarship. That doesn't need to be talked about (except with pride.) Because with only one or two exceptions all the clubs in the district are solidly behind it. But I wonder if we — all of us in the federation — are doing as well for the federation scholarship.

It is our plan in F. R. V. for each club to budget itself five dollars for scholarships. Four dollars go to our own district, one to the Federation. If each garden club gives one dollar, our Federation scholarship will be a nice scholarship. But clubs contributing just to one scholarship won't be satisfied with that. They will wish to contribute two, three, several dollars. Then our Federation scholarship becomes not just nice but very fine.

Let's not make our state chairman write to us coaxing for our money. How about giving her a scholarship check shower this month? I'm sure she will be most surprised and highly delighted. So get ready, Mrs. Kieckhefer. The check from my club goes into the mail today.

Sincerely, Marion B. Jenkins

(Continued From Page 236) watering if necessary; for the layer of leaves will intercept light rainfall, leaving little to penetrate the soil; but on the whole the leaves will be an advantage, for they can be spaded in later to increase the humus content of the soil.

So much for the planting, but — Oh! What a riot of color and delicate fragrance to enjoy from July until October. Many annuals survive the early frosts, cosmos, asters, marigolds, sometimes here and there, the lelicate snow storm petunia. What joy to survey the garden on a "nippy" fall morning, and discover some of your favorite annuals standing erect with their blossoms proclaiming that summer lingers on.

Highlights

Again we suggest that you borrow your president's March issue and read, on page 34, rules for entry in the Nation-Wide Flower Arrangement Contest open to all members of the National Council of State Garden Clubs, Inc. On the day you feel you have created THE masterpiece, photograph it (in black and white) and mail it to the Flower Arrangement Contest at National Headquarters. Complete instructions have already appeared in national Gardener but are printed again in the March issue. Entries are accepted up to May 1st, only.

Three new Special Achievement Awards were created by National Council at its last annual meeting at Lexington, May 1948, to be eligible for award in 1949

 A Bronze Seal.
 A Gold Seal. Requirements for these awards are published in the National Gardener for March-April.

A Gold Ribbon will be awarded the best State Flower Show conducted by a member federation. This must be a Standard flower show with not less than ten garden clubs exhibiting.

After 22 successful Chicago Flower Shows, the Garden Club of Illinois announces that 1949 plans for a large show must be set aside due to lack of a suitable hall.

A second Garden Week in Illinois, however, will permit flower lovers to visit beautiful gardens in suburban Chicago and farm estates in northern Illinois during the week of May 15 through May 22.

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A Plea for the Bluebirds

Won't each one of you good readers living in country homes or farm places where bluebirds can be attracted, put up one or two houses for them this spring. And many of you living in towns and cities have friends or relatives in the country who would be glad to have you put up a bluebird house on their property. Two houses in a locality are better than one, because many times nesting is started and eggs laid for the second brood before the young of the first brood are ready to leave the nest.

Bluebirds are cavity or hole-nesting birds, and due to our present day method of cutting all dead trees and removing dead hollow limbs they are unable to find suitable nesting sites. Also with competition by sparrows and starlings taking over all possible nesting holes, the bluebirds are carrying on a losing fight for existance.

These valuable, peace-loving birds need all the encouragement we can give them. Their mellow flute-like song of "tur-wee" or "pur-i-ty", is delightful to hear. Bluebirds are truly a symbol of happiness and not one word can be said to blemish their good character.

ANNOUNCEMENT!

The Berlin Garden Clubs will be hostessess to the Fox River Valley District Wednesday, May 4th in Berlin.

Lecture on Flower Arranging by Mrs. Tomoko Yamamoto, April 22, 2:15 P. M., Milwaukee Art Institute.

Wild Flower Tour of the Wisconsin University Arboretum, to be conducted by Prof. John T. Curtis, Associate Professor of Botany in the University, will be held Saturday afternoon, May 14, for Garden Clubs in the Madison District. Clubs will gather at the west entrance (as last year) at 1:00 o'clock. Mr. Wm. E. Sieker, Madison District Tour Chairman will be in charge. Admission fee fifty cents.

If spring is late and Prof. Curtis finds that the tour should be postponed a week Presidents of clubs will be notified. They love the open spaces, pastures, orchards, gardens and old fence rows, where they feed on many harmful insects such as: cutworms, army worms, tent caterpillers, grasshoppers, beetles, etc.

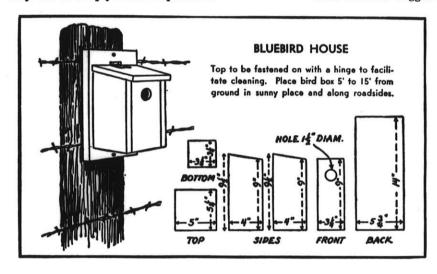
You have probably read about Mr. K. T. E. Musselman, Quincy, Adams Co., Illinois who a few years ago set up 102 houses along 43 miles of country road and later found 88 of them occupied by bluebirds.

By following the diagram given they can be simply made of pieces of scrap or box lumber. If painted, they should be of a dark neutral shade.

Place on a fence post in an open sunny area, facing south or southeast. If not over 4 or 5 feet from the ground, sparrows and starlings may not bother them.

So let's see how many bluebirds we can coax to nest in Wisconsin this year. They return in late March and early April so get the houses up as soon as possible. I would love to hear from any of you next fall about what luck you have had.

Mrs. Howard Higgins



Landscape Gossip — (Continued from Page 236)

The Wyoming Nurseries, Cincinnati, Ohio have patented a new type of Star Magnolia. The plant will be available for spring 1950. It is said to be an intermediate form between the Star Magnolia MAG-NOLIA STELLATA, and the Saucer Magnolia, MAGNOLIA SOULANGE-ana. The petals are broader than the Star Magnolia.

The flower is said to be larger and double with a deep rose-pink color on the outer surface of the petals and a warm white suffused with a delicate shade of pink at the tips on the inner surface. This is indeed an improvement over the ribbon-like petals and chalky white flowers of the Star Magnolia. According to the introducer, Carl E. Kern Jr., it is supposed to be hardy where the type grows. It would be interesting to obtain a specimen of this introduction and find out from experience if all the introductory literature is true and if it is adaptable to our conditions.

A trip to the Morten's Arboretum at Lisle, Illinois is awaited with great anticipation. One always finds the trip worth while and leaves knowing that something interesting has been observed. Especially should the trip be timed when the Anise Magnolia, MAGNOLIA SALICIFOLIA, is in bloom.

The list of used and new books sent out by C. W. Wood of Copemish, Michigan is always welcomed. In reading the lists, one desires to order more than the purse permits. It is a worthwhile venture to be placed on the mailing list, if one desires to collect a small library on garden books.

Henry F. Leweling

If seeds in boxes indoors are planted sparsely, much tedous thinning of the plants later on will be avoided.

Bird houses should be cleaned and new ones put up so that they will be ready when the birds come.

— The Gardener's Almanac.



The Wisconsin Society for Ornithology will hold a convention with the Wilson Ornithological Club (a national club) in Madison, April 21-24, with head-quarters in the

University of Wisconsin Memorial Union Building. The four-day convention will get under way Thursday morning at 10:30 and end with field trips on Sunday. All meetings, many of which will be illustrated with movies, will be held in the Union Theatre. The entire program Friday evening and Saturday afternoon will be devoted to bird movies. The annual banquet will be held in Great Hall of the Union at 6.30 P. M., with Dr. O. S. Pettingill as chief speaker. All sessions will be free and open to the public. Dinner tickets and room reservations may be secured from various committees or by writing to Dr. Geo. A. Hall. 1840 Summit Ave., Madison, Wis.

A series of bird paintings by O. J. Gromme, as planned for the forthcoming book on Wisconsin Birds by The Milwaukee Public Museum, will be on exhibit.

Marinette Garden Club 1949 Pres. — Rev. F. C. H. Wild, Church St., Marinette.

Vice Pres. — Mrs. N. S. Nelson, Ogden St., Marinette.

Sec.-Treas. — Mrs. Francis Comyne, 1813 Emma St., Menominee, Michigan.

Mequon Garden Club

Readers please note that the "Mequon-Thiensville" Garden Club should be simply "Mequon" Garden Club. But they have started a new club over at Thiensville and call it the Thiensville Rural Garden Club.

Sturgeon Bay

Mrs. Ralph Jenquin, Secy., has resigned and Mrs. Elmer Bohn will take over that office for the renainder of the year.

Sum-Mer-Del Garden Club Treas. — Mrs. W. L. McCrory, Route 1, Pewaukee, Wisconsin.

DISTRICT MAIL BOX

Far from the beaten path are two bits of news that have found their way to this department.

The Kenosha County Garden Club has a "hat" program scheduled for May 24th. A Milwaukee flower stylist, Mrs. Edna M Nichols, will present a Hat Show, doing "things with fresh flowers. The program has advance notices of "beautiful, entertaining and instructive." It's an idea!

A full page in the Cambridge News was given to the Cambridge Garden Club for a review of the year's activities. The history was an original poem written by Esther Post of their club. This is certainly a sparkling touch to an otherwise prosaic bit of business. Again, an idea!

The spring projects were reviewed in this manner:

We voted to decorate

Store windows with flowers Providing members would

Bring them in showers It was quite a task

To make each display The ones who served

Worked many a day.

Conservation continues to be the important part of program-planning of the individual clubs. The Seymour Garden Club has a May program scheduled which may prove inspirational to other groups. Seeking to create a gardening interest among their young people with the Junior Gardener movement in mind, they are cooperating with the Girl Scout movement in that groups's nature study. The May program is a joint meeting for the study of wildflowers. In the promotion of Conservation

Elm Grove Garden Club

The following list of officers for this year may be inserted in the directory in place of the previous list which was incorrect:

President Mrs. C. J. Bensing Box 101.

Vice President — Mrs. Clarence Sievert, Box 217.

Corresponding Sec. — Mrs. Theo. Seith, Box 456. Recording Sec. — Mrs. Eugene

Muensberg, Box 189

Treasurer — Mrs. H. J. Schroeder,
Box 502.

All above addresses are Elm Grove, Wisconsin.

study in the schools don't neglect obtaining the stamps issued by the National Wildlife Federation, Washington, D. C. Clubs too, can find many uses for them. The Kenosha County Garden Club bulletin has its March issue decorated with such a stamp. They are effective library or garden center displays. A store window given over to a conservation display could certainly use them. The stamps, which come in various sizes, are levely artistic interpretations of the various sides of our national wildlife. They are definitely worth some study.

The Milwaukee District Garden Club bulletin lists some program suggestions which should be noted. In connection with conservation they suggest the clubs contact their county Soil Conservationist. "Write to the Federal Soil Conservation Service, U. S. Department of Agriculture for the name of the worker in your county." is their suggestion. Usually talks and slides are free. Two speakers are listed:

Mrs. William A. Bowers, Field Secretary, Milwaukee Downer College, Milwaukee 11. "Tulips and Early Flowering Bulbs" is her topic.

Mrs. Gerald Donahue, 134 South Cuyler Ave., Oak Park, Ill. The Milwaukee bulletin describes her subject as "Iris and Chrysanthemums" and adds that she has some excellent slides.

A reminder which appears on the Kenosha bulletin might well be extended to other groups. When buying bulbs, seeds and plants this spring bear in mind what you can exhibit at the county fairs in the summer and fall. It is another fine way to promote individual gardening efforts.

The planting of trees and shrubs may be started as soon as the ground can be worked.

- The Gardener's Almanac.

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J. H. Phillips, Manager

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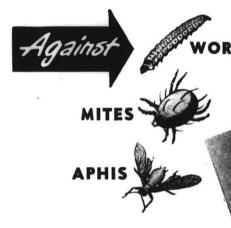
Wisconsin Corticulture

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May, 1949



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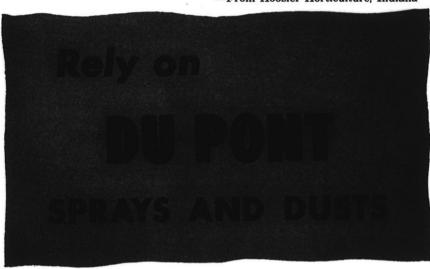
TEMPERATURE TOLERANCE OF FRUIT

According to the U. S. Weather Bureau fruits will endure for 30 minutes or less the temperatures listed.

	Stage of Development			
Bud	s Closed but	:	Small Green	
Sho	wing Color	Full Bloom	Fruit	
D	egrees F.	Degrees F.	Degrees F.	
Apples	. 25	28	29	
Cherries	28	28	30	
Pears	25	28	30	
Plums	25	28	30	
Grapes	. 30	31	31	

For equal temperatures the amount of damage to fruit or plants will be greater on damp nights than on dry nights.

-From Hoosier Horticulture, Indiana



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The Fight Against Codling Moth



The codling moth is the most serious insect pest of apples. Timely spraying is most important to fully control the moth and at the same time reduce the cost to a minimum. Economy is the watch word in orcharding these days.

When First Brood Moths Appear

Dr. C. L. Fluke, Dept. of Entomology, University of Wisconsin, advises that many years of study of the emergence of codling moth in Wisconsin indicates that, depending upon the weather, we may expect the first moths to emerge or start to appear about 2 weeks after petal fall. It may be as late as 3 or 4 weeks after petal fall if there is considerable cool weather following blossoming. In case of very warm weather it may be as early as 10 days after petal fall.

It is this variation in the time of emergence caused by the weather which makes the **bait trap** so important for accurate and economical control of codling moths.

The peak flight of moths is usually from 1 week to 10 days after the first moths appear.

The Second Brood Appearance

Just about 55 to 60 days after the first brood appearance the second brood moths will begin to appear. If the weather is hot during those intervening days, they may begin to emerge a little earlier—in about 50 days. If the weather is somewhat cool, it may be a little later—as late as 65 days after the first brood.

Dr. Fluke says that years of ob-

servation have shown that if the peak of the first brood comes, for example on June 25, then the peak for the second brood will be just about 2 months

later-August 20 to 25.

If the weather is extremely warm during the regular flight season when the moths are emerging in either the first or second brood, they emerge rapidly and we may expect large numbers of moths flying.

Spray With DDT

Dr. Fluke recommends using DDT, 2 lbs. of 50% wettable powder per 100 gal. of water, for codling moth control, spraying in the regular 10 day after petal fall period and again at the peak of emergence.

Second Brood Spray

To control the second brood moths, spray with DDT at any peak of the flight. The DDT will kill the adult moths and also the larvae and is therefore very effective. To avoid spray residue on the picked fruit do not spray for 30 days before the harvest.

Use Bait Traps

This is the formula recommended for codling moth bait traps by Dr. C. L. Fluke.

- 2 teacups of blackstrap molasses and
- 2 teacups of either honey or dimalt syrup
- ½ cake of yeast
- 5 gallons of water

Mix in a jar. Use wide mouth pans such as stew pans for the traps. Fill Adult codling moth. Our most important insect pest of apples. Color mottled grey with fine silvery lines across wing. Wing tips darker. About %" long. Wing spread about 1 inch. First appearance about 2 weeks after petal fall. Second brood appearance begins 55 to 60 days later.

To determine appearance of moths, Dr. C. L. Fluke recommends use of bait traps. When they appear in large numbers, or reach a "peak," spray with DDT to kill moths,



about half full and hang them as high in the tree as possible. Use a rope and pulley in order to lower the pans for examination each morning. On hot days the bait should be changed once each week and again after heavy rains. If you spray with lime sulphur remove the pans while spraying or clean out the pans immediately afterwards and refill them with new solution.

A man writes to ask who runs the average American home. Evidently, the gentleman has no teen age children.—Burlington Standard Democrat.

Orchard Irrigation In Door County---1948

By Moulton B. Goff

A lateral irrigation line with two overtree sprinklers in the M. B. Goff Orchard at Sturgeon Bay, Wis.



Certainly every orchard owner in Wisconsin has thought about the application of water in a dry season. But there are so many unanswered questions surrounding an effort of this kind that it is easy to get a good argument on both sides of the issue at the mere mention of irrigation in humid regions. Many opinions are expressed.

Perhaps the first and most frequently asked question is: "Can you get your money back from an investment in pumps and piping?" We at the Goff Orchard answer this question emphatically "Yes." We feel that this year we were repaid for at least one-third of our plant investment, in addition, of course, to covering all operating charges.

Specific figures to comparative yields from irrigated and non-irrigated trees will be available when the Experiment Station data is evaluated. The Station is making a study of our operations with a view to making the findings available to the industry. We are much indebted to Professor J. G. Moore and his Station associates of soils, engineering and pathology for guidance in our project.

We try to answer questions often asked about irrigation.

DOESN'T COLD WELL WATER. DAMAGE YOUR TREES? Our answer to that is: Not so far as we can see. We're inclined to feel that slow application of water is not sufficiently upsetting to soil or air temperatures to cause much difference.

WILL IRRIGATED FRUIT KEEP AS WELL AS UNIRRIGATED? To that question we say, frankly: We don't know. There are probably so

many factors involved along with the additional supply of water that it is quite difficult to form definite conclusions until some rather extensive storage tests can be worked out.

WILL IRRIGATION I MPAIR COLOR? On that, one season's results are inconclusive. We lean to the opinion that there may be some color deficiency resulting from irrigation. But any positive statement is wholly premature.

DOESN'T WATERING BRING THE ROOTS CLOSE TO THE SUR-SO COMPLETELY FACE AND CHANGE'S THEIR SOIL RELA-TIONSHIP? Undoubtedly this is true where sufficient water is not applied at one time. But when at least two acre inches of water are applied at a setting the moisture soaks down into the soil a long way, so that unless the previous drying out process has been too prolonged the surface addition will join up with the underlying soil moisture layers so that continuous capillarity is maintained. In that case, the tree roots keep their normal relationship with the below-surface

HOW MUCH WATER SHOULD BE APPLIED AND HOW RAPIDLY SHOULD IT BE PUT ON? We feel, for our conditions, that it is wise to apply at least two acre inches at one setting. It not only has the benefit of not disurbing root relationships but likewise reduces the frequency of applications. Depending, of course, on the various soil types encountered, a heavy watering will allow ten-day to two-week intervals between applications and still promote vigorous

growth, even though there is no rainfall meanwhile.

DOES RAIN UPSET THE IRRI-GATION SCHEDULE? Our aim has been to have a two-inch application every ten days to two weeks. If rain supplements this schedule sufficiently, we can of course delay the application. However, most summer rains in a dry period have so much run-off and have such difficulty in penetrating the dry soil that the actual beneficial effect from the rain is often far less than supposed. One authority, who has quite a little experience in irrigating field crops, says: "Keep the water going through rain and sunshine, and never stop it." Subject, of course, to good common sense, this rule isn't a bad one to follow.

DOESN'T IRRIGATION INCREASE SCAB AND OTHER FUNGUS DISEASE? Time will give us an effective answer to this question. Until we have had sufficient exposure to develop sound conclusions, our opinion is that there is very little relationship. All we're trying to do in any event is to have a good rain every ten days or two weeks. All of the spray schedules we have been using envision at least this much moisture, so it would seem hardly probable that our irrigation practice will materially change disease conditions.

WHICH FRUIT RECEIVES THE MOST BENEFIT—APPLES OR CHERRIES? The answer to this is a seasonal matter. If, as sometimes happens, the dry spell comes vervearly in the season, then presumably cherries would receive great benefit because of their ripening. However, the reverse is more likely to be true.

In such cases the residual moisture in the soil after snow and spring rains have ceased, is often enough to carry the cherry crop through to a fairly successful harvest, even though little rain falls after the cherries are half grown. We do feel, at Goff Orchard, that irrigation has been very beneficial to the cherries, although with the exception of a block in sod culture we encountered no benefit to the fruit visible to the eye. The experience of growers in other sections of the country indicates that in an early fruit crop, like cherries, the gain to the trees themselves in vitality is more noticeable in a future crop yield than in the year in which irrigation is first commenced.

Regarding apples, there is no question at all in our minds about the great benefit. It is particularly noticeable with the earlier varieties since they come at the close of what is often the driest part of the summer. The benefit was so noticeable with us in the '48 season in Wealthies that the unirrigated areas were practically unmarketable, while the yield from the irrigated blocks was exceptional in size and quality. Tree condition, of course, paralleled the condition of the fruit and amply justified the efforts. The sod mulch was likewise greatly

improved in the irrigated areas. When it comes to later varieties for instance, including McIntosh, we feel that the irrigation benefits may be less pronounced. Even though the fruit size in the unirrigated crop is smaller, later rains have more time to benefit McIntosh than, for example, Duchess or Wealthy.

There is one gain in irrigating apples that would sometimes justify the investment in a plant even though but one or two waterings were given in a season. It is the kick that can be given the fruit just at the time that lack of moisture seems visibly to be slowing down fruit sizing. It is commonly recognized that fruit once checked never quite picks up again, regardless of later moisture.

Another observation is that the fruit on weaker branches, which in an ordinary dry season would be worthless, under irrigation came through this year in splendid condition.

WHAT ABOUT THE COSTS? Costs will vary considerably in different projects. The prime element is plant amortization charges. These vary entirely in proportion to the expense of the water supply, whether from wells or surface sources, the distance of distribution, and the original cost of the installation. Ten dollars

to fifteen per acre per year should probably cover these charges under current conditions. For operating costs, the figure is again variable, depending on the power available, the pumping head, the cost of labor. At 75 cents per hour for labor, and using gasoline for fuel, operating costs may run as high as \$4 and \$5 per acre per application.

HOW IS THE WATER DISTRIBUTED? At Goff Orchard we use portable lightweight tubing with rotating overhead sprinklers. The tubing is picked up and moved with each application so that we are watering two or threes areas each day. Our schedule calls for supplying about half an inch per hour, making four hours or more per setting.

WHY DO YOU SRINKLE OVER-HEAD? WOULDN'T SURFACE AP-PLICATIONS BE BETTER? The decision is primarily based on saving in costs. By using overhead sprinklers our lines of pipe can be laid sixty feet apart. But if we were to us low down sprinklers a line would have to be laid for every row. The additional tubing and labor would be substantial. Surface flooding in most midwest sections is impractical. In sod orchards, it would be hopeless.

(To Be Continued)

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WAUKESHA, WISCONSIN

Cultivation vs Mulching In the Orchard

By Clarence Baker In The Rural New Yorker

Before the importance of nitrogen fertilizers was understood, it was noticed that trees growing in sodded areas were weak and unproductive, and that cultivating the soil tended to make the trees grow more vigorously and produce larger crops. Experiments in many parts of the country confirmed these observations. This started a wave of cultivation in both apple and stone fruit planting that swept across the country, bringing with it improved tree growth and more abundant crops of fruit. The more frequent and thorough the cultivation, the better the results appeared to be. So complete was this shift to cultivation that in many localities an orchardist who permitted even a few weeds to develop was considered to be an unworthy member of the fruit growing profession.

As the years went by, however it became apparent that the benefits of cultivation were decreasing. Declining vigor of the trees and reduction in the size, quality and amount of fruit indicated that something was wrong. The thing that was wrong was that the trees were starving for food and moisture. The shift from grass culture to cultivation was originally beneficial as result of the conversion of the plant food materials that had been stored in the grass and roots of the sod into forms that were available to the trees. This decay and oxidation of the organic matter, following intensive cultivation, liberated large quantities of soluable nitrogen compounds and other nutrients that caused the trees to grow vigorously. The destruction of the organic matter was very rapid, however, and as the soil supply became exhausted, the beneficial results diminished.

Many other unfavorable factors were involved. In the first place, the wave of cultivation taking in many orchards on hilly or rolling land, excessive erosion quickly carried away the most productive top soil. Even on compartively level land the intensive cultivation resulted in a break-down of the soil structure following the destruction of the organic matter. Soils that had originally been friable and retentive of moisture were found to run together into a sticky mass when rain fell. The first few minutes of a

shower caused an impervious layer to form on the surface as the soil became wet, resulting in a heavy runoff of rainfall, further encouraging erosion. Such soils can store little water, and cultivated orchards were found to suffer from lack of moisture when grass covered soils were well supplied.

To correct the loss of organic matter and to reduce erosion. Fall sown cover crops were resorted to, customarily such crops as rye or winter wheat, which survived winter freezes. This practice helped to a limited extent and delayed somewhat the unfavorable effects of clean cultivation. As the importance of nitrogen and the use of nitrogen carrying fertilizers became better understood, it developed that apple trees, at least, could be profitably grown in permanent grass or legume sods if the trees were given sufficient nitrogen. In some locations the use of a complete fertilizer was needed for maximum growth of sods or covers, but the trees themselves showed response to elements other than nitrogen in only a few localized areas.

Sod Culture Needs Nitrogen

During the last 20 years the trend has been back toward sod orchards in the case of apples and, more recently and to a smaller extent, in the case of stone fruits. In any sod culture, sufficient nitrogen must be provided to supply the tree over and above the amount taken up by the grass. Either spring or fall applications usually are satisfactory, with a trend toward fall applications in many parts of the country. Sod culture reduces erosion losses, improves or retains favorable soil structure, checks run-off or rainfali and encourages the penetration of moisture to lower levels.

An outstanding, and also the most recent, modification of sod culture is the use of mulch of some organic substance, such as manure, straw or sawdust, beneath the tree well out to the spread of the branches. Such a practice has many advantages over sod alone, as it promotes a more vigorous growth that is reflected in increased production of high quality fruit. Moisture conditions about the roots of the tree are improved, plant food is added

as the mulch decays, and in some instances the increased value of fallen fruit has more than equalled the cost of mulching. This practice is developing rapidly among the most progressive orchardists in many sections

Mulching The Orchard

In starting any mulching program, it should be remembered that newly mulched trees are likely to need increased applications of nitrogen for the first two or three years, unless a considerable amount of manure is used in the mulch, such as a mixture of manure and straw, or manure and sawdust or shavings. Where straw only is used, about 50 per cent more nitrogen should be applied than is necessary on sod alone. In the case of a six-inch mulch of sawdust the amount of nitrogen should be doubled for at least the first two years. Some poor results from the use of sawdust appear to be from failure to satisfy the nitrogen requirement. After a mulch has been established for about three years, it usually is unnecesary to add any chemical nitrogen, so a saving of fertilizer eventually may be affected

IN THE ORCHARD

DORMANT SPRAY ON THE WAY OUT is the heading of an article in BETTER FRUIT, official publication of western fruit growers. It was the opinion of speakers at a recent conference in Portland, Oregon.

German chemists followed by those in England have been working on problems of making plants themselves poison to insects. The Germans have gone a step further in endeavoring to make animals also immune to insect attacks. The problem of discovering chemicals which will be harmless to animals but would kill the pests is a difficult one but may be solved someday.

Beginning in February the Washington Commission spent \$120,000 in an advertising push for Washington Winesaps. The campaign was carried on in 100 major city markets during February, March and April. Newspaper advertising was carried on in 88 papers in 76 cities.

BRUSH DISPOSAL, Shredding and chopping orchard brush is superceding burning in commercial orchards especially in the West. The idea that organic matter will be left in the orchard by shredding is one of the reasons why orchardists are adopting the practice. Some believe that it will he necessary to add nitrogen to the soil if shredding is continued. The decomposing brush may temporarily deplete the supply of nitrogen available to the trees unless a little more than the normal amount is used.

Orchardist Wanted

MAN AND WIFE-Permanent. Man to work small cherry and apple orchard, Washington Island, Wisconsin, and in woods during winter. Wife to cook and help with housework while owner is there. Separate small, modest home on place available. Please give experience as farmer or orchardist, age, religion, etc., references if possible. Opportunity of developing the place when proven satisfactory.

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Apple Institute Item

West Virginia Law Declared Unconstitutional

West Virginia's apple volume is too small to affect the public welfare. wrote the West Virginia Supreme Court in declaring the new apple law unconstitutional.

The West Virginia law which charged growers 1c per bushel to obtain money for an apple promotion fund had been considered as a model and was discussed at Wisconsin fruit growers meetings. The fact that the law was declared unconstitutional in that state is of interest to our growers.

Mr. Carroll R. Miller, secretary of the Appalachian Apple Service writes about the law as follows:

"On March 15 the West Virginia Supreme Court decided that apple growing in West Virginia is too insignificant to affect the public welfare and therefore the Apple Law spends public money for private use and is unconstitutional.

"The Court noted decisions of the Supreme Courts of Michigan, Idaho

and Louisiana which sustained similar laws, but said these did not apply in West Virginia as apple volume walk too small."

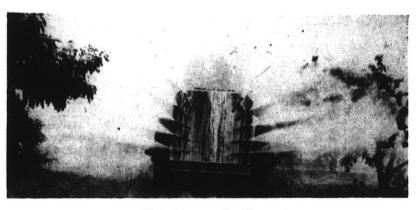
Mr. Miller then points out that the acreage of bearing apples in West Virginia in proportion to all crops is larger than in Michigan, Idaho and Louisiana where similar laws have been enacted. He writes: "The West Virginia decision has one merit:—it applies to no other state. Each state must compute for itself whether the volume is sufficient to put apples in the public interest as the Court noted. West Virginia Horticultural Society officers are canvassing further steps: -a re-hearing, an appeal to U. S. Supreme Court, etc."

POWER PRUNING. A Hood River, Oregon fruit grower has developed a whole set of pneumatic power tools to speed up orchard pruning. A new pneumatic saw will handle anything up to an 8 inch limb. It is operated by a 27-ounce motor which can exert a pull of more than 300 pounds while a 10 foot pole weighs 6 pounds. The inventor is Ronald Hyskell, Silver Springs Orchard, Hood River, Oregon.

Each nozzle or each side can be operated independently.

Pump has only 2 moving parts.

A one-man sprayer which will cut the cost of your orchard spraying.



Hale Sprayer In Operation

HALE SPRAYER

The Hale Sprayer is the only one using the centrifugal pump. Pressure can be maintained at 750 lbs. if desired. Capacity 80 gal. per minute at 600 lbs. pressure. 100 gal. p.m. at 500 lbs. and 125 gal. at 400 lbs.

Has 500 gal. tank. Chrysler 6 cylinder Ind. engine. Available on trailer, skid, mounted, or engine and pump unit.

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Pat. No. 2,423,262

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PURATIZED AGRICULTURAL SPRAY doubly safeguards your trees. It offers fast, effective protection before in-

fection occurs and acts to eradicate infections after they start.

This unique inactivating power, plus the usual protectant action, makes PURATIZED AGRICULTURAL SPRAY an invaluable weapon for combating scab. Consult your local dealer or write today for further details.

Puratized Agricultural Spray

- A low cost spray program one gallon makes 800 gallons of spray.
- * Instantly water soluble.
- Leaves no visible deposit.
- Can be applied with common insecticides and fungicides.
- Effective too, for brown rot blossom blight of cherries and peaches.

*Trade Mark

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Peaches In Door County

By Charles F. Swingle, Superintendent Peninsular Branch Experiment Station, Sturgeon Bay

While occasional instances of young trees bearing peaches in Door County are not unknown, we have heard of only 2 trees that have been consistently bearing for the past 6 years. In the spring of 1940, Frank Morey, of Ellison Bay (about Lat. 45°15') planted 2 Sungold peach trees. Starting with 1943, these have had a crop every year, including 25 seventeen-pound lugs in 1947, their biggest year, and 20 boxes this year most of which were 21/4" up. These trees, in Mr. Morey's fruit plantation, have the benefit of his exceptional personal care, but have not had any unusual treatment. They received about 3 lbs. of ammonium nitrate per tree in April 1948, with resulting 8 to 16 inches of growth during this year. They still had green foliage the first week of October, but had made a good start towards hardening off their wood. This year was exceptionally dry in Door County from May until the end of August. The trees received a dormant spray of lime-sulfur 1 to 10, and 3 sprays of wettable sulfur.

These trees regularly blossom late and set well. They appear to be completely self fertile, for no other peach flowers are known to be within half a mile or more. The fruit ripens the last week in September—late but not too late for Door County. The lowest official temperature recorded at the Peninsular Station last winter was -18°F. A thermometer believed to be reasonably correct, situated at Ellison Bay, recorded -20°. It is believed that the trees in question have withstood temperatures as low as -26° during the past 6 years.

Mr. Morey reports he is greatly bothered by would-be customers far in excess of the amount of his crop from these 2 trees. He has several more trees coming on, but does not plan to plant any large acreage.

Down in Cuba they raise cane to make rum, but in the United States they drink rum to raise cane.

GROWERS MORE INTERESTED IN MARKETING

Truman Nold, secretary National Apple Institute, makes this report about the Michigan State Horticultural Society meeting in Grand Rapids last December.

"One of the number of noteworthy things about this Grand Rapids meeting was the evidence of greater interest in everything connected with marketing. Most horticulture meetings are packed while the program is on production; but when the marketing subjects come along there is usually an exodus—good time to go out for a smoke. Not so at Grand Ixpids; if there was any such letdown of interest, it was not visible in the overflow audience.

"The growers are feeling fairly good about the market this season. A number expressed very serious concern about next season if an above average crop materializes."

"Strong colonies of bees for pollinating service."

Merciers' Greenvale Produce Janesville, Wis.

SPRAYERS, DUSTERS, FRUIT SIZERS and CLEANERS



We are pleased to announce that we have been appointed Dealer with exclusive rights in Door, Kewaunee, Brown, Manitowoc, Calumet, and Outagamie counties for SPRAYERS, DUSTERS, AND FRUIT PACKING EQUIPMENT manufactured by FRIEND MAUFACTURING CO. We have new and used sprayers and pumps. We also have a complete stock of repairs.

Lee Krueger Implement Company

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Sturgeon Bay, Wisconsin

Phone 940



Irrigation Comes To Wisconsin

By Harold D. Roberts

One Wisconsin grower recently told me that his portable pipe irrigation system was the most useful single item of equipment on his farm and had yielded him the most in return for his investment.

We have been slow to recognize that even in "normal" years many of our crops suffer from an acute shortage of moisture. It is true that seldom do we have a complete crop failure; we usually have a "normal" or "average" yield. But our ideas of what should constitute a normal yield are being changed—being changed in an upward direction by irrigation.

Yields Increased

Said one Wisconsin strawberry grower upon completion of his first season of irrigating, "Before I used irrigation I just would not have believed it possible to have the yield that we had this year." The plain fact is that added moisture will increase the yield and quality of nearly all crops in a normal Wisconsin summer; in the average season there is insufficient water to meet the optimum needs of most crops.

Take, for example, potatoes. Without irrigation 300 bushels per acre would be an unusually good yield. Anyone producing a crop of that size would have been proud of his harvest in the old days, but now the standard has changed. Under irrigation 500 bushels per acre is common, and even this yield has been frequently exceeded. In order to produce these larger yields, there are certain increased expenses for ammortization of the irrigation system, operation of that equipment, additional seed planted, increased amount of fertilizer used, and for additional spraying. At current prices, these added expenses per acre mount to less than the price of 22 bushels. Spending the equivalent of 22 bushels to obtain perhaps 200 bushels, and at the same time protecting oneself against a possible crop failure due to an unusually dry season, is just common sense.

Strawberries Need Water

Strawberries are another example. After the early peak in the harvest, the size of the berries usually declines until all that remains are "nubbins." It is becoming increasingly clear that the explanation for this drop off in quality and quantity of fruit is largely due to insufficient moisture to the plants during harvest. And strawberry picking time is not considered to be a particularly dry season of the year. One strawberry grower puts it this way, "With my irrigation system, I can bring every fruit that is set to a good saleable berry."

Among other crops that show marked response to additional water are tomatoes, cucumbers, peppers, carrots, sweet corn, onions, beets, horseradish, raspberries, alfalfa and ladino clover, tobacco, gladiolus, in fact most all flowers, nursery stock, and truck crops. Even orchard trees are responding well.

Frost Protection

The role played by overhead irrigation in frost protection of a crop like strawberries is becoming increasingly clear. The first effect of the water being thrown into the air from the sprinklers is to raise the temperature of the surrounding air a few degrees—depending upon several factors as air and water temperatures, humidity, and air movement. Thus, under conditions where a slight frost would have occurred, the air temperature was kept above freezing and the frost did not materialize.

In cases where the temperature drop is more severe, the presence of the water in the air in inadequate to keep the air temperature above freezing; and ice begins to form on the vegetation. It is this layer of ice covering the plants that prevents the frost damage. Apparently the ice forms an insulating covering over the plant at the temperature of 32 degrees, the constant temperature of ice. Since temperatures which are injurious to most of our flowers and fruits are under 32 degrees, the plants are thus saved from frost damage.

Damage to delicate flowers and fruits from being covered with ice is surprisingly slight. One strawberry grower, with a modest acreage, pointed to his new home and then to his new car and said, "My irrigation system paid for these in one night." His strawberries were at the height of blossom when a sharp frost began moving in shortly after dark. He turned on his sprinklers and by morning had a covering of ice as much as an inch thick over the blossoms. Upon later examination he could find no sign of injury to them, while in a portion of the bed which was not protected by water, the crop was a complete failure.

Similarly a grower saved his late tomatoes last fall when the temperature dipped to 14 degrees.

Apply Fertilizers

Another newer use of irrigation equipment is the application of fertilizers, especially the nitrogen fertilizers, through the irrigation water. Applications of even the smallest amount can be applied with complete uniformity and without any danger to the plant. Cost of making such applications is much lower than when mechanical means are used and can be done in a fraction of the time.

The fact that irrigation has become so profitable to growers in Wisconsin is due largely to the type of equipment in general use today—portable quick-coupling pipe with rotating sprinklers.

(Continued on page 265)

WINNEBAGO COUNTY FRUIT GROWERS ASSOCIATION CELEBRATES 10th ANNIVERSARY

Ten years ago about 45 men and women met in the Court House in Oshkosh to organize the Winnebago County Fruit and Garden Growers Association. The county agent at that time, Robert Heffernan, took an active part in the organization and explained that the extension work extended by the county agents office and the College of Agriculture could be of much greater service if there were such an organization. Among the projects outlined for the organization were: Cooperative buying and selling of products growers need, educational and demonstrational work on the production of fruits and vegetables; promotion of spray rings and a creation of greater interest in their product. It was Mr. N. A. Rasmussen of Oshkosh who suggested that vegetable gardening be included in this organization. Other charter members from Oshkosh, Neenah and Omro who expressed themselves included Otto Ruelke, William Nelson, Fred Roehl, Albert Yahnke, E. A. Boeshaar and Art Plummer.

First officers were: Art Plummer, president; Albert Yahnke, vice-president; Fred Roehl, treasurer; R. C. Heffernan, secretary. Directors were Otto Ruelke and William Nelson.

In April, 1939, the Wisconsin Horticultural Society recognized the organization and extended appreciation of the fact that they had voted to affiliate with the Society. Since that time the members have affiliated with the Wisconsin Horticultural Society.

Presidents who followed Mr. Plummer were N. A. Rasmussen, Dale Nolte, Otto Ruelke and at present Harold Rasmussen.

Until recently the organization met the second Monday evening of every month. Programs have been educational with speakers who are specialists in various fields of horticulture. Among the speakers that have appeared annually have been Prof. C. L. Kuehner, extension horticulturist and H. J. Rahmlow of the State Horticultural Society.

In June of each year there has been a strawberry festival. Vegetable and orchard tours have been quite popular and in December of each year there has been an annual Christmas party.

V. W. Peroutky, County Agent.



Winnebago County Fruit Growers Association elected new officers at the meeting in Oshkosh in April. From left: County Agent V. W. Peroutky; Edgar Abraham, secretary-treasurer; George Doemel, chairman, nominating committee. Otto Ruelke, past president congratulates Harold Rasmussen, newly elected president. Mr. Carl Koch, Oshkosh, was elected vice president.



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Manufacturers and Designers of

COMPLETE IRRIGATION SYSTEMS FOR PART OF AN ACRE OR FOR 500 ACRES

H. D. ROBERTS

Black River Falls

Wisconsin

The Berry and Vegetable Growers' Meeting

Large Attendance and Excellent Program at Meeting of Wisconsin Berry and Vegetable Growers' Association

With the registration at 185, the new Wisconsin Berry and Vegetable Growers' Association held an enthusiastic meeting in the Armory at Waupaca on April 1. Much credit is due to President and Mrs. Charles Braman, County Agent Mike Drozd of Waupaca and the officers of the Association for the excellent attendance and interest.

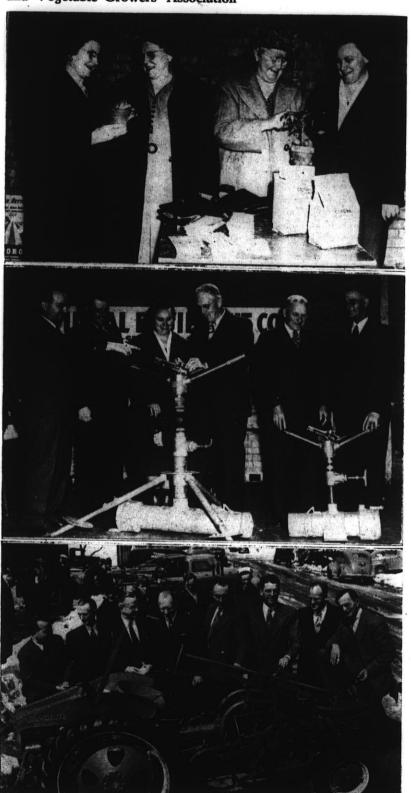
Prof. Arthur Alberts of the U. W.

The ladies gave valuable assistance and were interested observers at the fruit and vegetable growers meeting. Examining vegetable transplants are wives of officers. From left: Mrs. Charles Braman, Waupaca; Mrs. Roy Rasmus, Waupaca; Mrs. E. L. White, Fort Atkinson; Mrs. Charles Wood, Shawano, secretary-treasurer.

Officers Wisconsin Berry and Vegetable Growers Association were interested in the new type3 of irrigation equipment on display at the annual meeting. From left: County Agent Michael Drozd, Waupaca; Dwight Hensel, Waupaca; Mrs. Charles Wood, Shawano; E. L. White, Fort Atkinson; N. A. Rasmussen, Oshkosh, and Charles Braman, Waupaca, president.

County Agents and speakers at the annual spring meeting Wisconsin Berry and Vegetable Growers Association examine some of the machinery on display. From left: County Agent Michael Drozd, Waupaca; Charles Braman, Waupaca, president; County Agent J. F. Magnus, Appleton; Prof. O. B. Combs, Madison, Vegetable Specialist; Prof. C. L. Kuehner, Madison, Horticultural Extension Specialist; County Agent V. W. Peroutky, Oshkosh; H. E. Halliday, Madison, Entomologist, State Department of Agriculture; Prof. A. R. Alberts, Madison, Soil Specialist,

Department of Soils emphasized that on the lighter soils, irrigation has great value on crops of a high per-acre value. It has not yet proven iteself on general farm crops but will pay on berries and vegetables. In choosing a location for these high per-acre crops, we must try to get suitable land and location. The land should be level and not too



heavy so that it will take water well. Raspberries in particular, deserve a good soil with good drainage.

Prof. Alberts did not favor the application of sulphur to create acidity because it may liberate boron and manganese suddenly which may have a detrimental affect on certain crops.

He gave the pH requirement of certain crops as follows:

pH Preferences

	pН
Apple	5.0-6.5
Field Beans	6.0-7.5
Lima Beans	6.0-7
Table Beets	6.0-7.5
Sugar Beets	6.5-8
Begonias	5.5-7
Blackberries	5.0-6
Low Bush Blueberries	4.5-6
High Bush Blueberries	4.0-5
Cabbage	
Cantaloupe	6.0-7.5
Garden Carrot	5.5-7
Sour Cherries	6.0-7
Iris, German	6.5-7.5
Lettuce	6.0-7
Common Lilac	6.0-7.5
Peas	6.0-7.5
Black Raspberry	5.0-6.5
Red Raspberry	
Tomato	5.5-7.5
Strawberry	5.0-6.5

Use Fertilizers To Grow Cover Crops

"We may have to use fertilizer to grow cover crops to get more organic matter," said Prof. Albert. Peat is somewhat too expensive for larger areas. Organic matter is very important for good crops of strawberries which may also require phosphate for fruit production. Nitrate fertilizers are especially valuable for leafy vegetables but in a New York experiment a heavy application of late nitrogen proved harmful to strawberries because it developed large leaves which required considerable amounts of water. Do not over-lime,

RASPBERRY PLANTS FOR SALE

"Hardy, early bearing Viking raspberry plants." Heavy producer of large, firm, finer flavored berries. Good shipper—well rooted and State Inspected healthy plants. \$40.00 per 1,000; \$5.00 per 100.

JOHN TORBICK
Bayfield, Wis.

Prof. Alberts advised because it will fix phosphorus, manganese and boron and then we will have a new problem on our hands.

To obtain organic matter, manure is excellent although it may present a weed problem. Cover crops, sown after harvest, should become an established practice. Rye is especially good on light soils. Oats, barley and rape are fine if we need the land in early spring. A blue grass sod provides more organic matter than alfalfa or other legumes be-

(Continued on Page 267)

STRAWBERRY PLANTS FOR SALE

Beaver, Premier, Dunlap and Improved Robinson, June and Progressive everbearing.

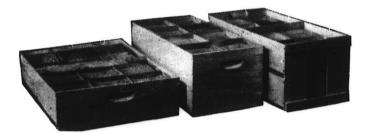
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Hale centrifugal pumps operate our irrigation units.

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Hale Pump in Operation

Estimates without obligation

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Frank Leach, Representative

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Green Bay, Wis.

Wisconsin Beekeeping

OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPERS
ASSOCIATION OFFICERS:

Robert Knutson, Ladysmith, President Lawrence Figge, Milwaukee, Vice-President H. J. Rahmlow, Madison, Cor. Sec'y. Mrs. Louise Brucggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer

DISTRICT CHAIRMEN:

Newton Boggs, Viroqua Wm. E. Gross, Milwaukee Robt. Knutson, Ladysmith E. Schroeder, Marshfield Guy Sherman, Seymour Ivan Whiting, Rockford

BEEKEEPERS LEARN ABOUT POLLEN SUBSTITUTE FEEDING

About 30 Southern Wisconsin beekeepers spent the afternoon of Saturday, April 2, with Dr. C. L. Farrar in the Central States Bee Laboratory, Madison, inspecting colonies which had been fed pollen-soybean cakes beginning on February 18. The beekeepers had requested the session at the District Meeting in Janesville in March. They wanted to see if outdoor wintering with no protection excepting a windbreak, plus feeding pollen-soybean flour cakes in late February and March would really produce strong colonies by early April.

Everyone was very much surprised when Dr. Farrar announced that the first colony he was about to open had 11 frames of brood. He took out each of the 11 frames. Of course, it was the strongest colony in the yard and above the average. However, he stated that the 48 colonies in the yard would average at least 6 frames of brood.

Each colony had been fed about 3 pounds of pollen supplement just two weeks before but in spite of the slight flow of pollen coming in from Maples, most colonies had consumed the cakes and were ready for more.

Dr. Farrar said that from February 18 to April 2, he had fed 1500 pounds of the pollen supplement to 285 colonies.

In answer to questions these facts were brought out. The pollen-soybean flour cakes are made by mixing one part of the natural pollen to three parts of soybean flour. The method is described in circular E 531 which may be obtained from the Division of Bee Culture, U. S. Dept. of Agriculture, Beltsville, Md.

Only soybean flour made by the expeller process should be used. Asked if he had found any other material which was better than pollen for mixing with the flour he replied, "No, while the natural pollen-soybean flour mixture has given almost as good results as pollen alone, no other supplement tested was found to be as good. Soybean flour alone does not give as good results as a mixture. The bees do not consume it as



readily and consequently will not produce as much brood."

Asked if it is advisable to continue feeding pollen during April and even May, in cases there are periods of inclement weather when no pollen can be gathered, he replied that it is important to do so in order to maintain brood rearing at a maximum rate.

RUSK-SAWYER ASSOCIATION

The Rusk-Sawyer Beekeepers Association held its annual meeting March 22 in Bruce, Wisconsin. The following officers were elected: Mr. Iven Wisherd, Bruce, president; Mr. Edward Bruger, Ladysmith, vice president and Miss Eva L. Nelson, Glen Flora, secretary-treasurer.

By Eva L. Nelson, secretary, Glen Flora, Wis.

A BEEKEEPER ANSWERS THE QUESTION

On Page 181 of the March magazine appeared the question, "How can we come out on that?" by L. G. S. Beekeepers should use their heads-offer less of a better product at a fair price. They should leave more of the offgrade off-flavored honey on each hive and even some of the best honey if the bees need it for food. Honey is the best bee food at any time of the year. Every time a beekeeper feeds sugar to his bees he drives one more nail into his own coffin. We have had honey bees for 43 years and have found 209 bee trees in the last 43 years. It is a great clean sport to hunt bee trees.

The place with 10,000,000 busy bees— H. R. Neumann, R. 2, Spencer, Wis.

You can judge the times by the length of the cigarette butts people throw away.—Oregon Observer.

DISTRICT MEETINGS WELL ATTENDED

Better grading of honey, better marketing; more successful wintering; the great need for colony build-up in spring and disease control were discussed from many angles at district meetings of the Wisconsin Beekeepers Association held at Janesville, March 17, for the Southern District; Brillion, March 22, for the Fox River Valley District and Marshfeld, April 7—the North Central District.

Mr. John Long, chief apiary inspector, answered questions on the new grading law. He said that many beekeepers are selling their white honey as "golden" honey, which is legal. Buckwheat honey is usually dark and must be so labeled. Comb honey need no longer have the "Packer Number" printed on the section but the name and address of the producer or seller is required on the package. It should be on the outside of the carton or on the section (if covered with cellophane) so it can be seen by the customer.

Label Large Cans

All 60 pound cans of honey, if sold to the consumer or at retail, must be labeled with a regular label showing the grade and name and address of the seller.

The label may state the source or flavor of the honey but not more than one flavor. For example, it might be very desirable to put the words "Buckwheat Flavored" on the label so consumers would know what to expect.

The District invited the State Association to hold its annual summer meeting for the southern half of the state at Janesville.

The Tragedy of Winter Losses

H. J. Rahmlow, secretary of the Wisconsin State Horticultural Society asked the question, "Why must we continue to lose from 30 to 40 percent of our bees throughout northern states whenever the weather during winter months is a little unfavorable? Why must we let our bees starve even in a winter when the weather has been

favorable such as the one just past? Why aren't we making more progress in wintering?"

He pointed out that every beekeeper

Officers of the Central District, Wisconsin Beekeepers Association arranged a well attended meeting in April. Front row from left: Louis Backow, Goodrich, president Taylor Co. Association; Robert Knutson, Ladysmith, president, State Association; Rueben Neises, Marshfield, secretary-treasurer. Back row: Arthur Kehl of the G. B. Lewis Company, visitor; Ernest Schroeder, Marshfield, District president; Howard Dankemeyer of the Marshfield Manufacturing Co. and Frank Greeler, Neillsville, District vice president.

Officers of the Southern District at the Janesville meeting examine honey grader being tested by the Wisconsin Department of Agriculture, From left to right: Rev. F. B. Richardson, Beloit, secretary-treasurer; Ivan Whiting, Rockford, president; John Long, Madison, Dept. of Bees and Honey; William Judd, Stoughton; vice president; Walter Diehnelt, Menomonie Falls, past president State Association.

Officers Wisconsin Beekeepers Association met with Wisconsin Department of Agriculture officials to plan State Fair honey exhibit and study regulations on honey grading and disease control. Seated from left: Robert Knutson, Ladysmith, president State Association; Milton Button, Madison, Director of Wisconsin Department of Agriculture; D. N. McDowell, Madison, Administrative Director, Department of Agriculture. Standing from left: H. J. Rahmlow, Madison, secretary Horticultural Society; John Long, Newton Boggs, Viroqua, president Southwestern District: Wm. E. Gross. Milwaukee, president Southeastern District; Lawrence Figge, Milwaukee, vice-president State Association.

Officers Fox River Valley District examine honey grading regulations at annual meeting. Seated: Leonard Otto, Forest Junction, secretary; Guy Sherman, Seymour, president; Douglas Stevens, Chilton, vice president. Standing: County Agent Orrin Meyer, Chilton and Joe Mills, Ripon, director of the National Beekeepers Federation.

today loses just as many colonies over winter as they did 50 years ago in spite of years of debate as to what kind of packing to use, whether to (Continued on Page 258)









MAY IN THE APIARY

Is A Swarm In May Worth A Load Of Hay?

Were you born early enough to remember the days of "A swarm in May is worth a load of hay. A swarm in June is worth a silver spoon. A swarm in July isn't worth a fly." Those were the days of dish pan pounding, ringing the dinner bell and reflecting sunlight on the swirling bees in the air to get them to settle. Those were also the days when someone stayed home every Sunday and holiday to hive the swarms.

They were the days too, when we might start out in the spring with 50 overwintered colonies, increase to about 100 by July and be back to 50 or less the next spring, even by cellar wintering.

Have Made Progress

So beekeeping has made some progress. The subject of swarm control is no longer the important topic at beekeepers meetings.

Instead of a swarm in May being worth a load of hay it actually results in a definite loss. The divided colonies will not be able to make a good crop from clover in June.

Just as soon as a colony had filled its brood chambers with brood, bees or honey they usually prepare to swarm. A colony confined to one 8 frame brood chamber naturally will swarm very early in the season. A colony given two 10 frame brood chambers will have more space to fill and will prepare to swarm a little later. One provided with 3 standard 10 frame brood chambers, reversed before the top one is filled, will prepare to swarm still later, and if delayed until the honey flow starts in June, will not swarm at all. Many large beekeepers report less than 5% swarming when they use the 3 brood chamber and reversing method of control. It requires the least amount of work of any method of which we have heard.

Conditions Of Swarming

Here are some other conditions of swarming which we must keep in mind. It is normal for a colony to expand in an upward direction. Empty combs below the brood nest will not help prevent swarming.

A weak or medium strength colony may swarm in June because there are not enough bees to occupy the honey supers and so they may store too much honey in the brood nest, creating a crowded condition which results in swarming.

Divide Strong Colonies

If during the later part of May you have colonies which are so strong they will prepare to swarm, they should be divided temporarily into two equal units. Set the brood chamber containing most of the young brood and queen on the bottom board and add a set of empty combs above. Put on the inner cover with the escape hole closed. Then set on the breed chamber containing the sealed and emerging brood with the adhearing bees, giving it an entrance and of course plenty of honey for food. Allow the queenless unit to raise a queen by giving it queen cells or better still give it a laying queen.

District Meetings

(Continued from Page 257)

winter in the cellar or out of doors, whether to winter in one, two or three brood chambers.

The solution to this problem, he pointed out, lies not in any of these but in one that we have overlooked. Whether a colony will winter depends entirely upon these factors: 1. The strength or population of the colony in the fall of the year. 2. The location and amount of stores available to the winter cluster. 3. A wind break or shelter from strong winter winds.

Pollen Should Be Available

The strength of the colony on April 1 depends not only on the above factors but also upon the availability of pollen to the winter cluster. Brood rearing, he pointed out, begins in January and can be maintained uniformly throughout February and March if pollen and honey are available to the nurse bees.

Officers Elected

The Southern District elected Ivan Whiting of Rockford, president; Mr. Wm. Judd, Stoughton, vice president and Rev. F. C. Richardson, Beloit as secretary-treasurer.

The Fox River Valley District elected Guy Sherman, Seymour, president; Douglas Stevens, Chilton, vice president and Leonard Otto, Forest Junction, secretary-treasurer.

The North Central District re-elected Ernest Schroeder, Marshfield, president; Frank Greeler, Neillsville, vice-president; Rueben Neises, Marshfield, secretary-treasurer.

Hybrid Queens Available For Test Purposes

Joint statement by

Bureau of Entomology and Plant Quarantine, U.S.D.A. &

Honey Bee Improvement Cooperative
Association

Plans are being completed for the second year's work on the honey bee improvement project at Kelley's Island, Ohio.

During the period from June 18 to August 31, 1948, 1292 queens were produced and 1072 of these were sent out for tests. Expansion of facilities indicate that approximately 2500 queens will be produced for distribution in 1949.

The following tentative schedule for queen rearing with be attempted in 1949, 300 queens in June, 800 in July. 800 in August, and 600 in September.

The minimum numler of queens to be sold to each cooperator for comprehensive tests will be not less than 25, thereby providing the possibility for a number of rejected lines to be tested at the same time.

The isolation of Kelley's Island provides the unusual opportunity of practically 100 pct. control of natural matings. The colonies on the island are now headed by sister queens which are hybrids between two selected inbred lines. All drones produced by these queens will thus be progeny of lines selected for honey production and disease resistance. Four different hybrid combinations of queens will be produced and these will, of course, mate to the selected drones. These queens will be hybrids of other unrelated inbred lines which have been tested for resistance and honey production. The worker progeny of queens sent to cooperators will thus be 4-way or double hybrids. All cooperators will receive queens of each hybrid combination.

Beekeepers desiring to obtain queens for testing should write to C. A. Reese, Secretary. HBICA, B & Z Bldg., Ohio State University, Columbus 10, Ohio. The beekeeper will be sent a questionnaire which he will fill out and return After all questionnaires are in, the shipping schedule can be arranged and each beekeeper will be notified of acceptance or rejection of his order and the approximate shipping date. The prospective cooperator must be a beekeeper who operates 50 or more colonies.—(Condensed).



Dr. C. L. Farrar inspects nest of strong colony on April 2 while Southern Wisconsin beekeepers look on. Colony was fed pollen supplement and had 11 frames of brood.

Feeding Maintains Brood-Rearing

In our March and April issue we showed pictures of a colony which began raising brood on January 14. On February 5 this colony had 3 frames with fair sized areas of brood. The picture taken on February 5 shows pollen areas as well as honey in combs containing the brood. On March 2 we again inspected the colony and found slightly less brood than shown on February 5. Examining the combs we found the pollen and most of the honey had been consumed. Realizing that unless we fed a supplement there would be a decrease in broodrearing and consequent dwindling of the colonies in April, we immediately fed soybean flour and on March 12 the brood pattern had improved considerably. The flour was then fed every week thereafter with excellent results. The first week in April the colony had 6 frames of brood.

ANNUAL SUMMER MEETINGS WISCONSIN BEEKEEPERS ASSOCIATION

July 26 — Janesville, Wis. July 27 — Eau Claire Lakes

WOOD COUNTY BEEKEEPERS MEETING

The Wood County Beekeepers Association Will Hold Its Annual Picnic On Sunday, June 26.

The meeting will be held at the E. E. Bennett Cranberry Growers Marsh five miles west of Port Edwards on Highway 54. There is a sign with the name at the entrance.

Mr. John Long, Madison, will be the speaker after the noon dinner. By E. L. Schroeder, Marshfield, President.

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Complete stock of bee supplies and equipment carried in Madison.

G. A. DUNN & CO. 2138 University Ave. Madison, Wis.

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Three brood chamber hives with bees and brood on drawn comb. Painted. Shallow, square type as used at the University of Wisconsin.—Will be state inspected before permit to move is given.

Extra supers available completely assembled with wired foundation. — Three body hives each \$20.00 — Extra supers each \$4.50.

Home Sundays only except by appointments.

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We now have a good supply of 60 lb. cans, 5 and 10 lb. pails. Also the 5 lb., 3 lb., 2 lb. and 1 lb. and 8 oz. glass jars. We can make immediate shipment.

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From the Editor's Desk

WE CHANGE PRINTERS

This issue of Wisconsin Horticulture is being printed in Waterloo, Wis. The change was made due to complaints about the magazine coming out late—later each month.

From now on we expect the magazine to be printed the first week of the month. There will be a rigid deadline for receiving copy, proof reading, making up page proof and final corrections on page proof. In order to comply with these deadlines the officers of the Wisconsin Horticultural Society have instructed the editor to take complete charge of all proof reading and magazine makeup.

All affiliated organizations are invited to cooperate by sending in material of interest to their members. We welcome the appointment of an editor by affiliated organizations to ake charge of gathering and preparing such material as will benefit their members.

WISCONSIN WILDFLOWERS

An attractive new bulletin, Wisconsin Wildflowers, Bulletin No. 601 has been issued by the Conservation Department, State of Wisconsin, State Capitol, Madison, Wis. It is written by Mr. W. T. Calhoun and contains pictures of many of the important wild flowers growing in the state.

The bulletin gives the names of plants which are in danger of becoming extinct and should never be picked; list of the varieties now protected; varieties which need protection and should seldom if ever be picked; plants which may be picked in moderation; plants which may be picked freely.

Garden Club members should note that there are many varieties of wild flowers which may be picked freely and therefore used in bouquets and at flower shows; also varieties which should not be picked.

The best to find a helping hand is at the end of your arm.

A synonym is a word used in place of the one you can't spell.



WHITE PINE PROTECTED Currant And Gooseberry Bushes Destroyed In White Pine Areas

The Wisconsin Department of Agriculture reports that nearly 1½ million currant and gooseberry bushes were destroyed in Wisconsin last year in the campaign to protect the State's valuable stands of white Pine against blister rust.

Mr. P. F. Kouba, state blister rust control leader reports that the state now has a control area of about 1½ million acres. This pine has an estimated maturity value of more than \$125,000,000 if properly protected against rust.

NATIONAL APPLE INSTITUTE ANNUAL MEETING

Lansing, Michigan June 16-17-18, 1949

The National Apple Institute will hold its annual meeting in Lansing, June 16-18, 1949. This will be the closest it will probably come to Wisconsin for some time. Last year the meeting was held at Harrisburg, Pa. and the year before in Wenatchee, Washington.

A large number of the members of the Wisconsin Apple Institute are expected to attend the meeting. The program and full details will be sent to all Institute members in their regular Institute Bulletins.

Are you interested in joining the Wisconsin Apple Institute? If so, write to Mr. Arnold Nieman, treasurer, Cedarburg, Wis.

FOR BETTER COUNTY FAIR FLOWER EXHIBITS

A letter to the secretary of the Waupaca County Fair by the president of the Iola Garden Club:

Dear Secretary:

Members of our garden club who put on fine flower shows each year are naturally very much surprised and disappointed when they come to one of our best County Fairs and see "just a bunch of flowers stuck in tin pails and other atrocious looking vases" quoting from one of our younger members.

This situation can certainly be remedied and our fair flower shows made up to date to compare favorably with flower shows held elsewhere with the help of a little education and change in the premium list.

We would suggest that we follow the suggestions of the editor of Wisconsin Horticulture (in an article enclosed)—that 50% be allowed for quality of flowers, and 50% for arrangement and suitability of containers.

Information about suitable containers and suitable rules for arrangements could easily be included in the premium list.

Containers, vases, bowls, glass dishes or low shallow containers in plain solid colors as grey, dull green, brown, cream, white and black. Rules:

- 1. Use only so many flowers so each one can be seen—loose group—not tight large mass.
- 2. The tallest stemmed flowers in center with others cut shorter, shortest near the edges.
- 3. White and lightest colors at top—darker and darkest colors lower and at bottom. Smaller blooms towards top, larger nearer bottom and low.

These rules would be a beginning. Appoint a good committee of women for this department who really would be interested and responsible for putting on a display that would be beautiful and appropriate. Garden clubs could be contacted to exhibit several arrangements which we are sure they would do to help make the show successful.

Mrs. J. L. Larson, Iola, Wis.



A TWO FACED OWL SAID TO DRIVE AWAY STARLINGS

"How can we keep the starlings away from our fruit trees?" is a question often asked by fruit growers. A two faced aluminum owl recommended in a Horticultural magazine some time ago, was investigated. The owls are made by the Starling Pest Control Company, 1775 N. Main St., Decatur, Ill. Mayor James Hedrick of Decatur writes: "For several years we were greatly annoyed with starlings on numerous business buildings on our streets and in our city parks. We tried the fire department with water, different types of poisons, noise makers, shooting and other things which only caused them to go from one location to another."

The Mayor goes on to say they then discussed the matter of the owls, installed them and "much to my surprise as well as to many others, they have completely eliminated starlings from the uptown district of our city." Full information about prices can be obtained by writing the Starling Pest Control Co., Decatur, Illinois.

Note: If the owls are used in the city the starlings may be driven into the country-then we will have to use owls in the country to drive them away. Are we going in circles?

A white owl-two faced, Made of aluminum. Will drive or scare away starlings. This type is recommended for fruit growers.

FORTY-FIFTH ANNUAL **EXHIBITION**

of the

AMERICAN PEONY SOCIETY

Milwaukee Gas Light Bldg. 626 East Wisconsin Avenue Milwaukee, Wisconsin

Saturday and Sunday, June 25-26, 1949

PROGRAM

SATURDAY, JUNE 25, 1949

11:00 a.m. to 3:00 p.m. Judging of exhibits and awarding of prizes.

3:00 p.m. Formal opening of show. Open to public-No admission charge.

6:30 p.m. Banquet, Pfister Hotel.

8:00 p.m. Annual meeting of the American Peony Society in the banquet room.

PROGRAM

SUNDAY, IUNE 26, 1949

10:00 a.m. Visit to Whitnall Park Arhoretum.

3:00 p.m. Colored slides and demonstration of three dimension photography and projection.

Officers: M. C. Karrels, 3272 S. 46th St., Milwaukee 14, Wis., president; Jerome Host, vice president and Roy Gayle, secretary.

Board Members: Mrs. R. E. Kartack, Ralph Schroeder and James Mason.

For further information write to Mr. Karrels.

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4 Rebarb, best red
4 Peonies, all different
6 Chrysanthemums or Phlox
7 Iris, Lilies, or assorted
50 Paradise Apparagus
50 Everbearing Strawberries
51 Gladiolus, best assorted
2 Spruce, or Arbor Vitae

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For the WISCONSIN GLADIOLUS SOCIETY

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Arnold Sartorius, Porterfield Dr Geo, Scheer, Sheboygan A r Scholtz, Wausau Val White, Wausau Dr. L. C. Dietsch, Plymouth

PRESIDENT'S MESSAGE

It was indeed gratifying to see such a large number of gladiolus fans at our meeting at Fond du Lac. About 90 persons were in attendance.

We wish to thank Mr. Shaw and his committee for the fine work done on the bulb auction. Also a "thank you" for the buyers who added \$242 to our Society treasury and for the excellent work of auctioneer Archie Spatz—"Thanks Archie!" This is a fine addition to our funds.

At this meeting the following Wisconsin Gladiolus Society shows were approved—July 31st, Seedling and Recent Introductions at Walter Millers, Sun Prairie, Wis.; State Show, Beloit College Fieldhouse, August 6 and 7; Wisconsin Show at the State Fair, August 23, 24 and 25.

The matter of making legal our number and method of electing directors, provisions for adding new members, etc. was accomplished, thanks to the energetic efforts of our chapter officers and others.

The committee to study our by-laws and suggest changes consists of Val White, Chairman; Hugo Krubsack and Frank Bayer.

The location of the June Directors meeting will be announced in the June issue of Horticulture.

Everett Van Ness and committee members, Sleezer, Janes, and Shaw did a fine piece of work in having before our meeting the Beloit Chamber of Commerce proposition for our 1949 show.

Mr. Van Ness, Clinton, Wis. desires donation of bulbs for distribution to Beloit area novice growers. If you have not sent some, please do so.

Mr. Roger Russell will report on N.E.G.S. and N.A.G.C. meetings from time to time in these pages.

Bulb Dip

As promised the editor, the following spring gladiolus bulb dip is suggested as beneficial and easy to obtain by those who grow only a few gladiolus.

1949 SHOWS,

WISCONSIN GLADIOLUS SOCIETY

July 31, 1949—Seedling and Recent Introductions Show at Walter Millers, Sun Prairie, Wis.

Prize Schedule and Show Manager— Leland Shaw; assistant—Harold Janes.

Arrangements Committee — Theo. Woods, John Flad, Roger Russell, J. H. Torrie.

August 6-7, 1949—Wisconsin Gladiolus Society at Beloit College Fieldhouse, Beloit, Wis.

Arrangement Committee — Dewey Sleezer, chairman; Leland Shaw, Harold Janes, Everett Van Ness.

Premium Schedule—Harold Janes. Trophies—Val White.

Supervisor of Judges—Dewey Sleezer; assistant—Ed Lins.

Show Manager and Classification— Everett Van Ness; Co-chairman: Dewey Sleezer and Oren Baster.

Finance—Frank Bayer.
Banquet—(to be announced).

August 23, 24, 25, 1949—Wisconsin Gladiolus Society State Fair Show, State Fair Park, Milwaukee, Wis.

Prize Schedule — Walter Krueger, Dave Puerner.

Show Manager — Walter Krueger, Lloyd Pateman, Frank Bayer.

If limited to one dip, we suggest Lysol (most drug stores have it) used at 4 tablespoons in 3 gallons of water—bulbs 6 hours; bulblets 12 hours.

Other growers who are members of N.E.G.S. or N.A.G.C. have access to the printed experimental reports by experts.

We shall be pleased to suggest treatments to any inquirer concerning specific problems. Our experience is restricted to the use of Delbetar, Arasan, Spergon, Natuphane, Fermate, Zerlate, N. I. Ceresan,, bi-chloride of mercury, yellow oxide of mercury.

Those who were not present at Fond du Lac missed a fine demonstration of pre-packaged gladiolus blooms with comments. Thanks Paul Ravet!

Chapter recognition was given by W.G.S. at the spring meeting to the Manitowoc County Gladiolus Society upon application of Mr. Thompson.

Walter Krueger, president

TREASURER'S REPORT

Mr. Frank Bayer, treasurer of the Society, reported at the annual meeting that at that time there were 342 members of which 90 have joined the N.E.G.S. and 68 the N.A.G.C.

In presenting the financial report, he said that there was a total on hand of \$763.54. Receipts since October had been \$159.18 and total disbursements \$147.64.

Show Rules Adopted

At the business meeting the following rules were adopted:

- All commercial displays and other entries shall be required to meet the rules as to space, etc.
- 2. Ballots of judges shall be required on champion awards and voting shall be in the presence of the clerk. For division champion, there shall be three judges for grand champion, five judges.
- 3. Entries may not compete in more than one class.
- 4. The grand champion shall be selected only from entries having won division championships.
- 5. A motion was passed to appoint a show reporter to summarize and send in reports of winners to all organizations and magazines desiring them. A sum of \$15 will pay the reporter.

Lots of girls who look glamorous across the night-club table sipping a cocktail aren't nearly so charming when it comes to oatmeal at breakfast. (The same applies to men).

Soil-Borne Diseases of Gladiolus

Some of the most important diseases of gladiolus are soil-borne. These include Fusarium yellows, Fusarium dry rot. Fusarium basal rot. Sclerotinia drv rot, scab, and bacterial leaf blight. Undoubtedly the leaf-blight fungi survive in the soil on the diseased plant refuse that is plowed under. The Fusarium diseases, however, are the most destructive of the soil-borne infections, since the causal fungi may persist for several years in the soil in the absence of the host plant. The maximum periods of survival for these diseases are unknown. but the writer has evidence of the persistence of the Sclerotinia dry-rot fungus in sandy loam soil for 10 years during which no gladioli were grown. The bacterial parasites are much shorter lived under comparable conditions.

The gladiolus grower should imitate this natural method of maintaining the soil in a fertile and biologically favorable condition for the culture of a crop. To encourage maximum competition among soil organisms, a variety of crop residues should regularly be returned to the soil. If this is not done and the gladiolus is grown continually on the same site, the soil will become colonized by the harmful organisms introduced in the planting stocks and will soon become unsuitable for the growing of disease-free corms.

Some useful soil-building crops to employ in rotations with gladiolus are soybeans, clovers, rape, buckwheat, sudan grass, and rye. By wise planning, large organic residues can be returned to the

soil in one year. As an example, soybeans can be planted about May 15 and the plants plowed under deeply about August 10, when they will have attained maximum vegetative development. Rape can then be broadcast and the soil rolled lightly. By September, the rape will have produced maximum vegetative growth and can be rolled and disked under. If rye is then sown and plowed down in the spring, just preceding the planting of a cultivated crop a maximum of organic material will have been incorporated in the soil The crop immediately following the rye preferably should not be glatiolus. There is little experimental miormation on the crop sequences most effective in the control of disease, but very beneficial results have been obtained in the control of Fusarium yellows following a crop of soybeans and rye. It cannot be anticipated, however, that effective control can be achieved with such short rotations.

From Michigan Special Bulletin 350, Diseases of Gladiolus by Dr. Ray Nelson.

NEW CHAPTER ORGANIZED

On Sunday, March 27, a meeting was held at the Traver Hotel, Lake Geneva, to organize the Southern Wisconsin and Northern Illinois Gladiolus Society. Forty growers signed as chapter members. A constitution and by-laws was adopted and an executive board elected. Officers elected are: Mr. Leland Shaw, Milton, president; Mr. John Brinkman, Chicago, Ill., vice president; Mr. Oren Baxter, Janesville, secretary; Mr. Dewey Sleezer, Lake Geneva, treasurer.

Directors: Mr. Dave Puerner, Milwaukee; Mr. George Bourdages, Harvard, Ill.; Mrs. Harold Turner, Woodstock, Ill.; Mr. Lloyd Pateman, Dousman; Mr. A. M. Dickman, Rockford, Ill.; Mr. Harold Janes, Whitewater.

By D. L. Sleezer

Madison Gladiolus Chapter Meeting

The Madison Gladiolus Chapter held its annual meeting on April 26 to elect officers and hold a most interesting type of bulb sale. An excellent performance of magic was given by Dr. H. S. Bostock of Madison.

Officers were re-elected: John J. Flad, president; Ed Lins, vice president; A. Van Kleeck, secretary-treasurer. Directors: Paul E. Hoppe, R. B. Russell, Mrs. Sam Post and Mrs. T. Wisniewski. A picture of the officers will be published in our next issue.

Mr. R. B. Russell provided entertainment with an entirely new type of bulb auction which we hope to describe more in detail in another issue. He donated bulbs of 26 varieties. Each person present was privileged to buy a ticket containing the list of varieties and a number, for 50c. The first corresponding number drawn from a hat gave the lucky person the privilege of choosing first from the lot of bulbs. If the retail value of the package excedded \$3.00 another 50c wsa collected from the winner but if the value was less than a certain amount a refund was given. It looks like an excellent idea for bulb auctions as everyone participated.

LEFT: Officers and directors of the Wisconsin Gladich. Society examine packaged cut flowers and bulbs for the auction. Seated, left to right: Dr. Geo. Scheer. Sheboygan vice president; Mrs. A. E. Piepkorn, Plymouth, secretary; Walter Krueger, Oconomowoc, president; Frank Bayer, Milwaukee treasurer, Back row: A. F. Scholtz, Wausau; Walter Miller, Sun Prairie. A. Sartorius, Porterfield; Dr. L. C. Dietsch, Plymouth, Ed Lins, Spring Green; Val White, Wausau; H. Krubsack, Peshtigo. Paul Ravet, Menomonie. Mich.; Archie Spatz, Schofield; Dave Puerner, Milwaukee.

RIGHT: Four clerks were kept very busy sisting sples at the bulb auction of the Wisconsin Gladiolus Society. Clerks, from left: W. A. Kurtz, Chilton; Frank Bayer, Milwaukee; Mrs I. Wightman Plymouth and Dewey Sleezer, Lake Geneva.





New Bunch Sweet Potato in Southern Wisconsin

By C. P. Holway, Evansville, Wis.

We have been so pleased with the new bunch Porto Rico sweet potato. despite this summer's drought and a very short crop, that we think other home gardeners in Wisconsin will want to try this fine variety, an introduction of the Georgia Coastal Plain Experiment Station. We secured the plants—50 is the minimum order—from the P. D. Fulwood Co., Tifton, Ga.

The usual directions for growing sweet potatoes call for "lots of room and a long, hot summer." But this new potato needs no more space than a white potato, for it "bunches"—grows straight up and does **not** make a vine that rambles all over your garden. You no longer need an acre in which to grow a few bushels for home use.

In June, the plants made fair growth, but by July they began to suffer from lack of rain.

In fall, it was obvious we were not going to have a large yield. When we began to dig during the last week of September we found that only about 10 per cent of the tubers had matured into medium-sized potatoes. The remaining 90 per cent were the size of a lead pencil, but the "hill" covered an area no larger than a bushel basket would cover.

Do the mature potatoes make good eating? Most assuredly, yes! Baked, they are moist but not mushy, completely free of "yammy" fibers, and delicious in flavor. The meat is a pale orange in color. The thin outer skin peels off easily, and the inner skin is tender and edible.

What Is A Sweet Potato

Sweet potatoes cause so many dinnertable arguments over what is a sweet potato and what is a yam that this seems a good place to settle the argument. If you will accept as authority the word of William R. Van Dersal. biologist of the U.S.D.A., and author of "The American Land," here is the answer:

There are several hundred species of morning glory (Ipomea), says Mr. Van Dersal, but only one produces edible roots—the sweet potato. The plant is entirely different from the yam, which is good only for cattle feed. Only a few yams are grown in the deep south.

"Yams" Are Not Yams

The moist, orange-yellow "yams" that we eat are not yams but sweet potatoes

-just as are the dry, mealy, light-yellow tubers.

The new Porto Rico Bunch variety seems to have the best qualities of both types. If you like sweet potatoes, try them in your 1949 garden. A somewhat sandy soil is best, and a loose subsoil that will let the roots go down for moisture. The plants are available after April 1 but are not frostproof. In southern Wisconsin (Rock County) the May 27 planting date was a little late. Ten to 14 days earlier probably would have been better.

PELLETED SEEDS OFFER PROMISE

Growers of out door vegetables will be interested to know that in the opinion of workers at Michigan State College, pelleted seeds offer great promise of more accurate planting. While the seeds are not yet perfected, the Michigan Station feels that plantings of cucumbers, sweet corn may be made when seeds become available.

He: "Since I met you I can't eat, sleep, or drink."

She (shyly: "Why not?"

He: "No Dough."

Worry will make almost anybody thin except the people who worry because they are fat.

HOW TO PROPAGATE BLACK RASPBERRIES

QUESTION: What is the proper time to tip the new canes of black and purple raspberries in order to get new plants?

ANSWER: Black and purple raspberries are propagated by tipping the new canes in late August or early September. By that time the tips of the canes have taken on a snake-like appearance and are then ready to tip.

First work up the soil well so that it is mellow. Then insert the tips vertically into the soil to a depth of about four inches.

Some growers plow a furrow in which the tips are inserted. They are then covered by plowing.

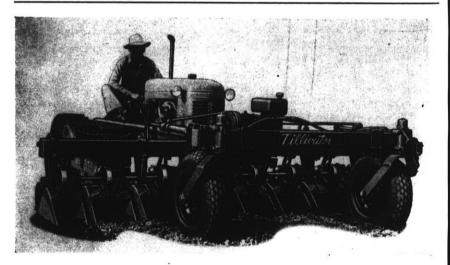
Tipping should not be done too late because high winds may drag the tips along the ground and bruise them so that they will not root.

STREAMLINER STRAWBERRY

How does the new Streamliner strawberry compare with the older everbearing varieties?

Reports on the Streamliner strawberry vary. Most growers agree that the quality is good, but its habit of producing its fruits on short stems seems to be objectionable for the commercial producers. For the home gardener this characteristic may not be too serious.

—From questions and answers in the Minnesota Horticulturist.



THE TILLIVATOR is the newest method of cultivating row crops. It can be adjusted so any combination of row widths can be cultivated accurately Revolving times eliminate hand weeding and labor. Being used on onions carrots, head lettuce, celery, sugar beets, mint and spinach by large commercial growers. It is made by the Ariens Company, Brillion, Wis.

Irrigation Comes To Wisconsin

(Continued from Page 252)

Selection of Sprinklers

Sprinklers are available in various sizes and with a variety of nozzle sizes; but the sprinkler in most common use at the present time throws an 80 foot circle of water of uniform coverage and will apply an inch of water to the ground in from 65 to 140 minutes, depending upon the size of nozzles and pressure. Selection of the proper sprinklers depends upon many factors, type of soil, crops grown, acreage under cultivation, etc.

With these sprinklers placed along the pipe line, usually at 40 foot intervals, a strip 80 feet wide is irrigated at one time. The pipe line is then moved to the next position.

Until recently, lightweight galvanized steel pipe in 20 foot lengths was most commonly used; but within the last two years pipe made of an aluminum alloy has shown several points of superiority, principally in a reduction in labor required to move the pipe line.

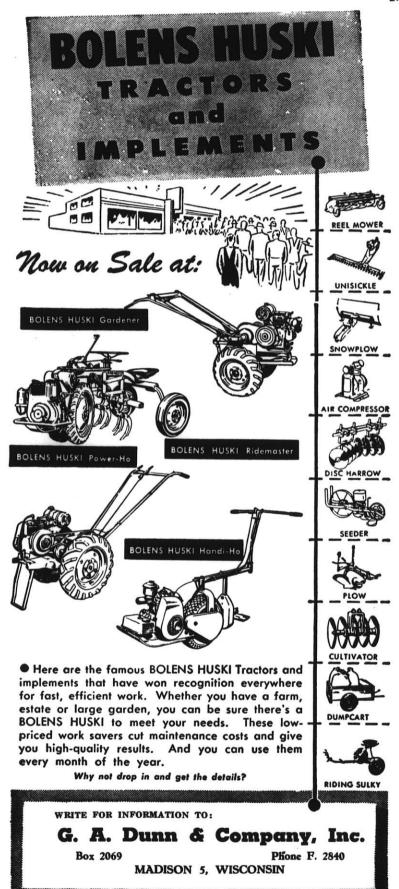
Where available, surface water such as streams and lakes provide the most economical source of water. Ordinary farm wells are not a satisfactory source of water because of the volume required in irrigation. Whether the expense of a large-capacity well is justified or not is a matter to be decided in each case individually.

The purchase of an irrigation system differs somewhat from the purchase of most other standard agricultural equipment in that each system should be designed on an individual basis taking into consideration such things as the particular crops to be irrigated, acreage to be covered, type of soil, topography of the land, water supply, possible future expansion, and a number of other factors. Thus, irrigation equipment is usually handled by specialists in that line who have devoted years to the study of successful irrigation.

"Remember," admonished the professor, "every man should know himself."

"Maybe," countered the flippant student, "but in doing so he wastes a lot of time that might be spent making more desirable acquaintances."

A secret is something you tell to a number of people individually.



Wisconsin Horticulture

Vegetables Which May Be Weeded With Chemicals

Questions Answered by O. B. Combs

QUESTION: We hear a lot about weeding with chemicals. Just which vegetables may be weeded with chemicals?

ANSWER: Under certain conditions, with certain weeds, with certain precautions and to a more or less satisfactory degree, a number of vegetables may be weeded with chemicals. Those which may be so weeded, include asparagus, beets, carrots, caraway, parsley, parsnips, dill, lima beans, snap beans, onions, peas, potatoes and sweet corn.

Asparagus

QUESTION: How can we weed asparagus with chemicals?

ANSWER: We have known for a number of years that calcium cyanamid, one of our nitrogen and lime fertilizers, was quite effective in controlling weeds in asparagus. The common recommendation has called for an application of the granular form at approximately 300 pounds to the acre applied in an 18 inch band directly over the row. This should be done after the weeds are up but before they are more than around 2 inches high. Where the weed problem is especially severe, a second application at the close of the cutting season has been suggested. This would amount to around 1 pound of granular calcium cyanamid to each 30 feet of row for each application. The dusting grade has been used at the rate of 75 to 100 pounds to the acre when the weeds were wet with dew and before they were more than about 2 inches high. If this form is used it is applied with a duster.

QUESTION: Does calcium cyanamid actually kill all weeds in asparagus?

ANSWER: No, not all weeds. Itgets most of them if properly used. Calcium cyanamid will stunt such deep rooted weeds as Creeping Jenny and Canada Thistle but it will not kill them.

QUESTION: Are there any other chemicals which may be used to weed asparagus?

ANSWER: Yes, and the most promising material is 2,4-D. It is not the safest material to have around vege-

tables but if properly used it can be very effective on broad-leaved weeds in asparagus. It can be used to carefully spot-spray such weeds as Creeping Jenny and Canada Thistle or it is even more useful when applied by spraying over the whole asparagus area before growth starts in the spring. Up to 4 pounds of 2,4-D to the acre may be safely used and, except for some of the grasses, practically all weeds will be killed. The sodium salt of 2.4-D should be used for both this early-season or pre-emergence spraying and also the later spraying for the deep-rooted Creeping Jenny and Canada Thistles. If 2,4-D is applied during the cutting season, all shoots should be cut below ground before the 2.4-D is applied.

Carrots

QUESTION: What chemical is used for carrots?

ANSWER: Stoddard solvent, one of the dry-cleaner type oils. This oil may be applied directly to carrots and weeds without injuring the carrots. When properly applied, all common weeds except ragweed will be killed.

QUESTION: What do you mean by "when properly applied"?

ANSWER: Stoddard solvent gives the best kill of weeds if applied at the rate of around 100 gallons to the acre when the weeds are still small, say under 2 to 3 inches high, and when it's comparatively cool. Spraying is best done on cloudy days or at night. When only the row strips are sprayed rather than the entire area, the amount applied may be reduced to as low as 50 to 60 gallons or less per

QUESTION: Can Stoddard solvent be safely used on any of the vegetables other than carrots?

ANSWER: Yes, Stoddard solvent may also be safely used on parsnips, dill, caraway and parsley. Those vegetables are all close relatives of the carrot. In fact it's been suggested by some of the eastern experimenters for use on small celery seedlings but we do not feel justified in recommending it for celery in this state.

Onions

QUESTION: What chemicals are used for weeding onions?

ANSWER: One of the first chemi cals used for weeding onions was sulfuric acid, and it's still used to some extent in Wisconsin. Sulfuric acid, or course, burns clothing and skin and also corrodes metal sprayer parts so it's not the most convenient and pleasant material to handle. It's generally applied in a 21/2 to 3 per cent water solution and at the rate of around 100 to 150 gallons per acre. The onions should have at least one true leaf around 3 to 4 inches long, and like some of the other weed control chemicals, it doesn't kill all weeds. Sulfuric acid commonly does not kill lambs quarters and grasses and it will also miss purslane unless the plants are very small. It does a good job on such weeds as pigweed, smart weed, ragweed and mustard.

QUESTION: What other chemicals are used on onions?

ANSWER: A large number of other materials have been tried but none are completely satisfactory. Some of the oils such as diesel fuel and Stoddard solvent do a good job of killing weeds when applied after seeding but before the onions get up, that is when applied as pre-emergence sprays. The dinitro compounds, including Sinox W, Dow Selective and Dynitro have also been used in the same way with fair results. 2,4-D applied as a preemergence spray in the same fashion has given very promising results on muck soils. When used on upland mineral soil, however, 2,4-D also kills all or most of the onions as well as most of the weeds. Should heavy rains fall shortly after 2,4-D is applied, it may cause serious injury to onions even on organic soils. Its use, then, is promising, not fool proof. Sodium pentachlorophenate (sold as Santobrite and Dowside G) has also given fair weed control in onions. In addition, aero cyanate and calcium cyanamid, used according to the manufacturers directions, have given excellent results in some areas.

—From Radio Talk Given by O. B. Combs, On State Stations Farm Program, WHA and WLBL.

THE BERRY AND VEGETABLE GROWERS' MEETING

(Con't from Pg. 255)

cause it has a very dense root system.

Prof. Alberts cautioned not to put the tertilizer underneath root crops which have a tap root such as carrots, beets, etc. because we may get multiple rooted plants. Put it beside the rows.

Pest Control Discussed

Mr. H. E. Halliday of the State Department of Agriculture discussed the control of pests by inspection. He emphasized that many diseases and insects have been brought in from foreign countries through carelessness. It is the program in his department to control spreading of such pests. Red Steele of strawberries has already been brought into Wisconsin and he advised growers to buy only inspected plants.

Raspberry mosaic or virus is a most serious problem and growers should plant only inspected plants. Keep the red raspberries at least 300 feet from the black raspberries, he advised, because the blacks may have a virus to which they are somewhat resistant but when spread to the reds it becomes very serious.

Mr. Halliday stated that central Wisconsin is in the area in which grass-hoppers may become serious this summer. All County Agents have been advised as to proper methods of control. Since control is best early in the season when the hoppers are very small, growers should be on guard to protect their crops. Poison bait and spraying are advised.

Strawberry virus has become a common thing on the lighter soils. Growers should watch for it and pull out plants affected—the kind that have several crowns and small yellowish leaves.

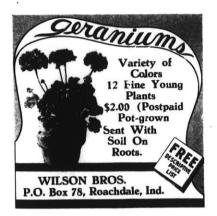
Vegetable Varieties Discussed

Prof. O. B. Combs of the Department of Horticulture, U. W., gave a most interesting talk on vegetable varieties illustrated with colored slides. These varieties were listed in this magazine in the February and March issues to which we refer our members.

Prof. C. L. Kuehner gave a very interesting talk on small fruits, illustrated with slides. He mentioned a new strawberry variety, No. 537, originated by the Department of Horticulture, U. W. which is to be tested over a wider area this year but plants are now no longer

available. He mentioned that the use of chicken manure on raspberries may cause late growth and heavy winter killing so should be avoided. A narrow raspberry row is best because it prevents crowding and there will be less disease and more sunshine for better production. Do not let the raspberry row get too wide and the plants too thick. Do not prune raspberries too low because it will reduce the total yield. The advice to prune to hip height is dangerous: a rather short man did this-with the result that he greatly reduced his crop. Cutting back 1/3 of the total length was mentioned; President Charles Braman said that he likes that method very much. The raspberry crop can be greatly improved by irrigation.

Always remember that if you got all you prayed for, there would not be enough to go around.



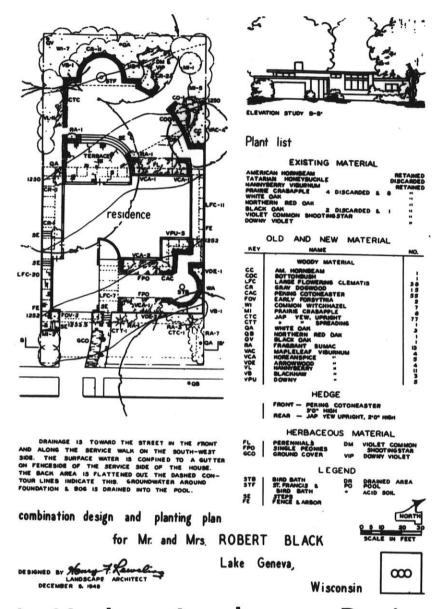


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A Modern Landscape Design

A Contemporary Design For Out Door Living By Henry F. Leweling, Madison, Wis.

A hypothetical problem which had been presented to the advanced students in landscape gardening at the University of Wisconsin by the author makes for an interesting solution to all home owners and gardeners.

The Black's landscape development is a contemporary design problem presenting the following situations:

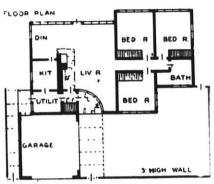
- a lot sloping from the street with a seepage area toward the rear.
- a house of modern design, meeting the zoning setback requirements but too large for the lot.

- 3. existing material the hypothetical client desired to preserve.
- a short history of the family and their interests.
- expressed desire of the client for something new and different.

It was assumed that the surrounding lots and properties were designed in a naturalistic manner and that the public side of the property should blend with its surroundings.

Horizontal Lines Repeated

The horizontal lines of the house are



repeated in the horizontal pattern of the branches of the Prairie Crabapple and the Blackhaw Viburnum.

Since the dual purpose garage also serves as an enclosed porch and opens onto the enclosed front area; it is the most logical place for a floral and feature display area accented by a clipped hedge. It forms a semi-private area and utilizes the valuable land area more efficiently. The Koreanspice Viburnum will contribute to the spring floral display and fragrance. The foliage of the single Peonies will combine pleasantly with the foliage of the woody material both trimmed and untrimmed to create pleasing shades of green during the summer and good fall color.

The service walk along the left side of the lot is paved with flagstone and has a gutter on the outside to facilitate drainage of the runoff water from the front area to the rear. It is screened by a fence repeating the architectural features of the house and forms a transition from the house to the garden with Large Flowering Clematis trained on the fence.

The terrace was built to bring the living room into the private rear yard and also to bridge the difference of the living room floor elevation down to the finished garden grade. break from the severe straight lines, the terrace was curved on the north end. The curve was repeated in the clipped hedge material to emphasize the design and define the active part of the garden. The clipped hedge will further hide the legginess of the shrubbery used. A Statute of St. Francis on a bird bath was used to terminate the primary axis from the doorway leading to the terrace from the living-dining room area of the house. This termination area of the primary axis from the doorway was backed by the clipped hedge and native shrubbery to attract birds. The seepage area was developed into a small pool with all drainage pipes leading into it. The northern most corner was developed into a wild flower area.

Four Season Interest

The shrubbery will present a four seasonal interest. In the winter bark color, branching pattern, and bud formations will be very interesting. The spring will produce the greatest floral effect, the pinks of the Prairie Crabapples and the white to creams of the Viburnums and Dogwoods with the shell pink and fragrance of the Koreanspice Viburnum. The canopy of the Oak branches will contribute to the subtle colors and contrast nicely whenever the sky is deep blue with fleeting white fleecy clouds. The herbs will cloak the ground of the wildflower area with purples and mauve colors. The pool will catch the reflections of the sky in the unshaded sections. Shade and sun loving perennials could be used in the flower border on the northwestern side of the house. The perennial border will give a pattern of color during the summer while the green foliage of varying patterns will furnish a setting for the summer's rest and activity in the back yard. The fall of the year will be a fiesta of colors. With the gay tones of the Fragrant Sumacs. Cotoneasters and some of the Viburnums to the more sober tones of the Oaks, Gray Dogwoods, and some of the Viburnums. In the winter the architectural pattern of the fence and the clipped hedge material will create interesting patterns when blanketed with snow in contrast to the unclipped vegetation and the brilliant blue sky of the sunny days.

TAKE CARE

If you are planting a vegetable garden this year, make sure you do not have the wrong kind of flowers nearby, warns Prof. Charles Chupp, plant pathologist at Cornell University. A lilac hedge, for example, can be beautiful but if it happens to have bacterial blight and is near a lima bean planting, the limas may not be worth much, he says.

Many florists like to produce dozens of different kinds of petunias as well as the Jerusalem cherry and the Chinese lantern. But woe to the commercial gardener who has these plants in the same greenhouse where he grows tomato, pepper or muskmelon seedlings. If the flowers have a virus disease this can be

BORON REQUIREMENTS OF VEGETABLES

K. C. Berger and H. H. Hull, Department of Soils, University of Wisconsin

Crops which are most likely to respond to boron fertilization are alfalfa, red beets, sugar beets and mangels. Other crops which have a relatively high boron requirement are: cabbage, tomatoes, cauliflower, carrots and celery.

Soils usually low in boron are: light colored soils, sandy soils and alkaline soils. Dark colored, slightly acid soils generally contain sufficient available boron for most crops.

When soil tests or field observations show that boron is needed for the crop

transmitted by hand to the gevetables in the course of tending the crops."

Fruit may also be a problem to the grower, Chupp points out. "Probably nothing is more beautiful than Montmorency cherry trees loaded with ripe fruit but some orchards have the virus disease known as necrotic ring spot." If vine crops like cucumbers are planted adjoining them, the vines may become infected and practically worthless. From Massachusetts', "Horticulture."

611 Maywood Ave.

to be grown, the following rates and methods of applications are recom-

Red beets: Apply borax broadcast at the rate of 50 pounds per acre and work into the soil before seeding or mix with the fertilizer and drill at the side of the seed at the rate of 20 pounds per acre.

On heavy soils, 40 pounds of borax per acre mixed with the fertilizer and drilled at the side of the seed, will help control weeds in the row and so far as is known will not injure the beets.

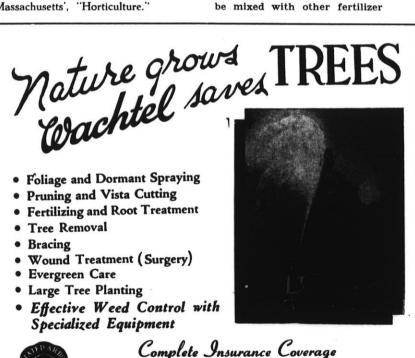
Tomatoes, cabbage, carrots, celery, cauliflower: Apply borax broadcast at the rate of 40 pounds per acre before planting and work into the soil.

In no case should borax be applied in direct contact with the seed as injury to germination is likely to result.

Borax and Fertilizer Borate are the fertilizers commonly used to supply boron to the soil. These materials contain about 11 per cent of boron, are granular, dry, flow easily, and do not set if kept dry.

To apply uniformly small amounts of borax broadcast, a cyclone type or wheelbarrow type of grass seeder can conveniently be used or the borax can be mixed with other fertilizer

Wauwatosa 13, Wisconsin



Wisconsin Horticulture

GARDEN GLEANINGS

DORMANT BULBS should never be placed in a wet soil. Rot is very likely to start in bulbs such as Tuberous-rooted Begonias, Gloxinia and others in soil that is wet—it should be barely damp until growth starts. Once the bulbs have developed a root system they become more resistant to decay.

TUBEROUS-ROOTED BEGONIAS will become vigorous plants with large flowers if you follow these 3 requirements. First, they require constant shade during the sunny part of the day—at least from 8 a.m. to 6 p.m. in summer. Second, a loose porous soil containing at least ½ peat to which has been added a complete fertilizer. Third, the shade may be due to trees or shrubbery near by and their roots dry the soil below the surface, so water frequently and deeply during dry weather.

ROSES THRIVE ON NITROGEN AND WATER. A high nitrogen fertilizer or one such as milorganite together with a soil containing organic matter, (peat moss or rotted cow manure) and plenty of water will assure vigorous growth of rose bushes, with a succession of bloom.

ROSE BLACK SPOT is much like apple scab; it overwinters on the old dead leaves. The spores fall on the leaves and if they are wet from rain or dew for a number of hours, will grow and we have black spot. The type of material for control, whether it is sulphur or some other insecticide, is not as important as the time of application. The fungicide must be on the leaves during the rainy period when the spores start their growth. Therefore, the rule, spray or dust frequently during rainy weather. It is a good idea to apply the dust when the rain starts and dust every three days if necessary. During dry weather it is not necessary to dust.

DO NOT ADD LIME TO WIS-CONSIN'S GARDENS without testing the soil—wood ashes and bone meal may be included in this catagory. The use of lime is fine if the soil is quite acid. Many Wisconsin soils do not need lime to grow flowers, fruit or vegetables. If the garden is watered with hard water the pH will gradually increase until it is quite high. Additional lime or wood ashes might lock up some of the minor plant food elements. Test your soil.

DON'T MISTAKE A FUNGICIDE FOR AN INSECTICIDE and vise versa.



Red Duchess, an excellent sub-zero Hybrid Tea Rose by Brownell.

Lime Sulphur will not kill insects while Arsenate of Lead, DDT or Rotenone will not prevent fungus diseases. To control fungus diseases and insects on most plants in the small garden, we can still safely use a combination of sulphur dust with Rotenone. If Rotenone does not control a certain insect, we can change to DDT or some other insecticide that will fit the case, but Rotenone will control most garden insects.

DO NOT CULTIVATE DEEPLY AFTER PLANTS HAVE BECOME ESTABLISHED. There is great danger of cutting off the feeding roots in dry weather thereby stunting the plants. The main purpose of cultivating is to kill weeds and leave a light mulch on the surface of the soil. Shallow cultivation will do it.

DON'T TOP DRESS THE LAWN WITH MANURE. It is not any better as a plant food than commercial fertilizer but is likely to contain weed seeds. It certainly is unsightly and if you have to buy it, the cost will be higher than commercial fertilizer. If the lawn is rough, fill the holes with good black soil to level it.

DON'T FEED ALL PLANTS ALIKE. Roses do well when fed liberally with a nitrogen fertilizer and given plenty of water. Nitrogen fertilizer on many other plants will cause a rank growth and weak stems.

Doctor: "The thing for you to do is to stop thinking about yourself; try burying yourself in your work."

Patient: "Mercy, and me a concrete mixer."

THE HARDIER HYBRID ROSES

Red Duchess, introduced three years ago, has been carefully tested here and has proved to be an excellent sub-zero with a vigorous spreading plant bearing many loose-petaled informal type beautiful roses throughout the summer and fall. The color of Red Duchess is not really red, it is more the shade of Charlotte Armstrong. The first red sub-zero. Red Robin, never proved satisfactory: the blossoms are not of uniform quality.

A new pink of Brownell's, Curly Pink, is just about the most perfect pink rose anyone could dream of. You can disbud it to one on a stem if you want fewer but bigger roses. We can almost guarantee that you will like it, and best of all it is one of the easiest roses to grow.

Older Good Varieties

Many older varieties remain on the satisfactory list. Among the best are Lily Pons, Break O'Day, Anne Vanderbilt, V for Victory, King Boreas, Pink Princess, and Shades of Autumn.

By Richard Wilcox in The Minnesota Horticulturist

ORIGIN OF THE AFRICAN VIOLET

The African Violet was introduced into European horticulture about 50 years ago. Horticultural journals in 1895 were featuring illustrations of this new and unusual plant, according to B. Y. Morrison in the October issue of National Horticultural Magazine.

The plant was originally discovered growing in two localities in wooded spots in fissures of limestone rocks filled with rich soil and vegetable material, about 100 feet above sea level. It was also found about 2500 feet above sea level in a sheltered spot on granite rock with good soil.

The original plants were blue. But at present there are blue, purple, white, pink and other shades.

The first plants came from the provine of Usambara, Africa. Their habitat makes them adaptable to a wide range of growing conditions but the soil should be rich, porous and high in coarse humus which will drain readily. The degree of sunlight will increase the flowers and decrease the attractiveness of the foliage. Feeding with a little liquid fertilizer about every two weeks will help when the light is good.

RHODODENDRONS GROW AND BLOOM IN WAUWATOSA

Early in June the garden of Herman F. Koch, 1729 N. 47th Street, Wauwatosa is bright with the blooms of Rhododendron. There are about 50 of the plants. His flowers range in color from pure white to deep purple and with several shades of pink and rose in between.

Mr. Koch probably has one of the very few collections of Rhododendrons in Wisconsin and the reason why more are not grown is because they require so much time and care. Our soil is not acid enough and the winters are too cold so an acid soil must be maintained carefully and winter protection must be given. Mr. Koch has built a large cistern which collects rain water to water the plants. While growing Rhododendrons is a hobby with Mr. Koch he admits that it takes up a good deal of his time.

IRIS SYMPOSIUM FOR 1948

Results Of Annual "Popularity Contest" By The American Iris Society Judges

Here are the results of the annual popularity contest by judges of the American Iris Society.

As popular new varieties become better known they have advanced rapidly into the upper ranks. Older varieties began to suffer by comparison and are retiring gracefully into the wings, according to the committee on awards of the AIS.

The Top 15 Varieties

- 1. Ola Kala
- 2. Great Lakes
- 3. Chivalry
- 4. Bryce Canyon
- 5. Helen McGregor
- 6. Blue Rhythm
- 7. Sable
- 8. Elmohr
- 9. Blue Shimmer
- 10. Master Charles
- 11. Wabash
- 12. Lady Mohr
- 13. Berkeley Gold
- 14. Mulberry Rose
- 15. Azure Skies

The pupil was asked to paraphrase the sentence: "He was bent on seeing her."

This is what the pupil handed to the teacher: "The sight of her doubled him up."



Mr. Herman Koch in his Wauwatosa garden.

ANNUAL IRIS SHOW MILWAUKEE, IUNE 5

This year the Wisconsin Iris Society will hold its 15th Annual Iris Show in the west wing of Mitchell Park Conservatory, Sunday, June 5th. It will open at 1 p.m. Admission will be free.

Officers of the Society for 1949 are: Mrs. Arthur Yaeger, Milwaukee, president; Mr. C. D. Adams, Wauwatosa, vice-president; Mrs. Robert Baumgartner, Milwaukee, secretary and Mrs. Alfred Dess, Milwaukee, treasurer.

Reporter: "Which of these two men is the bridegroom?"

Relative of the Bride: "The anxiouslooking one—the cheerful one is her father."





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Rt. 1, Box 218, Fort Atkinson

Editor — Mrs. Oliver S. Rundell, 2227 Van Hise Avenue, Madison, Wis. Parliamentarian — Mrs. Paul Hammersmith, 2755 N. Stowell Avenue, Milwaukee 11, Wis.

PRESIDENTS MESSAGE

Dear Federation Members:

315 3rd Street, Baraboo

Wisconsin has a new district!

At long last our seven orphan clubs are in a district of their own—the Northwest District. The clubs are: LaCrosse, Eau Claire, Homemakers of Prentice, Namekagon of Hayward, Piney Ramblers of Wentworth, Superior and West Salem. We welcome Northwest District.

We also welcome the following new clubs: Good Earth of Wausau, Friendly Homemakers of Prentice, Westfield, Poynette and Thiensville Rural.

Be on the alert for award winners. Our own state Special achievement award is now officially established and clearly defined as follows:

- 1. The award shall be known as the Special Achievement Award of the Wisconsin Garden Club Federation. It shall be a rosette with two streamers, the medallion to carry the words Wisconsin Garden Club Federation, one streamer to carry the words "Special Achievement Award 19......", and the other streamer to carry the name of the winner. The color shall be light blue with lettering in gold.
- 2. This award shall be given only to clubs or club members who have made an outstanding contribution to Horticulture, Conservation, the promotion of gardening among youth or who have done distinguished civic work in

making permanent improvements for public benefit in town or countryside.

- 3. All applications for this award shall be filed with the Awards Chair-
- 4. The contribution to horticulture, conservation, or promotion of gardening among youth shall have been made not more than two years preceding the year in which application is made.
- 5. Applications because of civic achievement should be accompanied by "before and after" pictures and the project shall have been completed during the year preceding the making of application. The Awards Chairman shall be informed of the project when the work is begun, so she may watch its progress, familiarize herself with all its problems and judge it on completion.
- No club or club member shall be eligible for this award two years in succession.
- 7. The Awards Chairman shall make her recommendations to the Executive Board and together they shall make the final decision, reserving the right to withhold the award any year that applications do not merit consideration.
- 8. This award shall be presented to the winner by the President at the Annual State Convention.

In the March-April issue of National Gardener you will find a clear explanation of the new National Council awards created last year at the annual

DIRECTORS

Flower Show: Mrs. Ervin Kulow, Rt. 2, Box 441, Waukesha Garden Tours: Dr. Ralph A. Norem, 466 Elmwood Avenue, Oshkosh

CHAIRMEN

Auditor: Mrs. Clarence Kasdorf, 736 Ridge Street, Baraboo Birds: Miss Elsa Lautenbach, 135 Smith Street, Plymouth Conservation: Mrs. Conrad Biebler, 2027 E. Olive St., Milwaukee 11 Historian: Mrs. Walter Roehrborn, 1922 Georgia Ave., Sheboygan Horticulture: Mrs. Herbert Chaffin, 543 Scott Street, Ripon Junior Gardens: Mrs. Earl F. House, 421 8th Ave., Baraboo Judging Schools: Mrs. George J. Portman, 308 12th Street, Wausau Membership: Mrs. George E. Flanders, 806 West Wisconsin St., Portage Nominating: Mrs. Harold C. Kallies, 723 No. 8th St., Manitowoc Program: Mrs. M. C. Spence, Williams Bay, Wisconsin Publicity: Mrs. Fred C. Marquardt, Rt. 1, Box 63, Hales Corners, Wis. Roadside Beautification: Mrs. Malvin Scholarship: Mrs. Alfred J. Kieckhefer, 1250 W. Dean Rd., Milwaukee 11 Year Book and Awards: Mrs. H. G. Harries, Rt. 1, Box 31A, Hales Corners, Wis.

meeting in Lexington and mentioned in our own April issue.

What do you think about this? It has been suggested that we become uniform as to the time of elections in the individual clubs. This is the plan: Select nominating Committee in June. Elect officers in September to take office in January. This gives both old and new officers an opportunity to attend fall district and Regional meetings. President elect would then have plenty of time for appointing her chairmen and the chairmen would have ample time for setting up programs and getting out yearbooks before January. Everyone would be ready in January for a good year's work It sounds plausible. think it over. Of course this schedule is already established in many of our clubs.

Pass the Hat and let your nickles. dimes, quarters and dollars if you will, fall into it. Then have your treasurer send the net results to Mrs. Kieckhefer, Scholarship Chairman. Let's have the fun of feeling proud this year.

We have a surprise in store for you. A Summer Annual, just one issue, entirely our own, will greet you some day around the first of July. Wisconsin too, will have a memento of the "First Twenty Years" which National Council is celebrating this year.

Most sincerely, Gretchen Fiebrantz. Pres.

Some Hints For The Lawn

B. H. PAUL

A great deal has been written about lawn seed and starting new lawns. The suggestions that are made here are not usually found in the standard practices described for establishing and caring for lawns; rather, they are adjuncts or supplemental ways that may help out.

There are two preferred seasons of the year for seeding lawns; early spring and early autumn, or more exactly, early April and September. For early spring sowing use high grade seed. Weeds have an even chance with the grass if weed seed is present in the soil or mixed with the grass seed. In September sowing, the annual weeds that may come up with the grass get frozen out before they have a chance to grow very large.

However, there is no reason why a lawn may not be started at any time throughout the summer; with new homes, new lawns are needed as soon as the grading around the house is completed. A discussion of soil preparation is not included in this, except to say that the lawn should have a layer of good top soil about six inches deep.

Frequently a quick cover is desired, and of course, the quickest as well as the most expensive method is sodding. But we are not talking about sodding, -quick results come from seeding by the use of a quick growing "nurse crop" which covers the ground and prevents washing by rain while the slower growing grass becomes firmly established. Kentucky blue grass is the standard lawn grass for this part of the country, except for shady places where one of the several shady lawn mixtures is better. Kentucky blue grass, with a mixture of about twenty per cent rye will give a good soil cover in a few weeks. For even quicker results a mixture of some of the grains like oats, millet or rye are successful. An advantage of oats or other non-hardy grain is-that the roots are killed out over winter and this leaves room for full development of the grass roots early the next spring. Rye on the other hand will remain alive over winter, and this, while not serious, makes lawn cutting more difficult the next spring.

Sloping lawns offer a hazard from



sudden heavy rain storms during the period immediately after seeding and before a ground cover is established. Whether a "nurse crop" is used or not, it is a good practice to mulch the soil lightly with a thin covering of swamp hay just enough to protect the soil from washing, but not enough to smother the germinating grass seeds. Rake the hay as soon as germination is well established.

Another helpful hint that may be combined with the above or used alone, where the ground is gently sloping, is "contour cultivation". We seeded a block of lawn in early summer after ordinary harrowing of the soil. We took care that the small furrows of the harrow teeth were at right angles to the direction of the slope. We did not use a roller until after the seed had germinated and was well rooted. The small contour furrows and ridges left by the harrow prevented any serious washing but, as we remember, there were no heavy rain storms during the critical period that vear.

When mixing different kinds of grass seed, it is well to know the growth habits of the kinds mixed. When we seeded our first patch of lawn sixteen years ago, we mixed one pound of creeping bent grass seed with twenty-five pounds of Kentucky blue grass seed. Now we have a patch of creeping bent "lawn." That is fine except for a slightly different shade of green that now shows the boundry of the creeping bent and the blue grass of the adjacent expanded lawn. Creeping bent requires somewhat more care than blue grass. It shows

the ill effects of dry weather more quickly and needs more watering; otherwise it succeeds well under about the same concitions as the rest of the lawn. If we had it to do over again, we would leave the bent grass out, unless we had a small lawn to which we could devote sufficient time to care for an all bent grass lawn.

Many people like white clover in their lawns, it leaves a pleasant fragrance after cutting; it gives a clean look to the green; it attracts the bees and birds; some say it even crowds out the weeds. Mix in a little white clover seed when starting a new lawn. White clover comes and goes. A hard winter with bare ground may kill it. In many locations it will come back naturally, especially in lawns not cut too close. A good practice is to scatter some seed thinly over the lawn in early spring. It will thrive best if allowed to bloom each time before mowing.

To be successful, a lawn requires continual watering during dry seasons. Many weeds are deep rooted and will take over if the grass stops growing because of drought. Also, to keep grass roots growing and to protect the soil surface from direct sun, do not cut the grass too short. Or course you have read that many times elsewhere; your lawn won't look quite so smooth if "cut long" but it will "last better", and the growing grass will help crowd out undesirable tenants.

And what do we do with clippings? Well, since we have a greatly expanded lawn the last few years, we just do not have time to remove them, except in places where they may be heavy enough to smother the grass. Besides, they are a source of organic matter which the soil needs. They are worked into the upper soil layers by angle worms; this improves the tilth and thus the water holding capacity of the upper soil layer.

So when people ask, after observing the smoothness and greenness of our lawn, "What kind of fertilizer do you use to produce a lawn like this?" We have just one answer:

"Water".

Landscape Gossip

By Henry F. Leweling, Landscape Architect.

The loveliest month of spring is May. Then days are balmy and gardening activities are evident in all directions. Late spring revels in her gaity of bloom, with the softer or pastel colors predominating, and the loveliest of all spring-flowering bulbs, the Narcissus is in bloom.

One book, "New Design of Small Properties" by M. E. Bottomley, published by MacMillan Co., New York in 1948, for \$3.75, has been on our book shelf for some time. In paging through the book and concentrating with somewhat a critical eye, upon the illustrations, a cord of rebellion stirred against the naturalistic design one finds so much in landscape books of the 1930's and the early 1940's. In this book Bottomley has successfully produced modernism in the landscape design.

In scouting around for plant material, a stop over in Cincinnati was necessary. During a visit to a Cincinnati landscape nursery firm the conversation drifted to design work. The work of Prof. Bottomley at the University of Cincinnati was mentioned and a suggested trip to see some of his work became a reality. Two places accredited to Prof. Bottomley and his students were visited. Looking at the design plans, appeared stuntish (using a local expression) but as executed on the grounds the plans appeared nest, crisp, refreshing, original and stimulating. The residence and the land were a harmonious combination. The sunposedly severe but dramatic lines of the clipped hedges were softened with new shoots. Upon questioning property owner, it was revealed that the hedge material was clipped only twice during the growing season. From all appearances, it looked like the clipping of the hedges would take a week to perform but the lady of the house said, "A man from a local landscape service company does it in one day with electrical shearing equipment." hedges varied from 1' to 6' high and were judged to be 500 feet long. The owners were enthusiastic about their novel grounds and utilized the outdoors extensively.

On a tour of new subdivisions in Minneapolis, it was interesting to observe that the modern and ranch style

contemporary houses were built upon larger lots. These types need large sites but costly improvements and earlier subdivision work tend to keep the lots smaller as one approaches the heart of the city. However, modern and ranch style homes look better upon large sites than on small or crowded lots.

One becomes aware of the trend in architecture upon a visit to the Institute of Technology at the University of Minnesota. The Architectural Department there is very active and the student response is spirited. A progressive architectural spirit generates from the drafting laboratories in all directions into the Twin Cities area.

With spring fever rampant, one is hard put to stay indoors. A piculc is merely an inducement to go out and enjoy the beauties of the Baraboo Bluffs. One taste of the outdoors leads to many jaunts hither and you.

ANDORRA JUNIPER AS AN EDGING PLANT

One of the loveliest evergreen edgings that I have ever seen was made of the beautiful Andorra juniper-a plant beautiful not only in its airy, plumy growth, but in the pleasing green of its summer foliage and the rich reddish-purple of its winter foliage. This is a plant particularly desirable for midwestern conditions where an edging up to eighteen inches in height is desired. It can take much punishment from drought and cold and does well in full sun or light shade. Little shearing is needed during the first few years of growth, and, after it has filled its allotted space, trimming back once a year in early summer will keep it in place.

It is seldom advisable to plant these junipers close enough to obtain an immediate continuous line of foliage. In the first place, that would be too costly, and the thinning out which is apt to be needed in a few years would be sure to create a disheveled appearance for a time. It is usually better to space them fifteen inches apart or more and wait the short time needed to have them fill out into an uninterruped line, if such is desired.

 By C. W. Wood in American Nurseryman.

PROGRAMS

Horticulture, as a theme for programs ranks No. 1 in creating garder club interest. Programs given over toplain dirt gardening and gardening problems will keep a club interest as no other topic can. Since most garden club members are also interested in a study of Flower Arrangement, programs that are planned to help them Grow Their Own Arrangements are excellent.

Discuss one group of flowers at each meeting, preferably at planting time or when in bloom. As an example, choose tulips. Your study would include: Classes: Darwin, Cottage, E'reeder, etc; soil requirements; time and method of planting; diseases and their control; their place in the garden landscape; reviewing of catalogues offering varieties. If your program is scheduled for Tulip time make flower arrangements using tulips.

This type of program may be carried out with any flower or combination of flowers (blooming at the same time) such as poppies, roses, flowering shrubs, unusual bulbs and house plants.

National Council has eight new sets of Kodachrome slides on different phrases of Horticulture, each with a short lecture, which may be rented for a small charge. They are highly educational so take advantage of them. However, make your reservations early to avoid disappointment.

With the arrival of our lovely spring and summer weather, garden clubs should take advantage of district tours, and also plan local tours. Visual education is an easy and pleasant way to learn and is helpful and inspiring to new gardeners. Our own club. Williams Bay, has chartered one of the large boats for a trip around Lake Geneva for our June meeting. The boat accommodates 80 persons which permits guests to have the pleasure of visiting the beautiful estate gardens with us. We will enjoy a picnic lunch on the boat.

a work party where members do weeding, cultivating, general cleaning up. In a couple of hours, 15-20 women can do an amazing amount of this sort of work without putting undue strain on any one person or on the club budget.

Helen L. Spence State Program Chairman

Garden Club News

Announcement!

OAKFIELD FLOWER SHOW

Oakfield Garden Club will hold a Spring Flower Show in conjunction with a Hobby Show, May 20th and . 21st at Liberty Hall, Oakfield.

SPRING FLOWER SHOW

The Fond du Lac Community Garden Club will hold its annual spring luncheon and flower show with an arrangement clinic, at 12:30, May 27, at the Hotel Retlaw. The guest speaker will be Mrs. J. Wilson McAllister. Guests are welcome if the Secretary Mrs. L. W. Romaine, 106 Sheboygan St., is notified by May 24th.

GARDEN CLUBS INVITED TO WASHINGTON ISLAND

The Washington Island Garden Club extends an invitation to all garden club members throughout the state to visit Washington Island Thursday, June 16. It will be necessary to arrive in time to take the ferry at Gills Rock at 10:30 a.m.

The crossing from Gills Rock to Washington Island takes about forty-five minutes. Members of the Washington Island club will meet us at the dock when we arrive. We return on the ferry which leaves at 4:30 p. m. That will allow about five hours for a noonday picnic lunch and for a tour of the island.

Wear warm clothes. It never gets really warm on the island, and a day in June can be quite cold. Wear heavy, rough clothes and shoes for hiking. Bring your own dishes, cold drink, sandwiches, and dish to pass. This dish can be a salad, a fruit jello, or a cake. The islanders will provide hot food and plenty of hot coffee.

The registration fee is \$2.25 for each person. This fee includes the ferry boat fare and the cost of transportation on the island. You do not pay the fare to the ferry. You pay the registration fee to the local committee on arrangements, and the committee will settle with the ferry.

The registration fee is set at a figure which is calculated to leave a small balance which is to be applied to some project supported by the Federation. A number of projects have been suggested, but no decision has



as yet been made as to where the money is to go. It could be some scholarship fund or the Redwood project in California. Perhaps it could be put to good use in roadside beautification. Do you have any ideas on the subject?

Would you like to make the trip? If so, will you please write to Mrs. Clara Jessen, Washington Island, Wisconsin, and tell her so. She is chairman of the committee on arrangements. The committee would like to know how many to plan for. Mrs. Jessen can supply you with a tourist map of Washington Island and answer any questions you may have.

Ralph A. Norem, Director of Tours.

THIENSVILLE OFFICERS 1949

President—Mrs. Herbert Ohm. Vice President—Mrs. Carl Jahn. Secretary—Mrs. Herbert Bellin. Treasurer—Mrs. Edward Dineen.

MRS. RENNEBOHM HOSTESS TO GARDEN CLUBS

A highlight of the summer season in the Madison District will be a tea given by Mrs. Oscar Rennebohm at the Executive Residence, 130 East Gilman Street, Madison, Wednesday, June 30, for garden club members.

A talk at 2:30 o'clock, by Dr. Clifford S. Lord, Director of the Wisconsin State Historical Society, on "Historic Sites in Badgerland," will preface the tea. In his talk Dr. Lord will stress sites which he thinks could appropriately be marked in case garden clubs in the Wisconsin Federation might wish to consider the placing of markers as a project for the future.

Plans for a District flower show to be held in Madison in September, are under way.

MAIL BOX DE FOREST CLUB

The DeForest Garden Clubs' home talent show, "Televisional Home," held in March for the benefit of the new Community Hall and Community Improvement Fund was their second big undertaking this spring. The District meeting at DeForest late in February was the largest the district has ever had.

A young man said he knew his girl could keep a secret, because they had been engaged for weeks before even he knew anything about it.

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Book Reviews

DAGNY BORGE

Malabar Farm, by Louis Bromfield, with Drawings by Kate Lord, is an absorbingly interesting sequel to his popular Pleasant Valley. It was issued in 1948 by Harper & Brothers, but portions of it have appeared in the Atlantic Monthly and in The Land. It is prefaced with a long letter to one of the thousands of GI's who wrote to the author after reading the earlier volume. In this second book we learn, partly through the writer's journal, of the transformation achieved on this famous farm in the five years since the first one was published. With justifiable pride Bromfield tells of the progress made, particularly in soil restoration. It is exciting to read of the accomplishments of the war period, when labor and machines were so scarce. Perhaps the most astounding fact gleaned from these pages of information and inspiration is that this farmer no longer uses sprays or insecticide dusts. In the chapter entitled "Gardening Without Tears" he ascribes much of his success in growing healthy and unusually prolific plants to mulches of various sorts. The only phase of agriculture Bromfield seems to be diffident about attempting is apiculture. Root's thick "ABC and XYZ of Beekeeping mystifies him. The charming illustrations are by the wife of an eminent soil conservationist.

The Earth is Ours, by Marion Pedersen Teal, issued in 1948 by the Thomas Y. Crowell Company, also tells of building up an old farmstead, but on a smaller scale. During the depression the author and her husband got fed up with city life and with their baby went back to his boyhood home to farm and make a home. The place had been rented for years and was run down. But she was only one generation removed from the soil and he had a master's degree in agricultural economics from the University of Illinois; so they managed to make a comfortable living. While her viewpoint is still slightly that of a city bred person, she is fair in her appraisal of the social life of the community and her narration of how they became integrated into it is very much worth while.

Days Without Time, Adventures of



a Naturalist, by Edwin Way Teale, published by Dodd, Mead & Company in 1948, is handsomely illustrated by almost 150 photographs, most of them full page, by the author. Parts of the book have appeared in magazines and in a syndicated newspaper column. One disheartening chapter, entitled "Bird Invasion," tells how starlings have spread from a mere hundred birds to millions from importation sixty years ago by a wealthy New Yorker whose hobby it was to introduce into America all birds mentioned in the works of William Shakespeare.

Birds Over America, by Roger Tory Peterson, is another Dodd, Mead book published in 1948. It is a fascinating account of the author's adventures in bird watching in all but one of our 48 states over a period of nearly 30 years, from the time his seventh grade teacher organized a Junior Audubon Club. More than 100, mostly full page, photographs by the author enhance the value of the book. In discussing why people love to watch and listen to birds, this eminent amateur ornithologist suggests that what appeals most to them is the suggestion birds give of freedom and escape from restraint. He mentions that Wisconsin is one of the states in which progressive work in ornithology, such as ecological and behavior studies, is being done at present, and quotes both J. J. Hickey and the late Aldo Leopold, both of the Wildlife Management Department of the College of Agriculture of the University of Wisconsin. The famous colony of barn swallows near Deerfield, Wisconsin, is also mentioned. His How to Know the Birds is now available in a 35 cent reprint in the Mentor Book series, published by the New American Library.

A Child's Garden of Flowers, by Robert V. Masters, and a similar volume by the same author, entitled A Child's Garden of Vegetables, are 1949 publications from Greenberg at a dollar each. The tiny books are only a little over seven inches tall. Each contains five packets of Burpee seeds guaranteed good to 1952, a planting chart, and the history and culture of each plant included. Of course separate packets of these seeds may be purchased for much less, but having them presented in book form may intrigue potential young gardeners.

Many of us consider the word compost a comparatively new term, but Shakespeare used it in **Hamlet**, where the melancholy Dane says to his mother, "And do not spread the compost on the weeds, to make them ranker."

An English organization, Plant Protection, Ltd., has produced a color film, Operation Forget-Me-Not, showing the English country scene, with some close-ups of gardens, for showing by various groups aiding in the distribution of surplus plants to small plots surrounding prefabricated houses on bombed sites in Britain.

Making Friends with Birds, by Arthur F. Park.

This entertaining and informative book by an English amateur photographer was published by Chatto and Windus in London in 1948. He approaches his theme from a unique angle in that he has always made friends of his subjects before he attempted to photograph them, and therefore was able to take pictures at the very close range of three or four feet without resorting to what he terms "hides." Most of the pictures are of fledglings. He found that older females were also easily approached, but he could not make friends at close range with male adult birds. Certain species were found tamer than others, the willow warbler being the most responsive.

Hemerocallis

By Mrs. George Harbort

A few years ago there were only a few people interested in hybridizing the Hemerocallis and among these was a young college professor, Dr. A. B. Stout, who realized the great possibilities in this plant. Other pioneers in this field were Amos Perry, Carl Betscher, Bertrand Farr, and Hans Peter Sass. The modern Day Lily has developed from species taken from the wild, cold, hot, and dry areas of Tibet, Korea, Siberia, China and Japan.

Dr. Stout has observed, selected and recored all the information he could obtain on the daylily and has put it to work. He has grown over 100,000 seedlings and out of these has selected only those he considered outstanding and superior. thing like fifty plants have stood the test. Some fifteen years ago there were about four hundred named varieties of Hemerocallis but now the number is in the thousands. It is to be hoped, however, that hybridizers will strive to limit their introductions to plants that are different from and superior to existing varieties.

The hybridizers' present objectives. according to Gretchen Harshbarger, President of the Midwest Hemerocallis Society, cover every aspect of the plants and flowers. They include new sizes and shapes of flowers, new color combinations, double flowers in various colors; a larger number of flowers, better lasting qualities, additional night blooming varieties, blooms that are proportionate to the plants, stems that are erect, flowers with fragrance, good branching, flowers that will withstand wilt and not curl or bleach in the hot sun or during drought, plants that will multiply and plants that are resistant to cold and disease.

As a rule they do not bloom the first year while they are getting established. The plants you get from nurseries are small, probably only one year old and they need more root system to bloom on.

Hermerocallis ar not water plants but they like to dip their roots into pools and streams. However, they resent moisture around their crown. Drought and dry slopes are their speciality. Wet feet but dry heads



Hemerocallis add much to the flower border.

are their favorite condition and they bloom much better in hot dry weather, than they do with cloudy skies and rain at their blooming period.

Hemerocallis are declared to be pest free but if they are over crowded or n e a r to uncut grass and the weather unfavorable they might have some thrip trouble. Flower stems will look rusty and some of the blooms will be crippled or deformed. You can use the usual tartar emitic spray or DDT spray. I use the DDT

spray, 50% wettable for my glads and finish up the remaining liquid on those plants that I think need a spray. I have never found any thrips on my hemorocallis.

When transplanting becomes necessary it is important to fairly butcher the plants so as to speed rigorous and healthy new growth. Cut and pull the plants apart and cut off or pull out old roots entirely. Trim off ends of other roots about half their length. Pull off all outer and wilted foliage and cut good leaves 2/3 of the way down. If you are not severe, plants will take much longer to come back.

For an all season border, try alternating hemerocallis with peonies and chrysanthemums. One planting I particularly liked, consisted of a clump of lemon day lily, one soft pink peony and a good sized clump of Caprice, an orchid colored oris. In combining the various colors you should take care to plant reds and darker shades away from each other. using yellows and other plant material between. Spring, Summer and Fall bloomers should be well distributed throughout the garden. Give the multi-branched and small flowered type plenty of room and prominence.

Day lilies are very good for naturalizing along creeks or beside pools and in open woodland spots, also on sunny banks and knolls. They make good foundation plantings when spaced between evergreens and tall shrubs also as individual specimens or for

(Continued on Page 278)



Home and part of the garden of Mr. and Mrs. George Harbort, Madison. About 35 varieties of Hemerocallis are grown.

Plan To Study Birds

The following items sent in by Miss Elsa Lautenbach, State Bird Chairman will interest bird club members and others wishing to know more about birds.

The Wisconsin Conservation department issues a most enlightening publication on birds and wild life. It is bulletin 607-C47 and is free. Also obtainable from the department are various bulletins and books valuable in the study of bird lore as well as visual aids on Waterfowl and Birds of Wisconsin.

The Passenger Pigeon, published by the Wisconsin Society of Ornithology is an interesting, worthwhile quarterly priced at \$1.50 a year, available through N. R. Eargar, 4333 Hillcrest Drive, Madison. The society maintains a splendid supply department including books, bird houses, feeding stations, etc.

A survey by the society, last year, on the American Egret proved valuable in locating the species in various counties. This year the yellow-headed blackbird should be observed Kindly make a note of when and where found. Approximate size of breeding colonies should be noted and migration data kept.

National Council of Garden Clubs puts out some fine written lectures on birds and also visual aids. One especially advocated is a group of 51 slides on birds of America. Rental fee, \$3.00, includes transportation, both ways, east of the Mississippi River, but only one way west of the river.

Some excellent programs available to clubs: Mr. Earl G. Wright, of the Neville Public Museum, gives 2 lectures: One is entitled, "Nature's Calendar in Color", the other is "Our Native Wildlife." Address: 129 S. Jefferson, Green Bay. Fee—\$25 within a radius of 50 to 60 miles from the Bay.

Rev. Howard L. Oriens, 2401 S. Williams St., Milwaukee, gives 2 lectures, "Lakelore" (1¼ hour) and "Wildlife at your Doorstep", (1 hour.) Both are illustrated with colored motion pictures. Fee—\$25, 50 to 60 miles from Milwaukee

Dr. Robert McCabe of the University of Wisconsin talks on birds. Fee— \$15 in immediate vicinity of Madison. Mr. Marvin Lederer, Jefferson, Wis.



talks on birds. Miss Merle Pickett, Michigan Ave., Manitowoc, and Mrs. Winifred Smith, Two Creeks, are both exceptional people and ardent birders. Mrs. Smith was a speaker at the Ornithological Convention held in Madison in April.

Outline for Observing a Bird

- 1. Date
- 2. Name of bird
- 3. Where is the bird seen: Woods, border of woods, bushes, open field, trees or bushes along fences, roadside, border of stream, marsh, pond or lake, garden, orchard about buildings?
- 4. Compare the size of the bird with that of the crow, the English sparrow, or the robin.
- Its most striking colors are: gray, slate, brown, black.
- 6. Does it show flash colors when flying? If so where and what color: Wing, Tail, Rump, Under Tail.
- 7. In action is it: Slow and quiet or active and nervous?
- 8. Does it occur alone or in a flock?
- 9. In flying does it go: Straight and swift, dart about, up and down, wave like, flap the wings and then sail?
 - 10. Describe its song or call note.
- 11. Where does it sit when singing? Does it sing while flying?

For Closer Observation

12. Colors, markings of:

Breast wings tail top of head eye streak back 13. Is the bill: Slender and long, short and thick, medium, curved, hooked?

- 14. Is the tail: Forked, notched square, rounded?
- 15. What is the food of the bird and how obtained?
- 16. Where does the bird spend the winter?
- 17. Describe nest, where place how far from the ground, how supported, of what material is the ouside mase, how lined. The color as I number of eggs.
- 18. How are the young fed and cared for? The colors of the plumage of the young birds?

Hemerocallis

(Continued from Page 277)

accent effects. You wiil notice the foliage of the hemerocallis is gracefully recurved and no weeds ever grow under them.

Hemerocllis make very good cut flowers, but they should be cut when the first lily is open or when buds are plump and ready to open. This in sures a succession of bloom for many days. Trim off the old ones. The sizes of the blooms range from one to nine inches in diameter. With the new types you need not fear that your lilies will close up on the dinner table. Evening bloomers are now available and some of the outstanding ones are Cabellero, Patricia, Sunny, Yeldrin and Vesta.

There are a great many nurseries from which you can purchase your plants. I have had very good luck with plants from the Russell Gardens of Spring, Texas, Wayside Gardens, Ohio, and, from the Farr Nursery Co. at Weiser, Pa.

We read that A Handbook of Flower Show Judging is to be revised. There will be no drastic changes but the subject matter is to be brought up to date, according to Mrs. Jerome W. Coombonevision Chairman.

Massachusetts suggests that clubs be responsible for the expenses of at least one delegate to each state meeting of the State Federation. Reports of the meetings should be made to the club (Many Wisconsin clubs follow this practice.)

A nation is not made great by the number of square miles it contains but by the number of SQUARE people it contains.

New Rose Varieties

Four New Semi-Hardy Kinds Introduced By University of Minnesota

By Richard S. Wilcox, Chairman, Test Garden Committee, Minnesota Rose Societu

Four new rose varieties of unusual interest will be available in limited quantities from Minnesota nurseries this year. The new varieties: L. E. Longley, White Dawn, Red Rocket, and Pink Rocket recently were announced by the University of Minnesota, Division of Horticulture, where they were originated by Dr. Longley.

L. E. Longley

The L. E. Longley rose is a semidouble, bright red, and has a bud which is as beautiful as any. The petals are deep and have good substance. The plant is in a class by itself. Bushy, with many basal shoots all with vigorous growth, it quickly forms an attractive little shrub. The foliage is unusually disease-resistant. It probably should be classed as a subzero hybrid tea, although some may call it a floribunda. This variety has proved unusually winter-hardy and comes through ready to bound forth into luxurious growth, quite different from the majority of hybrid teas. Two great roses, Crimson Glory and Pink Princess are its parents.

White Dawn

White Dawn is the name given to a low climber which is likely to become most popular because it fills an important place not only here but all over the country. It is out of New Dawn, the everblooming climber we have had up to now, and Lily Pons, one of the best of the Brownell subzeros. This gives it hardy parentage on both sides. White Dawn appears to be as hardy as New Dawn. Its bloom is continuous and more abundant than that of New Dawn. The pure white blossoms are particularly beautiful against the glossy bluish green fol age, as free from disease as any climber. This rose, like New Dawn, must be well fed to give it the nutrition ne essary to maintain its generous bloom. There is no white climber now in commerce that compares with it.

Red Rocket-Pink Rocket

Red Rocket and Pink Rocket are two varieties out of Skyrocket selfed. Both are singles and may never be popular for this reason. The flowers are borne in lar je spectacular clusters and are outstandingly beautiful if one does not narrow his appreciation in roses to the double type. Red Rocket is a bright red, quite superior to Skyrocket in size of flower, size of cluster, and intensity of red color. Pink Rocket is the first good pink we have had in this type. The red is hardier than the pink one, otherwise they are much alike, vigorous and disease-resistant. They will make excellent border plants to place in the background.

-From Roving With Roses in The Minnesota Horticulturist

WHERE DID THESE VEGETABLES COME FROM ORIGINALLY?

Look these up in your books and catalogs and see what you can find out about each one.

- Tomato
- 6. Radish
- Potato
- 7. Lima bean
- Beets Carrots
- 8. Pea
- 9. Corn
- Turnips
 - 10. Squash

Book Reviews

The Book of Stillmeadow, by Taber, consists of selections from a kind of diary the author began keeping the year she and her sister found an old house in the New England countryside about a decade ago. Macrae-Smith of Philadelphia published it in 1948. As in the author's book on flower arranging, cats and dogs interrupt the narrative at frequent and unexpected intervals. The seventeenth century house took all available cash the first few years, but now the family has found sufficient means to invest in all sorts of electric labor saving gadgets, including a deep-freeze into which quantities of garden produce, meat and baked goods are put. The one money making enterprise on the bury place is breeding and raising spaniels. No other livestock, except chickens, are kept, because such pets are made of them that their owners cannot bear to part with them. If it were not for the husky and friendly young sons of the farmer across the road life at Stillmeadow would be much harder, for these young men do the heavy work and are always willing to help out in emergencies. This is a pleasant chronicle bubbling over with enthusiasms.

District Mail Box

A good share of the time. Garden Club activities give silent answers to the "why" of such a group in a community. Once in a while a group is given a chance to speak up. Such an opportunity came recently (April 12) to the Seymour Garden Club.

The local Kiwanis Club, interested in certain of their projects, invited their officers to dinner for a "Garden Club Night." "Tell us about your organization" was the only stipulation.

Most of the telling was done informally in the course of the dinner. Two members had been given an opportunity to prepare short talks. Mrs. Erma Swann, who had held a six-term stretch as secretary-treasurer compiled a history of the Seymour Garden Club. Mrs. Leone Droeger, who had been instrumental in the original founding of the group, explained to the Kiwanians the place of a garden club in community affairs. She pointed out the many opportunities the group of local women has, if aided and abetted by other organizations in the city.

Seymour Kiwanians are still chuckling about her opening shot. "Most of you men think our group gets together just to meet and eat. I'm here to tell you differently." She waved her sheaf of notes and the men sat up and listened. Such a job of selling can push a garden club to the foremost place in a community, a position which it deserves.

-Eleanor Piehl

Life is an eternal struggle to keep one's earning capacity up to one's yearning capacity.

ANSWERS TO - WHERE DID THESE VEGETABLES COME FROM?

- 1. Peru
- Chili, Peru
- Mediterranean Region, Canary Islands
- Europe, Western Asia
- Europe, Western Siberia
- Temperate Asia
- Probably Tropical America
- Southern Caucasusu to Persia
- Probably American origin but not now found wild
- 10. Probably American origin.
- -By Prof. Victor H. Ries, in Country Gardeners Program Service.

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J. H. Phillips, Manager

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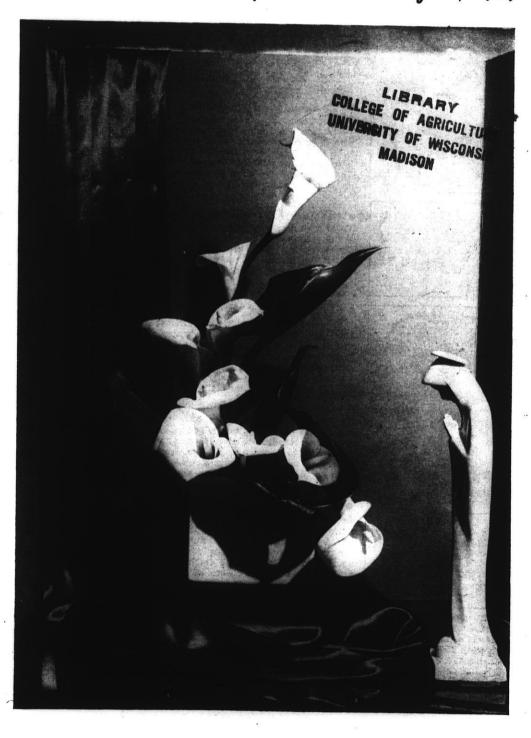
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Glamorous Grower Arrangements

June, 1949



ARE YOU SURE???

A certain lady, with great confidence in her learning, was elated at being placed next to Rudyard Kipling at a dinner. Wishing to impress the great poet, she remarked:

"Mr. Kipling, are you aware that

there are only two words in the English language beginning with "su" and pronounced as "shu"-sugar and su-

Kipling looked over his glasses with a glint of humor and inquired: "Are you sure??"

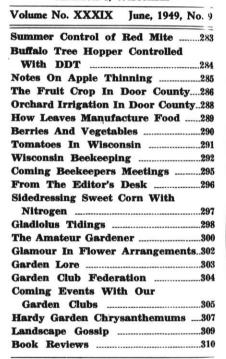
WISCONSIN HORTICULTURE

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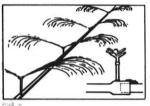
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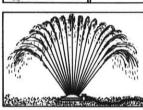
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The Ideal Equipment Company Port Washington, Wis. Phone 107

Summer Control of Red Mite

By Dr. C. L. Fluke

Dormant sprays of oil or Dinitro compounds readily kill the overwintering eggs of the red mite found on apple trees in Wisconsin (1948 Report), but by mid-summer the mite populations may build up to more than ten or twelve per leaf. This number of mites causes the foliage to turn bronze or yellowish and become sickly in appearance. Mite populations often increase materially by mid-summer whether a dormant spray is used or not.

To test various sprays as possible miticides a large block of Northwestern Greening apple trees was selected, located in the Horseshoe Bay Orchards about 15 miles north of Sturgeon Bay. This block is close to the shores of Green Bay and influenced by cool nights and relatively cool days. The mites however, built up an enormous population during the 1948 season, as many as 50 per leaf and often more than 500 eggs per leaf:

Forty nine trees in the middle of this orchard were selected. Six materials and a control were used so each test was replicated seven times.

Materials Tested

The following materials were tested:

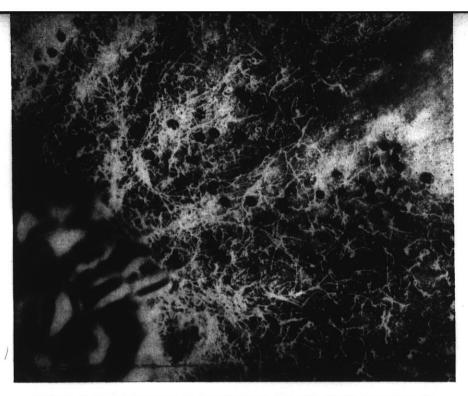
1. Tetraethylpyrophosphate (Vapatore)

- 2. Summer oil (not applied).
- "Sulfide" (DuPont experimental miticide).
- 4. Parathion,
- 5. DN-111 plus alum.
- 6. CR-1639 (Rohm & Haas).
- 7. Check.

The border rows were sprayed with Parathion and the rest of the orchard treated with TEPP. June 30 the entire block was sprayed with Fermate and DDT. July 1 the mites were counted and July 2 the test sprays were applied using a single gun with a number 7 disc and 550 pounds pressure.

Results

The most striking result was the almost complete control by all the materials tested including the checks! The population of mites in all of the



Picture of the winter eggs of the European red mite which have been deposited on the calyx end of an apple.

Photographs from Technical Bulletin No. 89 loaned through courtesy of the U. S. Dept. of Agriculture by B. A. Porter, Fruit Insect Investigation.

treated trees, no matter what material was used, dropped to less that 0.3 mites per leaf and the checks to 2.6 mites per leaf. Almost no mites at all were found on the Vapatone and Parathion plots. These results were difficult to understand but indicated that one of the materials acted as a fumigant. A careful study of the orchard map shows that Parathion was undoubtedly the insecticide responsible for the unexpected results. It indicates that single tree replicates cannot be used for tests with this material. A valuation of the different materials therefore cannot be made.

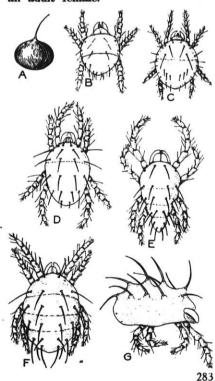
The rest of the orchard had also been sprayed with the speed sprayer using TEPP and the applications made a few days before the test materials were applied. Mite counts in this area (50 leaves) showed .46 mites per leaf leaf.

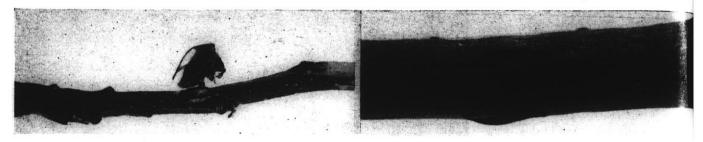
By the end of the season counts on all of the plots were about the same, approximaately 10 mites per leaf.

No injury was noticed on any of the trees except those in plot 3. The "older" leaves turned yellow and dropped. The injury showed up in about four or five days. After these yellow leaves dropped the trees did not appear any different than the trees in the other plots.

STAGES OF EUROPEAN RED MITE

Line drawings of various stages of European red mite. A is the egg, B a newly hatched larva, C a protonymph, D a deutonymph, E an adult male, F and adult female, G a lateral view of an adult female.





The Buffalo tree hopper. Adult female with her ovipositor in a young apple twig.

Buffalo tree hopper injury. Slits in the bark of an apple twig made by the female during egg-laying.

Buffalo Tree Hopper Controlled With DDT

DDT successfully controlled adult Buffalo tree hoppers when applied to the trees as a wet spray, using 3 pounds of 50 per cent DDT wettable powder to 100 gallons of water in experiments conducted by Dr. C. L Fluke, U. W. Department of Entomology.

This insect may severely injure young trees, even killing them, by making crescent-shaped slits in the twigs in which they winter in the egg stage. The slits are shown in the picture.

Hatching begins in late May or early June. As soon as the young are born they drop to the ground and feed by sucking the juices of many kinds of plants. They prefer legumes and will develop best in orchards planted to alfalfa and sweet clover.

Ground Spray Not Successful

In the 1947 test the first eggs hatched on June 11 according to Dr. Fluke. The spraying was delayed until July 21 because of the apparent long-delayed complete hatch. Then a 50% DDT wettable powder, at the rate of two pounds to 100 gallons of water, was applied as a ground spray. The grass had been mowed two days before. This, according to Dr. Fluke, was not successful because adult hoppers began to appear August 6 and by August 14 were very numerous both in sprayed and unsprayed areas although there were less hoppers in the sprayed area, the ground cover spray was not considered effective.

Good Results From Tree Spraying

On August 23, this same 3-acre plot which had received the ground treatment was sprayed with 50% DDT, wettable powder, using three pounds to each 100 gallons of water. Both

the trees and ground under the trees were sprayed. No live hoppers were afterward found in the sprayed areas while considerable numbers were found in the unsprayed or check plots. The owner of the orchard was so pleased with the results that he sprayed the other trees in his orchard and again the control was very effective.

Recommendations

Dr. Fluke recommends three pounds of 50% DDT wettable powder to each 100 gallons of water applied to the trees as soon as the Buffalo tree hoppers become adults and move to the trees for egg laying. The spray should also be applied to the ground cover beneath the trees. Time of application will vary between July 25 and August 20 in southern Wisconsin depending upon the earliness or lateness of the season; and somewhat later north and in counties along the Lake Michigan shore.

Commercial Tests With TEPP And Parathion

Three orchards near Madison were sprayed by the owners for red mite control. The entire orchard in each case was treated. Counts of the number of mites were made in these orchards several times during the summer. One orchard was sprayed with Parathion (½ pound of 25% to 100 gallons of water) and the other two with TEPP (Vapatone) (1 pint to 100 gallons water).

Parathion reduced the mite population from 22.5 (mites per leaf) to 1.7 in two days on Northwestern Greenings and from 12.9 to 0.2 mites on MacIntosh, TEPP lowered the mite count from 12.6 to 4.7 on Yellow Delicious in one day and from 21.1 to 0.4

on Red Delicious in one day. In another orchard TEPP reduced the mites from 9.0 to 1.8 on Northwestern Greenings in five days. These commercial tests indicate that the two materials are about equally effective but that the spraying was not as thorough as it should have been. It appears however that the full effects of Parathion spraying are not reached until three to five days following application.



Badly scared apple tree twigs as a result of the egg-laying habits of the adult hopper.

Notes on Apple Thinning

By Dr. E. L. Overholser and R. C. Moore Department of Horticulture, V. P. L.

Thinning the excessive fruits from apple trees benefits both the trees and the remaining fruits. Under favorable conditions, apples set far more fruits than they can mature and develop to desirable size, color and quality, and at the same time, initiate a sufficient number of fruit buds for the next vear's crop.

Influence on Fruits

Benefits from fruit thinning, when the operation is completed sufficiently early in the season in an effective manner, are as follows: Thinning increases the size of fruit remaining on the tree; improves color; increases the proportion of harvested highgrade fruit and hence, results in a smaller proportion of inferior fruit at harvest time; tends to bring about uniformity of size and color and enables the crop to be more uniformly matured in the fall; and thus tends to increase the market value of the fruit at harvest time.

With apples, it is especially important that the fruit be thinned as early as feasible during each year of heavy fruit set. Thinning of apples after the so-called "June drop" generally has little influence on apple fruit bud formation as related to overcoming biennial fruit bearing. The earlier that fruit thinning may be conducted, the greater the potential effect on current season fruit bud differentiation for the crop of next year. Generally however, it is not practical to hand thin on a large scale before the June crop.

Distance To Thin

The general suggestions are as follows: (1) remove all ill formed, diseased or inferior fruits: (2) in anples, reduce all clusters to one fruit on a spur; and (3) then thin off additional fruits until specimens are no closer than four to six inches apart. The relative degree of thinning, however, should be determined by the size and vigor of the tree as indicated by the amount of deep green foliage. and by the number of days after the time of full-bloom that the thinning is performed.

For example, with most varieties of apples, if the tree is thinned within 30 days from full-bloom, 30 to 35 functioning leaves per each apple left on the tree after thinning may be sufflicient to result in a commercial drop the following year. If, however, the foliage lacks deep green color, if the individual leaves are small and if the terminal growth is insufficient, and if the thinning is done later than 25 days from full-bloom, it will be desirable to thin so as to obtain from 40 to 50 leaves per each apple left on the tree in order to influence favorable bud-bloom formation for next year's crop and also to enable the tree to produce apples of sufficient size and color for the current crop.

Condensed The Southern from Planter.

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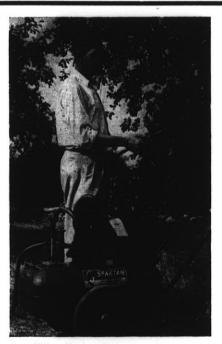
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The Fruit Crop In Door County

By Charles Swingle, Extension Horticulturist, Sturgeon Bay

On May 9, our best guess on the cherry crop for Door County was about 80% of last year, or from 30 to 35 million pounds of cherries—subject to spring frosts. Many flowers were open on May 6, one of the earliest dates ever reported.

On June 1 we were forced to reconsider the estimate. Frosts and unfavorable pollination weather the last 10 days of May greatly reduced the crop prospects. Heavy frosts killed up to 90% of the blossoms in some orchards while in others as high as 50% of the cherries, as they came out of the husks, appeared dwarfed. In the opinion of some of our leading growers these small cherries will drop off. The crop may therefore be less than 50% of last year, depending upon this drop. Given enough rain the increased size of cherries remaining will help.

Sweet Cherries In Door County

Sweet cherries came through the winter with practically all buds intact, and were in full bloom by May 6 in some of our very few sweet cherry orchards. It is doubtful if the sweet cherries will produce full crops because almost no attention has been given to the pollination question. In one sweet cherry orchard, bouquets are being used to improve pollination.

Apples have come through the winter without injury, and on May 9 we could see no reason why we should not have a full crop.

Fertilizer is being applied in generous quantities—mostly in the form of ammonium nitrate, but no manure has gone to waste and large quantities of it, if available, could be sold at good prices here.

Straw piles have about completely disappeared for use as tree mulching materials. Sawdust piles are being depleted for the same purpose. Even paper fertilizer sacks are finding use as mulch for young trees. Practically no mulch is being applied to healthy old trees.

The Spray Program

Bordeaux and lead arsenate are being used principally in cherry orchards. Lime sulphur, wettable sulphur and fermate are all being used for scab control on apples. Probably both lead arsenate and DDT will be

used together in several apple orchards and about half the orchards that were given a dormant oil or dinitro spray for mites, rosyaphids, and oystershell scale. About half of our apple orchards were given a ground spray for scab control.

Cherry Orchards and Sod

More and more cherry orchards are going into sod, at all ages. Few growers indeed are going back to clean cultivation once they have gotten accustomed to sod. Almost without exception, apple orchards over 10 years old are in sod.

Pollination

More and more attention is being given to proper pollination for apples, especially Delicious. That most new plantings going in show the need for abundant pollinizers for this variety is recognized. Meanwhile older plantings with too much concentration of Delicious are being top grafted, bouquet pollinated, or, as with Spencer Eames orchards, Egg Harbor, hand pollinated. Bees are at a premium of \$8 to \$10 per hive for fruit pollination season. Past experience has convinced most orchardists that even with selffertile crop like sour cherries, bees are a worthwhile form of insurance especially in the larger orchards that have a relatively small amount of forest nearby and other undisturbed land to depend on for wild insects.

Modest new plantings of strawberries (mostly Beaver) and of Latham raspberries have been made.

CHERRY GROWERS TAKE ANOTHER STEP FORWARD

For several years cherry growers and processors have been able to point with pride to the steadily increasing consumption of processed cherries, both canned and frozen. In the face of our biggest crop in 1948 (140,000 tons processed) the Institute pushed movement so effectively that we now have only a million pounds, or 31/2% more carryover of frozen cherries than in 1948. Canned cherries are in strong position. This was done at a fairly high price level and without loss to anyone. Promotion on a large scale is, in the opinion of most growers and processors, and the trade, responsible for the good movement. A good share of the money for this promotion has come from Michigan and Wisconsin; a good deal of the leadership from New York State. New York must come through with more money to hold up its end and every grower is being asked to contribute an increased amount. An investment which increases your income as definitely as the Cherry Growers Association has, certainly deserves your financial and moral support. From New York State Horticultural Society bulletin.

CAUTION ABOUT USE OF PARATHION

"With parathion generally available to growers this year, it should be emphasized that this material should not be used until the middle of the summer, or around the first part of the second-brood codling moth period. Some growers are anticipating its use starting with the first and second cover sprays. This is definitely wrong. Because of the newness of the material, such injury as severe fruit russeting is likely to occur, as well as other situations not foreseen. This material should be used primarily for mite control when it is known that mites are prevalent. Follow the suggestions of the state and federal entomologists. Let's keep out of deep water if possible."

From Illinois Spray Service Report No. 7, May 8-14, 1949.

HONEY BEES FOR POLLINIZING RED CLOVER

The U.S. Department of Agriculture has obtained some more information on the value of honey bees for pollinating red clover in work done in Ohio. It was found that 4/5 of the pollinating insects in the clover fields were honey bees. Less than 1/5 were bumble bees. Less than 1/12 of the pollinators were solitary bees and other miscellaneous insects. Since clover depends on the pollinating insects to set seed, these figures give an idea on the relative importance of honey bees. On a 300 acre alfalfa field in California, the yield of seed was 1/3 greater close to the bee hive than 1/5 of 8 mile away.

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Advantages like these pay off in higher packouts of the "money fruit." So, when you buy your DDT spray material, insist on Genitox S50. You, too, will see the different-and-better qualities.



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Orchard Irrigation In Door County

By M. B. Goff (continued from May)

Another idea, however, seems to support the overhead method. It is its similarity to actual rainfall. When water is applied to the ground only. there is an imperfect balance between the moist root condition and the dry upper portions of the tree. A rain brings atmospheric conditions into proper relationship with the soil situation. The cooler temperature and the humidity of the air blanket the trees and cut off evaporation at the same time as the roots are absorbing water. Herein may lie a factor of considerable importance. Those of you who have seen an overhead system in actual operation in an orchard can visualize how truly it resembles a steady slow downpour of rain.

HOW DO YOU KNOW WHEN TO WATER? On this the Experiment Station at Madison has been of great assistance. Mr. Joe Zubriski, a graduate student, has been working on the project, developing material for his doctor's thesis. Zubriski uses a resistance bridge. By burying electrodes in the ground at different depths and taking resistance readings, he is able to calculate, to approximate accuracy, the percentage of moisture in the ground. When the moisture in the top six inches is low, we find that the second six inches is fast drying out. It is a good plan to water before the second six inch layer has become dry, since after that it is more difficult to apply enough water to get a good contact between the surface and deeper moisture. Incidentally, when the third six-inch layer starts to dry out, the effects are quite likely to be pronounced on the trees. Old hands at the irrigation business proceed very much by rule of thumb, digging up a small handful of soil and pinching it in their fingers, to determine whether or not it is time to water. Of course, observation of the trees themselves gives a good cue. However, the more technical data afforded by the Station procedure has been of great benefit to us.

WHAT ARE THE "BUGS" IN THE DEAL? Frankly, this year there were a good many. The equipment in all respects performed marvelously. But the problem was to make the best use of labor and to speed the applications

of water at the time when they were most needed, so as to cover the ground fast enough. In this respect the 1948 mistakes will profit in the future.

It is highly desirable to have enough extra tubing so that the next section can be laid while the previous section is being irrigated. It is then merely a matter of turning valves to shift the flow of water from one area to the next. Where there is only tubing enough to permit the watering of one area at a time, there is considerable delay between shifts. We found it very difficult in the middle of the cherry harvest, which was a critical time for watering the apples, to have enough labor to move the pipe rapidly. In consequence, two settings per day were about as much as we could work out. By having the additional tubing which we anticipate this coming season, we shall be able to put on at least four settings per day with only a moderately increased labor cost.

We found that a crew of three men made the changes in pipe most expeditiously. All pieces of tubing, including our thirty-foot sections of six-inch mains, were easily handled by one man, but allowing the tractor driver to remain on his tractor while the trailer is being loaded and having another man for convenience in carrying the tubing, decidedly speeds things up.

In conclusion, we at Goff Orchard are very happy with our venture. We are sure that it will pay. Moreover, the satisfaction that we get from preventing the inroads of drought is hard to evaluate. In the irrigated area of our orchard we can now avoid the heartbreak of standing by while trees wither and fruit shrivels day by day, an experience which at some time or other has plagued every midwest fruit grower.

PROGRESS OF IRRIGATION By J. W. Willobee, Michigan

Irrigation in the midwest is still in its infancy but growers and experiment stations are fast becoming interested in its development because it means more net income to growers who expect to compete with western growers high quality and high yields. In this area we have a considerable freight advantage, from farm to

market, and if we can produce higher yields and better quality, we will survive as one of the nations greatest agricultural areas. Therefore we are and should be interested in any step which will give us better control of our production. Irrigation in itself is not the answer but irrigation with a knowledge of its effects and the knowledge of the amount of fertilizer to use with it gives a tremendous new outlook on crop potential.

New Equipment Developed

New methods of water application have been developing very readily in the past 6 or 8 years. Equipment that was purchased 5 years ago is somewhat out of date The quick-coupling pipe was the first development which made it possible for us to use our vast natural water supplies, in that it reduces the amount of high cost labor necessary. Next, probably was the development of the aluminum companies to adapt their material to our pipe needs. The first aluminum pipe was used 5 years ago and now its use in lateral lines is probably in the vicinity of 85%. The next development of interest to the fruit grower was the use of low angle undertree sprinklers which do not damage the foliage. These sprinklers however today are being replaced somewhat by high pressure giant sprinklers which cover as much area as 31/2 acres each and take a strip down through the orchard from 8 to 10 rows wide. This eliminates much moving of pipe within the orchard, which is sometimes a problem in close plantings.

The use of specialized irrigation equipment for frost prevention is another angle of much interest. In New Jersey, peaches have been saved by such equipment when neighboring orchards had a crop failure. In Michigan, during the past season we placed 7 acres of strawberries under irrigation for frost prevention and got 1½ pickings more from this field then from an adjoining one without any frost prevention method.

Presented at Annual Convention. Wisconsin State Horticultural Society, Nov. 1948.



TAG

The addition of TAG to sulfur sprays transforms their passive resistance to scab spore attack to ACTIVE prevention of scab infection.

TAG prevents the development of apple scab fungus when applied after rains during which scab infection may have taken place.

TAG provides effective after-infection control of apple scab. If scab spots should show up, the immediate use of TAG kills the fungus and prevents spread of the disease.

TAG

FUNGICIDE NO. 331

This organic fungicide, originated by OR HO, combined with MICRO-FLOOX converts sulfur sprays into ACTIVATED protection against and after-infection control of apple scab.

FOR SCAB-FREE APPLE CROPS THIS YEAR - - Consult your ORTHO Fieldman in your area or, at least write for this folder - - an introduction to TAG Fungicide No. 331.

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Berries and Vegetables

PRESIDENT'S MESSAGE

Members and Friends:

Undaunted by an unscheduled heavy snow storm, dozens of interested gardeners and growers came to our April 1st meeting at Waupaca.

It was indeed gratifying to note the keen interest in the program. It was an enthusiastic group.

We feel sure that those attending the meeting carried home ideas on growing, and we hope a clearer understanding of the purpose for which we are organized.

We hear nothing but praise from all sides, and we want to express our sincere appreciation to the authoritative speakers, cooperative exhibitors and all those who so ably helped with the arrangements.

C. H. Braman, president, Wisconsin Berry and Vegetable Growers Association.

REPORTS ON BERRIES

Early in May we asked several Wisconsin strawberry and raspberry growers about crop prospects and variety preferences. The following were their replies: J. C. Bobb of Menasha stated that the stands of strawberry plants were about 70% of 1948 but looking quite good in May. He grows only the Senator Dunlap variety and the Latham raspberry. Raspberry plants came through the winter in very good condition. Uses Vigoro as a fertilizer for herries

Mr. Frank Kuehnhold of Waupaca: Strawberry plants came through the winter very well. The beds which were not irrigated were not in very good condition on light soils but the crop may be about as good as last year. He grows the Premier and Robinson varieties and has just started with raspberries planting Latham.

Mr. Roy Rasmus of Waupaca: The strawberry crop looks good. Where they were irrigated there were possibly too many runners and as a whole the crop will be about 100% of 1948. He grows the Premier and Kellog Beauty strawberries and Latham. Tavlor and Newburg raspberries. raspberries came through the winter in very good shape. Mr. Rasmus uses lots of compost and organic matter in growing berries.

Mr. Marlin Steinbach of Clintonville: Strawberries came through the GARDEN MACHINERY AND IRRIGATION DEMONSTRATION

J. R. Williams' Lake View Fruit Farms

(C.T. "K" between Packwaukee and Montello)

Tuesday, July 19 Sponsored by the

Wisconsin Berry and Vegetable Growers Association in cooperation with the

Wisconsin State Horticultural Society and

The Extension Service, Wisconsin College of Agriculture Tentative Program

10:30 a. m. Meeting called to order by Mr. Charles Braman, President Wisconsin Berry and Vegetable Growers Association. Preliminary announce-

Remarks by G. J. Hipke, New Holstein, President Wisconsin Horticultural Society and by our host, J. R. Williams. Conducted tour with demonstration of irrigation systems and machinery.

12:00 m. Noon luncheon. Bring your own lunch. Those who wish may drive to Montello or other nearby eating places for lunch.

1:30 p. m. Demonstration of irrigation systems and equipment. Discussion by specialist of Department of Agricultural Engineering, University of Wisconsin and demonstrations by representatives of companies making equipment.

2:30 p. m. Demonstration of garden tractors, rotary tillers, cultivators and other garden machinery.

Remarks by the vegetable and berry specialist, Department of Horticulture, University of Wisconsin. Demonstrations conducted by representatives of the manufacturing companies.

winter in very good shape and the runners had good roots. Grows Polar Queen, Senator Dunlap and Temple strawberries and Early Sunrise and St. Regis raspberries. The raspberries came through the winter fine and are doing well. Uses a commercial fertilizer high in potash.

IRRIGATION TESTS ON VEGETABLE CROPS

Tests At Michigan State College In 1948 Show Value Of Irrigation

Tests conducted during 1948 to determine the effect of different amounts and times of irrigation on the yields of snap beans, tomatoes and sweet corn are reported in the Michigan Experiment Station Quarterly Bulletin.

Varieties tested were: snap beans: Stringless Green Pod and Brittle Wax; tomatoes: Stokesdale and Wisconsin 55; sweet corn: Golden Cross Bantam and Frie

A pre-planting application of 800 pounds per acre of 3-12-12 fertilizer was drilled over the entire area. Water used for irrigation was pumped from a stream adjacent to the field.

Quick-coupling portable pipe carried the water to the plots, and it was applied through a group of fixed type sprinklers attached to a supply line supported on stands in the middle of each plot. A combination of full, quarter and half-circle sprinklers was used to obtain uniform distribution of water.

Conclusions

The results of these tests indicate that irrigation in a year of sub-normal rainfall during the growing season is a very profitable practice on vegetable crops. Even in years of normal rainfall there are frequently drought periods of sufficient duration to warrant the investment in irrigation equipment.

Under the conditions of this experiment, increased quantities of irrigation water did not result in proportionate increases in yields. In some cases, yields decreased with the larger quantities of water.

It was found that sweet corn showed the greatest response to irrigation, with tomatoes and snap beans following in the order named.

The data reported are based on one year's results on a Hillsdale sandy loam soil. Under other conditions the response to irrigation would probably vary considerably. Further investigations of the inter-relationship of vegetable crops soils and irrigation practices under varying seasonal climatic conditions warranted.

TOMATOES IN WISCONSIN Questions Answered by Prof. O. B. Combs

QUESTION: How important are tomatoes in Wisconsin?

ANSWER: Tomatoes are perhaps our leading home and market garden vegetable. Wisconsin gardeners, especially in the southeastern part of the State, grow a considerable acreage of tomatoes for commercial canning. Our canning acreage this past season, we believe was approximately 1200. That's down from recent years because the ton-year average (1936-45) is about 2300 acres.

QUESTION: Are our seasons long enough to compete with such important nearby tomato canning states as Indiana and Ohio?

ANSWER: Probably not. And it isn't likely that our total canning acreage will ever be much greater than it is now unless earlier, more dependable varieties are developed. After all, our season is relatively short and our late spring and early summer weather is likely to be a little too wet and cool in most years, at least, for good growth of tomatoes. We do have at least one real advantage, of course. We commonly do not have the prolonged, hot, dry, mid-summer periods so common farther South. When we have a favorable season, as we did in 1937. for example, we get some of the heaviest yields and the finest quality tomatoes produced anywhere in the United States.

Yields

QUESTION: Just how big are tomato yields?

(Continued on page 297)



Tomatoes displayed in a modern grocery store. Such displays create "impulse buying." The modern type of cooler with mirror reflects the entire display.

BERRY GROWERS

Strong, clean boxes for all kinds of berries.



WRITE FOR OUR PRICE LIST.

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Wisconsin Beekeeping

OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPERS
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Robert Knutson, Ladysmith, President Lawrence Figge, Milwaukee, Vice-President H. J. Rahmlow, Madison, Cor. Sec'y. Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer

DISTRICT CHAIRMEN:

Newton Boggs, Viroqua Wm. E. Gross, Milwaukee Robt. Knutson, Ladysmith E. Schroeder, Marshfield Guy Sherman, Seymour Ivan Whiting, Rockford



Dr. Karl Von Frisch of the University at Graz, Austria, inspects two queen colonies in shallow, square equipment in an apiary of the Central States Bee Laboratory, Madison, Wis. Left to right: Dr. C. L. Farrar, Dr. Frisch and Mr. Floyd Moeller, apiculturist, assistant in the Central States Laboratory.

THE LANGUAGE OF THE BEES

It was a rare privilege for beekeepers to be able to hear Dr. Karl Von Frisch lecture on his fundamental research in the discovery of the language of bees. Dr. Frisch's visit to America was made possible by the Rockefeller Foundation. He visited Madison May 9 and 10, giving two lectures before hundreds of students and beekeepers. His lecture was well illustrated with lantern slides and movies. The description of the methods used to determine how bees transmit information as to food location, distance and direction was most interesting.

It was Mrs. Frisch who added an interesting note. She said that in some of the tests, after assistants had placed dishes of food in several locations, Dr. Frisch asked where they were. She replied, "Let the bees tell you where they are." He took the challenge and by studying the type of dance, the number of turns the bees make in 15 seconds, and the direction of the tail wagging run, he was able to determine

where the food was.

While in Madison, Dr. C. L. Farrar showed Dr. Frisch two-queen colony management, the use of shallow, square equipment, results of pollen feeding and pollen trapping. The picture shows a two queen colony on a scale which was bringing in considerable nectar during the dandelion bloom.

BEES FOR POLLINATION OR FOR SALE

Can furnish strong colonies for pollination in lots of ten at \$15.00 per hive.

For sale at \$20 per 3 story hive. These are in the new type square, shallow hive bodies as used at the University of Wisconsin. Good price if all equipment is taken.

Have been state inspected this year and found ok. Never had any disease. Home Sundays only except by appointment.

M. H. LYONS

Box 192

Hustler, Wis.

Reports By Beekeepers on Conditions

Swarm Control Methods and Wintering Practices Have Changed

Late in May we received reports from officers of the Wisconsin Beckeepers Association and District and County Associations on conditions and beekeeping methods.

Mr. Robert Knutson, Ladysmith, State president writes complimenting the National Beekeepers Federation on inducing the Government to buy honey for the school lunch program. He states: "Colonies have built up rapidly since warm weather came. Total winter losses about 10%. Most colonies are wintered outside with some packing and wrapping -a few in cellars. Swarm control methods vary but reversing brood chambers is practiced by most beekeepers. Clovers are somewhat scarce. Many new seedings dried out last year. Other honey plants about normal. Practically no packages coming in this spring."

Mr. Francis Bancroft, president Waukesha County Ass'n. writes: "Colonies building up fast with little winter loss. Majority of bees wintered here with some packing. Very little feeding has been done. Alfalfa and other hay crops look good but clover is scarce."

Mr. A. I. Bennitt of Hortonville writes: "Colonies have built up fine this spring but 4% loss over winter. Tar paper wrapping, insulation under the cover and wind breaks are practiced. Reversing brood chambers and raising brood from brood nests is practiced for swarm control. Very little sugar has been fed so far. Honey plants look good but not too much clover due to dry weather last summer. Some new seedings were plowed under."

Mr. Newton Boggs, Viroqua: "Bees have built up rapidly—most colonies were wintered outside. Reversing is practiced for swarm control. Not much feeding has been done. White clover looks poor, others look good."

Mr. H. C. Braithwaite, "Baraboo: Colonies building up very fast this spring with light winter loss. Outdoor wintering practiced mostly without packing. Some use Demaree methods but mostly reversing of brood chambers in the method of swarm control. Some sugar syrup was fed and also a lot of off grade honey. Honey plants look good now with plenty of bloom in prospect. Planning a beekeepers tour on June 5."

Mr. Joseph Deiser, Superior: "Winter losses were about 25% but colonies are building up well. There is some outside wintering with colonies wrapped with insulation board and tar paper on top of the insulation. Demareeing is the method used for swarm control. We fed from 20 to 35 pounds of sugar syrup but no pollen substitutes. Clover plants look fair here."

Mr. E. A. Collins, Bloomer: 'Our colonies built up very fast this spring. Winter losses were small. We winter with light packing. Reversing brood chambers is practiced for swarm control. Very little if any sugar has been fed. Honey plants, especially clovers are in good condition."

Mr. Joseph Garre, Marathon County: This has been one of the best springs for bees in years. Weather has been almost ideal for flight. Soft Maples yielded well. Colonies in good condition. Many beekeepers preferred cellar wintering here. Losses were small and feeding was light. Swarming is no problem. Reverse two brood chambers once and then top super. All honey plants are in fair to good condition. We are planning a beekeepers picnic in August."

Mr. Frank Greeler, Neillsville: "Colonies built up very well this spring. There was some winter loss. Some bees wintered outdoors but most of them in cellars here. Clovers look good but some fields were lost due to drought. A few beekeepers lost quite a number of colonies."

Mr. C. C. Meyer, Appleton: "Colonies are in average condition building up well. Winter losses about 10%. Practically all bees are wintered outdoors, some with protection, some without. Swarm control is by several variations of the Demaree method. Some beekeepers have fed considerable sugar syrup. Alfalfa stands are best in several years but not much white clover."

Mr. John Pagel, Medford: "Colonies are building up well this spring if they have good queens. Winter losses were from 3 to 12%. Wintering is in both cellar and outdoors. We winter outdoors excepting nuclei. For swarm control use

SUMMER MEETINGS, WISCONSIN BEEKEEPERS ASS'N.

Tuesday, July 26, Riverside Park, Janesville, Wis.

Wednesday, July 27, Eau Claire Lakes Park, Augusta, Wis. (On Highway 27 north of Augusta)

Program For Both Meetings

10:30 a.m. Inspection of gadgets, labor saving equipment and new types of beekeeping equipment. Beekeepers and manufacturers are all invited to bring or display any types of equipment helpful to beekeeping.

11:00 a. m. Meeting called to order by District or State President.

We expect a prominent out-of-state speaker to give a talk at this time.

Noon Luncheon

12:00 m. Pot luck luncheon. There will be a cafeteria style luncheon at each meeting. Each person or family should bring a dish of food such as potato salad, baked beans, or other hot dish, sandwiches, cake, etc. Bring enough for your family and a little more. Association will furnish free coffee and lemonade.

A committee of women will serve all food cafeteria style. Bring your own dishes—plates, cups, silverware.

A charge of 65c per person to all who do not bring food. This will be used to pay for extra food furnished by committee. Tickets will be given by committee chairmen to all who bring food.

Afternoon Program

1:30 p. m. Let's Spread It On Thick—We Mean Honey. By Miss Phyllis Rasmusson, Home Economist, American Honey Institute, Madison.

2:00 p. m. Discussion of timely topics by out-of-state visitors. Dadant & Sons, Hamilton, Ill.; A. I. Root Co., Medina, Ohio; G. B. Lewis Co., Watertown; Walter T. Kelley, Paducah, Kentucky.

Additional topics to be announced.

NOTE: This is the only issue of Wisconsin Horticulture which will contain this program or announcement. Our July-August issues are combined and will not reach our members until after the meeting.

Special Session For Woman's Auxiliary

All ladies present will be invited to a special session of the Woman's Auxiliary at 2:30 p.m. Miss Phyllis Rasmusson of the American Honey Institute will lead the discussion.

State officers of the Woman's Auxiliary of the Wisconsin Beekeepers Association are: Mrs. H. W. Knight, Dalton, president; Mrs. Emerson Grebel, Beaver Dam, vice president and Mrs. Wallace Freund, West Bend, secretary treasurer.

Officers of the Northwestern District are: Mrs. Milton Lundgren, Amery, president; Mrs. Charles Roy, Sparta, vice president and Mrs. Henry Schaefer, Osseo, secretary treasurer.

Luncheon Committee for meeting at Janesville: Mrs. Victor Henning, Janesville; Mrs. William Judd, Stoughton; Mrs. P. S. Riesterer, Janesville, and Mrs. Donald Williams, Beloit.

Luncheon Committee for meeting at Eau Claire Lakes: Mrs. Robert Knutson, Chairman, Ladysmith; Mrs. Henry Schaefer, Osseo; Mrs. George Hotchkiss, Eau Claire; Mrs. Wm. Lorenz, Bruce; Mrs. Herman Rodeski, Fountain City, and Mrs. Charles Roy, Sparta.

the 3 brood chamber reversing method. Some beekeepers use the modification of the Demaree system. Honey plants look very good."

Mr. E. L. Schroeder, Marshfield: "Spring buildup is satisfactory. Winter losses are varied. Some who placed bees in brooder houses lost heavily. Wintering is equally in cellar and outdoors.

Swarm control is by reversing in general. Some have considerable swarming. Clover plants look fine but drought ruined many fields last year."

Mr. Art Schultz, Hustiford, Dodge County: "Colonies built up very good this spring. Winter losses small. Most beekeepers winter outdoors with some pack-

(Continued on Next Page)

Reports By Beekeepers on Conditions

ing. Swarm control is by reversing brood chambers. Very little sugar has been fed. Honey plants look good."

Mr. Frank Wilkens, West Bend: "Colonies built up very well this spring. Most common method of wintering is outside with some packing. Very little sugar has been fed this spring. Honey plants look very good—especially clovers."

Mr. G. Wisherd, Bruce: "Most colonies built up very well. Winter losses small—not over 10%. Most all colonies are wintered outside with packing. Some wrapped in tar paper. We use the 3 brood chamber reversing method for swarm control. Very little sugar has been fed. Clovers winterkilled badly but with plenty of rain there should still be a good crop."

Mr. Ivan Whiting, Rockford, president Southern Wisconsin District: "Winter losses were lowest we have ever had and spring build up has been good. Wintering is outdoors without protection in most cases. For swarm control we reverse brood chambers and divide colonies. Not much sugar has been fed. Honey plants look good. Colonies are not as strong as they were at this time a year ago."

Mr. E. A. Babcock, Milton, Rock County: "Colonies with plenty of stores built up fast. Winter losses were small but many starved this spring. Most common method of wintering here is tar paper cover with not much packing and wind break. Swarm control is by giving plenty of room. Very little sugar has been fed. Honey plants look good and clover should be O.K. if we get rain."

A WISCONSIN HONEY PACKING PLANT—SOMETHING TO THINK ABOUT

Henry A. Schaefer, Osseo, Wis.

We would like to have the Wisconsin beekeepers think about the possibility of establishing their own packing plant and selling their packed honey through the Sioux Honey Association's channels and of course to Sioux standards.

Benefits to Wisconsin beekeepers would be these:

- Honey uniformly packed—a necessity for marketing and infant feeding.
 - 2. Tie-in with national advertising.
 - 3. Save freight.



Officers of the Northwestern District, Wisconsin Beekeepers Association and speakers were interested in a resolution passed by the organization asking their congressmen for aid in securing more funds for federal research in beekeeping at the meeting in Menomonie on May 3. From left: Mr. Nathan Paddock, Bruce, secretary-treasurer; Mr. Henry Schaefer, Osseo, vice president; Mr. Robert Knutson, Ladysmith, president; Archie Johnson, county agent of Dunn County and Mr. John Long, Madison, Chief Inspector.

- Tie-in with national distribution of the Sioux Association sales organization.
 - 5. Save on packing supplies.
- 6. Bottle our honey to be sold in this state where customers like our honey and our own honey grades.

Disadvantages: There may be many and can be talked over at our future meetings.

Do you remember that when creameries came in and made uniform butter—butter prices went up. Same will happen with honey.

OCCUPATIONAL TAX AND INDEMNITIES PAID IN 1948

In our April issue we listed the varicus counties of the State with the amount of occupational tax paid to the State in 1948 and also the amount of indemnity paid by the State on colonies destroyed.

These counties were not listed correctly and the correct amounts are given here.

Fond du Lac County occupational tax —\$90.93; Indemnity \$63.00.

Grant County occupational tax — \$88.31; Indemnity \$45.00.

Marquette County occupational tax—\$10.15; Polk County occupational tax—\$32.60; Indemnity \$93.00.

The total amount of occupational tax received by the State was \$4,439.67 as of January 25. The indemnity paid in 1948 totaled \$1,701.

ACETIC ACID A PROMISING BEE REPELLENT

By S. E. McGregor, U. S. Bureau of Entomology and Plant Quarantine.

In preliminary tests acetic acid has shown promise as a substitute for carbolic acid to repel bees while honey is being removed from the hives. A 50-per cent acetic acid can be easily diluted with water to the desired strength. Acetic acid solution sprinkled on a repelling cloth, such as is used with regular carbolic acid treatment, repels the bees as readily as does carbolic acid. Bees return more quickly to supers treated with this acid, and it is less likely to impart an objectionable odor to the honey. Pure glacial acetic acid is less dangerous to handle. Vinegar, which is about 6-per cent solution of acetic acid, is sometimes recommended as a repellent for stinging bees.

Acetic acid has also been used as a substitute for smoke in the manipulation of bees. In situations where smoke would create too great a fire hazard, acetic acid can be sprinkled on excelsion or similar material in the smoker and the fumes blown into the hive as is done when smoke is used

These are merely preliminary observations. Only experience can determine whether or not this acid will be satisfactory under various conditions in different parts of the country.

From Dec. American Bee Journal.

Aus Dem Leben Der Bienen

By Prof. Dr. K. von Frisch

This famous book, which was published in 1927, has now reached its fourth edition. Written in simple style and without references to the original literature, since it is intended for the general public, it is nevertheless the best extant book on those parts of bee physiology with which it deals. After introductory sections dealing with the bee colony, hives, the food of bees, pollination, swarming and the expulsion of the drones, the author gives an account of the work done on division of labour. then senses of bees, orientation, communication, time sense, bee "psychology" -all subjects in which most of what we now know is due to the work of the author and his pupils.

It is to be hoped that a full English translation of this book may some day be made. It would not only give pleasure to many amateur naturalists and to intelligent young people, but—as regards the rank and file of British beekeepers—it "wad frae mony a fancy free us, and foolish notion."

From The Bee World, England.

BEE SUPPLIES

Complete stock of bee supplies and equipment carried in Madison. G. A. DUNN & CO. 2138 University Ave. Madison, Wis. COMING BEEKEEPERS MEETINGS

June 12, Sunday—Dodge County Beekeepers Ass'n. picnic at Riverside Park, Watertown.

June 12, Sunday—Picnic of the Eau Claire—Chippewa County Beekeepers Association at Cornell, Wis. E. A. Collins, Bloomer, Wis., president.

June 26, Sunday — Annual picnic Rusk-Sawyer County Beekeepers Ass'n. at Ojibwa State Park.

June 26, Sunday — Wood County Beekeepers Picnic at Bennetts Cranberry Marsh, 5 miles west of Port Edwards on Highway 54.

June 28, Tuesday—8:00 p. m. Joint meeting, St. Louis County, Minnesota Beekeepers and Douglas County Beekeepers. Vocational School, Superior. Speakers: H. J. Rahmlow, Madison, and Arthur Kehl, G. B. Lewis Co., Watertown.

July 26, Tuesday—July 27, Wednesday—Annual Summer Meetings, Wisconsin Beekeepers Association, Janesville, and Eau Claire Lakes.

TAYLOR-CLARK COUNTY BEEKEEPERS MEETING City Park, Medford, Wis.

Sunday, July 31—Beginning 11 a. m. Speakers will be Mr. John Long, Madison, and a representative from the G. B. Lewis Company, Bring your picnic luncheon. The Association will furnish coffee. Contests for all members with prizes. All beekeepers and all interested are cordially invited to attend.

John C. Pagel, Sec.



Beekeepers watch Dr. C. L. Farrar, Madison, take out 11 frames of brood on April 2. See details on Page 256 of our May issue.

HONEY CONTAINERS

We now have a good supply of 60 lb. cans, 5 and 10 lb. pails. Also the 5 lb., 3 lb., 2 lb. and 1 lb. and 8 oz. glass jars. We can make immediate shipment.

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

Write for Complete Price List

Order through your State Beekeepers Association

HONEY ACRES

Menomonee Falls, Wisconsin

NEED BEE SUPPLIES?

WE HAVE

Everything the Beekeeper needs.

Sections

Supers with fittings

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WRITE FOR PRICES

AUGUST LOTZ CO.

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HONEY WANTED

Carloads and less than carloads. Mail sample and best prices in all grades.

C. W. AEPPLER COMPANY Oconomowoc, Wisconsin

From the Editor's Desk

BANDITS IN HORTICULTURE

A variety of "bandits" appear every spring and sell our gardeners worthless stock and services which are a source of much disappointment.

Says Lawn Care, pamphlet of O. M. Scott and Sons:

"BLACK DIRT bandits are out early this year. They took a New York City surgeon for \$300 and his banker too. A man in Hartford let them 'spread' his lawn for 600 dollars! An Ohio operator made a killing around St. Louis putting on worthless "lawn conditioner" at \$1.50 per bushel.

"CAUTION: Do not make deals with itinerant truckmen. Know with whom you are dealing—otherwise you may be held up to pay at the rate of a hundred dollars for two dollars' worth of fertilizer."

Cheap Plant Advertisements

Mrs. S. Valsvik of the Racine Garden Club wrote on May 2 asking if anything could be done about misleading advertising in newspapers. She sent a clipping from a daily paper of large circulation advertising gladiolus bulblets and other plants at very low prices indicating that the stock could not possibly be of good quality. She asked if something can be done "to stop such evident, unfair and dishonest advertising."

We suggest that every gardener who reads unfair advertising about plant material write or telephone the newspaper carrying the advertisements pointing out the dishonest statements. We believe that newspapers and magazines will cooperate as they wish to protect their readers but do not know enough about horticulture to judge the statements made.

PEONY PLANTING FOR SALE

Mrs. J. D. Millar, 803 Wilson Ave., Menomonie, Wis., writes that since her husband passed away she will not be able to take care of the large peony planting of excellent varieties he developed. She invites anyone interested to see the peonies during blooming time, June 5 to June 30. She will be glad to sell any or all plants.



ANNUAL PEONY SHOW BY THE

AMERICAN PEONY SOCIETY

Milwaukee Gas Light Building 626 East Wisconsin Ave., Milwaukee, Wis.

Saturday and Sunday, June 18-19, 1949

The date is late because of the Canadian exhibits expected. There will be no admission charge. All flower lovers invited.

Mr. M. C. Karrels, 3272 S. 46th St., Milwaukee 14, is president of the National Organization and Mr. W. F. Cristman, North Brook, Ill. is secretary.

CLINTONVILLE GARDEN CLUB ORGANIZED

The Clintonville Flower and Garden Club held its second meeting Tuesday, May 3rd and elected the following officers: Earl Maldenhauer, president; Carl Shalund, vice-president; Mrs. James Lackwood, second vice-president; Mrs. Frank J. Buchaltz, secretary-treasurer.

Clintonville has many garden and flower lovers and we welcome the Clintonville Flower and Garden Club to membership and wish them every success in their program. The club was started through the efforts of Mr. and Mrs. E. A. Rosenberg.

NOW . . . 2,3,5-T FOR BRUSH CONTROL

Will We Destroy Our Natural Beauty?

The newest thing in chemical weed and brush control is 2,4,5-T, reports the California Spray-Chemical Corporation. It is another one of those weed killers with the long chemical name which we will not bother with printing, a close cousin to 2,4-D and kills by hormone action.

It is recommended for controlling brush and woody perennials along fence rows, highways, etc.

We wish to throw in a word of warning however. When it is easy to kill something the tendency is to just go out and kill. Recently we heard a county agent tell about this new material and advised that all the brush along the highway could now be easily killed. Must we have barren looking highways? Aren't shrubs which form a part of the landscape very desirable? There seems to be a great lack of appreciation of beauty in our country by those who are in contact with it most closely.

Recently a young farmer said he was planning to cut down a wood lot because the land was more valuable for growing crops. We pointed out that if all the wood lots were cut down, Wisconsin would soon be a prairie state where wind storms might blow away our top soil and we might lack our present natural beauty. In sections without forests, farmers are planting windbreaks of evergreens just to hold the soil and to break the wind.

SALTPETER FOR STUMP REMOVAL

Saltpeter for stump removal—an old hoax. About 25 years ago, articles appeared in the press describing such an easy method of getting rid of stumps that one could imagine the stump removal problem had been solved. This seemingly easy method consists of boring a hole about 18 inches deep in the center of the stump, putting in several ounces of saltpeter and plugging the hole. The following spring simply remove the plug, pour in some kerosene or gasoline and ignite it. The stump is

then supposed to be entirely consumed by the fire because the saltpeter has penetrated every bit of the wood way down to the root tips.

The fact is, it simply doesn't happen that way. The saltpeter just won't penetrate the heart wood. The Forestry Department at the University of Wisconsin has given the facts repeatedly but still the articles appear. The last one we saw was in the December issue of a garden magazine of National circulation.

If stump removal were that easy, why would we still be using dynamite and bulldozers.

SIDEDRESSING SWEET CORN WITH NITROGEN

By M. T. Vittum, Geneva, N. Y.

If nitrogen is a limiting factor in the growth of sweet corn, increases in yield can be expected from sidedressing with a nitrogen fertilizer—provided the nitrogen is applied at the proper time and provided that adequate rainfall occurs following the sidedressing to carry the nitrogen down into the soil where it can be absorbed by the plant roots.

Nitrogen starvation in sweet corn can be easily detected by the light yellowgreen color of the leaves. This yellowing, or "firing," starts at the tip of the leaf and, as the deficiency becomes more severe, works down the midrib, leaving a green margin. The symptoms first appear on the older or lower leaves of the plant.

The four sidedressing treatments were O, 18, 37, and 75 pounds of actual nitrogen per acre. This nitrogen was applied on July 14 as ammonium nitrate, which contains 33.5 per cent actual nitrogen.

Larger Ears Obtained

The yield response to the sidedressed nitrogen is evident from the data in the table. The sidedressing treatments did not affect the number of ears harvested per plot. Therefore, the increas-

CABBAGE OR BRUSSEL SPROUTS —WHICH?



Yes, it is cabbage but tastes about as good as brussel sprouts. After the head was cut these small heads developed on the old plant. Picture courtesy of Prof. O. B. Combs, Madison.

ed yield was due to farger ears in the sidedressed plots. Under the conditions of this experiment, when 40 pounds of nitrogen per acre were applied before planting, a sidedressing of 37½ pounds of nitrogen was the most economical.

The 1947 results indicate that nitrogen starvation in sweet corn can be corrected by sidedressing with appropriate nitrogen fertilizer provided (1) that the sidedressing is applied at the proper time—usually at the time of the last cultivation—and (2) that adequate rainfall occurs following sidedressing to move the nitrogen down into the soil where it will be available to the plant roots. Of course, if nitrogen is not a limiting factor in the growth of the crop, no response to supplemental nitrogen can be expected.

A good way to keep the boys out of the cookie jar is to lock it up in the pantry and hide the key under the soap in the bathroom.

Effect of Nitrogen Sidedressing on the Yield of Sweet Corn

Acre yield	Average weight per ear,
in tons	ounces
4.2	6.2
4.8	6.6
5.1	6.9
5.1	6.9
	in tons 4.2 4.8 5.1

*800 pounds of 5-10-5 per acre drilled in on all plots before planting.

Condensed from Farm Research, N. Y. Experiment Station.

Tomatoes in Wisconsin

(Continued from page 291)

ANSWER: If you're speaking of averages, we must say around four to six tons an acre for most states. Quite a few twenty-ton yields have been harvested in Wisconsin, and a few growers have harvested considerably more than twenty tons. The ten-year average yield in Wisconsin is 5.1 tons; Utah's average yield is 9.1; and at least one state has a ten-year average of only 1.3 tons.

QUESTION: What food value do tomatoes have?

Tomatoes High In Vitamin C

ANSWER: Tomatoes are especially valuable for their relatively high ascorbic acid or Vitamin C content. But their principal value to most people, we suspect, lies in their much-enjoyed flavor and their unusually wide usefulness in cooked dishes.

QUESTION: Speaking of food value and cooked dishes, what about the food value of green tomatoes? Is it just as high as that in ripe tomatoes?

ANSWER: Strangely enough, there is little difference in Vitamin C content between green and ripe tomatoes. Ripe fruits, and especially those ripened in direct sunlight, do have more Vitamin C, but the difference isn't great.

QUESTION: It's well to know that fruits ripened in direct sunlight have more Vitamin C than those ripened in the shade, but what about the sunscald problem? That's also more severe in direct sunlight.

ANSWER: It certainly is, and I personally will take my tomatoes ripened without sunscald in the shade of a few nice green tomato leaves. If I need more Vitamin C, I'll simply eat more tomatoes or get it from other foods.

QUESTION: Has anyone discovered a way to freeze tomatoes successfully?

ANSWER: The answer to that is a sort of yes and no. Yes, if you want to freeze tomatoes only for use in cooked dishes. Definitely no, if you are thinking of having fresh sliced tomatoes, picked in August, frozen and served in February. None of the methods we've tried here, at least, have resulted in anything better than a pretty thoroughly collapsed and generally undesirable product. Undesirable, that, is, when compared with fresh tomatoes.

Condensed from Radio Talk, Farm Program W.H.A.



For the WISCONSIN GLADIOLUS SOCIETY

WALTER KRUEGER
President
Ocenomowec

DR. GEORGE SCHEER Vice-President Sheboygan F. M. BAYER

4668 No. 41st St., Milwaukee 9

Sheboygan 613 N. Mil. St., Plymouth M. BAYER Treasurer

MRS. A. E. PIEPKORN Secretary

PRESIDENT'S MESSAGE

Information on the location and date of the June directors' meeting of our Society will be sent to the directors by mail.

Final details on 1949 show premium lists will be the important business of the meeting. The committees for each of the three shows are hard at work on their assignments.

Acceptance and approval of the changes in our articles of incorporation has been received from the office of the Secretary of State.

At this time we wish to urge every member of the Wisconsin Gladiolus Society to support and visit the 1949 shows.

The feature of the State Fair Show is not only the opportunity to win cash prizes but by mass display to emphasize Gladiolus to Fair visitors. Spike, basket and vase classes will be featured, with this innovation-in one spike entries, those with 2 or 3 or more blooms should be shown, the best floret to be judged, the less open, to help make the show attractive the second and third day. Exhibitors should also bring a second less open entry in 3 spike classes so the show will be more pleasing on the second and third day. Bring some baskets in addition to those in competition so exhibits can be made to carry out the plan of quality bloom appearance for the later days of our show. Your help is needed!

Premium lists for the State Fair Show will be mailed with the Beloit premium list.

Mr. Van Ness, and Mr. Nelson of the Beloit Chamber of Commerce with able assistance from Dewey Sleezer, are doing an excellent promotion job for the show and are stimulating the novice growers by distribution of bulbs.

Thanks are due all the donators of bulbs for this project. From my latest list this includes James Baxter, Melk Bros., Sleezer, Puerner and the undersigned. Thanks are also due Mrs. Piepkorn, our secretary and Frank Bayer, treasurer. They do much work for the good of our Society. Give them a bit of recognition now and then!

Walter Krueger, President.

HOW THEY GROW GLADIOLUS Directors Report On Methods They Are Using This Year

In May we asked the Board of Directors of the Wisconsin Gladiolus Society to answer six questions. Replies were very good and are summarized here.

1. How are you fertilizing your gladiolus this spring?

1. John Brinkman, president of the Southern Chapter writes: Compost with side dressing of Vigoro. 2. Dave Puerner: Fertilizer applied after planting, on top of rows and before emergence of plants. Also side dressing of 2-20-12. Use ground tobacco stem against grubs, etc. 3. D. L. Sleezer, Lake Geneva plans to use Milorganite as a side dressing in three applications on bulblets and two on larger sized bulbs. Has had good luck with this method. 4. Arnold Sartorious used 3-12-12 fertilizer, manure on some plants, also some Milorganite. 5. Dr. Geo. Scheer, Sheboygan uses Vigoro working into the bottoms of the rows prior to planting. 6. H. H. Groth, Manitowoc has used balanced commercial fertilizer for years and mulched last year with saw-

2. What type of dips did you use for your bulbs?

In the same order as above, directors answered: 1. Cresol solution in past years. Now trying no dip on all. 2. Dusting small bulbs and bulblets with Fermate and Dow 9-B seed protectant and use this combination for dipping. Early planted large bulbs all treated with lysol. 3. Did not dip bulbs this year. Use Arasan dust which has given good results. 4. Am dipping

DIRECTORS

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Arnold Sartorius, Porterfield
A. F. Scholtz, Wausau
Val White, Wausau
Dr. L. C. Dietsch, Plymouth
E. A. Lins, Spring Gren
Walter Miller, Sun Prairie
Archie Spatz, Schoefield
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Harold Janes, Whitewater
D. M. Peurner, Milwaukee
Paul Ravet, Menomonie, Mich.

MR. JOHN FLAD, A DIRECTOR OF THE SOUTHERN CHAPTER

Mr. Oren Baxter, secretary of the Southern Chapter of the Wisconsin Gladiolus Society informs us that in our last issue we omitted the name of Mr. John Flad of Madison as a director of the Southern Chapter.

larger bulbs in Natriphene. 5. Use new improved Ceresan with Dreft. 6. Have used lysol and found it satisfactory.

3. Are you planning to irrigate this spring?

1. Will use soil soaker. 2. Will do some irrigation by Skinner overhead system. 3. Will use a sprinkler for irrigation a little later in the season. My system operates from side to side with a water motor. 4. Will try watering with the soil soaker especially on small bulbs and bulblets. 5. Am installing an irrigation system if I can get the materials. It will be a system using rotary surface sprinklers with water under pressure. 6. No irrigation.

4. How are you planning to control thrips?

1. Will use 5% DDT dust alternating with all purpose dust. 2. Will use regular DDT formula. Also one spraying of chlordane. Plan to try Protexall which contains 20% DDT, 30% fermate, 3% Rotonone and 18% sulphur, unless the formula has been changed. Will spray once or twice with Nicotine. If I get through the summer should have killed or cured everything including the glads. 3. Will use ready mixed preparation as dust or spray which contains DDT, Rotonone, Zerlate and Fermate. 4. Used some chlordane last year, will try it again if thrips threaten. Rotonone and Sabadilla seemed ok. 5. Will use DDT dust. 6. Use Rotonone or DDT dust. Have had good control.

5. What are some of the new varieties you are planting this year?

1. John Brinkman lists 34 new varieties which he will try this year. 2. Puerner says, "Half my planting will be Spic and Span and a fair percentage of Hearts Desire. Have purchased trial lots of about 50 new introductions and have a fairly large planting of Mountain Gem, a promising deep red. 3. Mr. Sleezer tests these varieties: Red Cherry, Immaculate, Nancy, Miss Chicago, White Challenge, Texas, Sunspot, June Day and several others. 4. Mr. Sartorious is testing Hearts Desire, Chantenay plus some scented varieties. 5. Mr. Groth writes there are so many new ones coming out and available stock so large, that growers planting over 1,000 bulbs almost have to specialize-either in commercial varieties, show varieties or certain favorite colors. He has eliminated blues and smokies and is concentrating on ruffles.

6. Remarks.

Mr. Brinkman likes Smokey and early varieties. Dr. Scheer writes, "from indications up until mid-May, 1949 may be a record drought year." (Continued on page 301)

SHEBOYGAN CHAPTER MEETING Plan Show For Aug. 20-21

The Sheboygan County Chapter met on May 10. Our show chairman, Mrs. Arthur Piepkorn gave a report on a meeting with the Manitowoc Chapter show committee which she and Otto Kapschitzke, President, attended. Our annual show is to be a joint regional show with Manitowoc and Sheboygan chapters at Two Rivers Community Hall, Saturday and Sunday, August 20-21.

Members of the Manitowoc committees are: John Gates, Two Rivers, show chairman. Show arrangements: John Gates, Harold Groth and Gilbert Thompson, Manitowoc. Commercial displays: John Bayless, Two Rivers.

Other members of the Sheboygan County show committee are: Mrs. L. Wightman, Plymouth, Chester Harrison, Waldo, Harvey Pierce, Harold Hahn and Otto Kapschitzke Jr. of Sheboygan.

Entries will close at 10:30 a.m. Saturday, August 20. Show will open at 2:00 p.m. Banquet Saturday evening. Send your banquet reservations early to Gilbert Thompson, Route 2, Manitowoc.

Dr. L. C. Dietsch, Plymouth, Peter DePagter, Cedar Grove and Chester Harrison, Waldo, presented an amusing demonstration of the use of a certain type of duster

How To Control Gladiolus Thrips

The 1948 experiments on control of Gladiolus thrips conducted by F. F. Smith and A. L. Boswell of the U.S.D.A. and presented at the convention of the N.E.G.S. in Michigan and Toronto during the winter indicates that 6 weekly applications of tartar emetic plus sugar was less effective than comparable applications of other insecticides tested. When the insecticides were compared according to the number of applications, four applications resulted in fewer unscarred flowers than six applications, excepting with parathion.

Where only two applications were made the degree of protection was considerably lower with all materials.

The treatment should be started befor the flower spikes appear. The best control appeared to be obtained where sprays or dusts were applied early and continued to within two weeks of the end of the flowering season.

Tests With Dusts And Sprays In Controlling Gladiolus Thrips

 Materials Applied
 Flowers cut

 Total
 Salable

 Number
 Number

 Untreated check
 297
 66

 DDT:
 343
 326

(Continued on page 301)

Premium Schedule WISCONSIN SEEDLING AND NEW INTRODUCTION SHOW SUNDAY, JULY 31, 1949

Walter Miller Gardens, Sun Prairie
All entries must be staged and ready
for judging by 1 p. m.

Only division championship spikes shall be eligible to compete for the grand championship.

Division 1—Seedlings—1st and 2nd bloom.

Section $A = 4\frac{1}{2}$ inches and over. Color Classes 1 to 10.

Section B—Under 4½ inches. Color Classes 1 to 10.

Awards. 1st and 2nd place ribbons. No section or division championships. No entries in this division shall be eligible to compete for seedling or show championships.

Division II—Seedlings—3rd bloom or more.

Section A—Any size—Color Classes 1 to 10.

Awards. The "Merit" system shall be used in judging.

Division III—Seedling baskets.

Entries shall consist of baskets of 12 or more spikes of the same seedling. Filler material may be used, but gladiolus must predominate. Judging will stress quality of the gladiolus rather than arrangement.

(Continued on page 301)



Officers Madison Gladiolus Society elected at the April meeting. Seated from left: Mr. John Flad, president; Mrs. Theo. Wisniewski, board member; Mr. Ed Lins, Spring Green, vice president. Standing: Mr. Roger Russell, board member; Mr. A. Van Kleeck, secretary-treasurer; Mr. Paul Hoppe, director. Mrs. Sam Post, director, absent,

The Amateur Gardener

Question: Can Tuberous-rooted Begonias be grown in heavy shade?

Answer: No, especially not in spring. They will grow to be tall and spindly and have very few flowers if the shade is too dense. Sometimes trees or shrubs under which they are growing can be pruned so as to allow a little light to filter through which will be ideal since so few of us can have a house made of slats. Direct sunlight during mid - summer months, however, will burn the leaves. Frequent watering is necessary.

Question: What shall we do with tulips after they have finished blooming?

Answer: Leave them right where they are if they seem to be doing well. Some time in July the plants will have matured, the leaves will turn brown, and should then be cut off and removed. If the bulbs were planted about 6 inches deep as they should have been, annuals may be planted above them without injuring the bulbs.

If tulips are planted in clumps with spaces between, then the annuals can be planted before the tulips mature. However, many gardeners sow the seeds of such sturdy annuals as zinnias, marigolds and calendulas outdoors in a plant bed in May. The little seedlings will be ready to transplant when the tulips mature and still create a beautiful midsummer garden flower show.

Question: Which annuals can be most easily grown by the amateur?

Answer: We have found zinnias, marigolds, calendula, sweet alyssum and vinca rosea in variety very easily grown from seed. Petunias are among our most desirable flowers but the amateur may get better results by buying plants from florists because they are somewhat difficult to grow properly.

Question: Can I grow flowering trees such as flowering crabapples from seed?

Answer: It can be done but the trees will be seedlings and not like the parent tree from which the seed came. Out of 100 trees you may not get very many that will give you the beautiful blooms you expect. This is true with all fruit trees whose blossoms are pollinated by insects, because the flowers are self-sterile and consequently there has been much crossing or hybridizing over the centuries. Some of our fruit growers have planted the seeds of Northwestern Greening apples (which are green) and about 90% of the seedling trees produced red apples.



Dicentra or Bleedingheart was an attractive plant in bloom in the perennial border at Whitnall Park Botanical Gardens in May.

Question: When should we divide and transplant iris?

Answer: Any time after the iris have finished blooming. July is the month when most iris growers begin to sell divisions and is a good time for us to divide old clumps and transplant them. In doing this at home, keep as much of the root system intact as possible so they will be sure to bloom next year. Worn out or diseased rhizomes should be discarded.

Question: Shall I cut down the leaves of the iris after they are through blooming?

Answer: No. This is definitely a poor practice. The idea came about because so often during a rainy season the leaves become infected with iris leaf spot and die back. Gardeners think the leaves are maturing and so cut them off. By keeping the leaves healthy they will produce much larger and stronger rhizomes and consequently much larger flowers the next year. Dust the leaves beginning early in spring with sulphur to control leaf spot especially during a period of wet weather.

Question: How shall I prune my hybrid tea roses during the summer?

Answer: **Do not prune them** here in Wisconsin. It is quite unusual for a plant to become so large that it requires pruning in this state. The reason is that win-

ter injury does the pruning for us—in fact far too much so and our rose bushes would be larger and more vigorous if they were kept alive 10 to 12 inches high. Heavy pruning will stunt the plants

Question: My petunias did not do well last Year. They seemed to grow tall and straight with very few blossoms. What can I do?

Answer: If you give them more water and, if in a poor soil, a little more fertilizer and organic matter, they will do better. We have found that during the hot summer months petunias stop blooming as soon as the soil becomes dry. Frequent soaking with a soil soaker is very beneficial and will result in new flowers and many of them. In fact all annuals may suffer from drought in midsummer especially if roots of trees and shrubs are robbing the moisture and plant food from below.

BLEEDINGHEART, AN OLD FASHIONED BUT DESIRABLE PERENNIAL

The Bleedingheart is one of our most showy, old-fashioned flowers. It seems to be passing from our modern gardens but is a perennial which everyone will love if you grow it.

The proper name of Bleedingheart is Dicentra from di, two, and kentron, a spur; referring to the two spurs on the petals. The Fringed or Plumy Bleedingheart (D. eximia) has the handsomest foliage of any border plant.

THE IRIS BORER AND IRIS LEAF SPOT

Both the iris borer and iris leaf spot can be effectively controlled by dusting with a mixture of sulphur and DDT.

The iris borer overwinters in the egg stage. The eggs hatch over a period of several weeks in the spring and early summer. Therefore, dusting must be continued at about 10 day intervals from early spring until early summer.

The iris leaf spots spores overwinter on old dead foliage. In dry weather diseases are not serious but when it rains frequently, or the foliage remains we for long periods of time, it is necessary to keep the leaves covered with sulphus to that the disease be destroyed before it establishes a foot hold within the least tiesue.

Gladiolus Show Schedule

(Continued from page 299)

Awards. 1st, 2nd and 3rd place ribbons.

Division IV—Recent Introductions

Section A-4½ inches and over— Color Classes 1 to 10.

Awards. 1st and 2nd place ribbons for each class. Section and division championship ribbons.

Special awards. Trophies will be awarded to the Champion Seedling, to the Champion Recent Introduction, to the Champion Basket, and to the Grand Champion Spike of the Show, which shall be either the Champion Seedling or the Champion Recent Introduction. Should other trophies be made available, the show committee shall designate for what purpose or purposes they shall be awarded.

Note to all members. This is your show. Come with your families. Bring your picnic lunches. The Society will provide free ice-cream and drinks.

Leland Shaw and Harold Janes, Show Committee.

HOW TO CONTROL GLADIOLUS THRIPS

(Continued from page 299)

3% dust317	264
Toxaphene-5% dust300	271
Chlordane in emulsion	
0.25 lb277	228
Parathion:	
1.0% dust347	303
.5% dust348	282
.25 lb. in emulsion296	251
.25 lb. in wettable	
powder349	326
Lorol-2-thiazolinyl sulfide	
in emulsion 0.5 lb323	138

Discussion

The dusts were applied at an average rate of 45 pounds per acre by means of rotary dusters and the sprays were applied at an average of 130 gallons per acre by means of knapsack sprayers.

A dust containing 3 per cent of DDT was slightly less effective than a 5 per cent DDT dust, but nearly equal to a 5 per cent toxaphene dust. An emulsion containing only 0.25 pound of chlordane was also less effective than the toxaphene dust. The parathion formulations indicated that a 1 per cent dust was more efficient than a 0.5 per cent dust. Emulsions or wettable powders

containing 0.25 pound of parathion per 100 gallons of spray gave a high degree of protection and appeared to equal that obtained with a 0.5 pound dosage.

The miticide, lorol-2-thiazolinyl sulfide, was ineffective against the gladiolus thrips.

The insecticides in these experiments were given a severe test of their efficiency, since the thrips in untreated check plots caused almost complete loss of flowers.

No injury to foliage resulted from applications of any of these materials and, except with chlordane emulsion, no injury to flower parts was observed. Further injury was averted by cutting all open flowers before spraying.

(Continued from page 299)

Oren Baxter, Garden of the Gods, Janesville writes: We use no commercial fertilizer. Only cow manure applied one year before Gladiolus are planted. No fresh manure is ever used at planting time. Green rye is also plowed under the year preceding planting.

For a dip we use lysol. We are not irrigating at present. For thrips control in addition to lysol dip, we will spray with Tartar Emetic or DDT when necessary.

His new introductions include Nancy, Phipps, Jr., La Valle, Indian Summer, Butterscotch, April, Hearts Desire, Wedgewood, Red Cherry, Boise Belle, Silver Gull, Diadem and others.



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BRILLION - WISCONSIN



The arrangement in the large pottern canoe is by the writer. It is a natural istic arrangement on a wooden plaque. The horizontal arrangement combines line and mass. Branches are of forced lilac and catkins of blossoming pussywillows, Japanese Yew, with wooden roses for accent and a few sprays of acacia.

(Editor's Note): We think the arrangement is very charming and appreciate Mrs. St. Clair's help in obtaining the pictures from the Milwaukee Sentinel and sending the description of the arrangements.

Glamorous Flower Arrangements

By Norma St. Clair, Milwaukee

The cover picture on this month's Wisconsin Horticulture is a Calla lily arrangement by Mrs. Carl Hofstetter of Milwaukee.

It is an assymetrical arrangement of Calla lilies in a chartreuse vase with a madonna as a perfect accompaniment. It is a styalized arrangement and a good example of the Hogarth curve.

The Spring arrangement is by Mrs. L. G. Stewart of S. 87th St., Milwaukee. It consists of daffodils and curved branches of budded flowering currant, and horse-chestnut and a cluster of houseplant leaves. The colors are yellow, yellow-green and deep green color scheme with pears for accessory. It has a very good silhouette and balance.

All pictures were furnished through the courtesy of the Milwaukee Sentinel.

OUTDOOR ROSE SHOW Whitnall Park Botanical Gardens—Hales Corners

Beginning about mid-June and continuing through the summer, the Whitnall Park Botanical Gardens Rose Show will be very beautiful. There are 100 varieties and about 5,000 plants in the rose gardens. Many perennials will also be in bloom during mid-June and in July there will be 129 varieties of Hemerocallis blooming. Of these many are new varieties of the Stout introductions.

All garden lovers are invited to attend these shows by the Milwaukee County Park Commission.



Garden Lore

MORE EXPERIENCE WITH ST. PAULIAS

Continuing our tests with African Violets we have learned that: one must be patient with them. For example, if you propagate plants in April by cuttings they will probably not be in bloom until next Christmas.

If you divide plants, which is a good thing to do, it will take several months before the divisions have developed enough root system to fill the pots and start to produce flowers.

Watering is very important. While they should be kept moist all the time, they must not be soaked. If we water a little each day we inspect the plants each day; thereby we maintain interest and the plants are likely not to be neglected.

We have now sprinkled a large number of plants with warm water every day for several months and we find they are doing exceptionally well. Cold water would cause ring spots.

We have been given this advice: to induce a good sized plant to bloom, remove a few of the center leaves from the cluser of foliage about once each week to allow more light to reach the crown and encourage the development of flowers. We plan to try it-on vigorous plants.

Cyclamen Mite

We saw a plant recently infected with Cyclamen mite. The leaves and bulbs around the crown in the center of the plant were dwarfed and stunted. Plants so severly infected should be discarded. The mite causes the same kind of injury we often see on buds of Delphinium. Weekly spraying with nicotine applied as a mist over the tops of the plants is advised. Sodium selenate is used by growers.

WHERE DID THESE BULBS COME FROM ORIGINALLY?

Look these up in your books and catalogs and see what you can find out about each one.

- Colchicum
- 6. Crocus
- Erythronium
- 7. Grape Hyacinth
- Jonquils
- 8. Easter lily
- **Daffodils**

- 9. Squills
- Darwin Tulips 10. Regal lily

ANSWERS TO-WHERE DID THESE BULBS COME FROM?

- 1. Europe, England, North Africa
- 2. U. S.
- 3. S. E. Europe and Algeria
- 4. Europe, England
- 5. Russia and Asia
- 6. Mediterranean Region and Southwest Asia
- 7. Mediterranean Region and Southwest Asia
- 8. Japan
- 9. Mediterranean Region and Europe, Russia, S. W. Asia
- 10. China.
- -From Country Gardeners Program Service.

WHAT'S YOUR GARDEN I.Q.?

True or False?

- 1. Evergreens will grow where nothing else will.
- 2. Roses should be planted beneath large trees.
- 3. Wild violets are good grass substitutes beneath trees.
- 4. Earthworms are beneficial to a lawn.

- 5. Cultivation of flower beds is necessarv.
- 6. A mulch of peat moss is better than cultivation.
 - 7. Ants are beneficial in the garden.
- 8. Lawn grass will grow equally well if not fertilized.
 - 9. Peonies bloom well in the shade.
- 10. It is best to plant in the proper sign of the moon.

Answers To-What's Your Garden I.Q.?

True-3. 6.

False-1, 2, 7, 8, 9, 10.

- 4-Not necessarily, you can have just as good a lawn without them, and better if the worms are night crawlers.
- 5-Except to control weeds and loosen surface to catch rain, cultivation is not helpful.

From Country Garden Program Service, by Prof. Victor H. Ries.

John Adams died at 91, highest age attained by a President of the United States. His wife Abigail used to hang the family wash to dry in the East Room of the White House.



- Foliage and Dormant Spraying
- Pruning and Vista Cutting
- Fertilizing and Root Treatment
- Tree Removal
- Bracing
- Wound Treatment (Surgery)
- Evergreen Care
- Large Tree Planting
- Effective Weed Control with Specialized Equipment







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PRESIDENT'S MESSAGE

Dear Members of the Federation:

Do you use your library? It holds much that is of value to you so why not avail vourself of its opportunities? While browsing through our library today I came upon such titles as these: Saturday in My Garden, Farthing; Gardening for Women, Wolseley; Gardening Week by Week, Wright; Harper's Book for Young Gardeners, Verrill; The Herb Garden, Bardswell; Trees, Shrubs, Vines and Herbaceous Perennials, Kirkegaard: This Was Ever in My Dream, (Landscaping) King; A Book About Roses, Hole; Arranging Flowers Throughout the Year, Cary. These are fascinating titles, are they not? When taking them down from the shelf today. I was reminded that few of us have the time or the patience to read the more ponderous ones from cover to cover. But if we would scan them, and, out of each, glean one new idea we would have given ourselves a worthwhile hour or two.

Many of our clubs devote at least one program to gardening books. The books are not reviewed but, rather, "highlighted." Poignant facts are selected from each of the books and given over to discussion. This is an excellent way to spread much helpful information through the club. If you will try this suggestion in your club I am sure your members will say it has been successful and that you have been well rewarded for your time.

Will each club president please send



to me the name and address (plus 10c) of one of the delegates who will attend the convention at Wausau in October so we can send her a copy of the Constitution and By-Laws of our Wisconsin State Federation. Mrs. John West of Manitowoc has very kindly had enough copies made (at her own expense) for each club to have a copy for its files. We all realize that every club should have one but the cost was too great for us to have them made. Now Mrs. West comes to our rescue. Thank you Mrs. West. This is a need well met and another step in our policy of keeping our members posted on Federation affairs.

Both the club and the delegate can study the copy we send out and the

DIRECTORS Flower Show: Mrs. Ervin Kulow, Rt. 2, Box 441, Waukesha Garden Tours: Dr. Ralph A. Norem, 466 Elmwood Avenue, Oshkosh

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Year Book and Awards: Mrs. H. G. Harries, Rt. 1, Box 31A, Hales Corners, Wis.

delegate can take it to the convention with her. There she can insert any corrections or Amendments made at the convention and take it back with her to be kept in the files of her club.

> Sincerely, Gretchen Fiebrantz

Flowers

Spake full well, in language quaint and

One who dwelleth by the castled Rhine When he called the flowers, so blue and

Stars, that in earth's firmament do shine

Everywhere about us are they glowing. Some like stars, to tell us Spring born:

Others, their blue eyes with tears o'er-

Stand like Ruth amid the golden corn.

In all places, then, and in all seasons Flowers expand their light and soul-like

Teaching us, by most persuasive reasons How akin they are to human things.

-Longfellow.

The April. 1949, issue of the Indepen dent Women contains an article illus trated with many photographs about "Open House in Holly Springs," Freda Hutchison Dodd. This is an ac count of the annual pilgrimage conducted by the Garden Club of this small Miss issippi town, beginning in 1940. Holly Springs is unique in that it is preserved rather than restored.

COMING EVENTS WITH OUR GARDEN CLUBS

June 3, 1949—(Friday) — LeBelle Garden Club Flower Show, Oconomowoc, Zion Parish House. 2:00 p. m.—9:00 p. m.

June 11, 1949—(Saturday)—La Crosse Garden Club Spring Flower Exhibit. YWCA, La Crosse. Afternoon and evening.

July 6, 1949—(Wednesday)—Picnic and Garden Tour, Grandad Bluff near La Crosse.

August 3, 1949—Wednesday—Garden Tour and Tea. Gardens along the Mississippi River on the Minnesota side. The July and August meetings informal afternoon gatherings by La Crosse Club.

June 11, 1949—(Saturday)—Marinette Garden Club Spring Flower Show, Hotel Marinette, Marinette, Wis.

June 11, 1949—(Saturday) — Menomonee Falls Garden Club Flower Show. 2:00—8:00 p. m. Show in homes and several gardens open to visitors. Refreshments. Admission 50c Tickets from Mrs. John Johnson, 203 Donald Avenue, Menomonee Falls, Wis.

June 17, 1949—(Friday) — Horicon Garden Club Flower Show, Legion Home, Horicon.

June 24, 1949—(Friday)—Antigo Federated Garden Club Flower Show at Wesley Hall, Antigo.

June 28, 1949—(Tuesday)—Ceresco Garden Club Flower Show, Ripon.

June 28, 1949—(Tuesday) — Flower Arrangement and Judging School, Superior Garden Clubs. Concordia Lutheran Church at 17th and John Avenue, Superior. Begin at 10:00 a.m. Registration \$1.25 which includes luncheon.

Either August 9 or 23, 1949—(Tuesday)—Washington Island Annual Flower Show, Washington Island. For exact date write Mrs. Hans Baasch, president, Washington Island, Wis.

August 12, 1949 (Friday)—Grow 'em and Show 'em Garden Club Flower Show. City Hall Auditorium, Berlin. 10:00 a. m.—10:00 p. m.

September 17, 1949—(Saturday) — Brookfield Garden Club will present "Circus Time," with colored slides by Mr. Arthur Lemm and Mr. Al Priddy on "Can Animals Think." Open to the public.

AN INVITATION TO CLUB PRESIDENTS Plan Directory of Garden

Plan Directory of Gardens Open to the Public

Mrs. Fiebrantz has asked me to lend a hand in preparing a list of Wisconsin gardens which are open to the public. This is no small undertaking, and I need help. The project was begun last year. The National Council is planning to publish a directory of gardens on a nationwide scale, and the idea is that Wisconsin be adequately represented in it. The directory is to include privately owned gardens, public parks, arboretums, and botanical gardens.

In order that no locality be overlooked, I invite every club president to write me, or to designate some club member to do so, naming any gardens in the local community which can properly be included in the directory. It will be well to include the address or location of the garden, the name of its owner, the conditions under which it is open to the public, the season of the year when it can be seen to best advantage, and what is to be seen in it.

May I hear from you?

—Ralph A. Norem,
Garden Tour Chairman,
466 Elmwood Ave., Oshkosh

Politeness in Thibet requires that, when greeting a stranger, you seize your right ear with the right hand, and then stick out your tongue as far as possible.

Highlights

From The National Gardener

Mrs. Harry S. Gordon, National program chairman has made a timely suggestion in the latest issue of the National Gardener. In as much as this year is the 100th anniversary of Luther Burbank's birth, all garden clubs should give one program to the study of this great hybridizer's work as well as to others in his field. An article entitled "Every Wild Plant is Potentially Useful," written for the National Council by John Y. Beaty who worked with Mr. Burbank, will be helpful in carrying out a Luther Burbank Day.

Slides Available

Following is a list of slides, Kodachrome 2 x 2" 35 mm which may be found in the program department of National Council:

Arizona Gardens
Bellingrath Gardens
Birds of the United States
Central Atlantic Regional Slides
Central Regional Slides
Chrysanthemums, Dahlias and Lilies
Gardens—East and West
Flower Arrangements
Tuberous Begonias
Hemerocallis
Official State Flowers, Trees, Birds
New England Regional Slides
Rocky Mountain Regional Slides
Rare Trees, Shrubs, Vines and Plants
(Continued on Next Page)

The LaCrosse Garden Club entertained the West Salem Garden Club at their May 4th meeting. Here officers of both clubs study a spring arrangement made by members of the LaCrosse Club. From left to right: Mrs. Franklin J. Ranney, president, and Mrs. Adolph Linse, secretary-treasurer of the West Salem Club; Miss Gabriella Brendemuhl, vice president, Miss Bertha C. Shuman, president, William Bringe, secretary, and Miss Myrtle Larsen, treasurer of the LaCrosse Garden Club.

Highlights

Rock Gardens Western South Atlantic Regional Slides Texas Wild Flowers Wild Flowers

New Articles

Music and Flowers (Requires a reader, pianist and vocalist.)

The Value of a Bird.

Landscaping for a Small Home.

Birds Value in Conservation.

"Di-Argumenting" Flower Shows.

What's Your Score? (a quiz)

Horticulture—Fact or Fiction (a quiz)

What's Your Conservation I-Q?

Keeping Cut Flowers Fresh.

Dried Flower Arrangements.

Mrs. Gordon's 1949 Suggestions for

Garden Club Program Chairmen.
Every Wild Plant is Potentially Use-

Slides Are Lovely

Regarding the slides, Mrs. Gordon has this to say:

"The Regional slides are lovely and will give you a feeling of closer fellowship. Texas Wild Flowers takes you through the fields of Texas. Hemerocallis slides show the results of hybridizing in plantings, Flower Arrangements, and close-ups. Why go anywhere else for your Hemerocallis slides? Four hybridizers gave the slides."

Our slides of Tuberous Begonias are the world famous collection of Mr. Frank Reinelt. Rock Gardens are of both wild and cultivated rock gardens in the West and were presented to National Council by Mrs. Warder Irwin Higgins of Montana. Each set of slides has a message to give, each in its own way. Without a doubt there will be other slides later on for you to use. Incidentally, National Council pays express charges, one way, for clubs west of the Mississippi.

A SUCCESSFUL TOUR

A check for \$61.78 was presented to Mrs. Warren Jenkins, retiring president, at the meeting of the Fox River Valley District in Berlin, May 4, by the delegates from the Oshkosh Horticultural Society. This sum was the balance left after paying expenses on the garden tour at Oshkosh, Saturday, April 30. The money was deposited in the district treasury, and will be applied on the scholarships maintained by the district at Central State Teachers College at Stevens Point.

The tour was successful beyond all



expectations. Both gardens visited, the Paine Art Center and Arboretum and the flower garden of Mrs. Glen Fisher, were seen at their best. In all 153 persons registered for the tour. There were members from the garden clubs at Scandinavia, Ripon, Oakfield, Berlin, Omro, Stevens Point, Sheboygan, Milwaukee, Seymour, Wauwatosa, Waldo, Brandon, and De Pere.

The Paine Art Center and Arboretum had prepared a mimeographed guide for use in the garden which enabled the visitors to identify the great number of plants which are to be found there. Many of the plants are rare and unusual. Mrs. Fisher had fifty-five named varieties of African violets on display. A feature which attracted much attention on the tour was the rock garden in Mrs. Fisher's flower garden. It was in full bloom. Daffodils were everywhere to be found in her garden and were in full bloom.

As yet no tour has been scheduled for fall, for late September or early October. We should have such a tour to close the season. Can anyone come forward with a suggestion?

—Ralph A. Norem, Oshkosh, State Tour Director.

TREES FOR TOMORROW CONSERVATION CAMP

The Citizens Conservation Camp is sponsored by the Milwaukee Conservation Alliance in the interest of developing well informed leaders among our citizens. In the folder sent out by the Alliance announcing the four day camp from August 1st to 4th inclusive, the following statement of purposes and aims is given:

"The program is designed to acquaint interested citizens with the functions and activities of state and federal agencies and industrial and private landowners. Active and needed legislation is discussed. Law enforcement methods, game, timber, and other management

problems are considered, together with financial budgets and needs. Discussion leaders who are experts in their particular fields are on hand from various public and private agencies. This gi es an opportunity for frank discussion of problems and viewpoints to the end that activities of different groups are coordinated and their programs and energies made more effective. Several field trips highlight the meeting.

Since we know that on-the-ground learning is the most enduring and that everyone enjoys being out-of-doors in the summer, this spot has been chosen the past three years for an educational get-together. Past camps have been so successful that it was selected again as the point of contact for 1949.

Those attending should dress for the woods and also bring something comfortable for evening relaxation."

For further information write or telephone Mrs. Max J. Schmitt, Camp Chairman, 1912 N. 84th St., Wauwatosa 13, Wis. Phone—Bluemound 8-5563 or W. H. Stone, Associate Chairman, 1633 § 82nd St., West Allis 14, Wis. Phone-Greenfield 6-4150.

THE YELLOW-HEADED BLACKBIRD

"A note appearing in the April issue of What's News, The Milwaukee District Bulletin, reads as follows:

'Please be on the look-out for the Yellow-headed Blackbird this year. This is a state-wide project of the Wisconsin Society of Ornithology for 1949. This uncommon western bird with a yellow head and white wing patches is a bit larger than the red winged blackbird. It nests in sloughs and marshes. Please report observations of any nesting sites and approximate number of birds to me. also to Rev. Samuel D. Robbins, Jr., Mazomanie, Wis., field notes editor of W. S. O. and "Passenger Pigeon." I will be glad to hear of any unusual birds in your vicinity. Write or tell me about your observations.' Signed-Mrs. Howard Higgins, District Bird Chairman.

Mrs. Higgins informs us that these birds can be found at the east part of Hooker Lake, Kenosha County. Ask her for further details if you wish to observe this rare bird in this vicinity."

-Kenosha Club Bulletin.

An old man may feel young when he sees a pretty girl drop her handkerchief, but quickly becomes his age again if he attempts to pick it up.

Hardy Garden Chrysanthemums

By Mrs. Sam Post, Madison

Are the new chrysanthemums really hardy?

There is considerable variation of hardiness, but many of the new kinds will be steady garden growers if given average culture conditions.

Which ones do I choose?

Choose whatever color or type you want from recommended varieties in the nearest local growers' list. The color and type will depend on border or cutting needs. Many colors are needed to meet the average demand and several types—single, semi-double, double, pompon, low, medium or tall—may be selected for different uses. These are grown for abundance of bloom and should not be expected to compete with hot house types.

Will the tiny plants seen at growers' stands bloom this year?

Chrysanthemums are sold as small rooted cuttings or plant divisions, sometimes potted to insure quicker growth when set. A one stalk division is all that is needed to produce a bushy plant full of bloom. Where stolons of two or three heads are found, a stronger, larger plant may be expected.

When should chrysanthemums be planted?

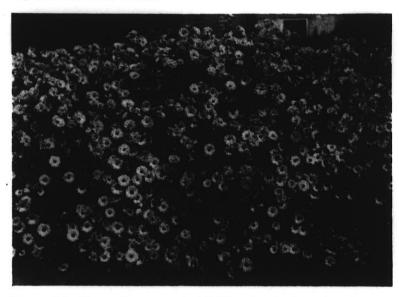
Any time after the frost scare is over is chrysanthemum planting time. It is better not to divide or set new plants in this locality before mid-May, as a rule. They will produce good results when set as late as mid-June. If frosted when set early, they recover and one less pinching is necessary.

How and where should they be plant-

Potted plants can be set one or two inches lower than pot level, and divided stolons or cuttings should be put about an inch below the crown and well firmed in to make good root anchorage. They may be set in the perennial border if given plenty of air circulation and no competition from shrubs or trees. In open garden or border, most plants require 18 to 24 inches of space or one-half of that space from edge if planting a border. One plant of the larger types may be set among perennials but groupings of 3 or more are most effective if space is available.

Do chrysanthemums need any special soil preparation?

Average garden soil of deep tilth is



These pink Chrysanthemums started blooming in August and were still a mound of pink in late October.

best. Good drainage is essential. Cultivation is necessary. They will grow in light or heavy soil of slightly acid reaction.

What about fertilizers?

Rotted manure is always good. Application should be made at planting time. A complete commercial fertilizer, one hand full to a plant, is recommended when manure is not to be had. Summer applications of nitrogen or phosphate fertilizer may be given if needed. Peat is helpful to vigorous growth because it retains needed moisture. Do not fertilize after budding time.

Do they have to be watered?

As a rule, yes. Usually 2 or 3 waterings of one inch is adequate. If plants show wilted tips, water is indicated. Water should be applied to the roots to avoid foliage troubles, slight as these may be in this locality.

Why do some plants look so thin and fall over?

Beginning when the stems are 6 to 8 inches tall, an inch of top should be pinched to promote branching. After 3 or 4 more inches of growth another pinching of all tips should be given, and another up to July 4th. This procedure with other good growing conditions makes stocky plants that need no staking.

Do they need dusting or spraying? Chrysanthemums may become in-

fested with aphids which are controlled by spraying with double strength Black Leaf 40. Hoppers and tarnish plant bugs are often bad and are controlled by dusting about every 10 days with 5% DDT or by spraying with 50% wettable DDT. When dusting other perennials with sulphur or Tri-ogen give the chrysanthemums a dose, too, to prevent red spider or leaf spot and mildew. The worst time for bugs is after frost has killed other hosts. Be sure to dust budded plants at this time.

Will chrysanthemums grow in shade?

No. They like open full sun situations and will tolerate up to ½ shaded hours. Shade from taller perennials or buildings seems to retard the blooming time. Controlled shade that is supposed to hasten the blooming time is difficult for the average gardener to manipulate.

Why do my plants not bloom as early as catalog dates?

Blooming dates of growers' lists can be adjusted to local conditions about as follows: one week lateness is added to every 100 miles of south latitude. If your catalog s i200 miles north, the plants may be expected to be 2 weeks later blooming for you. Also plants from first year setting are expected to be about one week later than 2-year-old plants. Other factors are temperature of particular year and culture given.

HARDY GARDEN CHRYSANTHEMUMS

Will they last long after cutting?

All chrysanthemums should be broken from the plant and rebroken when freshening. Leaves should be stripped from below water level and water changed frequently. Some varieties keep in a cool place as long as 5 weeks with this care.

Can they be moved in full bloom?

Yes. It is better, however, to move or pot the chrysanthemums before the buds are open. When relocating for the garden or house, they should be dug with enough soil about the roots to assure a minimum of root disturbance. Watering at this time restores them to full vigor.

How do I winter the plants?

Field or border plants should be cut back, covered with branchy tops of evergreens or perennials—or chrysanthemums themselves if free from disease—and 3 or 4 inches of marsh hay. To be sure of carrying over plants where exposure is great, lifting them to a protected spot or cold frame, covering them lightly with straw or leaves and then boards or sash is recommended. Many plants can be "stored" in a small space and be safe in doubtful winters. When taken up this way, they will be handy for early division and potting.

Does one plant back the whole plant when resetting?

Best plants are produced by tearing each stolen or rooted branch from the old plant and resetting the new divisions. Cutting may be made from tips without roots and these grown in a medium of one half sand and one half peat kept moist until rooted—about 4 weeks. In making divisions the center of the old plant should be thrown away. Plants from borders should be divided every two years.

Can I grow the larger chrysanthemums?

Many of the hardy hybrids, English types and some hot-house types can be grown in pots or the border, pruned to 3 stalks and disbudded to 1 or 2 blooms with good results. This is a hobby taking far more culture care than the average gardener can give. We suggest purchasing the large chrysanthemums from the florist.

What varieties are best?

All chrysanthemums have to be considered for type, good foliage, hardiness, blooming date, frost resistance of open flowers, and keeping quality. From the list of about 75 varieties grown by us in the past five years we recommend the

following as having the most good features named above:

White: White Knight, Boreas, Polar Ice.

Cream: Avalanche, Candle Light, Calcite.

Yellow: Chas Nye, Butterball, Eugene Wander. Sulphur yellow: Zantha.
Bronze: Sienna, Goblin, Wm. Longland.

Red: Glowing Coals, Burgundy, The Moor.

Gold: Md. Chiang Kai-shek, Stalwart, Harbinger.

Rose: Rosita, Roseglow.

Pink: Sept. Dawn, Betty.

Bronz Red: Early Harvest, Redhawk, Red Gold.

Buff: Olive Longland, Md. S. Du Pont III.

Purple: Chippewa, Violet, Murmurs. Lavender: Heatherbloom Lavender Lassie, Dean Kay.

Copper: Autumn Greetings.

(Ed. Note: The above talk on Chrysanthemums was given by Mrs. Post before garden clubs of the Madison District, at De Forest, Feb. 1949.)

TRUE OR FALSE?

- 1. The highbush cranberry grows wild in the United States.
- 2. The curling of the leaves and twigs in the common Snowball is caused by aphis (plant lice).
- 3. Planting plants deeper than they have been growing often causes poor growth.
- 4. Cuttings root better in sand than in soil.
- 5. Earthworms are necessary for the best growth of plants.
- 6. Spring flowering shrubs are best pruned after blooming rather than before blooming.
- 7. The Tulip Poplar is a Magnolia.
- 8. The Jerusaleum artichoke is a native U. S. sunflower.
- 9. Dandelion greens are high in vitamin A.
- Rutabagas are really turnips.

ANSWERS

True — 1, 2, 3, 4, 6, 7, 8, 9, 10. False — 5.

-From Country Gardeners Prog. Serv.

Garden Gossip

By Adeline Lyster, De Forest

Speaking of "Glads" reminds me of my Spic and Span bulblets' way over in England. I hope they bloom nicely and show those English gardeners that we can hybridize even if they think our gardens are not what they should be. Every Englishman I have met remarks about not having gardens. An English woman broadcasting from a Chicago station the other day said we are not garden conscious.

Americans are queer people. They probably would spend \$20,000.00 building a house, then spend next to nothing landscaping the place and still less preparing the soil. Will we ever realize the importance of soil preparation?

TRENCH and you will be well repaid for your effort. If I were a rose I certainly would prefer to send my roots down into three feet of good loam than into a few inches of sticky subsoil.

I just learned that Peace grown in Oregon produces as many as 70 petals! That's the rose I should use when I make rose-petal jam. As yet I have no recipe. The Austrians have been making this delicacy for many generations. I wonder what varieties they use. Perhaps I'll settle for Rose-hip conserve that I know has been made out of Rugosa or Sweetbriar roses. This conserve, I have discovered, was a favorite of Queen Victoria's.

I am going to try giving my roses the rust treatment this spring to produce stronger color. The rust is the kind you get from iron, not off the hollyhocks. It's too bad roses don't respond to the pinch method for strengthening their color like Chrysanthemums do. Of course you all know you should pinch twice for color and form in "Mums" but three times for just color.

I wish I could get some nice blue color in "Glads." They do not respond to dye or dust. Why can't one be satisfied with the exquisite blue of the Hyacinth? That reminds me to buy a mole trap. The moles ate half of my Hyacinth bulbs last year. I wish they liked quack grass as well.

Difficult times test your mettle. A cobweb is as good as a steel cable when there is no strain upon it.—Arnold H. Glasow.

Landscape Gossip

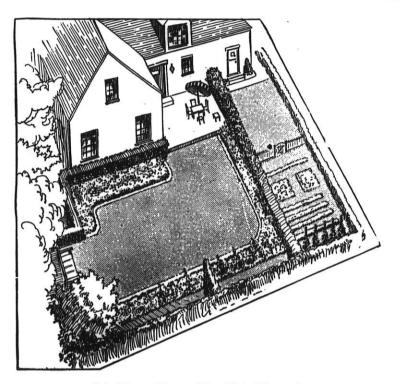
By Henry F. Leweling, Landscape Architect

June is a month when the peonies and the iris have given us their most spectacular bloom. The single peonies with their clustered blooming heads are really the gems for any landscaped area. The rains do not cause the blossoms to collapse when an overload of raindrops have collected between the petals. It is said to have a perfect blossom for a cut flower. The selected bud should be covered with a small bag just as it begins to open. Cut the stem at the desired length in the evening and place the selected covered bud in water in a cool place. When you desire the bud to bloom, place it in your flower arrangement and watch the petals gradually unfold. Within an hour it should open. One lady was quite perturbed when she followed the above advice: she had covered her peony buds after careful selection, cut them in the evening, placed them in a cooler, used the bud the following late afternoon in the arrangement of her center piece only to have them fail to open before dinner. When dinner was served, however, the buds gradually unfolded their petals and everyone commented favorably on the unique flower arrangement.

While speaking to a colleague, the conversation drifted to an exhibit of landscape plans by landscape architects and other interested persons. It would indeed be interesting to have an annual show of what was produced during the year. It could be made up of rendered plans, models photographs with explanations and anything else pertaining to the landscape development of a property.

Attractive Front Yards

Roaming about the city in search of a few nicely designed front yard areas, one is hard put to find an attractively landscaped front yard. Some have nice composition but the material will eventually become overgrown. The majority are overplanted. Most do not have any suggestion of originality. The modern and ranch style houses do not have good foundation plantings. If one could make a composite of several front yards, using the good features of several perhaps a jewel could be created. It is evident throughout the city and its suburbs that the front foundation plantings do not enhance the pleasing architectual lines of the buildings.



It's Not a Home Until It's Planted

"Shrubs and Trees for a Small Place" by J. J. VanMelle, published by Charles Scribner's Sons of New York City, in 1943 would be a valuable addition to any small library on gardening books since it has a wealth of information. The descriptions of the different plant families are enlightening. When reading the book, one must keep in mind that it is not written for Wisconsin conditions. When the viburnums are mentioned one must be careful to remember that many of these shrubs have obnoxious odors. This is especially evident in August and September.

The Morton Arboretum "Bulletin of Popular Information" is a constant joy to read every month. The information con-

tained in the bulletin helps the southern area of Wisconsin a great deal. It is probably the only publication of an arboretum that has many of the soil problems that face Wisconsin.

The May, 1949, issue of **Childhood Education** has an article on children's gardens by Carol Pitts, science teacher in the Randall School of Madison, entitled "Group Activity in Science," which tells about the many activities and benefits that result from spring planting by sixth grade children.

There are no warning signs along the road to success. You have to watch your step.

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Book Reviews

DAGNY BORGE

Garden Facts and Fancies, by Alfrec C. Hottes, profusely illustrated with drawings by the author, was issued by Dodd, Mead & Company this spring. It is a fascinating potpourri of all sorts of things related to gardening, gleaned over a period of years by this eminent horticulturist. Included are articles reprinted from Better Homes and Gardens, of which magazine he was for some time an associate editor. The compilation also contains reprints from any other authors and sources, in poetry and prose. Among these are the Chinese philosopher Lin Yutang and a story by Mrs. C. E. Strong of Wisconsin. Other items of particular interest to Wisconsin gardeners are the "tree that owns itself," located on the paved highway between Hudson and St. Paul, and the legend of the trailing-arbutus, from Indian lore of the south shore of Lake Superior. The book contains much of interest for garden club programs, such as a calendar of saints associated with flowers, a chapter on how to interest youth in gardening, and a list of native homes of some common garden plants. One of the more unusual fancies included is the one on Eve as the first gardener. Perhaps the most entertaining part of the volume is the chapter entitled "Garden Quips and Cranks," which has an amusing classification of gardeners and a hilarious story, "Charlie Chestnut Cultivates the Garden Clubs."

Taylor's Encyclopedia of Gardening, edited by Norman Taylor, was published in 1948 jointly by the American Guild, Inc., and Houghton, Mifflin Company. This is a welcome new edition of a publication originally entitled The Garden Dictionary, which was issued in 1936, and which was awarded the Gold Medal of the Massachusetts Horticultural Society for its excellence. One improvement in the new volume is that it is much less bulky, although it contains more material. This is a valuable book for amateurs and experts alike.

In celebrating the fiftieth anniversary of the National Audubon Society, the Audubon Magazine is presenting a series of paintings, entitled "Our beautiful western birds," by Roger Tory Peterson.



MASSES OF A SINGLE COLOR SUCH AS THE CRIMBONS AND SCARLETS ARE VERY EFFECTIVE AND LEND THEM—SELVES TO COLOR SCHEMES WELL.

Garden Gleanings, a little monthly magazine similar to Back To Eden, is edited by a teacher and nature lover at New Troy, Michigan. Mrs. Oscar Lund, who also owns and publishes the modest twelve page publication, receives advertisements and signed contributions from all over the country. Now in its third year of publication, the paper may be subscribed for at only seventy five cents a year.

An example of how much even a small garden contributes is given by Frances C. Elam of Mobank, Tex., who writes: "Last spring the cook in our lunch room set tomato plants as foundation plants around our kitchen. This fall, dry as it has been, we have been able to serve fresh tomatoes three times weekly from the vines. Besides, they look pretty growing there."

Sometimes home gardeners will earmark one or two rows of vegetables in their gardens for school lunch use.

The first step in developing a garden program is to obtain volunteer local or area leaders, who will organize a garden committee to sporsor a program. Such a committee can obtain local support and action through help of the extension service, the press, local business, women's groups, and other organizations, and in other ways make the program go. As a leader you can give no more valuable service perhaps than to lend your support with others in the organization of such a committee.

U. S. Dept. of Agriculture Nutrition News Letter, March, 1949.

The Book of the Lantern Cloche, is an interesting little pamphlet issued by the Intensive Gardening Press, Ltd., of Chertsey, Surrey, England, describing the use of those ingenious portable glass protective devices which serve as individual greenhouses, making earlier sowing of seed out of doors possible.

Wild Flower Guide, Northeastern and Midland United States, by Edgar T. Wherry, illustrated by Tabea Hoffman.

This volume is sponsored by the Wild Flower Preservation Society, Washington, D. C., and is dedicated "to wild flower conservationists who are successfully saving remnants of natural beauty in the midst of the drabness of the civilized landscape. The author is professor of botany, University of Pennsylvania, and the illustrator is well known for the excellence of her work. The publisher is Doubleday & Company, Inc., Garden City, N. Y. It is a 1948 book.

There are almost one hundred plates, almost half of them in color. The arrangement is by family. Appendices list flowers according to color and introduced wild flowers. There is also an outline of plant ecology and a bibliography on wild flowers. The volume is of a handy size for taking along in field trips.

The Herb Magazine, a small varityped and lithographed magazine devoted to "plants with a purpose—past-present & future," is a slight, little known publication issued monthly by Laure Hill Herb Farm, Falls Village, Connecticut, at \$2.50 a year.

U.W. Conservation Conference

In the Activities Progress Report of the Conservation Department prepared by Walter E. Scott, the University Conservation Conference scheduled for June 30. and July 1, is announced in detail. This Conference on Conservation of Wisconsins' Natural Resources is the 14th of a series of 16 Centennial Symposia sponsored during 1948-49 by the Centennial Committee of the University. Any correspondence regarding the Conference should be directed to Clay Schoenfeld, Executive Secy., 108 Bascom Hall, Madison. It is hoped that garden club members will attend the conference and report back to their clubs on Wisconsin's conservation activities.

A list of the speakers is given below (and unless otherwise indicated, speaker is from the University Staff):

THURSDAY, JUNE 30 Morning

The Conservation Problem—Pres. E. B. Fred, Chairman.

What This Conference is About— Noble Clark, Asso. Director Agricultural Exp. Station.

The Sciences and Conservation—Wm. B. Searles, Chairman, Dept. of Agricultural Bacteriology.

Soils—Robert J. Muckenhirn, Dept. of

Ground Water—Frank Foley, U. S. Geological Survey, Madison.

Surface Water—Gerard Rohlich, Dept. of Civil Engineering.

Fish—Arthur D. Hasler, Dept. of Zoology.

Afternoon

The Sciences and Conservation—Ernest F. Bean, Chairman, State Geologist.

Minerals—C. K. Leith, Emeritus Professor of Geology.

Vegetation—Norman C. Fassett and John T. Curtis, Dept. of Botany; George F. Kilp, Nekoosa-Edwards Paper Company, Port Edwards.

Wildlife—Durward L. Allen, U. S. Fish & Wildlife Service, Laurel, Md.

Scenic Resources—John E. Doerr, National Park Service, Washington, D. C.

Evening (Banquet program)

Tribute to Wisconsin Conservation Leaders—A. W. Schorger, former president, Wisconsin Academy of Sciences, Arts, and Letters, Madison.

Address of the Evening—William Voyt, Conservation Section, Pan American Union, and author, Road to Survival.

FRIDAY, JULY 1 Morning

The Public and Conservation—Ernest Swift, Conser. Director Chairman.

Welcome—Oscar Rennebohm, Governor of Wisconsin.

Wisconsin Conservation Today—Remarks by Chairman Swift.

Government—Harold Titus, Michigan conservation commissioner; Walter Rowlands.

Branch Experiment Stations—J. H. Beuscher, Law School.

Education—F. J. Schmeeckle, Central State Teachers College; Dorris Sander, School Supt., Whitehall; Walter A. Wittich, Bureau of Visual Instruction.

Industry and Business—Harry W. Gehm, Nat'l. Council for Stream Improvement of Pulp, Paper, and Paper Board Industries, Inc., New York City.

The Church—John Miller, Dept. of Economics, Sociology, Anthropolgy & Social Work.

Afternoon

The Public and Conservation—Chairman to be announced.

Clubs and Institutes—Robert O. Beatty, Izaak Walton League of America, Chicago.

Radio — Wakelin MacNeil, State Leader of 4-H Clubs.

The Press—Gordon MacQuarrie, Milwaukee Journal, and Tom Wallace, Editor Emertius, Louisville Times, Kentucky.

(Short discussion periods have been scheduled following each subject.)

The seventeenth annual New York Herald Tribune Forum which was recently held was devoted to "Our Imperiled Resources." Among the speakers were Louis Bromfield, William Vogt, and Fairfield Osborn, all of whom have recently published much discussed books dealing with the subject. A volume containing the complete transcript of forty speeches delivered at the Forum is available from the sponsor at 230 West 41st Street, New York 18, at \$2.25

Little Girl: "Mommy, look at that funny man on the sidewalk."

Mother: "What is he doing?"

Little Girl: "He's sitting on the sidewalk talking to that banana peel I just threw out."

A West Salem Project

The West Salem Garden club has reached the exciting point of a highway beautification project which has been in the "planning stage" for nearly two years, and which will have just passed the "planting stage" when you read this account of our efforts to date.

This village of 1400 is nestled among the beautiful hills of the Coulee region, just 12 miles due east of La Crosse. State highway 16 by-passes us in a long curve, and at the corner where that curve joins the road entering the village there is a sad looking triangle approximately 600 feet long along the longest side. It is our aim to beautify this spot with permanent planting so that it may be enjoyed by those who dash past our town as well as by us who live here and pass the spot regularly.

Our first step was to consult the La Crosse County Highway Dept. two years ago. They received our idea very cordially and told us to get permission from Mr. R. L. Williams of the State Highway department. He is the Roadside Development Engineer for the State. Inasmuch as our club is not a wealthy one it took considerable study to contrive a plan that would look attractive, be inexpensive and easy to care for, and still meet the requirements for safety—namely, low growing varieties.

The Plan

The state department has given us a blueprint so we know exactly how to proceed. At each corner of the triangle a group of three Pfitzer Junipers will mark the corner, and in front of each group will be a rather small horseshoeshaped bed of petunias. In the center a round flower bed 10 feet in diameter will have peonies in the center and two rows of iris around the border. Until our iris gets a good start we will plant petunias around this center bed too. Then toward the base of the triangle there will be a large horseshoe bed planted with annuals.

The peony roots and iris bulbs will come from the members' gardens; our village board has agreed to pay for the annuals and evergreens.

After the actual planting is done the County highway department will keep the grass mowed and the 35 members of our Garden Club will take turns hoeing the flower beds and caring for them in general. We feel sure that in a few years all of you who whizz past West Salem on Highway 16 will remember our blaze of color.

-Elizabeth a Hussa (Mrs. F. D.)

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J. H. Phillips, Manager

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Misconsin Horticulture

It's Cherry Picking Time

COLLEGE OF AGRICULTURE
UNIVERSITY OF WISCONSIN
MADISON

August, 1949



NEW GRASS KILLER NOT FOR LAWNS

Hillard Smith of the Dow Chemical Company reports that his firm in its several sales offices has received many calls from home owners asking where the new quack and crab grass killer, Sodium TCA 70%, can be purchased. Smith points out that TCA kills all sorts of grasses and will kill lawn grasses as well as quack, Bermuda,

Johnson and crab grass.

The product is being recommended to be used on grass-infested crop lands in the fall after the crop is harvested Used in this manner, the field will be relatively grass free in the spring. Sodium TCA 70% is a temporary soil sterilant. If used in the fall, however, the fall and winter rains will leach most of the material from the soil before the spring planting.



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WISCONSIN HORTICULTURE

The Official Organ of the Wisconsia State Horticultural Society

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H. J. Rahmlow, Editor 424 University Farm Place Madison 6, Wisconsin

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Apples Trees Show Benefit From Nitrogen Fertilizer

Fertilizer Containing Only Phosphorus and Potash Did Not Give Results

Nieman Brothers at Cedarburg have an interesting demonstration in their apple orchard this year on the effect of nitrogen fertilizer on leaf color, growth of cover crop, terminal growth and size and set of fruit as compared with an 0.20-10 fertilizer.

The upper picture shows Mr. Roland Nieman and a Red Delicious tree in a row which had been given five pounds of ammonium nitrate fertilizer per tree furing the "pin':" stage this spring.

The center picture shows Mr. Niean standing in a row of Red Detious trees which had been given five ounds per tree of 0-20-10 fertilizer.

The difference in growth of cover rop and leaf size is quite striking.

The lower picture shows a branch rom each tree taken at the same time howing the relative size of the fruit on hose trees.

These trees were planted in 1933, and are sixteen years old. Until this pring they had all been treated the ame. During the summer of 1948 one ale of straw was spread under the anches of each tree. The trees shown the pictures are typical of two enterows across the orchard, all treatithe same. No fertilizer had been wen in 1948, but this was an error in topinion of Nieman Brothers.

There was no benefit evident from a phosphorus or potash in the 0-20-10 milizer because nitrogen is needed. The aves on the trees receiving no nitron were not as dark green, the fruit smaller, and end growth of the anches only \frac{1}{3} as long as on the tes receiving the ammonium nitrate milizer.

If a grower is in doubt as to whether not his orchard soil needs phosphors or potash to improve the growth of cover crop, it is a good idea to ply a "complete" fertilizer between veral rows of trees and watch rests.

Wis. Hort. Soc. photos



In The Orchard

Straw Mulch Increases Yields of Fruit

Mulching cherry trees with straw or legume hay increased yields 100 percent in experiments conducted by Dr. A. L. Kenworthy, horticulturist at Michigan State College.

This increase occurred on trees receiving only mulch and no fertilizer as compared with trees which received complete fertilizer but no mulch. Yields increased 100 percent. Tree size and the content of nitrogen and phosphate in the leaves increased 25 percent over the unmulched trees. Potassium content of leaves increased 30 percent.

Sawdust

In some areas in Michigan sawdust is readily available as mulching material, and is used successfully on some vegetable and small fruit crops. However, when sawdust was applied around cherry trees, there was no increase in yield, tree size or nutrient content of the leaves, unless fertilizer applications were increased.

Dr. Kenworthy points out that part of the cost of mulching is absorbed by the saving in fertilizer. In many instances a complete fertilizer need not be applied when straw or hay mulch is used. If complete fertilizer is applied, no immediate benefit results if the soil is fairly fertile. Nitrogen applications have been reduced 50 percent with fresh straw mulch without reducing the percentage of nitrogen in the leaves.

"FACERS"

BELIEVE IT OR NOT but this actually happened. The other day, a lady was telling about the "nice" Transparent apples she had bought at a chain store. She said there were 2 baskets partly sold out, but she didn't want those apples. It happened that the man in charge opened another basket and she got the apples off the top of the basket. She was told that these were the "facers." Rather sarcastically, she asked why we weren't truthful about the matter; why not call them "fakers" for that's what they were. This is not a funny story. Maybe it shouldn't be printed-but it is a consumer thinking out loud.-Maryland Fruit Growers' News Letter.

CUTTING SORTING COSTS

The industry is well aware of the fact that fruit can be handled more economically over a rotating sorting table, but, unfortunately, this rotating sorting table is not always gentle with the fruit. Most shippers will not attempt to sort Goldens over a rotating table because the damage is so readily apparent. Actually, if Goldens are damaged, other fruit too is injured, except that it cannot always be seen.

Crane and Crane, packers at Brewster, Washington solved the problem of sorting Goldens on a rotating table. They lined the rollers, ropes and all, with a layer of felt. Toward the end of their packing season this scheme was still effective, the felt not having worn off completely.

When fruit is running heavy to small sizes, one way of reducing sorting costs is to eliminate small sizes before the apples go over the sorting table.—From Apple Research Digest, Washington State Apple Commission.

"Leaders Preferred"

Orchardist Gives Advice On How To Get Results

"There is a difference between a boss and a leader," is the gist of advice from an orchard owner in Maryland published in the magazine, Virginia Fruit. The difference between a leader and the boss is well stated in these quotations:

- The boss drives his men; the leader coaches them.
- 2. The boss depends upon authority; the leader upon good will.
- 3. The boss inspires fear; the leader inspires enthusiasm.
- 4. The boss says "I"; the leader says "We."
- 5. The boss assigns the tasks; the leader sets the pace.
- 6.' The boss says "Get here on time"; the leader gets there ahead of time.
- 7. The boss fixes the blame for the breakdown; the leader fixes the blame breakdown.
- The boss knows how it is done; the leader shows how.
- 9. The boss makes work a drudgery; the leader makes it a game.
- 10. The boss says "Go"; the leader says "Let's go."

Other Growers Advertise Their Apples In Wis.

To the editor: You may be interested in knowing how much the Washington Apple Commission spent in Wisconsin in 1948 to advertise Washington apples. By contacting the newspapers of the state, we find that the commission spent a total of more than \$4,634.00 of which all but \$272.00 was spent in newspaper advertising.

We have also contacted the U.S.D.A. fruit inspector for Wisconsin and found that 309,624 boxes of apples were shipped into the state by the Washington group in 1948. This means that more than 1.5c was spent to sell each box of the Washington apples within our state after point of display material and any other intangible promotion were considered.

We also found that the Michigan State Apple Commission has advertised extensively in this state. We thought this information might be of value to you and the Wisconsin growers.

Signed: Vern S. Laustsen, Bert S Gittins Advertising, Milwaukee.

Editor's note: Wisconsin apples come on the market early—in September, October and November, usually before western apples come in heaviest. It is entirely possible that Wisconsin consumers may be induced to wait for well advertised out-of-state apples instead of buying Wisconsin apples earlier in the season. This is just another reason why many Wisconsin growers are interested in the work of the Wisconsin Apple In stitute.

Chokecherries in New York state wis be destroyed if they are near commercial sour cherry orchards. The extension service is conducting a campaign for the control of X-disease which has apparently spread from infect chokecherries. The treatment recommended is spraying between the middle of June and the middle of Septemball chokecherries within 500 feet of the orchards with a weed killer.

NOTICE

Due to the necessity for a convention page in this issue as well as in or anniversary issue, Wisconsin Garden we are holding back until September number of short articles intended for the July-August issue.

Wisconsin Apple Institute Board Meets

The Board of Directors of the Wisconsin Apple Institute met at Arno Meyer's Waldo Orchards at Waldo, Wis., Thursday July 14th. After enjoying an inspection tour of the cherry and apple orchard which was in splendid condition, the board transacted important business.

Treasurer Arnold Nieman reported a balance of \$1,584.00 in the treasury. This is a rather small amount. After deducting necessary expenses and national dues the amount available for apple promotion this year will be about \$1,200.00—a small sum to carry on a program throughout the state.

However, the board voted to do as much as possible and one-half the amount will be spent for newspaper publicity and advertising and the balance for publicity and promotion work. Perhaps only one ad will be run at the beginning of the harvest season in leading state papers.

The board voted to ask Chairman of

the Department of Horticulture, Prof. O. B. Combs and Director of Agriculture, Milton H. Button for the help of Professor C. L. Kuehner and a representative of the Department of Markets to hold demonstration meetings in various apple growing sections to acquaint growers with better apple grading to improve the apple pack.

It was voted to accept the invitation of the Wisconsin Horticulture Society and hold the annual convention at the Hotel Retlaw, Fond du Lac, Wis., November 15-16 during the time of the Wisconsin Horticultural Society convention. The business meeting will be held during a special luncheon.

President C. J. Telfer appointed Mr. Art Bassett, Jr., Baraboo; H. A. Dvorak, Casco; and Don Reynolds, Sturgeon Bay as the nominating committee.

The board voted to recommend to the annual convention that dues for 1950 be reduced and that efforts be made to increase the membership in the institute.

WE MUST PRINT THE FACTS

"Wisconsin Horticulture (April), has an excellent article on the false statements made by the Steiner school (they use the term "biodynamic farming" in the U. S.) about the unwholesomeness of chemical fertilizers and the need for manure and earthworms if crops are to flourish and their produce be healthy for mankind. (Such ignorant folks should sometimes be allowed their say, in the interest of freedom of publication; but never without simultaneous statement of the scientific objections to their views and the reasons why they are untrue. Editors who omit this do the agricultural crafts a serious disservice. The same applies to nonsense about bee diseases.)"

-The Bee World, England, June '49

Love-making hasn't changed in 2500 years. Greek maidens used to sit and listen to a lyre all evening, too.

FRUIT GROWERS SUPPLIES

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WAUKESHA, WISCONSIN



Poplar Trees as Windbreaks in Orchards

By W. L. Thenell, Sturgeon Bay, Wis.

Poplar trees to provide wind protection for orchards have become quite popular in this section of Door County. While these trees are fast growing we do not believe they are quite as effective as maples found along the road toward town. It took 35 years however, to grow these maples to the large overlapping size they now are. The Lombardy Poplars shown in the picture, on the other hand, are only six years old. They are planted twenty feet apart, the same as the cherry trees. In another

four or five years they will be just about touching one another and will be very much taller.

Some of the older poplar trees along the highway have suffered somewhat from age and sleet. The branches are very brittle and will not stand much snow before they snap off. They do improve the appearance of the orchard, however, and if a tree dies it should be replaced immediately. Otherwise, in a couple of years, the others will be noticeably larger than the re-set. They seem to grow on any type of soil, but thrive on black, deep soil.

POPLAR TREES IN OUR ORCHARDS

By Don Reynolds, Sturgeon Bay, Wis.

We have used many Carolina Poplars as windbreaks around our orchards. The trees are planted on the ends of our orchard rows, i.e. if the orchard is planted 20' the poplars are also planted that distance.

The trees seem to do very well in all types of soil in Door County. We think they are quite valuable as a windbreak.

To have value as a windbreak these poplars do not have to be very old. Those that are in our orchards are from one year to ten years old and those shown in the picture are eight years old. Other growers in Door County and showing interest in this variety and some are planting them. Some are planting new orchards and planting poplars around them.

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POWER DUSTER: H. R. Bailey—3 wheels—Briggs & Stratton Motor. Originally \$370. One practically new, price \$275.00. One used, good condition, price \$175.00.

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SOAP SPREADER: 7 fifty gallon drums Greenleaf. Originally \$64.61. Price \$50.00.

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The Prepackaged Apple Question

Twenty-seven out of thirty receivers of apples in terminal markets said they would like to receive apples prepackaged. This was disclosed by a mailed questionnaire to wholesalers and jobbers who had previously expressed interest in packaging.

All of the receivers who felt that apples should be prepackaged thought they should be prepackaged at shipping point. This opinion supports observations made by the research department in Eastern markets where the large users of prepackaged apples were found to always want them packaged at the shipping point if possible.

Cost Lower at Shipping Point

In each case where cost estimates of terminal market prepackaging operations could be obtained, the expense was higher than that of shippers who have prepackaged apples in Washington State.

Package Preference: A larger number of the receivers preferred a transparent film bag for apples than any other one package. The mesh bag and the openfaced window carton were seconds in favor. However, it should be pointed out that many receivers who were not contacted might have altered the order of this preference.

Receivers who had handled mesh bags seemed to prefer the film bags or mesh bags. Those who had handled film bags preferred film bags and those who had sold open-faced window cartons were divided in their preferences on all three of these consumer packages.

Extra Costs: A little more than 50 per cent of the thirty receivers indicated that the extra cost warranted in prepackaging ranged from 20 to 50 cents per box. Forty-one per cent gave no indication of what increased cost could be tolerated, or felt that the cost should be competitive. In packing houses that have made a reasonable effort to set up efficient bagging operations costs can be kept with the acceptable limit expressed by these receivers.

Consumer Acceptance

The United States Department of Agriculture data generally indicates high acceptance of prepacked produce among consumers. A forthcoming report on apple packaging research indicates that the acceptance of film bagged apples by

consumers has been practically unanimous among housewives who have replied on questionnaire cards placed in bags.

In 98 per cent of the cases consumers felt that these packaged apples were as good, or better in quality, than similar Western bulk apples.

This optimistic note should be tempered by the fact that replies probably would not have been so favorable from consumers who did not buy packaged apples.

> From—Apple Research Digest June '49

CURCULIO RUINS MANY APPLES

"The plum curculio has been our worst insect pest in Madison this year," said Mr. Glen Dunn of G. A. Dunn & Co., Madison, one day early last June. Mr. Dunn does custom spraying of fruit trees in and around Madison and so is in an excellent position to observe.

Perhaps you noticed apples still quite small with little crescent shaped punctures—perhaps several of them on a fruit. This was the work of the plum curculio.

The egg laying starts when the fruit is about one-fourth inch in diameter. The insect cuts a little cavity and then lays an egg in it. After the egg is laid a little crescent shaped cut is made half way around the site of the egg, perhaps to prevent rapid growth of the fruit at that point. A tiny grub hatches in about a week and feeds in the little apples for about two weeks. When the fruit drops off, the insect leaves it and burrows down into the soil to a depth of about one inch. New adults emerge during August and after feeding for awhile on the mature fruit the beetles seek their winter quarters.

Control

Spraying with arsenate of lead, three pounds per hundred gallons of water (one and one-half tablespoons to each gallon) together with a fungicide such as sulphur, is a standard method of control. Timing however, is most important. The first spray should be put on when three-fourths of the petals have fallen—the so-called calyx or petal fall spray. Another spray should be applied about seven days later. Remember this next spring if you have had trouble this year.

IMPROVED APPLE HANDLING STUDIED

A testing machine has been set up by the Washington State Apple Commission Research Department, cooperating with the Experiment Station and other agencies to test methods of packing apples. The testing machine simulates the jarring encountered in railroad transit. Growers and shippers are invited to submit their packages for testing and effort will be made to produce a better package so that bruising can be prevented.

The Virginia Agricultural Extension Service conducted a survey in cooperation with the Virginia Apple Commission among consumers, retail stores and jobbers to find out what improvements are needed most in apple packaging and handling. The suggestions, receiving as many as 4,160 out of 7,000 replies, were in the order given below:

APPLE VARIETIES IN CENTRAL WISCONSIN

Mr. Carl Rhapstock of Plainfield, Wisconsin writes that the winter of '47 & '48 was a severe test for apple trees in his section. He has Cortlands about seven years old and only one escaped injury. Three were completely killed and the others more or less severely injured. An old McIntosh tree was also injured. The Minnesota varieties in his orchard all stood up well, especially Haralson, which he likes. His five trees are nicely shaped and loaded with fruit this year. He also has Beacon, Prairie Spie and Fireside, all doing well. This information may be of value to others in Central Wisconsin who have similar soil and climatic conditions.

School children in Rotterdam are making drawings of tulips this spring to present to members of the College Park, Maryland, Branch of the American Association of University Women, who were one of the groups that sent packages of pencils, erasers and paintbrushes to Dutch schools in need of supplies.

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3-Legged Orchard Specials Step-

6 - 8 - 10 ft......\$1.50 per ft.

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THE ORIGINAL DELICIOUS APPLE TREE

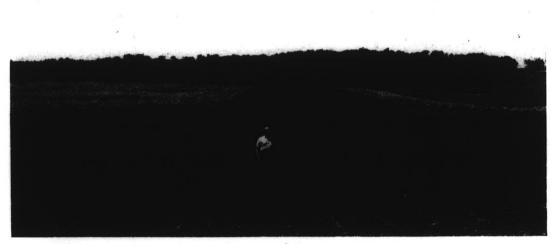
The orginal Delicious apple tree located near Peru, Iowa has passed away but in its place are two young trees which sprang up as root sprouts four or five years ago according to Mr. William H. Collins, Secretary of the Iowa State Horticultural Society.

It was perhaps only chance that permitted the old tree to send up sprouts from its roots before it died, thus permitting Iowa to continue to lay claim to the presence of the orginal tree which is the parent of the most heavily planted apple in the United States. The original stump with its cement filled cavity still stands, according to Mr. Collins.

SPRAYER FOR SALE

Friend Sprayer, 35 gallons per minute 400 gallon wood tank; Ford Motor Drive: mounted on Cab Over Engine. Internat'l 1937 truck. All tires like new. Will sacrifice. Complete for \$785.00 cash. Wachtel Tree Science & Service Company, 611 Maywood Ave., Wauwatosa 13, Wis.

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Plant McKay Fruit Trees and Small Fruits McKay Nursery Co.

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Illustrated Catalog Write "Dept. H"

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Madison 5, Wisconsin

Berries and Vegetables

Berry and Vegetable Growers Meet

The Garden Machinery and Irrigation Demonstration at I. R. Williams' Lakeview Fruit Farm, Montello, July 19. 1949 sponsored by the Wisconsin Berry and Vegetable Growers Association was attended by about 150 interested persons. During the forenoon session Mr. Williams took visitors on a tour of the farm in his bus with County Agent Connors, Montello and Jack Whirry, agricultural instructor, pointing out items of interest to the visitors. This was followed by a tour by the entire group to the various vegetable and berry plots conducted by Mr. H. J. Rahmlow, secretary of the society, with Mr. Williams, Prof. O. B. Combs. Prof. H. D. Bruhn, Dr. R. H. Roberts, Prof. C. L. Kuehner discussing agricultural practices.

Following the noon luncheon President Charles Braman presided at a short meeting. He called upon Mr. G. J. Hipke, New Holstein, president of the Horticultural Society who invited the Association to hold its annual meeting in conjunction with the Society's annual convention at the Hotel Retlaw, Fond du Lac, November 15-16. The invitation was accepted by Mr. Braman on behalf of the Association. Short talks were given by a number of those present.

Vegetable Growing Methods

Interesting comments on methods of growing various vegetables were:

ASPARAGUS. Mr. Williams grows only Martha Washington asparagus and his bed of about 1½ acres is over twenty-five years old. He said he fertilized twice each year, applying Vigoro in the spring and nitrate of soda after the last cutting. He uses about 1½ tons on the 1½ acres at each application. Prof. O. B. Combs emphasized that only young plants should be used for starting a new bed and should be covered only about 2 inches.

MELONS. The Milwaukee Market cantaloupe is favored by Mr. Williams. Prof. Combs said he is trying to find an improved strain of the Milwaukee Market, which is purely a local market melon. He emphasized the need for cross pollination by bees, pointing out that there are fewer staminate flowers than pistillate or female flowers. Some commercial growers keep colonies of bees for pollination purposes, Mr., Will-

iams uses about 1,000 pounds of Vigoro per acre in fertilizing. At this point Prof. Combs said that light soils need more nitrogen than heavy soils especially where irrigation water may wash out the soluble nitrogen fertilizers rapidly.

PEPPERS. Principle variety grown was California Wonder and serveral others of Mr. Williams own selection. Here again 1,000 pounds of Vigoro is used in the spring and a side dressing of nitrogen given after the peppers have set, which was about the time of the meeting—July 19th. If nitrogen is given too early there may be vegetative growth and the peppers fail to set. By continuous feeding later on and plenty of water the plants continue to bear for a long time.

SWEET CORN. The variety Gold Rush is preferred by Mr. Williams. Nitrate fertilizer is given at the time of the last cultivation at about 300-400 pounds per acre with an attachment on the cultivator. A lady visitor made the statement that she likes Wisconsin Golden No. 800 because it is excellent for freezing on the cob. Other varieties mentioned were: Our Choice and Carmel Cross, which is similar to Gold Rush. All corn is pre-cooled immediately after picking and iced for delivery. Mr. Williams stated he had tried pre-packaging but it didn't work under his conditions.

TOMATOES. The varieties grown were: Early, Valient, and the Mid-season Stokesdale. As a late variety Wis.

(Continued on page 324)



The Moulton Way

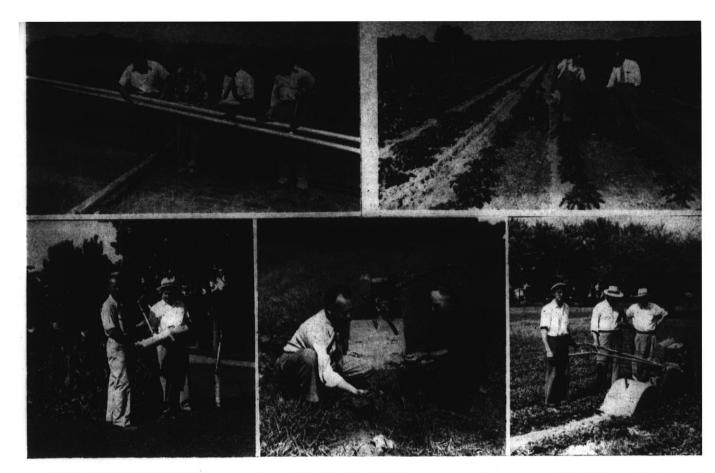
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COMPLETE IRRIGATION SYSTEMS FOR PART
OF AN ACRE OR FOR 500 ACRES

H. D. ROBERTS

Black River Falls

Wisconsin



THE DEMONSTRATIONS

Taking part in the demonstrations on irrigation equipment and gardening machinery were:

Upper left. (Left) jack Whirry, agricultural instructor; Charles Braman, Waupaca, Association president; E. A. Rosenberg, vice president, Clintonville; and B. J. Connors, county agent, Montello, inspect light aluminum pipes used for irrigation and demonstrated by: Mr. Harold Roberts, Black River Falls.

Lower left. Mr. Harold Roberts, representing the Moulton Irrigation Co., inspecting a coupling with (right) Prof. H. D. Bruhn of the Agricultural Engineering Department.

Upper right. Mr. Glenn Dunn of the G. A. Dunn and Company, Madison, pointing out features of the Bolens tractor line to Prof. O. B. Combs (right), Chairman of the Department of Horticulture. Shown is a plot of peppers in thrifty condition.

Lower center. C. I. Wilson, advertising manager, Ariens Company, Brillion, Wis., holds up quack grass plants which have been uprooted by the tiller. Mr. J. R. Williams (right), owner of the Lakeview Fruit Farm, is well pleased with the results.

Lower right. Shown with the tiller operator are, (center) Prof. C. L. Kuehner, Extension specialist in Horticulture, discussing the work of the tiller with Prof. H. D. Bruhn (right).

Used Fruit and Vegetable Containers For Sale

FRUIT AND VEGETABLE CONTAINERS, ONCE USED IN GOOD CONDITION, AT LOW PRICES

Lettuce Crates . . . Tomato Baskets—8 lbs. . . . Apple Boxes . . . Cauliflower Crates . . . Bushel Baskets . . . Strawberry Crates . . . Tomato Lugs . . . Hampers . . . Etc.

REGAL BOX CO

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BERRY AND VEGETABLE GROWERS MEET

(Continued from page 322)

No. 55 was grown. Professor Combs pointed out that growers must be careful about using nitrogen on tomatoes. Potash is needed for color and flavor. On heavier soils it is easy to get too much nitrogen, especially if manure is used.

Organic Matter Needed

Mr. Williams remarked that no manure had been used for twenty-five years at Lakeview Fruit Farm. A great deal of organic matter is plowed under however. Sweet corn is an excellent source. Rye is sown at the rate of 2 to 3 bushels per acre and irrigated during dry weather. It furnishes an excellent cover for winter and a great deal of humus.

The soil is slightly acid—pH 6 to 6.5 which, according to Prof. Combs, is excellent for growing vegetables. He remarked that growers must be careful in applying either lime or an acidifier. Too much lime would "lock up" certain elements needed by plants while sulphur might release others in too large quantities.

STRAWBERRIES. Only the Beaver strawberry is grown by Mr. Willams. Prof. C. L. Kuehner remarked that the new stand of plants was the best he had seen this year. Questioning the visitors it was found that those who favored Beavers were in equal number to those who could not grow the variety well. Prof. Kuehner pointed out that the Beaver does well on light soils and is a good shipping berry.

The plants are set with a two row transplanter, 42 inches between rows, and from 24 to 32 inches between plants. Organic matter is obtained from sweet corn stalks or rye. Timely irrigation assures good growth of newly set plants and also good growth of the old bed following mowing and narrowing the rows (as shown in the picture) with the use of the tiller.

RASPBERRIES: The Latham raspberry is preferred, and 50 crates were picked the day of the meeting. Nitrogen is necessary for vigorous growth but is not applied, because most of the crop is grown under the irrigation pipes and gets nitrogen from adjoining crops.

Machinery and Irrigation Demonstrations
The demonstrations of machinery and irrigation equipment were excellent and we appreciate the participation of those who took part. The pictures show equipment used and co-operators.

QUICK COOLING AIDS QUALITY IN SWEET CORN

Unless freshly harvested sweet corn is precooled before it is loaded into refrigerated trucks, a very large quantity of ice is required to get it to market in good condition, according to tests conducted by scientists of the U. S. Department of Agriculture.

Keeping sweet corn "sweet" from farm field to city market depends largely on low temperature. When picked at correct maturity, the corn has a high sugar content. This, however, turns to starch unless the corn is quickly cooled—ideally just above freezing—and held at the low temperature.

Findings by the scientists indicate that (1) icing practices commonly used in transit do not cool the corn sufficiently to maintain top quality; (2) cooling to desirable temperatures in transit requires nearly six times as much ice as is now used. It would be less expensive and more effective to precool the corn at least 20° below field temperature before it is loaded into the trucks.

EXPERIENCE WITH STRAWBERRIES THIS YEAR By Bert Copeland, Platteville

The Blakemore strawberry has again been the best berry on our land. My customers come long distances to get the Blakemore because they can so well and stand up as frozen berries. I am freezing about 1,000 one pound cartons to be sold under the trade name of **Dewy Fresh.**

We have planted a new strawberry the Sioux, put out by the University of Wyoming which was described in the American Nurseryman last winter.

This year we operated our irrigation system with excellent results. Strawberries must have rain at just the right time. I have seen fine looking plants wither just when they needed rain to produce berries. We have four sprinkler heads and together they water two acres without resetting the pipes. We used 70 pound pressure and it delivers 960 gallons of water per minute. The water comes from a creek and we use 1,500 feet of pipe.

NEW BULLETIN ON IRRIGATION

Irrigation in Wisconsin—The Equipment, stencil circular, No. 289, has been issued by the Extension Service of the University of Wisconsin and is available from the College of Agriculture. The bulletin, by H. G. Bruhn and O. I.

Berge, covers uses of irrigation equipment on Wisconsin farms.

For fruit, flower and vegetable growers this bulletin will be invaluable. It is for crops with a high per-acre value that irrigation is practical and in many cases a necessity for maximum production.

TREE FEEDING Missouri Botanical Garden Feeds Trees Liberally

Tree feeding is the subject of an extensive article in the May issue of the Missouri Botanical Garden Bulletin. The dosage of fertilizer given may be surprising to many gardeners-a total of 265 pounds of 10-8-6 fertilizer was applied under the branches of one tree. However, the spread of the branches of this tree was 60 feet and the height was 80 feet. The bulletin points out that "with a starving tree having a branch spread of 60 feet, we are working with 1/16th of an acre." It was their hope to restore the fertility to a depth of 30 inches which is often the depth of root penetration in which case they are dealing with an equivalent of a top soil of 2 acres.

This statement in the bulletin is of considerable interest:

"The soil within the Garden is of aeolian (wind-blown) origin, called loess. It has great depth, good waterholding capacity, and uniform texture to a depth of 30 inches where a "hard pan" is encountered. Although this soil is usually considered to be lacking in available phosphorus. additional phosphorus had no effect on tree growth. Only increased amounts of nitrogen stimulated the trees, and above a certain point that did not result in increased growth unless both phosphorus and potash were included in the fertilizer. Eventually the formula was established at 41 per cent nitrogen, and this was the only one in ten years of testing which gave predictable results. In time it became standardized as a 10-8-6 commercial fertilizer, containing 10 per cent of available nitrogen, 8 per cent phosphorus, and 6 per cent potash. Considerable work was done with the "minor" elementszinc, boron, manganese, magnesium, etc.,-but no measurable evidence indicated that they were needed in tree feeding, although their need in fertilizing field and truck crops is very well established."

Wisconsin Beekeeping

OFFICIAL ORGAN OF THE WISCONSIN STATE BEEKEEPERS
ASSOCIATION OFFICERS:

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DISTRICT CHAIRMEN:

Newton Boggs, Viroqua Wm. E. Gross, Milwaukee Robt. Knutson, Ladysmith E. Schroeder, Marshfield Guy Sherman, Seymour Ivan Whiting, Rockford

OBSERVATIONS IN THE APIARY -

WISCONSIN HONEY CROP prospects were greatly improved by rains during the last weeks of June and early July. In some sections the rains came too late to help the crop from clover as it had been injured by drought during May and early June. White clover started blooming following the rains but usually does not yield nectar during the hot weather of mid-summer. White sweet clover has almost disappeared in many parts of the state. Yellow sweet clover was seen in pastures and with enough rain to keep other grasses growing well cows did not destroy the blossoms early and some nectar was obtained from that source. Prospects for honey from the second crop of alfalfa were good when this was written.

Opinions still vary widely among beekeepers in northern Wisconsin as to the best method of wintering. Some maintain they cannot winter bees well without heavy packing or unless placed in the cellar. A few claim they are successful wintering outdoors without packing if the apiary has a good windbreak and if the bees are properly prepared for winter. Each beekeeper will have to work out his own system based upon his knowledge of his location and proper preparation of the brood nest for winter.

Re-queening in April or May by simply killing the old or failing queen and introducing a new queen in a mailing cage is a very doubtful practice. Tried it again this year and the experience forced us to conclude we will never try it again. Here are the reasons: first, too large a percentage of the queens were killed. This leaves the colony almost worthless as it must raise a new queen during a critical time when it should be building up a large population for the honey flow in June. Two: not a single case of re-queening resulted in a strong colony which brought in a crop of honey during June. The reason was, no doubt, that the failing queen or whatever the



cause of a small population during April, resulted in a colony unable to rebuild and produce a maximum population by mid-June.

It will be far better to place a nucleus on each weak colony, using one or two frames of hatching brood and some young bees to which the new queen is introduced. By setting this on top of the weak colony with a tight inner cover between, the two units can increase in population until the honey flow. Then the poor queen can be killed.

Dwindling colonies take much of the pleasure out of beekeepning. We suspect nosema as the cause. During April and May and even into June colonies which were re-queened in mid-April did not build up. On each inspection they seemed to have plenty of brood but no field bees. When the honey flow began in mid-June they were still too weak to bring in much nectar. The only solution we could think of was to unite several of them in order to get a good field population to bring in some nectar. That, however, left some equipment which should have been in use. Another solution may be to find such colonies in early spring and place a two pound package with young queen on top of them. By operating as a two queen colony until early June, then killing the poor queen, we might get a crop of honey. Or will the nosema infected bees transmit the disease to the package bees as well?

WATERMAN NAMED APIARY INSPECTION SUPERVISOR

Milton H. Button, Director of the State Department of Agriculture, this week announced the appointment of William Waterman as supervisor of apiary inspection.

Waterman will be assistant to John Long, who is in charge of apiary inspection and honey grading for the department. He will also be superintendent of bee and honey exhibits at the state fair.

For the past twelve years he has taught vocational agriculture in the high schools at Hawkins, Pittsville, Stratford, and Medford. He is a graduate of the Platteville State Teacher's College.

HONEY PURCHASED FOR SCHOOL LUNCH PROGRAM

The U. S. Department of Agriculture purchased 11½ million pounds of extracted honey during April and May for use in school lunch and institutional feeding programs. More than 18 million pounds were offered. Prices paid for the processed and packed honey in 5 pound cans f.o.b. shipping point were: white—14.67c, extra white amber—14.4c, light amber—13.3c and buckwheat—11.4c. Processors were required to certify they had paid beekeepers not less than 8.5c net per pound for buckwheat; 9c net for light amber; 10c net for extra light amber and 10.5c for light honey.

VALUE OF WINDBREAKS

Everyone knows how much worse a cold day is if there is a wind, but many of us do not realize the enormous difference that wind makes, expressed in figures. The March A.B.J., citing an ex-soldier's book on his Arctic experiences, mentions that there is the same "wind-chill" with a 20-mile wind at 12 degrees of frost as with a 1-mile wind at forty below zero. The importance of windbreaks for apiaries in cold climates becomes clearer with these figures.

From-The Bee World, June '49

Honey Bees Work Small Areas

By Sardar Singh, Ithaca

Horticulture and agriculture are dependent upon the pollination services of honeybees, and a knowledge of factors that limit or favor gathering activities, properly applied, could work to the mutual benefit of beekeepers and farmers. To this end, certain studies of the habits of bees concerned in gathering nectar and pollen have been undertaken.

Marking The Bees

The Experiments were conducted during 1947 and 1948 mostly in the vicinity of Ithaca. Individual bees were marked in several ways. "Dupli-Color touch up" paints, which are quick-drying, of suitable consistency, and available in a wide range of colors proved most efficient. The bees were caught in a piece of cheesecloth, held against a book and marked, and released 50 yards away. An effort was made to obtain as complete a record as possible of the course taken by each bee during her foraging visits to each crop, using graph paper to record the visits to individual flowers on each

Different-colored pencils were used, to aid in the interpretation of the graph, and composite maps of the visits on each day were made later. The area in which the bees worked was marked off in plots, some in a 40-acre field of buckwheat, others in areas of goldenrod, sweetclover, alsike, aster, and dandelion. Observations were made also in an apple orchard, although obvious handicaps prevented the observers from following the marked bees there for long periods.

From the observations, it appears that individual bees work the same plot consistently, and in a relatively small area, and that they are also consistent in gathering either nectar or pollen exclusively over the period of time when the produce is available.

One bee was observed to gather pollen in the forenoon and nectar in the afternoon. It is also evident that a bee tends to devote her attention to one crop, even though other plants may be blooming nearby. For instance, bees working on buckwheat ignored the presence of goldenrod beside the buckwheat plot. One of the bees under observation returned to the territory she had selected even when blown away from it by gusts of wind into other portions of the field where the same kind of plant was blooming. Some bees spent almost the whole of their lives in the same patch. However, when one crop is no longer profitable, the bees will shift to another.

One Bee's Work

This account of the observations on one bee will illustrate the general trend of activity. This bee was working on dandelions. She was a steady nectar gatherer from May 26 to 30, and was noticed to brush pollen from her body and let it fall rather than collect it in her pollen baskets, though other honeybees visiting the dandelions were gathering pollen. She was followed during most of her visits during the period, and she averaged 35 minutes for a visit. Her trip to and from the hive took 5 minutes. She was evidently limiting her work to dandelions, because she was found sitting in the hive at 8 a. m. on May 21, although other bees were bringing in pollen from hawthorn. Dandelion blossoms opened about 9 a. m. that day. She was found in the hive the next afternoon, after the dandelion blossoms had closed.

On May 31 she was absent from her usual plot, so a watch was kept at the hive entrance, where she arrived at 11:36, left 12:08, and again at 1:06. She was caught, and samples of pollen taken from her body indicated that she had shifted to gathering nectar from another crop. Some bees seem to shift from one crop to another earlier than others, and the reason is not clear. Apparently each is guided by the circumstances around her.

Orchard Observations

Observation of bees in apple trees presented major difficulties. The bees were marked with bright-colored powder to help in recognizing them from the ground, although in the course of a few hours the bees succeeded in cleaning the powder from their bodies, which handicapped continued observation. In general, final conclusions from the data obtained agreed with the work on field crops. Individual bees become localized to small areas which might be one tree. Apparently rambling over several trees may be due to a meager yield of nectar or pollen by the blossoms, or by disturbance by the wind, or by other insects.

Self-unfruitful varieties of apples and similar varieties of other fruits are the crops directly or chiefly affected by this localization of bees to small areas. A single apple tree may cover an area 30 feet in diameter, and put forth more blossoms at one time than other crops in a plot of equal size. Consequently, the activities of a bee that limits its foraging to one tree are of little benefit to the set of fruit.

Change In Practices

Evidence, as well as practical experience, points to the need to plant pollinizer and mother varieties next to each other to overcome this difficulty. As a result, changes in present practices may make the honeybees more useful to the fruit grower.

This study is the first that has presented detailed evidence of the behavior of bees engaged in gathering nectar and pollen. Although incomplete, it presents information concerning the advantages and limitations of honeybees that may be applied by fruit growers toward the solution of some of their problems in cross-pollinating self-unfruitful varieties. From Farm Research, New York State Agricultural Experiment Station and Cornell University Agricultural Experiment Station.

T. M. DOBROVSKY NOW AT CORNELL

Todor M. Dobrovsky is now working in beekeeping investigation at Cornell University, Ithaca, New York.

In the April issue of Bees, formerly Southern Beekeeper, published by the Hale Publishing Company, Hapeville, Georgia, Mr. Dobrovsky has a very instructive article entitled, "The Honey Bee—Master Tools for a Master Artisan." In the article Mr. Dobrovsky has drawings of the head of the bee and also the right mandible or jaw which are excellent in detail. The article discusses the mouth parts or the tools with which the bee carries on its work.

Mr. Dobrovsky was formerly inspector in Wisconsin and received his masters degree in entomology at the University.

New Regulations for Labeling and Marketing Your Honey

By John Long

Your new crop of honey will soon be ready for sale. How, when, and where will you find a market? What price will you get for this product? Much will depend upon the way you handle and prepare that crop. You have two choices in this matter. First, if you want the best price you may pack the honey the way the consumer wants it packed; that is in the kind of container showing the flavor of honey which that particular consumer may want. Or if you pack and label in the way more convenient to you, not as it should be, you may expect a corresponding price.

The Label

No matter how you pack it, you must meet certain state and federal food regulations. What are they? All honey sales can be divided into two classes. First, honey sold directly to consumer in his container or containers and filled in his presence (this type of sale requres no label or grade). Second, honey sold in containers previously prepared for sale must be labeled. What must go on that label? First, each label must have the following information: Your name and postoffice address, prefaced by produced or packed by; the net weight of the contents, and the words "Wisconsin Honey", if produced in this state.

Grades

If you do not wish to grade honey that you produce during that year, you may add the word "ungraded." This is the simplest label which you can use under our new regulations.

If you wish to grade your honey, it may be graded into three distinct groups: Wisconsin Fancy White, Wisconsin No. 1, and Wisconsin No. 2. Again No. 1 or No. 2 honey may be one of the following colors: white, golden or dark. This applies to all honey graded under Wisconsin grading rules and regulations. If you have any question in regard to the color of your honey, we suggest that you submit samples to the office of the Bee and Honey Section, for color grad-

Containers

Other new features of our present grading rules and regulations require that only new containers be used to sell honey in less than 50-lb. containers. Labels are now required on all containers on all sales of honey except those made directly to the consumer, by the producer.

Playor

It is also legal to use a flavor to describe a certain type of honey. For example. Wisconsin No. 1 Basswood Honey. The office of the Bee and Honey Section would like to receive samples of labels which you plan to use this coming year. In this way we can advise you as to corrections if such are necessary.

WANTED-SAMPLE OF YOUR LABELS

How well do the labels used on your honey, meet the requirements of the Honey Standards as adopted last October? Many labels now in use are in violation of the new rules and regulations.

The Bee & Honey Section of the State Department of Agriculture would like to make a study of the labels used on Wisconsin honey to facilitate rapid conformation to the revised regulations. We will appreciate it if all honey producers in the state will send a copy of their labels to: Wm. Waterman, Bee & Honey Section, State Capitol, Madison 2, Wis.

BEES FOR SALE

For Sale-Fifty-one colonies of bees on excellent location, consisting of two brood chambers and two supers each. All deep ten frame, fully equipped, two years old. Also thirty frame radial extractor, heating tank, settling tank, electric uncapping knife, five pound pails and other equipment-all new. Also 3,000 pounds honey. Best offer takes all. Thomas D. Malicke, Route No. 3, Box 574, Waukesha, Wisconsin.

WANTED—BEES & LOCATION Want small farm or few acres with buildings. Near town. Good beekeeping location within 150 miles of Chicago. Electricity and telephone available. Black soil. Hard road. Also will buy 25 to 50 colonies bees and equipment. Fall delivery. State lowest price. Write to, Box 454. Chicago 90, Illinois.

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Carloads and less than carloads. Mail sample and best prices in all

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Have on hand a carload of 5 pound glass jars. Can make an attractive price on them in 100 case lots. Write Oscar Ritland, Elroy, Wis.

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1/2 lb. jars, carton of 24, wt. 9 lbs. 72c 1 lb. jars, carton of 24, wt. 11 lbs. 84c 2 lb. jars, carton of 12, wt. 11 lbs. 55c 5 lb. jars, carton of 6, wt. 10 lbs. 49c

5 lb.	pails, carton of 50,	
wt.	25 lbs\$	4.68
5 lb.	pails, carton of 100,	
	46 lbs	9.36
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wt.	44 lbs	6.82
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We also carry a complete line of other bee supplies.

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Boyd, Wisconsin

From the Editor's Desk

THE BOARD OF DIRECTORS MEETS

The Board of Directors of the Wisconsin State Horticultural Society met at Bassett's Ski-Hi orchards near Baraboo as the luncheon guests of Mr. and Mrs. Art Bassett, Jr.

Some of the important matters of business acted upon were:

It was decided to hold the annual convention of the society at the Hotel Retlaw, Fond du Lac, on Nov. 15-16.

This year two women were chosen to receive the honorary recognition certificates of the society. The names will not be announced until the annual banquet.

The Wisconsin Berry and Vegetable Growers Association and the Wisconsin Apple Institute were invited to hold their annual meetings in conjunction with the meeting of the society.

The financial report and budget were considered at some length. A deficit of \$489.43 was reported in the past fiscal year's operations. This was due to the purchase of several items of equipment and an effort to improve the quality of the magazine by using more pictures. It was pointed out that the society is attempting to do more and more work on a smaller state appropriation than it had twenty-five years ago.

The president appointed the following members of the nominating committee to nominate officers for election at the annual convention: Mr. R. L. Marken, Kenosha, chairman; Mr. H. A. Dvorak, Casco; and Mr. E. L. White, Ft. Atkinson.

The board expressed appreciation to the Bassett's for their hospitality and the fine chicken dinner served members and their wives.

IT'S CHERRY PICKING TIME

Our cover picture this month shows Miss Dorothy Christiansen, daughter of Mr. & Mrs. Ray Christiansen of Sturgeon Bay, Wisconsin picking cherries in one of the Reynolds' Bros. Orchards at Sturgeon, Bay. Door County has many scenes like this during July and August each year.



BOARD OF DIRECTORS MEETS AT BARABOO

Guests of Mr. and Mrs. Art Bassett, Jr., the Board of Directors of The Wisconsin State Horticultural Society holds its regular summer session with the Ski-Hi Orchard as a background.

Seated, left to right: Sec., H. J. Rahmlow; Treas., E. L. Chambers; Vice-Pres., Arnold Nieman; Pres., Gilbert Hipke; Exec. Committee Member, Mrs. Art Bassett, Jr.; and H. A. Dvorak. Standing, left to right: M. H. Ward, R. C. Pippert, Arthur Brunn, R. L. Marken, and Earl Skaliskey. Six board members were unable to attend.

WISCONSIN STATE FAIR STATE FAIR PARK, WEST ALLIS, WISCONSIN AUGUST 20-28, 1949

The Wisconsin State Fair is one of the outstanding fairs in the nation. This year new ideas will be featured in the farm crops, fruit, and vegetable sections.

Instead of exhibits of grains, plates of vegetables and fruit the exhibits will attempt to show the advancement these branches of agriculture have made in recent years.

The fruit exhibit will feature modern methods of producing and marketing apples. The vegetable exhibit will feature the production and marketing of tomatoes and will be staged by county agents and growers in Racine and Milwaukee counties and several processors.

The flower show as in years past will be an outstanding feature in the Horticultural Building and again be supervised by Mr. E. L. Chambers and his staff.

THE COUNTY FAIR FLOWER SHOW

Mrs. J. L. Larson of the Iola Garden Club writes: "My letter about the county fair flower show published in the May issue of Wisconsin Horticulture (page 260) has already brought results. The premium list for the flower department at our county fair has been revised, though not drastically. An artistic arrangement section has been added so now our garden club members will have to contribute if it is to be successful."

We will be glad to hear from other members who have been working with county fair flower shows and will appreciate suggestions for improving the flower show section. How can it be made an asset to the county fair and really attract the attention of all visitors? It could become the most attractive feature of the county fair exhibit section.

Vegetables at The County Fair

"I see very little value in a paper plate with six carrots as an exhibit at the fair, especially when we see such beautiful displays of all kinds of vegetables in coolers in all of the modern grocery stores," was the opinion of Mr. John Hauser of Bayfield when we visited him recently.

Mr. Hauser is well qualified to speak on the subject. In years past he exhibited many vegetables at fairs. As Wisconsin's largest growers of perennials the Hausers display flowers at several nearby fairs.

We have heard complaints that fair managements do not give an adequate amount of money to the farm crop, fruit and vegetable exhibits at the fairs. Perhaps the reason is that fair visitors are not much interested in these exhibits. We must ask ourselves this question—do exhibits of fruit, flowers, and farm crops help the attendance at the fair? Do fair visitors and exhibitors flock to see them and study them? Are they of interest and educational? If the answer is no, then something should be done about it.

We can well ask ourselves the question, has the display of farm products at the fairs kept up with modern methods? If fruits and vegetables can be exhibited in grocery stores so that they are very attractive, why cannot they be shown attractively at the fair?

The president of a Wisconsin garden club told us in June that a committee representing her club had called upon the manager of their local fair and suggested they would like to help improve the flower show and that the club members would be willing to take part by exhibiting. They were told, "We have run this fair for many years and we are quite capable of continuing to do so."

Perhaps they are capable of managing the fair but if they do not keep up with modern times, modern improvements and modern methods of exhibiting, then they are headed for trouble.

All this has a negative tone. We have not made any suggestions as to how the exhibits can be improved. There are people who have ideas about improvement but as in the case of the garden club president such ideas may not be welcome. So we feel it necessary to call attention to the lack of progress in this department and hope that there will be an awakening.

IRIS SOCIETY ELECTS OFFICERS

The American Iris Society has elected the following officers: Judge Guy Rogers, Wichita Falls, Tex., president; Robert Allen, New York City, vice-president; E. G. Lapham, Elkhart, Ind., treasurer; Sam Caldwell, Nashville, Tenn., editor, and Geddes Douglas, Nashville, Tenn., secretary.

WISCONSIN IRIS SHOW DRAWS LARGE ATTENDANCE

Mrs. Robert Baumgartner of Milwaukee, Secretary of the Wisconsin Iris Society, reports a count of 6,549 at the annual Iris Show held at the Mitchell Park Conservatory in Milwaukee on June 5, 1949.

The Mitchell Park Conservatory was an ideal place for the show in the opinion of the officers of the society. The show was beautiful with many specimen stalks, artistic arrangements, and table arrangements.

We congratulate the Wisconsin Iris Society on this achievement.

A Sunday afternoon nap is the best automobile accident preventative.—Arcadia News-Leader.

611 Maywood Ave.

AN INVITATION

Milwaukee Garden Open to Visitors

The owner of the Meyer Specimen Garden on S.E. corner of South 40th st., West Forest Home ave., Milwaukee, Wisconsin extends an invitation to gardeners to see specimens of the following plants:

Rhododendrons, Azaleas, white, blue, yellow and salmon, largest 5' high, Magnolias, Hydrangeas—four varieties, Yews—Hatfield, Hicks, Globe, Japanese Umbrella Pine, Japanese Red Leaf Maple—dwarf and miniature, Oleander, 5' high—white, Lilies—about 24 varieties and Roses.

OUTDOOR EXPOSITION AND CONSERVATION ROUND-UP IN MILWAUKEE

The week of September 10-18 the Milwaukee County Conservation Alliance will sponsor a gigantic Outdoor Exposition and Conservation Round-Up in the Milwaukee Auditorium.

The event will be entirely different from a sports show and will feature conservation education. There will be outstanding speakers on the program. Watch for further announcements.

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By Paul Ravet, Menominee, Michigan

We have found a ready market for all our surplus Gladiolus blooms by putting them up in cellophane packages, consisting of from 4 to 8 spikes which retail at from 50c to \$1.00 per package, depending upon the local market conditions.

Length Of Stems

The spikes should be cut before hand and put in deep containers of water for at least 5 hours—overnight is better still. Stems don't have to be long, as these are bought by the housewife for immediate use in her home. (She doesn't want a yard of stem to contend with.) Overall length of stem and flower head should be from 30 to 36 inches for the most convenient sized package.

PRESIDENT'S MESSAGE

The committee to nominate directors for the annual election of officers of the Wisconsin Gladiolus Society is Paul Ravet, Chairman; Leland Shaw. and Mrs. A. E. Piephorn. Nominations must reach Mr. Rahmlow by September 1, 1949 for the October issue of Wisconsin Horticulture. At least 10 persons should be named for the 5 vacancies.

It appears that everything is in readiness for the big Beloit show on August 6th and 7th.

STATE FAIR SHOW:

Important rules for the Wisconsin Gladiolus Society Show at the State Fair, August 23, 24, & 25 are: Entries are to be in place by 8:00 a.m. August 23rd. Cash prizes are offered for winners in seedling, one and three spike, vase and basket classes. Some vases and baskets are available at the State Fair, but some must be supplied by the exhibitor (suggest nearby exhibitors furnish their own containers and leave the Fair supply for distant friends.)

To show gladiolus at their best to the large number of State Fair patrons, please bear in mind that single spike entries should have 1 or 2 added spikes of less maturity to make a fine showing on the second and third (usually hot) days of the show. The best spike only will be judged. For three spike entries please bring additional "fresh spikes" for the same purpose.

Cash prizes will not be too liberal this year because of the limited budget, but a good showing will likely bring an increased budget in future years. Please help make this show a success.

Walter Krueger, President

The donors of bulbs for novice growers in the Beloit area are: Oren Baxter, L. H. Hoffman, Harold Janes, Walter C. Krueger, Haugers Glad Gardens, C. H. & G. J. Melk, Dave Puerner, Lloyd Pattewan, Paul Ravet, Dewey Sleezer & Everett Van Ness.



Mr. Paul Ravet, Menominee, demonstrates packaging gladiolus at meeting of the Wisconsin Gladiolus Society.

GLADIOLUS SHOW DATES

August 6-7-Wisconsin State Gladiolus Show, Beloit, Wis.

August 7-8—Madison Gladiolus Society Show, First National Bank, Madison, Wis. (Open 2:00 p.m. Sunday, also Monday evening.) Seedling section open to all.

August 20-21-Marathon County Gladiolus Show.

August 20-21—Manitowoc, Sheboygan, and Calumet County Gladiolus Show, Two Rivers, Community Hall.

August 23-24-25-Gladiolus Show at the Wisconsin State Fair.

September 2-3-4-5—Southern Wisconsin and Northern Illinois Gladiolus Show, County Fair Grounds, Elkhorn, Wis.

August 12-13—Iowa State Gladiolus Show, Waterloo, Iowa.

August 27-28—Twin City Gladiolus Society Show, Presbyterian Church Auditorium, Menominee, Michigan.

August 20-21—Illinois Gladiolus Society Northern Show, Garfield Park Conservatory, Chicago, Ill.

August 22-23—Minnesota Gladiolus Society State Show, First National Bank, St. Paul, Minn.

August 25-26—New England Gladiolus Society, Horticultural Hall, Boston, Mass.
August 26-27—Minnesota Gladiolus Society Northern Show, Hibbing chapter of Minnesota Gladiolus Society, Hibbing, Minn.

August 29-30—Ohio Gladiolus Society State Show, Higbee Store Auditorium, Cleveland, O.

How To Make Packages

We use an 18 inch wide cellophane of medium weight which comes in various length rolls of 100 feet and more which can be obtained from a jobbing house of retail stores or bakery shops. (Bakery shops get very large rolls of cellophane.) We like No. 300 MSAT, which is moisture proof and the kind stores use for cheese. We cut off sheets from this roll about 6 feet in length and lay the spikes face up, side by side, on half of this sheet. When we have the desired number of spikes we take the other half of the cellophane and lay it over the flowers with the open end covering the bottom of the spikes. That leaves three sides to be sealed by a sealing iron, which can be obtained from the same jobbers as carry the cellophane. Seal the two sides first; then the bottom which is then folded under and around the (Continued on page 333)

JOINT REGIONAL SHOW, MANITOWOC, SHEBOYGAN, & CALUMET COUNTIES August 20-21

A joint regional gladiolus show will be held this year by the Sheboygan, Manitowoc, and Calumet County chapters in the Two Rivers Community Hall on Saturday and Sunday, August 20 & 21.

Final plans for the show were made at a picnic held on Sunday, July 17, 1949 at Roosevelt Park, Kohler. The Manitowoc County Chapter now has 32 members. Members of the show committee from Manitowoc are: John Gates, Two Rivers, show chairman. Show arrangements: John Gates, Harold Groth and Gilbert Thompson of Manitowoc. Commercial displays: John Bayless, Two Rivers. Sheboygan County show committee members are: Mrs. Arthur Piepkorn, Plymouth, chairman; Mrs. L. Wightman, Plymouth; Chester Harrison, Waldo; Harvey Pierce, Harold Hahn, and Otto Kapschitzke, Jr. all of Sheboygan.

Judges will be: Gordon Sheppek, Green Bay; Prof. Leland Shaw, Milton; Dr. George H. Scheer, Otto Kapschitzke, Sheboygan; and John Bayless, Two Rivers.

Committee on show schedule: Harold Groth, Manitowoc; Mrs. Archie Woodstock, Mishicot; and Wm. Hachmann, Two Rivers.

There will be parking for exhibitors back of the public school building onehalf block away from the community hall. The banquet will be held at the Hotel Hamilton. Send reservations to Gilbert Thompson, Manitowoc.

-By Mrs. Geo. Scheer, Sheboygan

TWIN CITY SHOW Aug. 27-28

The Twin Cities Gladiolus Society will hold its annual show August 27th and 28th in the Presbyterian Church Auditorium, Menominee, Michigan.

All growers and lovers of gladiolus are invited to come to this community. where the fine spirit of co-operation. shown by the local businessmen and civic groups assures a successful show, second to none.

By Arnold Sartorius, Secretary, Porterfield, Wisconsin

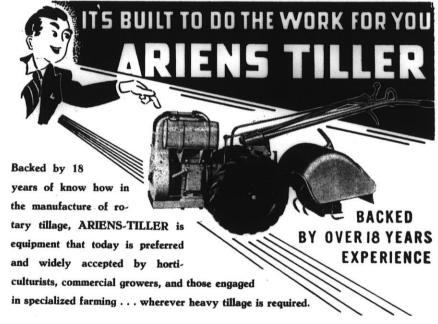
Write

HIGHLIGHTS OF THE DIRECTORS MEETING HELD IN JUNE

The Board of Directors of the Wisconsin Gladiolus Society met in June and took the following action:

- 1. Approval of the premium schedules of both the Beloit and State Fair shows.
- 2. Removal of classes and awards for air shipments to the Wisconsin Gladiolus show.
- 3. Reductions in a number of trophy awards to 15 and authorization for their nurchase
- 4. The board authorized the purchase of bottle covers for society gladiolus shows.
- 5. Modifide commercial display entries to one size class and alowed the services of professional arrangers in these dis-

(Continued on page 333)



ARIENS is not just another tiller . . . it's America's leading all-purpose rotary tiller, because it is the ONLY tiller with: full horsepower motor, 9 h. p. model B; 7 h. p. model C. Standard two speeds forward and reverse. Positive action multiple disc clutch. Full size 9/16 inch electric alloy steel tines . . Center shoe and share assembly cuts out middle and tills entire area.

> Write for complete details and prices—and name of the nearest ARIENS distributor where you may see the tiller that is built to do your job.

ARIENS COMPANY BRILLION - WISCONSIN

The Amateur Gardener

Question: We have a small bed of strawberries in our garden which did not do well this year. They grew tall and spindly; there were not very many berries, and these were not of good quality, but were soft when ripe. Can you advise us what to do?

Answer: Strawberries require lots of sunshine in order to produce good fruit. No doubt you have shade during a portion of the day, which (together with nitrogen fertilizer) would produce the tall spindly growth and berries of poor quality.

Most kinds of fruits and many vegetables require practically a full day of sunshine for best results. The berries you picked this year were really produced by the plants last year. Strawberry plants should be planted early in spring so that they and the runner plants from them can develop to maximum size by September, when fruit buds are formed in the crown of the plant. For next year's crop therefore, see that your plants have good care this summer. Do not let the plants become too thick; each plant should have six inches of space in which to develop. If the soil is dry at any time during the summer, water thoroughly. Only vigorous plants will produce good fruit next June. Organic matter in the soil is most important for berries.

Question: I wish to transplant Oriental Poppies. What is the best time to do this?

Answer: August is the best time to transplant poppies. They become dormant in July and early August and can be transplanted during August or early September. Be careful in transplanting so that the fleshy roots are not broken or twisted.

Question: I wish to transplant some of my Iris. Is it necessary to remove all of the soil from the roots and cut back the leaves so that they look like the plants one buys. Is August a good time to do this?

Answer: If you wish to move your Iris divisions from one part of the garden to another, dig up the whole clump, carefully clivide it, removing as little soil from the roots or destroying as few roots as possible. Transplant the entire division after removing any rhizomes that are decayed or of poor quality. It is not necessary to cut back



the leaves if but few roots have been destroyed. Yes, August is a good time to do this work.

Question: Is it best to cut back the tops of Iris and Peonies. I notice that many gardeners are doing that.

Answer: It is poor practice to cut off the leaves of plants having fleshy roots or rhizomes until they become dormant in fall. It is often done because the leaves are diseased or have died back. Healthy leaves are producing food all summer long to build a better root system and cutting them away early results in inferior plants and flowers next year. Control insects and diseases by dusting and it will not be necessary to cut off any leaves.

Question: My neighbor has told me that the lawn should be mowed closely so that one need not mow it so often. However, I have noticed that his lawn looks brown a good deal of the time even though he waters it. Does he cut the grass too short.

Answer: Yes, that is probably the reason why it looks brown a good deal of the time. Do not cut the grass shorter than about two inches and it will look much better and grow better. After all, the plant must have some leaf surface in order to grow as the roots have very little reserve food at this time of the year. Here again food for growth is made in the green leaves.

Question: Is there some way we can keep birds away from our berries and fruit?

Answer: You might try preparing a realistic cat with a long tail and glistening eyes as suggested by Mrs. I. F. Thompson of Beloit. These cats, if placed on the ends of the branches or near the berries might help.

How To Grow Hardy Lilies By W. A. and Marie M. Rowell, Minnetonka Lily Gardens

While neither poetry nor prose can adequately describe the allure, beauty and unusual fragrance of most lilies, it is the practical rather than the exotic side of lily growing which we want to discuss here.

Some otherwise desirable lilies apparently lack sufficient stamina to be of practical use in our Upper Midwest. For instance, we have had a great deal of difficulty growing the Auratum and Speciosum Rubrum, even though started from seeds in our own gardens. Careful selection is a "must" in lily growing. Although some types tested in our gardens seem to hold no promise, we now have under observation a large number of types, some in the seedling stage, and others mature, a few of which are showing enough promise to guarantee hardiness in this area. The lovely types listed below have proven sturdy in this climate; the same plants blooming year after year without interruption.

Plant In Fall

We, like many other lily growers, recommend fall planting. Digging is done after the tops die down, usually in October, and bulbs sent out immediately for replanting. When you receive your bulbs from the grower, don't allow them to lie around for even a day. The sooner they are put back into the ground, the surer you are of having healthy, blooming lilies the following year.

Plant In Groups

Lilies make the best showing in groups of six, planted six inches apart. The various colors and heights will determine the location in your border or garden. Lilies require well drained soil. It can be neutral or slightly acid. If these two requirements are fulfilled the soil can be of any kind or texture. Water can be applied at any time and in liberal amounts.

Plant Deeply

Depth of planting is important. A good "yardstick" to use is three times the diameter of the bulb from the surface of the ground to the top of the bulb. Deep planting serves two purposes: first, it helps to prevent loss due to freezing and thawing in the spring second, it retards growth in the spring

and helps the tender shoots get by our late frosts.

Feed lilies the same as you do your other perennials. Any good commercial fertilizer, not too high in nitrogen, is best. If possible shade the roots of your lilies by planting low growing plants in front of them, or give them a mulch about the first of July, of either manure, compost, or any good mulching medium. In the fall, after the ground is frozen, cover with about 5 to 6 inches of marsh hay. This will aid in bringing your bulbs through our hard winters and capricious springs.

Surely no one interested in fragrance, stamina, and beauty will go long without a cluster of Regales in his garden. Nor will the same person be satisfied unless he can look down into the glowing star of a Concolor. The dainty Cernuum is a perfect delight to gardeners who have them, while the Tenuifoliums make gardens smile in the early Spring.

The Henryi with its many nodding orange flowers gives zest and spice to the August garden—there really is no choice. Amabiles, Callosum, and the faithful Tigrium, to say nothing of the most satisfying Davidi and Maxwell make a flower lover's life worth living.

Sturdy Varieties				
Kind	Blooms			
Regale	July			
Amabile	June			
Callosum	Aug-Sept			
Cernuum	June-July			
Concolor	June			
Davidi	Mid-July			
Henryi	Aug.			
Maxwill	July-Aug			
Tenuifolium	June			
Tenuifolium Golden Glean	n June			
Tigrinum (Flore Pleno)	Aug			
Tigrinum	Aug			
Dauricum	Early June			
Umbellatum	June			
Color	Height			
White	3-6 feet			
Grenadine red	11/2 to 3 feet			
Brick red	3-5 feet			
Lavender	11/2 to 3 feet			
Scarlet	1½ to 2 feet			
Cinnabar red	3-5 feet			
Orange	3-8 feet			
Light orange	3-6 feet			
Coral	11/2 to 4 feet			
Yellow-orange	11/2 to 4 feet			
Orange	4-6 feet			
Orange	4-6 feet			
Salmon	11/2 to 3 feet			
Orange	2-4 feet			

HIGHLIGHTS

(Continued from page 331) plays and authorized cash premiums for commercial displays.

Mr. Hugo Krubsack was appointed to arrange for the location for the annual meeting to be held this fall. He announced that the place would be Green Bay. Watch for further information.

By-Walter Krueger, president

PACKAGING GLADS

(Continued from page 331) spikes or stems. This tends to hold them in one position and face up. Gladiolus so packaged will stay fresh without being put in water for several days. Racks or flower vases will hold several packages for store display. Keep from sudden change of temperature and wind.

It is not advisable to put them under refrigeration and take them out each day; they will fall and fade much quicker by so doing.

Don't overload the stores you supply, better to put in less and have them demand more, than have them suffer a loss.



Mrs. W. A. Rowell cross pollinating lilies

ENJOY BEAUTIFUL HARDY LILIES

Regale, Amabile, Callosum, Concolor, Dauricum, Davidi, Henryi, Maxwill, Tenuifolium. Tigrinum.

Grown from seed in our gardens. Stock carefully selected. No bulbs purchased elsewhere to fill orders.

Only those types are offered for sale that have proven vigorous, strong and hardy. Planted according to instructions, they make satisfied and happy gardeners.

Write for Price List Today

Minnetonka Lily Gardens

5537 South 15th Ave., Minneapolis 17, Minn.

Flower Arrangement

This month we present a page of flower arrangements and arrangers. The arrangements were shown at the Lodi Garden Club Flower Arrangement School held May 27th and the La (Oconomowoc) Garden Club Flower Show on June 3rd.

THE OVAL ARRANGEMENT (upper left)

By Mrs. O. F. Isenberg, Baraboo

Perhaps the outstanding qualities of this arrangement are the color harmony with relation of plant material to container and the unusual combination of material. The tall branches are the bloom buds of the hickory. The tulips have a gradation of color from the light yellow down through the yellow bronz and the deep bronzy red. Tulips give weight low with their deep color and open flowers. The variety in texture of material is emphasized with the shaggy bloom and a few deep green leaves of the rhubarb. The container was of antique copper is set off with much more interest when placed upon a board or mat.

MINIATURES

(upper right)

By Mrs. O. F. Isenberg

A miniature has a jewel-like quality. It is best if up to three inches in height but can be made up to six inches and still be considered a miniature. The visual size of an object varies with the space around it, therefore to be in good scale, a miniature is best displayed in a small niche.

In this picture, the inside dimensions of the niche are 71/2 x 91/2 inches and the arrangement with the accessory were made in scale, considering relation of plant material or size of flowers and leaves to each other and to the container and the space around it.

To help control scale, the sides of the niche must not be touched by any plant material, neither should it protrude in front. The center of the niche is its weakest point and an arrangement is most interesting if placed about two-thirds the distance across, measuring from side of niche inward.

Niches can easily be made at home, cutting old picture frames down to the proper size and making the recessed part of quarter inch plywood. Cigar boxes can also be used by glueing and nailing

the frame to the open edge. The background in this niche was a soft beige. The pitcher was green and orange and the tiny flowers were violas in shades of violet. The flowers measured about onehalf inch in diameter and the accessory about one inch. The miniature completes a pleasing picture when displayed in a niche and can be hung on a wall the same as a picture,

The little miniature center (not more than 3") had a wee turquoise jardiniere for the Chinese container set on a small marble slab. Star of Bethlehem foliage combined with purple violas and a delicate white wild flower were used for for the arrangement. The whole thing set in a cigar box painted a very pale green on the inside and black on the outside. The color combination was beautiful and quite outstanding. This miniature was arranged by Mrs. M. Mueller, Oconomowoc.

THE MADONNA (left center)

By Mrs. Robert Klaus, Oconomowoc

Both Madonnas and lilies seem to have much to give each other. Perhaps that is why arrangers like to use them together. Here the exhibitor carried the flowing lines of the Madonna on up into the Calla Lily buds. The leaves were used as an immediate background for the white figurine, and in this way outlined the beautiful curve of the Madonna's head. (Shown at the LaBelle Garden Club Flower Show. June 3, 1949.)

THE CRESCENT ARRANGEMENT (lower left)

By Mrs. O. F. Isenberg

This arrangement was made to emphasize rhythm in the design pattern of the crescent. The branches of the bridal wreath in full bloom and the gradation in deep rose color of the Sieboldii primrose with a focal point of three white iris gave this arrangement the feeling of movement which caught one's eye and carried throughout the arrangement. The container was of white pottery in the oval type which lends iteself very well to circular arrangements. Due to the narrow base of the container, a board was used to give the container and arrangement a feeling of stability.

AT THE SUPERIOR FLOWER **JUDGING SCHOOL**

(upper group picture)

Officers of the Superior Garden Club and school committee chairmen. From left to right: Mrs. George Flynn, Mrs. Robert Brandser, Mrs. Gilbert Snell. Sheboygan; Mrs. Clarence Schultz, Necnah; Mrs. Elmer Peterson, Mrs. Oscar Steen, president of the executive council; Mrs. Charles Jones, Mrs. Phillip Stratton, and Mrs. Herbert A. Juneau.

AT THE LA BELLE GARDEN CLUB FLOWER SHOW

(center group picture)

Left to right: Mrs. Robert Klaus, sec. treas.; Mrs. H. Robert Slater, judge, Itasca, Ill.; Mrs. Joseph Taylor, president; Mrs. Myron Reed, chairman of flower show; Mrs. B. Spransy, vicepres.; Mrs. L. Stewart, judge, West Allis; and Mrs. Val Suttinger, judge, West Allis.

LODI GARDEN CLUB FLOWER ARRANGEMENT SCHOOL

(lower group picture)

Left to right: Mrs. Oscar Isenberg Baraboo; Miss B. Esther Struckmever. Madison; Mrs. Art Bassett, Jr., Baraboo; speakers, Mrs. William Groves, president; and Mrs. G. H. Irwin, schol chairman.

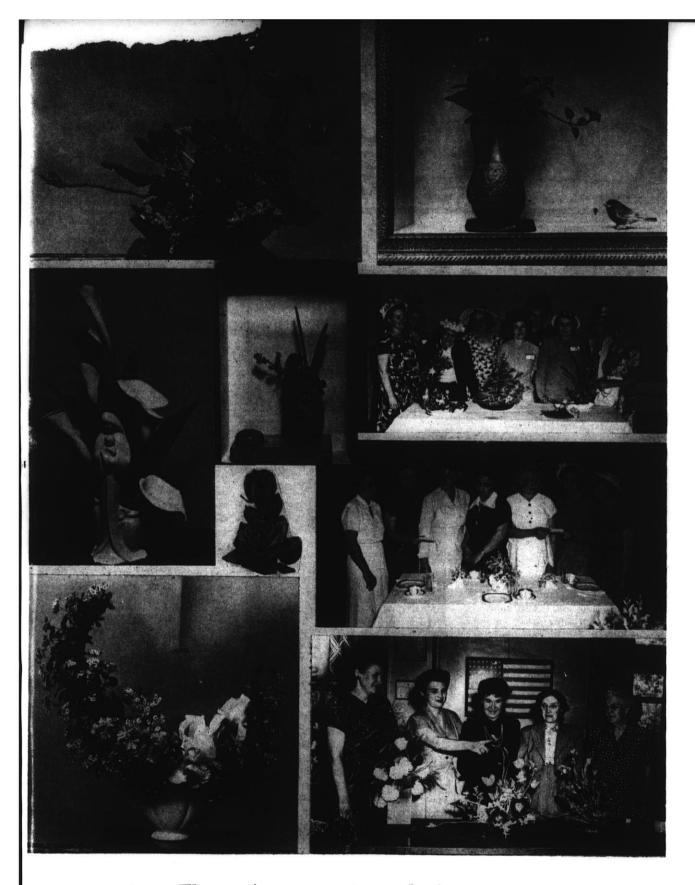
—Wis. Hort. Society Photos

TWO SUCCESSFUL SCHOOLS

The Lodi Garden Club school on May 27th was very instructive. Members of the Poynette and De Forest garden clubs attended. Speakers are shown in the picture.

A total of 162 garden club members from Superior, Duluth, Spooner, Hayward, Ashland, Washburn, Iron River, Bennett, Wentworth, Gordon, and Four Corners attended the school at Superior 26th. Flower arrangement on Tune demonstrators Mrs. Clarence were Schultz of Neenah, and Mrs. G. E. Snell of Sheboygan.

The program consisted of: 1. Discussion of judging systems and methods by H. J. Rahmlow, Madison, (who took the pictures). 2. Demonstration of principles of flower arrangement by speak ers shown in the pictures. 3. Participal tion of everyone present in judging three classes of arrangement of three entries each during the luncheon period 4. Open discussing of "how we placed the exhibits" by all speakers, with members expressing their views quite freely.



Flower Arrangements and Arrangers



OFFICERS

President: Mrs. Clarence Fiebrantz, 3006 N. Downer Ave., Milwaukee First Vice President: Mrs. Eric Martin, Route 1, Edgerton Second Vice President: Mrs. Ervin Kulow, Route 2, Box 464, Waukesha Corresponding-Recording Secretary: Mrs. Fred Marquardt, Hales Corners, Rt. 1.

Treasurer:
Mrs. Harry Wyatt,
315 3rd Street, Baraboo

DISTRICT PRESIDENTS

Madison District: Mrs. David Bogue, 304 W. Marion St., Protage Milwaukee District: Mrs. Stephen M. Cushman, 2932 Northwestern Ave., Racine Sheboygan District: Mrs. William Curtiss, Mrs. William Co Rt. 1, Plymouth South Central District: Mrs. Harold C. Poyer, Rt. 1, Box 218, Fort Atkinson

Editor — Mrs. Oliver S. Rundell, 2227 Van Hise Avenue, Madison, Wis. Parliamentarian — Mrs. Paul Hammersmith, 2755 N. Stowell Avenue, Milwaukee 11, Wis.

Fox River Valley District: Mrs. Warren Jenkins, 705 Green Ave., Park Ridge, Stevens Point

PRESIDENT'S MESSAGE

Dear Members:

With flower shows again in the air. I shall mention two recent shows that in my opinion were excellent: the show put on at Waukesha by the Spring City and the Town and Country Garden Clubs of that city, and the show of the Ceresco Garden Club of Ripon. This, incidentally, was their first show. When one sees flower shows like these or goes on a tour such as the Washington Island Garden Club had recently, one can't help admiring the efforts our Wisconsin garden clubs have put forth and the progress they are making through continued practice and work.

When I was in Portland at the National Council convention it seemed fitting for me to boast a little about what wonderful garden club members you of our Wisconsin federation really are. Could they have seen these beautiful flower shows and also our 20th anniversary memento-Wisconsin Gardens, they would understand why I feel as I do.

Of course it is work to put on a flower show but it pays well in rewards to the members who participate. A flower show as beautifully done as the one at Waukesha is a tribute to any garden club or to any member. It was high class in every respect, clean cut, and, above all, educational.

You all know that one of the prime



High Lake — Vilas County In Northern Highlands State Forest

requirements of a good flower show is its educational value to the exhibitor and to the public. This is best brought about by well labeled exhibits upon which the judges have recorded why or why not an exhibit is a good one or a poor one. These remarks help everyone. So, when you put on your show, arrange to have plenty of clerks to assist your judges so they will have plenty of time to write down these enlightening remarks on the exhibitor's card.

And don't hesitate to be an exhibitor just because you think you are

DIRECTORS

Flower Show: Mrs. Ervin Kulow, Rt. 2, Box 441, Waukesha Garden Tours: Dr. Ralph A. No. 466 Elmwood Avenue, Oshkosh Norem.

CHAIRMEN

Auditor: Mrs. Clarence Kasdorf, 736 Ridge Street, Baraboo Birds: Miss Elsa Lautenbach, 135 Smith Street, Plymouth Conservation: Mrs. Conrad Biebler, 2027 E. Olive St., Milwaukee 11 Historian: Mrs. Walter Roehrborn, 1922 Georgia Ave., Sheboygan Horticulture: Mrs. Herbert Chaffin, 543 Scott Street, Ripon Junior Gardens: Mrs. Earl F. House, 421 8th Ave., Baraboo Judging Schools: Mrs. George J. Portman, 308 12th Street, Wausau Membership: Mrs. George E. Flanders, 806 West Wisconsin St., Portage Nominating: Mrs. Harold C. Kallies, 723 No. 8th St., Manitowoc Program: Mrs. M. C. Spence, Williams Bay, Wisconsin Publicity: Mrs. Fred C. Marquardt Rt. 1, Box 63, Hales Corners, W Roadside Beautification: Mrs. Schneider, Hales Corners, Wis. Malvin Scholarship: Mrs. Alfred J. Kieckhefer, 1250 W. Dean Rd., Milwaukee 11 Year Book and Awards: Mrs. H. G. Har-ries, Rt. 1, Box 31A, Hales Corners, Wis.

not "tops". Practice at home; make arrangements for your home every day. Make them out of anything you can spare from your garden or find in the field (not on the conservation list). Let your imagination play games and arrange anything and everything always combining pleasing colors and dramatizing with different designs. This is the best way to teach yourself the art of flower arranging. When you hear a fine lecture on the subject put what you have heard into practice at once.

Here is a tip: Check with Mrs. Kulow before you have your show. A little additional effort may make it a show which can be registered nationally. Then the blue ribbons will count and those who assist in judging can receive National credit for it.

By this time most of you will have read your copy of our anniversary magazine. All those who have had addressograph plates made up, all of our advertisers, and other state federations whose magazines have been sent to me were sent copies immediately. In sending out copies to members not yet in our addressograph files there has been some delay. But the important thing is that each one of us have a copy of this wonderful memento that we can keep in our home: as a reminder of Wisconsin's fine gardens.

> Gretchen Fiebrantz President

Wisconsin Garden Club Federation 22nd Annual Convention

Wausau Hotel — Wausau, Oct. 13 & 14

AN INVITATION TO WAUSAU

On behalf of the four Wausau Garden Clubs I extend a cordial invitation to the delegates and visitors to the 22nd Annual Convention of the Wisconsin Garden Club Federation to come to Wausau October 13 and 14. We are delighted Wausau was chosen for the Convention and we are looking forward to having you as our guests.

Ada Portman,

Hostess Convention Chairman Wausau, Wisconsin

DELEGATES AND ALTERNATES

Under Article IX, Section 2 (State Convention) The Constitution provides:

"Each affiliated group shall be entitled to one delegate and one alternate for each 50 members or less, and one delegate and one alternate for each additional 50 members or major fraction thereof.

THOSE ENTITLED TO VOTE

- 1. Official club delegates.
- 2. Delegates-at-large (which includes (a) Elected Officers (b) Appointed Officers (c) District Presidents (d) State Committee Chairmen and Past Presidents—of the Federation).

Alternates shall have the privilege of voting only in the absence of the delegate.

(It has been suggested you decide on your delegates and alternates at the earliest date possible, advise Mrs. Harry L. Wyatt, state treasurer of their names and be sure to state the name of the club they represent. Credential cards will be mailed to club presidents later. Please keep the cards when received and instruct the delegates to turn them in when called for at the Convention. It is important that I know the names of your delegates and alternates in sufficient time to check on their standing.)

Mrs. H. W. Schaefer, Credentials Chairman 4416 Taft Road, Kenosha, Wisconsin Following is the program approved by the Executive Board at its meeting in Milwaukee, April 29, and released for publication in this issue by Mrs. Eric Martin, Convention General Chairman. A complete schedule of the convention will be printed in the September issue of Wisconsin Horticulture.

Program

"Suguaroland", an Arizona adventure film by Mr. Karl Maslowski, National Audubon Society, banquet speaker.

"Today's Landscape-Grounds for Better Living", Joseph S. Elfner, Asst. Prof. of Horticulture, Landscape Design, University of Wisconsin.

"The Why of Some Special Cultural Practices", Dr. Burdean E. Struckmeyer, Asst. Prof. of Horticulture, University of Wisconsin.

"A Way With Weeds" combined with Christmas Decorations, Mrs. Irwin L. Burger and Mrs. Wm. E. Kelly of Woodstock, Illinois.

Round Table Discussion of Program Suggestions, with participation by State Chairmen and club members, Mrs. M. C. Spence, State Program Chairman presiding.

Trip to Rib Mountain, and, time permitting, a tour of some of the scenic spots around Wausau. This is planned for the morning of October 13th for visitors not required to attend the Board of Managers meeting.

A tea in the Ballroom of the Wausau Hotel. Hostess clubs: Wausau Federated Home, Wausau Valley Federated and the Good Earth Garden Club, all of Wausau.

Advance registrations should be made with Mrs. C. H. Brimmer, Registrations Chairman, P. O. Box 495, Wausau, as early as possible. Registration Fee (to be paid

by everyone)\$1.00 Luncheon, Elks Club, October 13....\$1.25 Banquet, Elks Club, October 13....\$2.10 Luncheon, Wausau Hotel, Oc-

tober 14, (Gratuities included at all three meals)......\$1.60

Room reservations to be made directly with the Wausau Hotel.

CONVENTION COMMITTEES

The following committees designated by the Constitution and By-Laws of the Wisconsin Garden Club Federation in Article IX, Sections 11, 12, 13, and 14, have been appointed by Mrs. Fiebrantz.

Credentials:

Chairman, Mrs. H. W. Schaefer, 4416 Toft Road, Kenosha

Mrs. C. H. Brimer, P. O. Box 945, Wausau

Mrs. Howard Higgins, 6302—8th Ave. Kenosha.

Auditing:

Chairman, Mrs. Clarence Kasdorf—736 Ridge St., Baraboo.

Mrs. Wm. Klenert—1010 Dunn St., Portage

Mrs. Albert Steckelberg—Lodi. Resolutions:

Chairman, Mrs. Cecil B. Hake-603 Elm Spring Ave., Milwaukee (13)

Mrs. Alfred J. Kieckhefer—1250 W. Dean Rd., Milwaukee (11)

Mrs. F. J. Fitzgerald—649 Broad St., Menasha.

(An amendment passed at the 1948 Convention eliminated the Constitution and By-Laws Committee specified in Sec. 12, Art. IX. That Sec. now reads: "All proposed amendments to the Constitution and By-Laws shall be given to the Parliamentarian or in his absence or disability, to the presiding officer. It shall be his duty to present such proposed amendments to the Convention. All proposed amendments shall be in writing."—Ed.)

AN UNANNOUNCED GIFT

A check for \$16 was sent us by the Washington Island club to be applied to the expense of the Anniversary issue as needed. All advertising space had been sold by the time this generous gift reached us, and the magazine was in the printers hands, so we could not place this announcement where it belonged — in Wisconsin Gardens. We want the Washington Island club to know how deeply this gift was appreciated

EDITORIAL

August is a month for vacations, and Wisconsin a choice vacationland. As such, its fame spreads far and wide. The thousands of visitors northwoods-bound who passed through our town—and probably yours, too—bent on a long week-end of recreation over July 4th, are ample testimony.

With longings of our own for a whiff of the pines and a dip in clear, cold Lake Superior, we turn for temporary comfort and enjoyment to an attractive prospectus put out by the Wisconsin Conservation Department and sent to us by Mr. C. L. Harrington, superintendent of forests and parks. This informative booklet, entitled "Among the Wisconsin State Parks and Forests" was accompanied by additional information on facilities for camping, picnicking, boating, bathing, hiking, fishing, etc., to be found in our various parks and forests. With the thermometer standing at 94 degrees, no more acceptable reading matter than this could be found, anywhere. Nor could anything convince us more quickly of the rich heritage we have in these great State areas. We thank the department and Mr. Harrington in particular for this material.

By setting aside two pages in this issue for conservation reading and thinking, we are able to reprint, unabridged, an interesting article on the theme of recreation as a matter of public concern. The article, by Mr. Lowell Hanson, points out the steps taken by the conservation commission to secure a suitable recreational policy for Wisconsin and provisions for its development and administration; the enactment into law of the commission's recommendations (Chap. 549 Wis. Stat.), and, finally, a resume of the areas acquired since enactment and their classification as properties fitting the specifications of the statute. In brief, the classifications (into one of which each area purchased must fall) are: scenic, recreational, desirable for roadside parks, historical, archeological, botanical or geological.

Since conservation is a fundamental interest of the Wisconsin Garden Club Federation and a subject for study in all clubs, this close-up view of conservation of recreational areas in the state will interest every member.

Wisconsin State Parks Expand

Lowell Hanson, Wis. Conservation Dept.

Recreation in naturally attractive areas of woods and waters has evolved into a matter of statewide public concern, comparable to highways, education and health. All persons are directly or indirectly concerned with recreation from a personal, family, community, or business interest. While there had been substant al progress in the development of attractive recreational areas in the state thru the agency of the Conservational Department, it was recognized in 1947 that for the recreational development of the state to reach a greater degree of usefulness to the people, a reorganization of the state's parks and recreation policy was advisable. The key points in such a reorganization would be the provision of an adequate fiscal plan and the placing of the responsibilities for recreational areas in the state department best qualified to administer and manage such properties devoted to recreational uses. Accordingly, the Conservation Commission, in order to effect a comprehensive recreational policy for the state and to secure its most effective development and administration, presented to the Wisconsin Legislature in 1947 its recommendations for legislation. This legislation would expand the authority and responsibility of the Conservation Commission so that it would become the agency in this state to be responsible for a state park system comprehensive enough to include all classes of properties acquired for recreation, cultural, or scientific purposes. Within the recommended responsibilities would be included these types of properties:

- Scenic areas of statewide significance.
- (2) The best natural areas available to serve the recreational , needs of certain specific sections of the state.
- (3) Those areas that by location and natural attractiveness would be desirable for roadside parks immediately associated with the trunk line highway system.
- (4) Areas of historic value as authenticated by the State Historical Society.
- (5) Areas of natural wonder or of



Copper Falls

great archeological value such as rare and spectacular Indian mounds recommended by the Archeological Society.

(6) Areas of rare botanical or geological value as recommended by the university of qualified scientific groups.

The 1947 Legislature, recognizing the significance of the Conservation Commission's recommendations, enacted them into statute in Chapter 549. Today, the Conservation Department reports that, while the recreational program provided for in that law will be a long term program, already energetic steps are being taken to implement the statute. The Conservation Department has been enlarging present park properties that are now too small lest the pressure of use destroy the very qualities essential to the purpose.

Privately-owned parcels of land within existing park boundaries are being acquired to simplify administrative problems and to allow more use areas. Certain areas adjacent to park properties are being acquired to provide a buffer area or to protect against exterior detracting influences.

Better Services Being Provided

The development for full use of presently-held properties is being accelerated with the provision of better essential services such as adequate sanitary and water facilities, additional and improved camping, picnicking, and beach areas, new buildings, and the layout, construction, and improvement of existing and new park roads. New equipment such as trucks and power pieces and the hiring of additional personnel are providing for a great improvement in the over-all maintenance and service rendered to the public in all of the park areas.

Aztalan

But even more significant are the new park areas acquired for development in line with that 1947 law. Qualifying as an area of historical and archeological value was Aztalan—perhaps the greatest work of antiquity in Wisconsin. Located on the Crawfish River near Aztalan and Lake Mills in Jefferson county, approximately 120 acres have been acquired as the site of the ancient Indian Stockaded village called Aztalan (Aztalan for its probable ancestral Aztec or Mexican cultural origin).

While only the large pyramidal mounds and traces of the village's embankment are all that remain of the actual village, 10 well-preserved mounds remain. Around these existing mounds, which scenically overlook the Crawfish River, adequate facilities will be provided for parking and picnicking, and for an historical marker. It is hoped that actual restoration of the village and an accompanying museum may be developed when possible.

Eleazer Williams Home

Likewise qualifying as a historical site is the Eleazer Williams home on the banks of the Fox River near De-Pere in Brown county. It was here that Eleazer Williams, reputedly Louis XVII, Lost Dauphin of France, son of Louis XVI and Marie Antoinette, lived for a great part of his life.

Conclusive evidence now indicates that the young Louis XVII was, during the French Revolution, secreted out of prison and spirited to the Lowlands, to England and finally to New York where he was deposited with the Indians. Educated under the tutelage of several members of the clergy and at an academy connected with Dartmouth College. Eleazer Williams became an influential missionary figure



Scene in Copper Falls State Park showing recreation facilities.

among the Indians of New York and Canada.

With this influence, it is no wonder that Williams was successful in sponsoring negotiations resulting in the moving of the Oneida Indians to Wisconsin, and with that movement Williams came to Wisconsin and lived in this log cabin over-looking the Fox River. It is that same log cabin together with the surrounding wooded area that has now been acquired, by gift, as a state historical park.

Indian Mounds

An unusual group of Indian mounds, that group of over 30 mounds on the Ernst Hagner farm near West Bend in Washington County, is fully as important an archeological monument to our Indian cultural history as is Aztalan and, like Aztalan, has now been acquired as an archeological state park,

The 20-acre tract that has been acquired includes conical mounds, oval, linear, bird effigies, panther effigies and one lizard effigy of exceptional form. They are of prominent height, most of them extending at least 3 to 4 feet above the surrounding terrain, of careful construction, ideally located on high beautifully wooded land, and are exceptionally diversified in shape or type.

Two New Roadside Parks

Two roadside parks have been added-Roche a Cri Roadside State Park in Adams County and Apple River

Roadside State Park in Polk County. Roche a Cri, a long, narrow flat-topped ridge bordered by sheer precipices on all sides is probably the steepest hill in Wisconsin and is certainly one of the most conspicuous and beautiful. This craggy rock, from a distance looking like a ruined castle with towers, is set within a beautifully mixed wooded area through which runs Carter Creek. It's natural scenic value and its ideal location, just north of Adams and Friendship on heavily traveled State Highway 13, makes it a desirable addition to the roadside park system.

The Apple River Roadside Park is located on busy U. S. Highway 8 in Polk County. This Apple River area includes 75 acres of virgin pine and hardwoods and is to be used jointly as a roadside park and as a timber harvest demonstration forest under the university's extension forester. Bordering the park on the east is the clear, fast-flowing Apple river, making the area, scenically, the most attractive of the state's roadside parks.

Wildcat Mountain Park

Probably the best scenery of the western and southwestern part of the state is that along the Kickapoo River and now within the boundary of the newest of the state's major scenic parks—Wildcat Mountain State Park. Begun with an initial gift of 60 acres from Vernon County, another 450 acres

(Continued on page 343)

NOTICE We Make a Correction

Some "threes" got out of line in our anniversary issue, Wisconsin Gardens, and wandered into the wrong stalls, much to our dismay. In the very attractive McKay Nursery add, on the last page, the street address should have been 1919 Monroe instead of 1313, and the date of the luncheon at the Wausau Hotel, on page 17, should have been October 14 (the second day of the convention) instead of October 13.

The only explanation your editor has been able to get so far is that maybe it was "thirteens" and not "threes" that got out of line and maybe they are our "hoodoos". We'll watch it.

Anyway, it's lucky for us that Mc-Kay Nursery Co. is known the length and breadth of the state and far beyond. But when you call on them one of these days, at their Madison address (perhaps you always visit them at Waterloo, anyway), don't go poking around in the 1300 block on Monroe street, I beg of you, because there isn't any such block. The street begins with 1400.

Abigail P. Rundell

STATE EXECUTIVE BOARD MEETS

Three items of business at the June meeting of the executive board held in Milwaukee, June 29th, have been sent for publication in this issue.

- The Executive Board voted NOT to sponsor another Exhibitors and Judges School in September as previously announced, because of the close proximity to convention dates.
- 2.) On the same date the Executive Board voted to mail a copy of the State Constitution and By-Laws to each federated garden club in Wisconsin without charge to the club, and that it will not be necessary for the clubs to send in the 10c to cover cost of mailing as previously requested in the president's message which appeared in the June 1949 issue of Wisconsin Horticulture. If you do not receive your copy by September 1st please notify the state secretary.
- The Executive Board welcomed into the federation the newly organized Mendota Gardeners of Madison. This club was assigned to the Madison District.

Landscape Gossip

By Henry F. Leweling Landscape Architect

Annuals are our mainstay during the hot summer months. They usually fill the gap in perennial flowering display. Many of the annuals can resist the heat and drought better than the usual perennials found in the garden. The buds begin to appear and develop on the fall flowering material, as the days grow shorter.

August means a month of leisurely activity. Plans are made for the winter and the young folks look forward to their enrollment at the various institutions of higher learning.

A Course In Landscape Architecture

A request for information concerning colleges or universities giving instructions in landscape architecture came from a youth who was part of a landscape installment crew and who showed particular interest in the work. In considering the study of landscape architecture, the primary interest of the individual should determine whether or not the profession suits ones natural likes or dislikes. The educational program should cover in importance; 1. designing, 2. engineering and 3. plant material. Under design one should have good background in all phases of landscape architecture, city planning, regional planning, general architecture, recreation and drawing. In engineering, the curriculum should include topographical features, drainage, strength of material, structural details, soil types and cost estimation. Under plant materials one should be well versed in all plant material in the region of one's location and also the most common types of reliable plant material in the different planting zones of the nation. Expert knowledge of woody plant material, perennial herbacious material, annual herbacious material, foliage texture, structural growth pattern, and color values of plants during the entire year are a necessity to all landscape architects.

The American Society of Landscape Architects publishes a list of universities and colleges giving courses and degrees in landscape architecture. It is essential to know the rating of the educational institution in landscape architecture one intends to attend as well as the facilities in drafting rooms, library space, workshop, model rooms, lecture rooms, display rooms, the number of faculty members giving instructions in landscape architecture and the background of the faculty members.

One of the best institutions of higher learning for the study of landscape architecture is wherever separate or combined departments of landscape architecture, architecture, city planning exist. Especially is it beneficial to the student to select a university or college where the major problems in landscape architecture are done in cooperation with other related fields.

Birds In The Garden

A wealth of information awaits the reader of "Birds in the Garden and how to attract them" by Margaret McKenny. The book is published by the University of Minnesota Press of Minneapolis and copyrighted in 1939. Margaret McKenny has done a meritorious piece of work. The book is a valuable addition to any library for continuous reference and casual reading. The contents of the book need not be supplemented by articles clipped from the local paper or periodicals. The chapters on "Planting to Provide Food and Cover in the Larger Garden," "Feeding Devices", "Supplementary Food", "Protection", "Bird Houses", "Water in the Garden',, "Birds in the City Garden", "Lists of plants to attract birds in various sections of the country and birds attracted by them" are worthwhile reading for the gardener and home owner.

The upper Mississippi valley is very attractive in late summer. Especially is the country beautiful after a refreshing shower that seems to tone-up the different shades of green that clothe the hillsides. Touring the upper Mississippi valley with the many busy little cities clustered along the base of the bluffs is an inspiring sight that beckons one to revisit periodically.

The rose has but a summer reign.

Woods have tongues As walls have ears

All Aboard for San Francisco and Portland

by Genevieve C. Dakin

There were twenty-five of us from east and midwest leaving Chicago on the City of San Francisco the 18th of May with the National Convention in Portland our objective. Mrs. Mertens of New York, transportation chairman, saw to it that we were in adjoining Pullmans.

Long before we reached the Pacific Coast we were well acquainted, had exchanged ideas on many subjects, had made up tables in the diner, or when we could not see the passing landscape, gathered in the lounge to hear accounts of experiences in Quatamala or Mexico last winter or settled down to a foursome of bridge.

Crossing from Oakland on the ferry we hustled into waiting taxis to join others at the Palace Hotel, San Francisco, and boarded two chartered buses which were to take us up the coast through the redwoods to Portland.

The first day's objective was Eureka. California, where seventy of us spent the night at the Inn. The day's ride had taken us through beautiful mountainous country. Tall firs and cedars covered steep hillsides. Masses of mountain lilac, ceonothus, were soft blue. Large groups of Scotch broom now and then brought sunny vellow into the picture. Sword ferns, waisttall, lupines and a pink flowered shrub. sallal, attracted attention. Mahonia with glossy, holly-like foliage, native rhododendrons with here and there a flowering dogwood gave variety. Native iris, douglasiana, in creamy white. blue, orchid-pink, and lavender grew in large clumps. Groups of sequoias told us we were nearing the two hundred mile Redwood trail.

Next morning's journey brought us into the heart of the redwoods. Garden Club people greeted us at a roadside park in the forest where lunch was ready. Here we wandered among the giant trees, followed paths over huge logs into the depths of the woods to glimpse great ferns, mahonia, salmon berry and such natives as rose above the large leafed oxalis and mosses carpeting the forest floor. Masses of bearberry here and there caught the eye.

Fortified with food and hot coffee, we resumed our journey to the point six miles beyond where the dedication of the Redwood Groves was to take place. Private cars filled with Californian Garden Club members and Park and Redwoods officials plus the two busses formed quite a procession.

Standing on the side of the road we faced the lofty cathedral of redwoods. The tones of an organ, concealed among the trees, reached our ears. Then the words of "Trees" sung by a young man stirred our hearts. How could than song convey a truer message? Eyes sought the sky above the branches of these majestic kings of the forest with a prayer of thanks that we could behold and preserve for posterity these 2000 year trees.

California's Federation dedicated its grove first. The unveiling of its marker showed a bronze tablet set in a tall granite boulder.

Mrs. Lewis Hull, National President, dedicated National Council's forty acre grove in an impressive ceremony. California State Park and Save the Redwoods officials accepted the gifts in well-chosen words.

One of the two markers which will define our tract was unveiled. It is a broad rectangular sign made of redwood. Additional gifts make the purchase of more acreage possible. Letters of the inscription will be gilded in a permanent method to make the words plainly legible to the passing motorist.

Again back in the busses we headed toward the City of Roses.

Chamber of Commerce and Garden Club Officers persuaded us to stop at Brookings, Oregon for an Azalea Show and Tea. The Flower Show was beautiful, the native azaleas unforgettable and the hot tea with home made breads most acceptable.

By this time we realized that the hours were creeping up on us too fast.

Nine o'clock was the hour set for our arrival in Portland. The Oregon Coast so famed for its beauty proved long. Night fell before we had covered many miles of winding road. When we at last came to the end of our 800 mile journey, identified our bags and were taken to our hotel rooms it was close to breakfast time. Weary? Of course, but rich in friendships made and experiences shared in that memorable drive up the world-famous Redwood Highway.

Sweet Williams are true perennials although they are often treated as biennials. Highly decorative, they grow well in any soil of normal richness provided it has been dug deeply.

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A TOUR OF WASHINGTON ISLAND

Forty-four of us from clubs in ten Wisconsin communities were on hand to board the ferry at Gill's Rock on the morning of June 16 for a tour of Washington Island. As we approached the island on the ferry, it looked as if the whole of the club there was out on the dock to greet us.

The Washington Island Club, under the leadership of its president, Mrs. Hans Baasch, and the chairman of its committee on arrangements, Mrs. John Jessen, went all out to make its guests welcome. Everything went as scheduled. After a picnic lunch under the trees, we were taken on a tour that took us into all parts of the island.

The clubs represented on the tour included those at Ripon, Berlin, Fond du Lac, Waupaca, Portage, Green Bay, Seymour, Burlington, Oshkosh, and Milwaukee. When we returned on the ferry that evening we were all conscious of having had a rare experience. The charm of the island and the warm hearts of the islanders combined to give us a completely satisfying day.

I think we all felt that some day we should like to return to the island. We had not seen all there was to see. We had not seen the fishing boats come in to Jackson Harbor, and somehow we had missed the great pine tree which is so carefully marked on the map. And we should all like to live again some of the rich experiences of that day: to drive on beautiful Lobdel's Point Road; to drink in the quiet charm of Little Lake; and to see the demonstration of how squaws kept house in neolithic times.

Probably no one device can be more stimulating or of greater educational value than a properly conducted tour. The Washington Island tour demonstrated that.

Many of our members are rose enthusiasts, and some of these in the Milwaukee District are members of the Milwaukee Rose Society. They report that a tour conducted by that society last June featured five demonstrations and visits to no less than seven gardens. Nothing like making a day of it. To rose enthusiasts the growing of roses is serious business. The contributions of some federation people added to the success of the

A Growing Speakers Bureau

Garden clubs will find good material for programs in the speakers bureau printed below. They are urged to study the list carefully and make contacts early. The bureau will be increased in length and scope as time goes by and garden club program chairmen will soon find there is an abundance of authoritative and entertaining material near at hand when time for securing outside speakers rolls around. This list has been sent to us by Mrs. Spence, Program Chairman. Additions to it will be printed in later issues of Wisconsin Horticulture.—Editor.

Mrs. Herbert Main, Fort Atkinson, Wisconsin. Authority on Bird Life— Lecturer.

Miss Sara Ruhl, Lake Geneva, Wis. Transportation charges only. Excellent films on Birds and Animals.

Mr. Murl Duesing, Milwaukee Public Museum, Milwaukee, Wis. \$50. Films and Lecture: "Bright Feathers."

Mr. Norbert Roeder, Kencsha Public Museum, Kenosha, Wis. \$25. Films and Lectures: "Garden Gadabout", "Song of the Seasons".

Mrs. Earl Wright, Neville Public Museum, Green Bay, Wis. \$25. Films and Lectures. "Nature's Calendar in Color."

Mr. George Ziegler, University of Wisconsin Extension, Madison. Free Landscaping Lectures and Slides, also Plans drawn for landscaping Garden Club Projects. Eunice S. Fenelon, Landscape Architect, Weyauwega, Wis. \$15. and mileage Lectures with Kodachrome slides: "Home Grounds Useful and Beautiful" "By the Side of the Road" "Trees".

Also—Programs can be arranged on: Shrubs for all Purposes; Color Schemes in Flower Gardens; Continuous Bloom.

Mr. Harold Poyer, Fort Atkinson, Wis. Lecture with slides on Roadside Beautification.

Mrs. Yamamoto, c/o Mrs. Huttenlocker, Better Homes and Gardens, Des Moines, Iowa. Japanese Flower Arrangement, Lecture and Demonstration. \$50.

Milwaukee Equipment Manufacturing Co., 311 Marion Ave., So. Milwaukee, Wis. Excellent papers on the following subjects:

- 1. Gardening as a Science.
- 2. Physical Structure of the Soil.
- Chemical Structure of the Soil.
- 4. The Biology of Soil.
- 5. Organic Structure of the Soil.

These who have heard these speakers and seen their work say they are worthy of a place on your club program. If your budget is too small to finance a speaker alone, other clubs could be invited and tickets sold to defray expenses. Or the lectures could become community projects in order to give every one an opportunity to enjoy the program.

Helen L. Spence, State Program Chairman

tour. Among these was Mrs. Clarence Fiebrantz, who demonstrated some of the more fundamental principles of flower arrangement, and Mrs. Fred Marquardt, who took much of the mystery out of the making of corsages. The group had picnic supper on the beautiful and spacious grounds of Mr. and Mrs. Ervin Kulow.

The Milwaukee District has prepared a very admirable Symposium on Roses which is worthy of wide circulation. The symposium was edited by Mrs. J. L. Engler, and sells for fifty cents. Could your club use a few copies? If so, write to Mrs. Fred C. Marquardt at Hales Corners.

We can make more and better use of garden tours. To do that we need more information on where we can go. To be sure, information on available gardens is trickling in, but altogether too slowly. Every reader of these lines knows of one or two gardens that should be listed. Why not drop me a line?

Ralph A. Norem, Director Garden Tours.

RECOGNITION AT PORTLAND

National recognition went to Wisconsin three times at the Portland convention:

- 1) Recognition of Wisconsin Highway 51 as part of the Blue Star Highway;
- 2) White ribbon to Mrs. H. J. Anderson of the Racine Garden Club for her restoration of the Hoy Bird collection:
- One of the blue ribbons to Mrs.
 Edward Wurst, Wauwatosa, in National Flower Arrangement Contest.

WISCONSIN STATE PARKS

(Concluded)

has already been purchased, including Mt. Pisgah and Wildcat Mountain itself from which magnificent views are available of the forested hills and intervening valleys that so resemble the famous Rhine River or Cumberland Hills. This new park, traversed by State Highway 33 and therefore easily accessible, includes three streams—the famed Kickapoo River, Billings Creek, and Cheyenne Creek.

Another new scenic recreational park was begun with the approval by the Conservation Commission at its October meeting of the Cox's Hollow project. The project will be begun with the acceptance of 160 acres from Iowa County and the subsequent acquisition and development of a substantial acreage-1,300 to 1,600 acres. The area includes Cox Hollow and Pengilly Hollow and is believed to be the most scenic of the many valleys in southwestern Wisconsin's driftless (unglaciated) area with rugged sandstone cliffs, beautiful forests of pine and hardwoods, high hills, and long valleys. Both Cox Creek and Mill Creek flow through and join within the proposed area, and it is contemplated that a dam may be built to form a lake of 70 to 120 acres. Cox Hollow State Park would thus bring a recreational lake and a large state park to a heavily populated area of the state that is now without lakes or a state park.

Eligible as state parks on the basis of plants or wildlife are certain "natural areas"-areas with peculiar scientific value, virtual outdoor laboratories. Such areas are being acquired in cooperation with the university and other interested agencies and already three such areas have been acquired: Cedarburg Bog, Parfrey's Glen, and Pine Hollow. The Cedarburg Bog, 600 acres on County Trunk "Y" near Cedarburg in Ozaukee County, is notable for its variety and number of wild orchids and other wild flowers. Pine Hollow, at the edge of a large and recent southward addition to Devil's Lake State Park, and Parfrey's Glen, just to the east of Devil's Lake Park, are areas valuable as botanical preserves and are also geological monuments as examples of glens cut in quartzite in pre-cambrian times. And each is a natural scenic gem-each

Some Garden Hints

A mildew or white dusty substance on the foliage of many plants including roses, lilacs and phlox, can be controlled by keeping plants dusted with sulphur. (Mrs. H. C.)

For black sooty spots (black spot) on rose foliage spray or dust with a mixture containing fermate or sulphur. Burn fallen or severely infested leaves. (H. G.)

Late blight of Tomato: fungous disease causing brown, dry shallow rot of fruit and death of foliage. Keep plants covered with Bordeaux mixture or use one of the commercial preparations especially prepared for use on tomatoes. (H. G.)

DDT has proved very effective in controlling leaf hoppers. Contact insecticides such as nicotine sulphate or pyrethrum are also used. (H. G.)

Aster Yellows. Leaf veins of China Asters turn yellow first, then new leaves appear yellow and chlorotic. Plants are stunted and spindly and when flowers develop they are greenish. Often only half the flower is affected. The disease is spread by a leaf hopper, and the only real control is to cover plants with cloth (22 threads to the inch.) It is not transmitted by seed. Destroy infected plants at once. (H. G.)

September is the best month for daffodil planting if you can get the bulbs; it leaves time for proper new root growth before winter shuts down. (H. G.)

Mrs. Herbert Chaffin, Horticulture Chrm.

with a clear stream tumbling through a rocky gorge.

As a result, then, of the impetus of the state park law of 1947, Roche a Cri and Apple River Roadside Parks have been added so that seven such roadside state parks are now closely associated with the trunk highway system. Aztalan, Lost Dauphin, and the Hagner Indian mounds have been added as historical or archeological sites to give seven such significant sites within the state park system. Wildcat Mountain and Cox Hollow have increased the number of recreational parks of large size to 14. Cedarburg Bog, Parfrey's Glen, and Pine Hollow as scientific monuments or rare scenic gems are three initial acquisitions in a new type of state park hold-

ANNIVERSARY LUNCHEON

The Delavan City Garden Club celebrated its 10th anniversary with a very unusual luncheon at which the table decorations carried out the tin motif (ten years) and included the club flower, blue delphinium, and a birthday cake decorated with miniature garden implements.

A highlight of the luncheon was the presentation of Mrs. R. Alder of the Elkhorn Garden Club who, with Mrs. Niskern of the Delavan Rural Garden Club, assisted Mrs. M. H. Johnson in organizing the Delavan City Garden Club ten years ago. Mrs. Alder congratulated the club on its activities.

Mr. H. Verthein who has worked closely with the club through the years in promoting beauty in Delavan, was a second speaker. Mr. Glenn Boughton showed colored slides of attractive gardens in Delavan. Mrs. Mary Turnbull, president, presented the past presidents: Mrs. Johnson, Mrs. Robert Betzer, Mrs. Glen Doherty, Mrs. O. C. Sehnert, Mrs. Oliver Moum, and Mrs. H. O. Gardner. Each told of the outstanding events of her term, and Mrs. Dougherty read the club history.

Among the civic projects carried out by the club are: planting of shrubs on the Library grounds, and trees and shrubs in Horton Park and Lakeland Hospital grounds; placing signs—"Drive Leisurely and Enjoy Beautiful Delavan" on roads leading into Delavan; giving jelly to County Home at Christmas time; donating books on gardening to the Public Library; supplying flowers for High School graduation; and sponsoring decoration contests, lectures, tours, flower shows, and plant sales.

IOLA CLUB NEWS

A Landscape Gardening program with George A. Ziegler, Instructor in Horticulture at the University of Wisconsin as the speaker, was held May 11th in the Iola M. E. Church parlors and also in the gardens of Mrs. Arthur Kruse, Mrs. Helma Amundson and Mrs. Raymond Wright of Iola. The meeting was well attended and the program was unusually fine. Guests of the Iola club for the occasion were the garden clubs from Waupaca, Scandinavia and Ogdensburg. Refreshments were served.

The Iola club has added conservation as a topic for study in their year's program. Mrs. Frederick Wipf will present her conservation program at the Iola Winter Sports Club House on August 5th. A pot-luck picnic will follow.



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