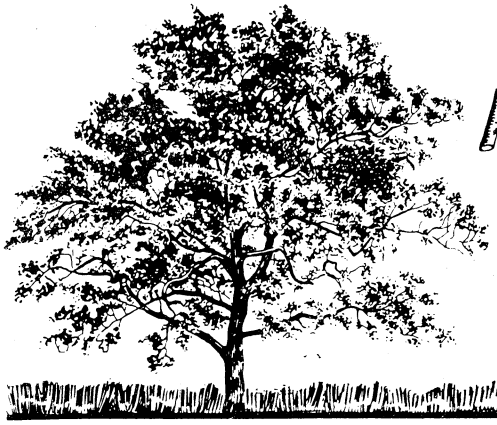
Arboretum news. Volume 2 1953

THE UNIVERSITY OF WISCONSIN



ARBORETUM NEWS

Vol. 2. No. 1 Madison, Wisconsin January, 1953

Fire Hazard in Autumn 1952

Last fall southern Wisconsin underwent the severest drought, with its accompanying dangerous fire potential, in the history of local weather recording. The emergency, especially acute in the Arboretum, lasted from the first of October to the middle of November. Adequate rainfall in spring and summer produced a luxuriant growth of vegetation throughout the Arboretum. The drought, beginning in the first week of September, converted the vegetation into a mass of highly inflammable tinder that would have actually exploded had it in some way become kindled.

A summary of the average weekly weather conditions during the emergency period, as shown by the records of the Truax Field weather station, will help to show the seriousness of the situation. (All readings were taken at 12 noon).

Week	Temperature	Wind	Rel. Humidity	Precipitation
Oct. 1 - 7	54	16 W.	36	0
" 8 - 14	60	20 S.	39	0
" 15 - 21	47	15 W.	37	trace
" 22 - 28	60	16 W.	32	0
" 29-Nov. 4	57	16 W.	33	0
Nov. 5 - 11	47	14 W.	43	0
" 12 - 15	56	10 S.	50	0
" 17	65	6 W.	89	¾ inch.

A definite fire protection plan was set up to counteract the grave threat. The nine man Arboretum crew was kept on duty nine hours a day, seven days per week. The University police gave us a daily patrol from two in the afternoon to ten o'clock at night, and the University Grounds Department promised to provide a fire-fighting crew on request. Road blocks were set up at the three entrances to the Arboretum and travel through the area was stopped, except for those people with homes on land adjacent to the Arboretum and with no means of access except over Arboretum roads, and others with necessary business. All were requested

not to smoke. A one-man patrol of the Arboretum perimeter was maintained from 8 AM to 10 PM. The Town of Madison Fire Dept. was alerted to the plan.

The most acute danger area was along the Belt Line highway and the Dane County Highway Dept. gave us valuable assistance by mowing the grass of both sides of this highway where it traverses the Arboretum. Our crew raked and hauled away the cuttings. Everything potentially inflammable was removed from the right-of-way.

Two fire lanes were plowed and disced to improve our protection, and another lane was widened. Many barrels of water, pails, mops, and fire extinguishers were placed along a strategic fire lane, ready for instant use. The truck with tank and Panama pump was always ready to go, and the tractor-plow was also kept available.

The radio and newspapers helped us greatly by informing the public of the hazardous conditions in the Arboretum. Fire danger signs were placed along our roads, and people burning leaves near the Arboretum were requested by the patrol to put out their fires. The ever-present fishermen along Murphy's Creek near the Mills Street entrance were asked not to smoke. The tenseness of the situation mounted daily. When and where would the fire start? We did not dare to relax our vigilance.

Rain finally came on Nov. 17th and with it, of course, relief to the tired crew. By a near miracle we had got by without a major fire. Thanks for splendid cooperation are offered to all who assisted us in this difficult period.

Antibiotic in Soil Sample from Arboretum

A sample of soil from one of the old Indian mounds in the Arboretum Wingra Woods has yielded a mold which produces achromycin, an antibiotic effective against the parasite which causes African sleeping sickness. The soil was collected by Dr. B. M. Duggar and Dr. E. J. Backus, both on the staff of the Lederle Laboratories, Pearl River, N. Y., where the antibiotic was developed. Dr. Duggar is internationally famous as the discoverer of the well-known antibiotic aureomycin, and both he and Dr. Backus are former University of Wisconsin scientists.

Land Acquisition

A rectangular 25 acre tract, adjacent to, and south of, the Madison Belt Line Highway which intersects the Arboretum, was acquired in late October 1952. This addition to the so-called Grady Tract gives us a more nearly so but still not fully straight east boundary from the Belt Line to the C. & N. W. R. R. (Lancaster branch), which latter forms the south boundary of the Arboretum. It will now be possible to extend eastward the existing pine plantings south of the highway, and to better integrate them with the older pine plantation across on the north side of the road.

A Giant Hickory

Mr. Walter E. Scott, in the Wisconsin Conservation Bulletin for October 1952, in an article entitled "Wisconsin Tree Monarchs", points out that the largest known shagbark hickory in the state is in the Arboretum. This tree, and a superb specimen it is, is 7 feet 7 inches

in circumference. The largest of all known trees of this species is 10 feet 6 inches.

Seed Exchange

The Arboretum Botanist has made rather extensive collections of seed of native plants for exchange purposes with other institutions. A list of species available has been prepared and will be sent upon request to those desiring to establish an exchange. Exchange is the only basis on which these seeds will be distributed.

The Arboretum Journal Series

The Arboretum, by virtue of its comparatively large size, its diverse terrain, and its closeness to Madison and the University, is an area very favorably situated for scientific studies in field biology.

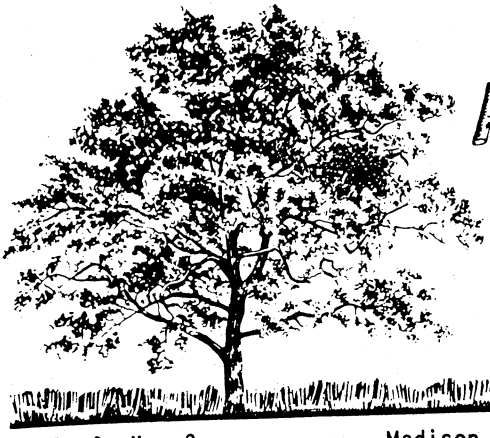
About twelve years ago the members of the Arboretum Committee, anticipating increasingly intensive use of the Arboretum and its facilities by those persons carrying on field research in the biological and allied sciences, established the Arboretum Journal Series. This series includes scientific papers wherein the results reported are based fully, or in important part, on work carried out in the Arboretum. So far, as shown in the accompanying list, 21 papers have been published, with 3 others accepted for publication. These papers reflect only part of the scientific investigations in progress on the Arboretum, since a number are long-term in nature and will not be completed for years, or even decades, to come.

Journal Series - University of Wisconsin Arboretum

1. Longenecker, G. W. - The University of Wisconsin Arboretum. Parks & Recreation 25: 25-31. 1941.
2. Elder, W. H. & L. K. Sowls - Body weight and sex-ratio of cottontail rabbits. Jour. Wildlife Management 6: 203-297. 1942.
3. Curtis, J. T. - Germination and seedling development in five species of Cypripedium. Amer. Jour. Bot. 30: 199-206. 1943.
4. Leopold, A., T. M. Sperry, W. S. Feeney & A. J. Catenhusen. Population turnover on a Wisconsin pheasant refuge. Jour. Wildlife Management 7: 383-394. 1943.
5. Anderson, H. G., W. S. Feeney, T. M. Sperry & A. J. Catenhusen. Birds of the University of Wisconsin Arboretum. Trans. Wis. Acad. Sci. 34: 5-22. 1942.
6. Curtis, J. T. - Use of mowing in management of white ladyslipper. Jour. Wildlife Management 10: 303-308. 1948.
7. McCabe, R. A. - A winter rabbit browse tally on the University of Wisconsin Arboretum. Trans. Wis. Acad. Sci. 37: 15-34. 1945.
8. Leopold, A. & S. E. Jones. - A phenological record for Sauk and Dane Counties, Wisconsin, 1935-1945. Ecol. Monogr. 17: 81-122. 1947.
9. Hasler, A. D., H. P. Thomsen, & J. C. Neess. - Facts and comments on raising two common bait minnows. Wis. Conserv. Dept. - Bull. 210. Series A-46. 13 pp. 1946.
10. Greene, H. C. - Fungi of the University of Wisconsin Arboretum. Trans. Wis. Acad. Sci. 39: 47-82. 1949.

11. McCabe, R. A. - The homing of transplanted young wood ducks. Wilson Bull. 59: 104-109. 1947.
12. Curtis, J. T. & M. L. Partch. - Effect of fire on the competition between blue grass and prairie plants. Amer. Midl. Nat. 39: 437-442.
13. Hale, J. - Ageing cottontail rabbits by bone growth. Jour. Wildlife Management 13: 216-225. 1949.
14. McCabe, R. A. - Notes on live-trapping mink. Jour. Mammology 30: 416-423. 1949.
15. Greene, H. C. & J. T. Curtis - Germination studies of Wisconsin prairie plants. Amer. Midl. Nat. 43: 186-194. 1950.
16. Curtis, J. T. & M. L. Partch - Some factors affecting flower production in Andropogon gerardi. Ecology 31: 488-489. 1950.
17. Curtis, J. T. & G. Cottam - Antibiotic and autotoxic effects in prairie sunflowers. Bull. Torr. Bot. Club 77: 187-191. 1950.
18. Stokes, A. W. - Breeding behavior of the goldfinch. Wilson Bull. 62: 107-127. 1950.
19. McCabe, R. A. - The song and song flight of the alder flycatcher. Wilson Bull. 63: 89-98. 1951.
20. Young, H. - Territorial behavior in the American robin. Proc. Linnaean Soc. New York. Sept. 1951, pp. 58-60.
21. Young, H. - A comparative study of nesting birds in a five-acre park. Wilson Bull. 61: 36-47. 1949.
22. Robocker, W. C., J. T. Curtis & H. L. Ahlgren. Some factors affecting emergence and establishment of native grass seedlings in Wisconsin. (Accepted for publication)
23. Young, H. - Breeding behavior and nesting of the eastern robin. Amer. Midl. Nat. (Accepted for publication)
24. Wright, M. - Effect of shade on form of black cherry trees. Jour. Forestry (Accepted for publication).

THE UNIVERSITY OF WISCONSIN



ARBORETUM NEWS

Vol. 2, No. 2 Madison, Wisconsin April, 1953

CARE AND SELECTION OF LILACS FOR WISCONSIN GARDENS

G. Wm. Longenecker

There are many shrubs which give more year around beauty than do the lilacs but there is nothing in northern gardens which can rival the color and the fragrance of the lilacs during lilac time. What other one plant could bring a crowd of over 6,000 people to the University Arboretum in a single day?

The common lilac came to this country with the early pioneers and it crept from cabin to cabin across the country and made long jumps in covered wagons. It did well in cool northern gardens and its popularity spread.

Today because of the love for the lilac and because of the efforts of plant breeders, we have many varieties and kinds of lilacs to choose from, and we can have fragrant showy clusters of lilacs of many colors and forms.

Lilacs are easy to grow; however, they respond to good treatment and will produce more and better flowers if given half a chance.

Lilacs like full sunlight and will not blossom well or at all when grown in a shady situation, and they do not like root competition.

They will grow in almost any kind of soil but will do best if grown in good, fairly heavy loam. Lilacs like a sweet soil so an occasional application of lime where soils are neutral or slightly acid is usually beneficial.

Occasional light applications of fertilizer worked into the area around a lilac will keep the shrub in a vigorous blooming condition. Heavy applications of nitrogenous fertilizers. however, may stimulate too much vegetative growth and such treatment often keeps young plants from blooming for a number of years.

Because borers are such a problem in Wisconsin it is better to allow the lilac to grow as a bush with several stems from the ground than to try to grow it as a tree or semi-tree with one stem or trunk.

It is also better to get hybrid lilacs which are growing on their own roots rather than plants which are grafted on common lilac; then a system of renewal pruning can be practiced, which will control the borer without danger of the plant reverting to the common lilac and it will also keep the shrubs in a vigorous growing condition which will produce larger flower clusters. When the lilac is grown as a shrub some of the older branches can be cut off right at the ground line every year or so and a vigorous sucker or two can be left to take their place.

Lilacs will flower better if the seed heads are cut from the bush before the seeds become fully developed. Do not cut too severely because the twigs on either side of the old flower cluster will form the buds for next year's flowers. The flower buds for the next year's flower crop should be forming at the same time the seed is developing. The lilac is not equipped to carry out both of these processes at the same time, so if the seeds are allowed to develop they are produced with a sacrifice of next year's flowers.

The adult lilac borer is a clear winged moth which lays its eggs in the shreds of bark on old lilac stems and trunks; these hatch out and eat into the lilac along about the last week in July or the first week in August. If the lilac leaves begin to get small and discolored, look for holes and a sign of sawdust toward the bottom of the older canes. Sometimes one can kill the borer by running a wire into the opening left by the borer. They can also be killed by injecting chemicals such as carbon bisulfide, ethylene dichloride, carbon tetrachloride or nicotine sulfate into the holes. Carbon bisulfide is very effective but it is also highly inflammable so if a person feels he has to smoke while treating borers it would be better to use something less dangerous. The easiest method of application is to put the chemical into an oil can and then a few drops of the chemical can be injected into the tunnel openings. The holes should then be plugged with clay, putty or some similar material.

The question of which lilacs are best to grow is a hard one to answer. The American Association of Botanical Gardens and Arboretums has a publication which lists the 100 best lilacs. This covers most of the better kinds but since this was published there have been some fine new introductions. Then too, no two people seem to have the same likes and dislikes.

Following is a short list of some favorites for Wisconsin gardens.

LILAC SPECIES

Syringa amurensis japonica -- Japanese Tree Lilac

The latest lilac to bloom can be grown as a large shrub or as an attractive small tree. Has large clusters of creamy white flowers followed by showy fruit clusters which can be used in interesting winter arrangements.

Syringa chinensis -- Chinese Lilac

A very free flowering lilac with loose clusters of purplish lilac flowers. An excellent shrub for landscape plantings. Flowers well without removing old flower heads. Flowers wilt rapidly when picked.

Syringa oblata dilatata -- Korean Early Lilac

The first lilac to bloom. The Early Lilacs are the only lilacs with good fall color. The foliage turns to a beautiful vinous-red in autumn.

HYBRID LILACS

Jeanne D' Arc -- Double, white, late

Mont Blanc -- single, white

Both of the above varieties are valuable for small yards because they are not excessively tall.

Siebold -- double, creamy white

PINK AND ROSE

Belle de Nancy -- Double rose lilac, lighter within giving the effect of pink.

Montaigne -- double, pinkish mauve

Paul Thérion -- double claret rose lilac -- Has beautiful large buds, late.

BLUE AND LAVENDER

Bleuatre -- single cobalt blue, the bluest of the lilacs, but the flower form not as attractive as some kinds.

Olivier de Serres -- double azure blue

President Faillières -- double, pale lavender

Pres. Lincoln -- single blue

PURPLE AND PURPLISH RED

Pres. Roosevelt -- single purple

Chas Jolly -- double, dark violet purplish red, silvery reverse side of petals, medium height

RED

Ludwig Spaeth -- single, deep maroon red -- one of the clearest of the deep reddish lilacs.

The best way to make a choice of lilacs is to visit a lilac collection. Visit the University Arboretum during lilac time. Here you will find over 160 varieties of lilacs and some twenty species of lilacs displayed in landscape groupings, several hundred lilacs in all.

THE ARBORETUM - AN ORNITHOLOGIST'S PARADISE

By Mary Walker

When the Arboretum was established on the very edge of Madison, a real nature lover's paradise was made available, not only to Madison naturalists but to those of the state and nation as well. The botanist has a wide selection of trees, shrubs, flowers, grasses, and aquatic vegetation. The zoologist has an opportunity to view, at one time or another, most of the wild animals native to Wisconsin, the icthyologist has a wide selection of the fishes of lake, stream, springs and lagoons, and the entomologist has many hundred of insect species for his studies. But the ornithologist is the one who is really in his glory, for in the

Arboretum has been seen practically every bird native to, or visiting, Wisconsin, and the field card published by the Wisconsin Society for Ornithology would be almost used up if all the birds seen over the years at the Arboretum were checked off.

We are now (April 1st) starting the intensive season of bird migration. During the next few weeks practically every migrating land and water bird of Wisconsin will call at the Arboretum. The bird watcher who has only a few hours or even minutes at his disposal can find no more productive and enjoyable hunting ground than in this wonderland.

But, after the migrants have come in the spring, raised their families in the summer, and departed in the autumn, the Arboretum is still a rich storehouse of bird life throughout the winter. It is never deserted by the birds. In 1952 a great blue heron stayed until Nov. 7, a flock of 16 mourning doves were observed on Nov. 10, and a kingfisher was still present Nov. 12. Fifty-four hooded mergansers were seen near the Mills St. entrance on Nov. 13. Red-tailed hawks have remained all winter, and a crow roost in the pines near the Nakoma entrance housed 200-300. Red polls and purple finches, and 30 or 40 blue jays also frequented this area.

John Kaspar, graduate student in Zoology, has made a study of the birds in the Arboretum this past winter. On December 21, the Madison Audubon Society conducted a "Christmas" census of the birds within a 7½ mile radius of Madison. Mr. Kaspar spent 8 hours in the woods and meadows of the Arboretum finding 18 species and a total of 310 birds, and his list on that date is interesting and instructive. He saw mallards, rough-legged hawks, ring-necked pheasants, rock doves (pigeons), long-eared owls, a red bellied woodpecker, hairy woodpeckers, a downy woodpecker, blue jays, crows, chickadees, white breasted nuthatches, brown creepers, golden crowned kinglets, cardinals, goldfinches, juncoes and tree sparrows. The total listing made in the Madison area by 20 careful observers on an all day excursion was 60 species (9592 birds). And so the Arboretum made a notable contribution. At about the same time the Indian mounds and springs produced a winter wren and two robins, as well as a flock of 40 juncoes, and a few days later a barred owl and three white throated sparrows were found in this same area.

By January 1 we found purple finches, pine siskins, tree sparrows and red polls in the Honeum Area. These northern visitors are rare enough to attract many observers and on January 4 while we were watching them a bald eagle flew low over our heads, went over to the Stevens Spring, and then circled out over Lake Wingra. This gave us quite a thrill, for we had an excellent look. The Stevens Spring is an interesting spot for the Arboretum visitor. It is on the edge of Nakoma, and a large flock of mallards and other occasional duck visitors can be seen there the year around. Eastward, the lagoons in the old "Lost City" also invariably produce some surprises.

About 40 species of birds can usually be seen in the Arboretum over the months of December, January and February. On February 14, two towhees and five white throated sparrows were seen. In addition to the ones mentioned as seen by Mr. Kaspar and others this past winter, the following birds have been noted in other years - bobwhite, screech

owl, great horned owl, short-eared owl, red-headed woodpecker, starling, English sparrow, goshawk, snowy owl, saw-whet owl, northern horned lark, northern shrike, red-breasted nuthatch, evening grosbeak, pine grosbeak, crossbill, Lapland longspurs, and snow buntings. It is evident that the bird watching visitor to the Arboretum can usually depend on finding a plentiful variety of birds there during the winter months.

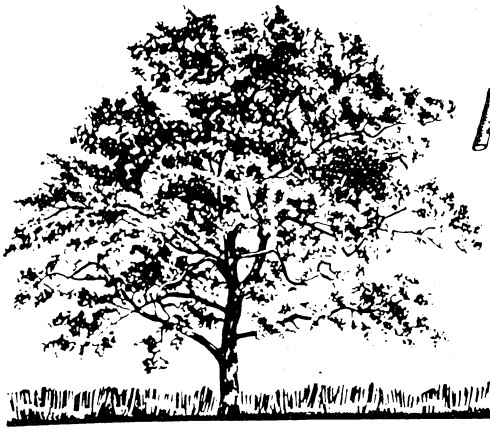
Seed Stratification

One aspect of the prairie reestablishment program, as carried out in the University of Wisconsin Arboretum, is the broadcasting of the seeds of prairie plants over the area being restored. These seeds are collected from prairie plants in the Arboretum and from relic prairies in southern Wisconsin.

Last November the seeds which will be broadcast this spring (1953) were mixed with damp soil then buried in the ground in suitable containers. This process is called stratification. The period from Nov. to April, has given the seeds several months at low temperatures under moist conditions. The advantages to be gained through stratifying are 1) increased % germination; 2) makes possible a more uniform mixture; 3) because the seeds are effectively "diluted", it facilitates more uniform broadcasting. The seed-soil mixture will be sown by a mechanical spreader this spring immediately following the annual prairie burn.

1,500 pounds of soil were used to stratify the 110 pounds of seed which represents 62 species of plants. The species were divided into four groups because there will be four different areas receiving the seed. The four groups are as follows: 1) the wet prairie material comprising 29 species whose seeds weighed 32 pounds; 2) the mesic prairie with 36 species weighing 33 pounds; 3) the dry prairie with 25 species weighing 16 pounds; 4) for a border to the prairie section of the strain and taxonomic gardens with 54 species weighing 29 pounds. This last area will, in addition, serve as an excellent seed source for further broadcastings and exchange purposes.

THE UNIVERSITY OF WISCONSIN



ARBORETUM NEWS

Vol. 2, No. 3 Madison, Wisconsin July, 1953

The date May 23, 1953 is an important one in the chronicles of the Arboretum for at that time dedication ceremonies honoring Maurice E. McCaffrey and Aldo Leopold, both former Arboretum Committee members and selfless workers for the Arboretum, were held near the headquarters and in the pines, in the presence of many friends of Prof. Leopold and Mr. McCaffrey. The road through the Arboretum, hitherto known as Arboretum Drive, was renamed McCaffrey Drive, and Prof. Leopold's name was conferred on the pine plantation. The remarks, in part, of the speakers of the day follow:

DEDICATION OF McCAFFREY DRIVE by President E. B. Fred

Mrs. McCaffrey, Members of the McCaffrey Family, and Friends of the University --

This is a happy occasion, dimmed only by the fact that the two men who would find it most happy cannot be with us. Maurice Erve McCaffrey and Aldo Leopold, the men we honor today, had a strong common interest, a bond with nature. Others will speak later of Aldo Leopold, when we dedicate the Arboretum pines to the memory of that man who knew the true meaning of conservation.

I wish to tell of Maurice Erve McCaffrey, to say why we name this drive through nature's laboratory for him. Not many knew Mac as one devoted to the pleasures which lie in the simplicities and complexities of the outdoors; his personality had so many facets, his skills were so varied, his interests so widespread.

A genial Irishman whose twinkle never faded, in the early years Mac was almost the entire University business management. He somehow combined two opposite and extremely valuable characteristics -- high efficiency and relaxed good fellowship.

He came to us in 1906 as secretary of our Board of Regents and, for all practical purposes, held that post for the rest of his life. He never relinquished his work for the University. He was a prudent and effective manager of University trust and loan funds. And this man who tramped the woods in every spare moment was besides an investment expert who made the University's money work and earn.

People both inside the University and out, sought Mac for advice and counsel. He was never too busy. Students, faculty, business office colleagues and fellow citizens imposed upon him mercilessly. But to Mac it was not imposition -- they were friends in need and he had much to give. As confidante of the Regents for more than 40 years, he played an important part in shaping the history of the University of Wisconsin. He did not attempt to thrust his ideas upon others. He had no need for all sought his advice and honored it.

This is the man we honor here today. And we honor him in most fitting fashion, for this Arboretum is, in fact, a monument to his business genius, his way with people, his influence upon his fellow man, and his love of the outdoors. Of all Mac did for the University nothing gave him more pleasure than the lead he took in the acquisition and development of the Arboretum. On the morning of the day of his death, he and Mrs. McCaffrey enjoyed a drive on the roadway we dedicate to him today.

The progress of mankind is built upon two different personalities -- those who dream the dreams, and those who make them real. Mac was some of both these types. He saw in the Arboretum the vast potentialities which we are, just now, exploring. But dominant in him was the second type -- the doer, the type which gets things done.

Universities, by their nature, may have more dreamers than doers. Thus the doers carry a heavy burden, and Mac carried more than his share of the load. He knew the value to society of education and research, and could translate its cost to dollars and cents. He was a skilled fund raiser, and a decade before World War II he dramatized the continuing value of gifts to the University with the term "Living Memorials".

In obtaining gifts and bequests for the University he pointed out that gifts of memorial funds "perpetuate forever, as long as there is a University and a State of Wisconsin and a United States of America, the memory of the individual, organization, or group in whose name the fund is established." Typical of such memorials is our Kemper K. Knapp Fund, one of the University's largest bequests, given by the late Chicago attorney after Mac had convinced him that it was the wisest possible investment of his estate. Much of the land McCaffrey Drive traverses in this Arboretum was acquired through similar efforts by Mac.

There are many among you today who know this story better than I

do, and many of you also contributed heavily of your time and effort and funds to the building of this nature laborator. But as one further example of Mac's contributions to this project, and -- his way with money -- let me tell you the story of J. Stephens Tripp, the Prairie du Sac banker.

Mac had seen to it that the bequest of the Vilas estate, made to the University when Col. William Vilas died in 1908, was accepted by the Regents. One of those who read accounts of it was Mr. Tripp. Impressed with Vilas' benevolence, Tripp came to Madison, and though he had no connection with the University, he left us his entire estate. The $510,000 in cash helped build Tripp Hall and Tripp Commons in the Union. The remainder of the assets were in what was considered "questionable holdings". The value was set at $85,000, but no one at the time expected that to be realized. No one, that is, except Mac. From those so-called "questionable holdings" Mac managed to acquire Arboretum land and improvements which were the beginning of the Arboretum as we see it today.

How to handle money and high idealism, those are traits a University business manager needs. And they are traits Mac had in full abundance. We honor the University of Wisconsin when we name this drive in the memory of Maurice Erve McCaffrey.

DEDICATION OF THE ALDO LEOPOLD PINES by Col. J. W. Jackson

Although good fortune has enabled me to participate in numerous dedications of various types, I do not recall one that seemed more fitting than what we are doing here this morning.

Aldo Leopold not only *loved* the pines--and all outdoors--but he dedicated his life to their preservation, their betterment and their propagation. Take, as but one example, this very plantation to which we proudly give his name. No one was more eager than he to establish it on what was then the bare, raw prairie of debilitated soil where it has since grown to be one of the most beautiful vistas of this Madison area. It seems so natural to think of Aldo as we look upon those trees as a joyous expression of nature when men work understandingly with her; and we behold the best utilization of poor land.

My thoughts go back to the time when we realized that the newly established Arboretum urgently needed a man who was adequately qualified to plan and direct the highly important phase of its research work including the fauna of the area.

The Arboretum Committee was meeting at the University Club. When the question of a research man was raised, Dean Russell quietly pointed to Aldo. After the meeting, the Dean told us of Aldo's high qualifications and that he had just recently become available after completing a nation-wide game survey for the National Arms and Ammunition Institute.

Aldo expressed interest in the proposal, but he did not desire to limit himself to the 1,000-acre Arboretum. What he had in mind was applying his work to the entire State of Wisconsin. When asked if he would like to teach--and at the University--he said that was exactly what he most wanted to do.

Thereupon there came into being the plan to establish at the University the Chair of Wild Life Management in order to secure Aldo's services for the Arboretum.

That called for funds, and it was Dean Russell who interested the Alumni Research Foundation in providing them for the first three year period. The Chair was established with Professor Aldo Leopold at its head. That was a truly happy day for all of us. At the end of the three year period, the University took it over for continuation, and as we all well know, it has attained exceptionally high rank for its outstanding work.

How fortunate that was--not only for this Arboretum, and for Wisconsin--but for all America and far beyond, for the work that he did and the young men he trained now reach out in all directions.

Aldo Leopold was the great *thinker*--the *planner*--and the *doer*. Above all he was the human question mark, eager to discover the *why*--the *where*--the *when* and the *how* of nature in all of her manifestations.

In the broad landscape--in all living things, flora and fauna, and in all that we call nature, he saw in letters a mile high what *most* of us can barely detect with a magnifying glass.

He raised our sights, stimulated our interest in and our determination to develop here on this Arboretum a truly great outdoor Laboratory of research, study and demonstration--not only for our University and our State of Wisconsin, but for our entire country. Happily, he lived long enough to lay the broad and firm foundation for exactly that.

It gives us all a deep sense of gratitude and satisfaction to know that 100 years from now--yes, 1,000 years hence--the results of Aldo Leopold's work will still be in evidence in this Arboretum.

While it grieves us deeply that he should be taken from us long before his time, let us be thankful that we did have him at the very time when we needed him *most*--in the early years of *planning* and *deciding*, of *planting* and *doing*.

Now, let us look upon the Aldo Leopold pines. When that area was acquired for the Arboretum it was a perfect example of bad farming on poor land. Aldo urged that it be planted to pines. That was as manna to my soul, because after living twenty years on the far flung prairies of North Dakota, I *hungered* for a forest.

Upon leaving for a two weeks' vacation in the north woods, assurance was given me that a pine forest would be there to greet me upon my return. In my mind's eye were visions of thousands of sturdy young pines and spruces, four, five and six feet high. Never was my disappointment so great as when I first saw those 16,000 tiny little seedlings, not one of them as tall as a tomato plant.

Utterly aghast, I esclaimed to Aldo, "Do *you* think I am going to be around here long enough to see those *little things* grow into *trees?*" As he looked at me with that kindly, quizzical smile, with a friendly twinkle in his eye he replied, "Yes, I am *sure* you will."

No one could possibly derive greater enjoyment than I do in seeing those beautiful, magnificent pines that we are privileged to dedicate to a grand gentleman. Every time I look upon them I am vividly reminded of his work for the Arboretum--of his knowledge of nature's ways--of his faith in nature's reward for those who plan and work with her--of his stimulating our interest in the good outdoors--of his *character,* as a scientist, a teacher, a citizen and a friend.

DEDICATION OF THE ALDO LEOPOLD PINES by A. W. Schorger

We have assembled today to do homage to Aldo Leopold, a gifted naturalist and an admirable friend. He was one of those rare individuals willing to devote the best years of his life wholly and unselfishly to the preservation of nature. No labor was too great for him to undertake to impress upon his fellow men the beauty and utility of our native plants, and the creatures that move among them. He comprehended the intricate relationships existing between the members of our flora and fauna, which we choose to call ecology, and was concerned that no link in these living chains be broken.

Man has studied himself for thousands of years and still cannot explain the origin of his special interests. Aldo wrote, "There are some who can live without wild things, and some who cannot," and confessed that he could not. Therein lay the strength of the man for he loved nature with all his heart and all his soul. He poured out his feelings in poetic prose. Within a few years his technical writings will be read only for their historical interest, but the "Almanac" will live as a permanent part of our literature. Generations to come will read this book and be stimulated by its precepts.

He believed that we should have areas representative of primitive Wisconsin. As first director of research of the Arboretum, he was active in converting the nearby field into a prairie. A century and a half ago southern Wisconsin was largely a land of prairies and oak openings. Between the pasque flowers of early spring and the gentians of autumn, these prairies were aglow with color. At its proper season each of a multitude of plants contributed to the portrait. So artistically were the oak groves dispersed that they drew unbounded admiration from

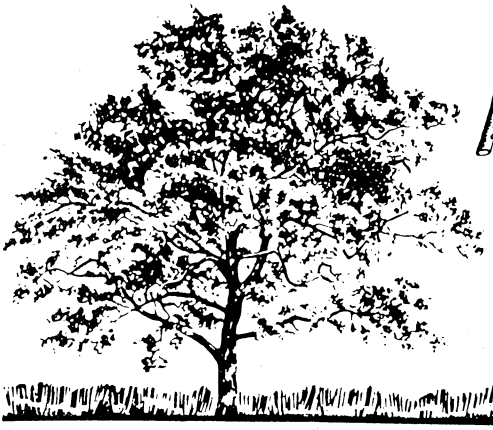
appreciative travelers. These prairies have passed beneath the plow except for pitifully small remnants. Reconstruction of this lost heritage can not be simple and again we face the sober truth that it is easier to destroy than to create.

The man whom we honor today accompanied words with deeds. Trees that he planted with his hands grow on the marshes at Riley and on the sands of Sauk County. I wish that I knew if he had read the lines of Van Dyke for they would have given him comfort:

> "He that planteth a tree is a friend of God,
> He provideth a kindness for many generations,
> And faces that he hath not seen shall bless him."

About us we see another planting of his creation, done with the full knowledge that it was for posterity. It is eminently fitting that these pines, growing here for a score of years, should be dedicated to him for they will long serve to keep his memory green.

THE UNIVERSITY OF WISCONSIN



ARBORETUM NEWS

Vol. 2, No. 4 Madison, Wisconsin October, 1953

AIBS and the Arboretum

The American Institute of Biological Sciences (AIBS) held its annual meeting at the University of Wisconsin in September 1953. About 3000 attended, including several hundred with an active interest in the field and outdoor aspects of biological research. As indicated in the following accounts, many of these scientists saw and used the Arboretum in one way or another. The general reaction to the Arboretum seemed highly favorable and we feel that it will benefit in many ways from the publicity received. The weather was ideal for the entire period of the meeting, a most helpful thing so far as the display of an outdoor area is concerned.

Sixty-five people attended a field trip arranged jointly by the Ecological Society of America and the American Society of Plant Taxonomists, on Sept. 5. They were shown a hybrid swarm of cattails by Prof. Fassett, the site of a blackbird behavior study by Mr. Nero, research tools in game management by Prof. McCabe, prairie legume restoration by Mr. Archbald, prairie grass establishment by Miss Miller, prairie forb (herb) restoration by Prof. Curtis, and the antibiotic effect of native sunflowers by Prof. Cottam. The group also visited the Aldo Leopold Memorial Pine Forest and the Noe Oak Woods. They appeared to be greatly impressed by the prairie which is in magnificent condition this year. Smaller groups of interested persons were led by Mr. Archbald and others during the meetings on Sept. 7,8 and 9. Considerable interest was shown in our seed exchange program and in the new equipment for seed processing, as demonstrated in the Botany quarters at the Arboretum Laboratory.

The Mycological Society of America, whose members are concerned with the study of fungi, holds an annual Foray (field trips and collecting expedition) in connection with and preceding the annual meeting of the AIBS. About 60 members of the Society spent one day of this year's

Foray in the Arboretum. Restrictions on the collecting of plant materials were temporarily relaxed and extensive collections were made, many by prominent and nationally known specialists in certain groups of fungi. When these specimens have been identified they will be listed and it is certain that many additions will be made to the already large number of fungi known from the Arboretum.

Dr. G. J. Stout, Professor of Horticulture, and Dr. G. F. Weber, Professor of Plant Pathology, University of Florida, studied the Wisconsin Arboretum in detail during the AIBS meetings. The University of Florida is starting an Arboretum near the campus at Gainesville on an area recently cut for timber. The Florida committee tried to purchase the site before the logging as it bore one of the few stands of original forest in the region.

Mr. Gallistel, Arboretum Committee Chairman, and Mr. Jacobson, Arboretum Superintendent, conducted a total of about 85 AIBS visitors, in three groups, on general interest tours through the Arboretum, and Mr. Jacobson in addition guided a number of small groups and individuals.

The Annual Seed Exchange

Most of the Arboreta and Botanic Gardens of the world prepare an annual list of seeds offered for exchange with similar institutions. These seeds are usually collected from cultivated specimen plants, or occasionally from native populations in the surrounding countryside. By means of these exchanges the various botanical collections are enriched by many species which would be very costly or even unobtainable from commercial sources. For many years the University of Wisconsin Arboretum has been the recipient of valuable species from a number of American collections. Our opportunity to reciprocate was rather limited until recently when we began large-scale seed collections for our own restoration work. All such collected seeds are now offered in an annual exchange list, issued about December 15th. The seeds are obtained from natural populations in native vegetation types in Wisconsin. In this way the full range of variation characteristic of the species tends to be represented. Special strains or selected horticultural types are at a minimum and will always be clearly indicated in the list.

In 1952 the Wisconsin list offered seeds of 71 species, mostly prairie plants. Requests were filled for 111 packets, of 54 species, from institutions in the United States, Canada, Denmark, France, Jugoslavia, and New Zealand. In 1953 108 species were listed, again mostly prairie plants. The number of requests filled increased to 492 packets of 103 species. Shipments were made to 15 foreign countries including Germany, England, Belgium, Czeckoslovakia, Hungary, Norway, Spain, Sweden, Rumania, and Malta, as well as all those of 1952.

The most popular plants were species of phlox, gentian, and lily, although nearly the entire group of prairie plants were in demand. Apparently there is no other source for a number of the characteristic species of the tall-grass prairie.

In 1953 seeds were received from a number of Arboreta in the United States, as well as from institutions in Canada, Belgium, Switzerland, Jugoslavia, Germany, and New Zealand.

Gentians on the Grady Tract Sand Prairie

The various gentians native to Wisconsin are among our showiest and most attractive fall-blooming species and the Grady Prairie with its light soils, ranging from very dry to continually moist, offers conditions seemingly ideal for all the gentians which occur in southern Wisconsin. Mature plants have been successfully transplanted to the area, but truly spectacular results have been obtained merely by sowing the tiny seeds on the soil surface, and without any special preparation of that surface. In early September 1953 there was a gorgeous display of thousands of plants of the greater fringed gentian, *Gentina crinita.* Many of the individual plants had 100 or more flowers. The lesser fringed gentian, *G. procera,* was present in smaller numbers on some of the wetter sites. The perennial bottle gentians, *G. andrewsii,* were in great profusion and very showy where concentrated. *G. quinquefolia* with its numerous clusters of small, tubular, deep purple flowers occurred at random over the prairie and was attractively massed at several points. Many small plants and a few blooming specimens of the cream-colored *G. flavida* were observed on some of the drier spots. The prairie or downy gentian, *G. puberula,* the most handsome of our native species and incidentally the most difficult to establish, is now doing well on the dry sand areas and a number of seedlings have been noted, indicating favorable conditions.

Movies of Prairie Fires

The Arboretum, in line with its program of reestablishing original plant communities of the Wisconsin area, is engaged in developing two specimen tall-grass prairies at Madison and, in addition, has responsibility for maintenance of the sixty acre Faville Prairie Preserve near Lake Mills in Jefferson Co.

Fire, as historical accounts show, was a highly important agent in maintenance of the prairie in Wisconsin and adjoining territory. It seems certain that, prior to the advent of the white settlers, the tall-grass prairie was very frequently and regularly burned over by fires deliberately set by Indians to drive game, or accidentally touched off by lightning or other means. In other words, with the highly combustible tall-grass came fire. Following cultivation of nearly all the original prairie land, however, the once far-ranging fires ceased and the few small patches of unplowed prairie left were burned over rarely or not at all. Since present-day Wisconsin climatic conditions favor development of forest over prairie lacking fires, our few prairie remnants are thus gradually being lost. Since the prairie is a plant community of great interest and hence worthy of preservation, the Arboretum has adopted the use of controlled fires at suitable intervals to keep its prairies in satisfactory condition.

In the spring of 1953 burns were made on all our prairies and Disney Films, Inc. took advantage of this to photograph the fires, the pictures to be used in a documentary film entitled "The Prairie Story". Through the courtesy of the Disney Co. a print of the fire film has been presented to the Arboretum, and on October 15th these pictures were shown to members of the Arboretum Committee and their guests. The photography was of a highly professional nature and many spectacular shots were obtained, some of which will undoubtedly be used in the finished film.

The University of Wisconsin Arboretum
A. F. Gallistel, Chairman
Observatory Hill Office Building
Madison 6, Wisconsin