

# NORTH AND SOUTH DAKOTA HORTICULTURE

JULY 1936



REGAL LILIES IN THE GARDEN OF MRS. M. MCCARTHY, WATERTOWN, S. D.

634.05  
811.63





## THE MARYLAND YELLOW-THROAT



O. A. Stevens      My first acquaintance with this species was among some of my earlier experiences with birds. While attending college we had a favorite botanizing area in some sandhills along the river. It involved a hike of several miles and one warm day in early summer as I rested under a tree, a small yellow bird with a large black patch on the side of his head, dropped down on the sand a few feet away and began to sing: "wichity, wichity, wichity." I had no idea what the bird was, but needless to say I was much impressed with his spriteliness and sociability. His markings were so distinct that I had no difficulty in finding his name.

The yellow-throat is among our summer resident warblers, in fact, the most common species after the yellow warbler. The female lacks the black mask of the male and in the fall, the preponderance of females and young birds is rather a puzzle among all the dull colored fall warblers. However, the distinctly yellow under parts, especially the throat and under tail coverts, brownish cast of the back, and the long, slender light colored legs are quite distinctive.

We find these birds in the tall grass along the borders of streams or swamps or in the underbrush of the woods. Knowing their habitat, it is an easy matter to find them. My nearest location is a drainage ditch, which is usually bordered with grass, tall weeds, or in places with willow thickets. At times I sought in vain for their nests among the grass and bushes. Once I searched a neighbors yard, where the birds had frequented the tangled growth of grass and shrubbery, but they probably removed to a more secluded place for their nesting. Only once have I happened to come across the nest, and this one was placed a few inches above the ground in a clump of tall grass stems in the woods.

Last summer, when visiting friends in Slope County, North Dakota, I was told of a bird which they had heard but had not succeeded in finding. The evidence indicated a yellow-throat, and early next morning I walked along the creek bed to a small thicket. Exploring cautiously around the edge of the thicket, Mrs. Yellow-throat soon came to see what I was about. They are fearless, inquisitive little birds, much like the house wrens in the way they explore the ground among the grasses and brush and in the way they come peering at you if you sit quietly awaiting them.

Volume IX.

July, 1936

Number VII.

Entered as second class matter at the Post Office at Sioux Falls, South Dakota, under the act of August 24, 1912. Original Office of entry Pierre, South Dakota.

Membership in the South Dakota State Horticultural Society is one dollar per year; fifty cents of this amount is for the subscription to "North and South Dakota Horticulture." The subscription rate for affiliated organizations is twenty-five cents per member, per year.

Published monthly at Sioux Falls, South Dakota, by the North and South Dakota State Horticultural Societies. Address all communications to W. A. Simmons, Secretary, Horticultural Office, Court House, Sioux Falls, South Dakota.

### SOUTH DAKOTA OFFICERS

F. X. Wallner, President.....Sioux Falls, S. D.  
Geo. W. Gurney, Vice-President.....Yankton, S. D.  
W. A. Simmons, Secretary and Editor.....Sioux Falls, S. D.  
H. N. Dybvig, Treasurer.....Colton, S. D.  
Chas. McCaffree, Librarian.....Canova, S. D.

### MEMBERS OF THE EXECUTIVE BOARD

John S. Robertson, five years .....Hot Springs, S. D.  
J. B. Taylor, four years .....Ipswich, S. D.  
E. A. Gates, three years .....Rapid City, S. D.  
H. E. Beebe, two years .....Ipswich, S. D.  
P. L. Keene, one year .....Huron, S. D.

### NORTH DAKOTA OFFICERS

A. L. Truax, President.....Crosby, N. D.  
J. C. Gould, Vice President.....Mandan, N. D.  
D. D. Baldwin, Vice President.....Bottineau, N. D.  
A. F. Yeager, Secretary..... Fargo, N. D.  
E. L. Shaw, Treasurer..... Fargo, N. D.

### TABLE OF CONTENTS

Page

Maryland Yellow-Throat, O. A. Stevens .....	74
N. D. News Letter, A. F. Yeager .....	75
Lilies in Manitoba, F. L. Skinner .....	76
President's Corner, F. X. Wallner .....	77
Indian Vegetables, G. F. Will .....	78
From Our Mailbag, V. Lundeen .....	79
Johnny Appleseed, R. A. Hamilton .....	80
Secretary's Corner, W. A. Simmons .....	81
Friendship Garden, Mrs. M. M. Saeger .....	84

The nests are composed of a considerable quantity of grasses and similar material. The eggs are white marked or with a few small brown spots or streaks. We seem to know little about the home life of the yellow-throat, which is surprising when we consider that it is such a common and well known species. An examination of more than 100 stomachs in California some years ago, showed that the birds fed almost entirely upon insects, especially ants, bugs, beetles and flies. The birds appear in our region about May 15 or 20 and soon are engaged upon their nesting activities. Upon their spring

(Continued on page 6)





## NORTH DAKOTA STATE HORTICULTURAL SOCIETY NEWS LETTER



A. F. Yeager,  
Secretary,  
Fargo, N. D.

Many of my friends in the past few years have been inclined to think me too conservative in not handing out a recommendation for Chinese elm. However, we have taken the position that the tree was still under trial. After this winter, I am still more inclined to think so. A great many of the Chinese elm in this region were severely winter killed last winter, while beside them the American elm was not damaged. Perhaps this is only a

local condition and does not apply to the state generally. Any of our members who agree or disagree with the above statement will be doing all of us a favor if they will write in their observations.

A fruit plant which previous trials on the experimental plots indicated might be somewhat tender is the Oka cherry. However, such good reports came from other places that we hesitatingly put it back on our recommended fruit list. In looking over the orchard this spring I find that nearly all the Oka cherries are killed back two-thirds of their length, whereas alongside them Mansan, Mordena, Compass Cherry, Opata and Cooper seem to be all right.

THE MARKET GROWERS JOURNAL suggests the use of rhubarb stalks which are too tough to sell as a source of rhubarb juice. Add one cup of sugar to a gallon of the juice before canning.

The Michigan Experiment Station reports that the more frequently cucumbers are picked the greater total number of fruits, though longer intervals give greater total weight. Where intervals were longer than 4 days more culls resulted. They suggest picking at least twice each week.

The blossoms on the potato plant have nothing to do with the production of tubers. The plants may produce a normal crop without blossoms, or if they do bloom the removal of the blossoms will not affect in any way their productivity.

A correspondent says she understands cucumbers must always be treated with salt in order to make them wholesome. Personally, I very much doubt the truth of this. If any of our members know of any evidence to support or refute this statement we will be glad to hear from you.

A correspondent from South Dakota says that the worms in the blossoms of marigolds, zinnias and cosmos were very bad at Sioux Falls last

year—the first time in 60 years. It is possible it may be another 60 years before we have another such infestation. At least, here's hoping.

The English GARDENERS CHRONICLE gives as a satisfactory method for catching wasps the filling of an ordinary fruit jar two-thirds full of water then adding fruit juices or jelly. Set near the wasp nest and the insects fall in and drown.

The AMERICAN ROSE MAGAZINE states in the Adams Garden at Quincy, Mass., there is a rose bush which was planted in 1788. It is probably one of the oldest rose plants in this country.

A YEAR IN THE ROSE GARDEN is the title of a new \$1.00 book published by Doubleday Doran Outdoor Books, Garden City, N. Y.

We are beginning to think that our new North Dakota series of numbered tomato varieties may be better adapted to the hot dry plains territory of the South than they are to the cooler Canadian region to the north. A variety developed for one particular locality will usually be found to be adapted to other regions similar to that place in certain features. One never can predict just what the reaction will be with such a new untried kind for planting elsewhere. We now know pretty well where the Bison tomato fits in. It is not adapted to humid climates, and while it is the earliest important named variety in most of North Dakota, as we get farther north it does not fit in excepting north of western North Dakota. To the south it fits in with Great Plains conditions quite well down to western Oklahoma.

According to Kains, in GARDENER'S CHRONICLE (American), hollyhock seeds from the lowest first ripening capsules will make the strongest plants. Also, there is less chance of the first seed produced on a plant being mixed with other varieties than that produced later.

Rotenone sprays are finding favor in the hands of vegetable growers. Many report better success with this material than with arsenicals for the control of some chewing insects. At the same time, the material is non-poisonous to humans.

The New York Experiment Station, in Technical Bulletin 236, states that mosaic disease can be transmitted from various kinds of clover, including white sweet clover, to a stringless green pod bean. Bean mosaic was found to be transmitted by contact and by wind.

According to the West Virginia Agricultural Experiment Station, paper mulch has a greater

(Continued on page 84)





## LILIES IN MANITOBA

F. L. Skinner

Fifteen years ago Lilies were rather uncommon in western Canada and though a few of the more uncommon Lilies had occasionally been grown with more of less success, still the old Tiger Lily and the Umbellatum Lily were really the only Lilies at all well known and even they were not common garden flowers at that time. In 1920 I gave the Manitoba Horticultural & Forestry Association 300 bulbs of a form of *Lilium tenuifolium* that had done well with me, to be distributed amongst its members. This greatly stimulated the interest in Lilies in this western region and this interest continues to grow as more people are successful in growing these stately and beautiful flowers.

The soil and climate of many parts of Western Canada are well suited to the cultivation of many of the Lily species brought from central Europe and eastern Asia. As our knowledge of their requirements increases we may expect to still further increase the number that can be planted here with reasonable assurance that they will succeed. Seeing that some of the species that we now cultivate were known to us only as dry botanical specimens less than 30 years ago, it is not very surprising that we still have much to learn regarding their requirements under cultivation. One thing we have learned, however, is that most Lilies, though they can stand a considerable amount of moisture while in full growth, still they resent anything like stagnant moisture around their roots while in a dormant state. In soils, therefore, that are on the heavy side or otherwise inclined to hold moisture, provision should be made for good drainage and in such soils it is a good plan to bed the lilies in sharp clean soil or fine gravel.

Another point we have learned in Lily culture is that if manure is used it should be well rotted and should not be allowed to come in contact with the bulbs.

In exposed locations, where the snow covering is liable to be blown off or in districts subject to winter thaws, it is advisable to give a covering of straw or other litter to insure that there will not be alternate freezing and thawing during the winter. While Lilies can stand to be frozen solid during the winter, only a few of the hardiest can stand alternate freezing and thawing.

While most Lilies that are fully hardy can be cultivated right out in the open, there are a few that prefer a location that is shaded during the hottest part of the day and all lilies can be grown successfully in locations that are partially shaded.

Among those that do better in partial shade, probably the foremost is *L. Hansonii*. This Lily starts into growth very early in spring and unless shaded or sheltered from cold and from the extreme heat of the sun's rays, it is liable to suffer and lose its flowers in cold and unfavorable spring seasons.

The Lily family has a long flowering season, commencing with us usually in the end of May or the first week in June and continuing until September. By a judicious selection, therefore, of varieties one can have lilies in bloom throughout the summer.

They also have a wider range in size, ranging from six to eight inches in height for some varieties of *L. thunbergianum* (also known as *L. elegans*) to the six foot spikes of *Lilium Maxim.* As to colour, the hardiest forms at present range through shades of yellow, orange-yellow, and red to deep mahogany-red with one very hardy species having rosy pink flowers. This is *Lilium cernuum*, a native of Korea, which in shape of flower and habit resembles the Coral Lily (*Lilium tenuifolium*).

While there are gardeners here and there who have successfully cultivated some of the white Lilies, on the whole the white varieties have not proved so satisfactory here as the coloured forms. It is more than likely, however, that when we understand their wants better and as new hybrids and geographical forms are introduced, the time will come when white Lilies can be as safely recommended to the average gardener as the coloured forms are at present.

### THE MARYLAND YELLOW THROAT

(Continued from page 74)

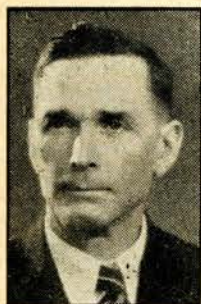
arrival, and during their fall migration in late August and early September, they are likely to be seen in any grove, thicket or bit of shrubbery.

This bird seems to have been first described by the English ornithologist George Edwards about 1760, and was called "Maryland Yellow-throat" by him. The "Northern Yellow-throat," described by Swainson in 1838, is found all through the north-eastern United States, in southern Canada and west to North Dakota. Their winter is spent in Mexico, Central America and the West Indies. Several western races have been described, and still others occur in Mexico and Central America, so that hardly any of North America except the northern part is without them. Some, or perhaps many, of the birds seen in North and South Dakota may be the "Western Yellow-throat."





## PRESIDENT'S CORNER



F. X. Wallner  
Sioux Falls, S. D.

May 29th. The Garden Discussion group met at Dr. Elmen's country home for the second annual picnic dinner, out on the lawn. Most of the trees and shrubs planted about 40 years ago on this place by the late Dr. A. Zetlitz, a life member of the Horticultural Society, are still growing and doing finely. The Honey Locust trees were in full bloom and cast a fragrance over the whole place. Many birds furnished the best of music and a fine time was had by all. Potatoes reached \$8.00 per barrel for a time, on the eastern market, but the big papers soon acquainted the housewife with the fact that potatoes were high, also several car loads from the south arrived in bad condition and prices dropped two or three dollars a barrel within a week. We have not had potatoes for over a week and will appreciate the humble spud, for supper tonight. For several years it has been the practice to protect vegetable plants from being cut off by cut worms with paper bands, or paper wrapped around the stems of the plants. We have used the wood veneer bands that the plants were growing in, also, but it seems the cut worm "King," or nature has gone us one better, as now we have the climbing cut worm, a new fruit pest. Reports of orchards being devastated in Virginia has caused considerable alarm. Bands of cotton, around the trees and poison bait at the base of the tree, resulted in numbers of the worms being killed. The climbing cut worm, like his garden relative, remains in the ground just under the surface, during the day and crawls up the tree at night or on cool, cloudy days for its ration of foliage. In about 10 days the larvae develop into beetles or moths which lay eggs and start another brood of worms. Without control, their propagation is said to reach serious proportions. From the same state also comes the report that in spite of the coldest winter in 30 years, the codling moth hatch is the earliest ever known. An extremely warm 48 hours following favorable weather, brot the hatch out suddenly and the specialists with their bait pails captured 10 times the average number they had ever caught before. The hatch depends on the coddler carry over in each orchard and where the carry over was heavy, the first brood may be a serious pest. Even the Lady Bug was the cause of a lawsuit against a railroad company, because a load of grapes from California was covered with Lady Bugs. While doing no damage to the grapes, either in transit or upon arrival, they did affect

the sales appearance, since the buyers were not horticulturists and did not know of the habits of the Lady Bugs and refused to pay the full price for the grapes, even tho the bugs might be worth more per ounce, than the grapes, a pound. The tomato acreage being planted in the U. S. is larger than before and the prices a little lower. In some sections, canneries are paying 20 cents, when last year the price was 25 cents and many are not contracting and will green wrap, to ship north. The south seems to have a severe douth so that plants have not done well, since set and much transplanting is being done. The hurricane in Georgia hit the plant growing section so that plants had to be got elsewhere and in Florida, where they were about all gone. C. L. Fitch, Sec. of the Iowa Vegetable Growers' Association, tells the Red River Potato Growers, they must ginger up if they wish to hold the potato seed trade. In a three column article in "THE PACKER," he says that a lot of mighty poor seed has gone out of the Valley. He said: "We have paid plenty for poor seed and were mighty mad. Then we were sold a lot of dry-rotting certified seed and we were all madder still." He says there must be less bruising at digging time, less bruising in handling in cars or trucks, and better storage. There should be lots of rejections of fields that have in the past, been sold as certified stock. The reason for the plain talking is to give the certifying officials ammunition to protect themselves and stiffen their backbone and cheer them on their way to a big trade and a fine premium. The first article in Lundeen's Mailbag for June, states that there is no benefit in pruning garden plants and I have seen the same advice given by others, but I disagree. I do know when the pepper and eggplant suckers begin to grow and get bigger than the original plant with the blossoms and early fruit, I have very little early fruit if they are not trimmed off at least twice. I have also seen where suckers kept off corn, there was a good crop of early corn. We expect to see a good attendance of South Dakota members at the joint meeting in Fargo August 20th and 21st. I am sure that the Canadian and Minnesota horticulturists will be there and possibly some from Iowa, also. It will be an educational tour as well as one of great pleasure and we have not forgotten the praise of Gooseberry Grunt, promised us all by Dean Walster. An airplane load of strawberries picked Monday morning, June 1st, in New Jersey, loaded in the plane at 2:15 p. m., reached the New York market 2 hours and 15 minutes later.

Three 104 year old apple trees in Michigan, are going to bear a bumper crop this year. One is a Golden Russet, one a Bellflower with one-

(Continued on page 80)





## ADVENTURES IN PRESERVING AND IMPROVING INDIAN FOOD PLANTS

Geo. F. Will

As probably many of you know, I was born on the banks of the Missouri in North Dakota and have always had the deepest interest in almost everything pertaining to the region of my birth. This includes an interest in the native plants, shrubs and trees which has been a source of much pleasure to me, as well as an interest in the general physical and geological conditions in our section and in the aboriginal inhabitants of the whole Northwest.

I have been more or less familiar with the Indians ever since I can remember and happened, when I went away to college, to fall in with some kindred spirits who drew me into the study of American Ethnology, in which I took a considerable amount of work. As a result the Department of Ethnology in Cambridge put me in charge of an expedition in the summer of 1905 to do some excavating for them in some of the Mandan village sites around Bismarck. That naturally concentrated my attention on the Mandan tribe and my interest in that tribe has been very helpful in the plant work I have done with Indian materials.

Interest in the Indian crops however, goes back considerably farther than my first acquaintance with the Mandans as I can remember a number of encounters with Indians in rather early childhood and particularly remember my father's account of the Hidatsa Chief, Son of a Star, who called on him at the little red potting shed attached to our small greenhouse where our business was conducted in 1881 to 86. This man very ceremoniously presented him with a good sized sample of what have since come to be known as the Great Northern Beans, with which you are doubtless familiar. I can also remember my father telling of the first Indian Corn which he received in 1881 or 82. This came from one of the officers at Fort Stevenson, and in accordance with the directions furnished by an old trapper, who worked for us at that time, was planted in slots cut into newly broken sod with a hatchet, the cut being tramped together after the Squaw Corn was dropped in it. A few years later a man named Holbrook, who had a wife and family from the Chippewa tribe of Minnesota and who lived some ten miles south of Bismarck, interested my father in some of his experiments with Melons. A particular development of his, selected and improved, has become our Will's Sugar Watermelon. As you know, the Burleigh County Mixed, Dakota White Flint and Gehu Corn varieties were all a direct result of the first experiment made with the Indian Corn.

After returning from college I still retained,

as I do yet, a great deal of interest in Indian matters and I was fortunate the first year in making the acquaintance of a young Mandan, James Holding Eagle, who was working for a few months at our State Historical Society. Through him I had an opportunity for sometime to study the Mandan language and to obtain from his mother, through him, seed of one variety of Mandan Corn and some Squash Seed, which turned out to be a hybrid mixture of most of the Indian types. The next year I went up to the reservation and stayed with this man's family for several weeks, getting not only further information on language but as complete a story of the Mandan agriculture as I could. Scattered Corn, the mother of James Holding Eagle, was a daughter of the last Mandan Corn Priest and probably the best informed on agricultural subjects of any one in that tribe. I saw the Corn prepared and dried in the Indian fashion, saw the drying of wild fruits and the preparation and drying of Squashes for winter storage. I also saw in the gardens in the vicinity a number of the varieties of Corn, Beans, etc., which the Fort Berthold tribes have always raised.

At about the same time I made the acquaintance of Rev. G. L. Wilson, who was doing some work for a New York Museum and who later published some of the best material on the Fort Berthold Indians that has appeared. He too, had taken a considerable interest in the agriculture and we derived a mutual benefit from comparison of our material.

A year or so later I met Mr. M. L. Wilson, who at that time was a County Agent in Custer County, Montana, but who is now, I believe, an Assistant Secretary of Agriculture. He too was very enthusiastic over the Indian agriculture and particularly the Corn. We arranged between us a series of experiments in securing, growing and describing every type of Indian Corn that we could get hold of. I obtained a good many from the Northwest, and through his contacts with the Department of Agriculture he was able to obtain samples from many other places. The American Museum in New York furnished me with trial samples of several varieties from the Pueblo district. Altogether we grew and described between 125 and 150 different varieties and a large number of these I have been able to keep alive by occasionally growing small patches of them.

A little later I got in touch with Mr. George Hyde of Omaha, who sent me specimens of Corn from some of the Nebraska Indians. At about that time too I made the acquaintance of Dr. Melvin R. Gilmore, who later moved to our state and who furnished me with many seeds

(Continued on page 82)





## FROM OUR MAILBAG

Mr. J. Kernall, one of the outstanding horticultural boosters in North Dakota, mentions in a recent letter that members of Grand Forks Garden Clubs are planning an excursion to Morden, Manitoba. I am sure that they will find this tour worthwhile from a horticultural standpoint. Organized garden groups are invited to visit the Horticultural Plots at the Agricultural College. If you come, let us know before hand so that there may be someone available to act as a guide.

Victor Lundeen



Mrs. A. Nelson of Grand Forks reports that her Chinese elms are dying or are already dead. Similar reports have come from many sections of the state. Death of these trees may probably be attributed to the severe weather of the past winter. Chinese elm appear to have failed to demonstrate ability to withstand extreme winter temperatures.

American elm produced an abundance of seed this spring. More than 200 pounds of this seed was gathered to be distributed free to people throughout the state. It is hoped that this distribution may show results in an increased number of trees in our prairie state. Results, however, may not be noted for several years because it is a long period between the time of seed planting and the time when we have large trees which provide shelter, shade and beauty. We shall be glad to send you upon request, a small quantity of this seed.

A correspondent inquires, "What is the proper time to prune lilacs and honeysuckle?" These early flowering shrubs should be pruned as soon as they have completed blooming. The older wood should be pruned out to favor the younger wood which may bear blossoms next year. Do not overdo your pruning. If you do you may destroy the appearance of the shrub. Numerous requests have been received for information regarding control of some of the common garden pests. Here are a few control recommendations:

1. Striped cucumber and squash beetle. 1 part lead arsenate to 20 parts of hydrated lime or flour. Dust on and around the plants.
2. Cabbage worms. 1 part lead arsenate to 12 parts hydrated lime. Use as a dust, apply when plants are wet with dew, in early morning or evening.
3. Plant lice, or aphids. 1 fluid ounce Black Leaf 40 (nicotine sulfate), 1/2 ounce laundry soap in 6 gallons of water. Use as a fine spray.

Spraying and dusting are best done in early morning or in the evening.

A correspondent from Pembina County writes that ants are destroying his poplar trees. I do not believe that the ants are responsible for death of the trees. Death is probably due to drought, extreme temperatures, disease, or other insects. Ants are not known to cause serious injury to trees.

B. W. Keitzman, Lakota, inquires if it is advisable to cut back the tops of cottonwood trees which are starting to show signs of dying out. Cutting back the tops is a rather common practice, but is hardly one to be recommended because it usually results in unsightly butchered appearance, and does not prolong the life of the tree. Removal of such portions as are already dead is the only pruning which we would recommend. Shallow clean cultivation is a better recovery measure than severe pruning of tops.

Mrs. Clarence Bunniss, Powers Lake, asks if soap water is harmful to flowering plants. Frequent heavy dousing with such water may have a detrimental effect because of the strong alkaline salts which such soap water may contain. We have had several reports of iris beds being affected with root rot and a general blighted appearance of the plants. Some report that their entire bed failed to show any vigorous signs of life this spring. Although this trouble may, in part, be due to winter injury, transplanting healthy plants to a new location as soon as they have completed blooming is probably advisable. July is a good time to transplant iris.

Drought has again struck the state. How does your garden look? Do you have a small irrigation system? If you do, let us have a description of it. Perhaps we can pass the information on to others who will find it valuable. Have you black walnut trees started from seed distributed from the North Dakota Agriculture College? If you have ever received any of this seed, let us hear from you in regard to success or failure of your planting.

**N. O. MONSERUD**  
SIOUX FALLS, S. DAK.  
Landscape Architect & Engineering  
Landscape Designing  
Laying out large and small grounds, city parks, golf grounds, cemeteries, and school grounds.  
GENERAL LANDSCAPE CONTRACTING  
TREE SURGERY  
CALL OR WRITE FOR APPOINTMENTS



## APPLESEED JOHNNY

R. A. Hamilton, Rugby, North Dakota

In the mad rush of progress we are all too prone to remember and revere the sensational and brilliant in men and their careers and slur over and laugh off their all too evident faults, at the same time neglecting the more useful and purer men on account of their modesty.

Just such a pure and modest character was Johnny Applesseed. Of all the constructive heroes of creative foresight, endurance and kindness he ranks among the very highest. Our first record of him is in the Territory of Ohio in 1801 with a horse load of apple seeds which he planted around Licking Creek. During the following five years he followed this same strange but noble occupation. Then in 1806 he set off down the Ohio River with two canoe loads of apple seeds for the western frontier—stopping to plant appleseeds in every inviting spot. These two facts and dates constitute all of the authentic history of Jonathan Chapman, who is believed to have been born in Boston in 1775.

The rest of this noble man's history has been passed down by word of mouth by the people who knew and lived with this most lovable and eccentric of men.

Jonathan Chapman was first of all a nurseryman. He procured seeds from the apple presses of Pennsylvania and planted them all over the Ohio territory and frontier. He had plenty of money, for he spent none, and some of the more prosperous buyers of his apple trees paid him. This money he used to buy up decrepit farm animals which he gave away as soon as they regained their health. His poorer debtors gave him notes which were never redeemed—or meant to be redeemed! He was incessantly planting nurseries of appleseeds or going to Pennsylvania after more seeds.

He harmed neither man nor beast. Even the snakes seem to have respected him and the people certainly did, for he traveled unarmed without a jeer or a hand raised against him through the wildest Indian villages and the roughest frontier settlements. He believed it wicked to kill and was never known to harm a living creature. He firmly opposed grafting and budding as evil practices. He must certainly have possessed something of an influence over animals for he traveled barefoot over land badly infested with rattlesnakes, nor was he ever bitten.

His clothing was cast-offs, or in later years, a coffee sack with holes cut in it for arms and legs. He wore a huge cardboard hat and generally shunned shoes, preferring to go barefoot even in the coldest winters. His attitude toward pain was stoical, and he often stuck pins through

his hands and cheeks. As a healing agent he seared his cuts, etc. with a red hot iron. His diet was as meager as his raiment!

Historically, Johnny Applesseed is most famous because he traveled day and night to warn people of Hull's surrender and the coming of the Indians and British. In this journey he doubtlessly saved hundreds of lives through his timely warning. Jonathan Chapman had peculiar religious ideals. He believed himself to be the recipient of messages from the angels and his teachings were based on these visions. He was an earnest disciple of Swedenborg and he encouraged his friends to read, by distributing his books among them—a part of each book to each family, and exchanged parts so that each family might have access to more books. The unkept, unshaven Applesseed Johnny was possessed with a personality that enabled him to maintain respect and to even be a convincing teacher and religious prophet. He moved west with the frontier into Indiana spreading appleseeds and noble religious ideals profusely, until in 1849 when his labors had borne fruit (both apples and noble inspirations) over a hundred thousand square miles.

Then, one summer day, Applesseed Johnny walked into the home of a settler in Allen County, Indiana, and after giving his usual sermon of "News from Heaven," he went to bed on the floor. The next morning he was nearly gone and he died that day without ever a whimper or a worry, for he had done his work and was content. And so he died, a self-imposed martyr—as strange, and eccentric, and noble, and useful a man as we may ever know. We wonder at this homeless, suffering, solitary, ragged benefactor of humanity, and as we wonder we cannot but bow our heads in tribute to the stoical heroism, and purest virtue of "Appleseed Johnny."

## Bibliography

1. "Quest of Jonathan Chapman," Newell D. Hills
2. "Cyclopedia of Horticulture," Vol. III, pp. 263-264.
3. Harpers, Vol. 43 (1861) pp. 830-836.
4. "Johnny Applesseed and Other Poems," Lucy Vachel Lindsay.

## PRESIDENT'S CORNER

(Continued from page 77)

third topworked to Northern Spy, one-third to Shiasawsee Beauty and the other third, the original Bellflower; the third tree, a Honey Sweet, lost most of its top in a storm last year, but has a new crop of suckers, in its battle for life. In Illinois there is a pear tree 106 years old with a fair setting of fruit this year.

In the state of Michigan there will be 85 fairs and produce shows, this year.





SECRETARY'S CORNER

W. A. Simmons

Our vice president, Mr. Geo. W. Gurney of Yankton, was in the office recently and reported that there had been a great deal of mortality among the Chinese Elms, in the northern part of the state, this past winter, amounting in some cases, to well over 50 per cent. He is of the opinion that the Chinese seed collectors are not to be trusted in telling the truth about where the seed is collected. He believes that they follow the line of least resistance, collect the seed from the place where it is most plentiful, and then tell the buyer that it was collected in the far north, or wherever they may want it collected.

Mr. Gurney thinks that we must develop a type of Chinese Elm, in this country, to fit the particular needs of each section. As there was no losses of this tree, in either his section or in the Sioux Falls region, he believes that we have the type of tree we need for our districts, but that our type might not be suitable for either the north or very much farther south. He believes that a qualified plant explorer could obtain seed from its farthest north occurrence that would be perfectly hardy in North Dakota and southern Canada, but that this tree might not be of as fast growth as the ones of more southern origin, that we now have.

In a letter to John Robertson, Mr. H. P. Miner of Mission Ridge, S. D., advances quite an interesting theory. He says: "I have a theory or perhaps a pipe dream, though I don't smoke, which is new to me; it may be you have known it for years, here it is. Away back about 1915 my sisters sent me strawberry, vegetable plants and shrubbery from Wisconsin, which invariably came through the mail O. K. and lived, while plants from South Dakota usually died or tried to, and this was where my first fish, angle or earth worms came from. In 1935 I ordered strawberry plants from St. Paul which arrived after delays, in the brightest, healthiest and most perfect condition, with no signs of rot or mold, in fact they looked as if just dug and washed and the soil replaced on the roots. And here is the secret, just plain earthworms, from 1 to 4 or 5 inches long, nearly a dozen in the 50 plants, no doubt accidentally left in the soil when packed, as eggs or small worms. Last year (1935), I ordered a dozen Wayzata potted plants from Albert Lea, Minn.; one or two of the potted plants had earthworms inside and they were very noticeably better than the others. As I understand it, the earthworm lives on humus, decayed vegetable matter and mold, and why isn't it possible that they keep the decayed vegetable matter eaten off the roots before it can

# Bargain Offer

ORDER DIRECT FROM THIS AD

Coral Lily, this is a beautiful rock garden Lily and can be planted any place in the border. Blooming size bulbs, \$1.00 per dozen prepaid.

Regal Lily, Henryi Lily, Umbellatum Lily, Tiger Lily, Single and Double, all large blooming size bulbs, 25c each; \$2.50 per dozen prepaid.

Chinese Elm Seedlings Special offer, mention North and South Dakota Horticulture. Per 100 prepaid

6-12 inch seedlings.....	\$1.50
12-18 inch seedlings.....	2.00
18-24 inch seedlings.....	2.75
2-3 foot seedlings.....	3.50

DYBVIG NURSERIES

COLTON, S. DAK.

In reference to asparagus cutting, a recent bulletin from the Iowa Station says: "Cutting until June 15th seemed to give the best results over a 6-year harvest period. Cutting until May 1st, May 15th, or June 1st, was not so profitable as cutting until June 15th, although the market quality of the spears was better in these three treatments than in any of the others. The total yield was not sufficient, however, to justify discontinuing cutting at these dates."

affect the roots or plants, much the same as years ago maggots were sometimes used in very stubborn cases of sores that refused to heal, before the present antiseptics were heard of? I have no strawberry plants to ship, as the hoppers cleaned me out, but have ordered 100 Wayzata plants this spring and may be able to get some more proof. If you ship plants this spring, why not try the earthworm idea, if it is new and you think it worthy of trial? I would suggest putting 2 or 3 worms, half grown, in each dozen plants—ship to some quite distant point with instructions to return plants to you unopened, and you can see for yourself." Have any of our readers had any similar experience?







### ADVENTURES IN PRESERVING AND IMPROVING INDIAN FOOD PLANTS

(Continued from page 78)

for trial from the Indians of Iowa, Nebraska and Oklahoma. Special and unusual varieties for trial were also sent me by Mr. Biggar, a South Dakota man who at one time wrote for the Dakota Farmer, and also by Messrs. Collins & Richey of the Department of Agriculture at Washington.

At about the same time I first heard from the present Secretary of Agriculture, Mr. Wallace, who has been a breeder and student of Corn for a good many years and who has had a particular interest recently in the Flour Corn varieties, which were the favorites with the Indians. When he was in Bismarck a year or so ago he came to see me with the express purpose of discussing that type of Corn.

I have had a good deal of interesting correspondence in the last few years also with some of the Russian corn specialists, who have been anxious not only to get samples and learn more about the Indian varieties, but have also been much interested in the use and growing of Sunflowers among the Indians. They in turn have furnished me with some most interesting types of Corn and Sunflower seed of their own breeding.

Possibly I have implied that Indian agriculture in North Dakota was confined to the Mandan tribe; if so, it has not been my intention for the Hidatsa and Arikara tribes, who are also residents on the Fort Berthold Reservation, are equally as good farmers today as are the Mandans. In fact, Dr. Gilmore and I have had numerous arguments over the campfire or in our tents as to whether the Arikara taught the Mandans agriculture or vice versa.

I have found a great deal of pleasure and interest in becoming acquainted with our native agricultural people and have spent altogether a good many weeks among them alone or in company with Dr. Gilmore, Russell Reid or some other friend who was interested in some phase of Indian culture. It was with considerable surprise that I first discovered that the people up there were actually raising and preserving some thirteen different strains of Corn, some five or six strains of Beans and several types of Squash and Pumpkin. I found among them an excellent Sweet Corn, a number of varieties of Flour Corn, which by the way they consider to be better for roasting ears than the Sweet Corn, and also several varieties of Flints. At that time there were a number of excellent growers on the reservation and I remember attending the Indian Fair up there some twenty-five years ago and purchasing six or eight perfect braids of Seed Corn, all grown by a rather mysterious old man

known as Water Chief who lived on the west side of the Missouri and a ways up the Little Missouri. Among these strains was a very dark red Flour Corn which I think was the most beautiful thing I have ever seen in the way of Corn.

I found also that the old men were still growing the original small type of Tobacco and that there were cultivated several types of Sunflower. A few years later Dr. Gilmore discovered that the Arikara still grew and enjoyed the little early Watermelon which Lewis & Clark described as being grown by them in 1803.

I have from other sources another Watermelon which Dr. Gilmore found among the Ponka tribe of Nebraska, and twenty or thirty varieties of Beans which have no outside commercial value but are of a great deal of interest. The Pinto Bean which has a considerable sale nowadays has been grown for centuries by the Indians of the Southwest, as has also the little Tepary Bean. Only recently a Colorado and a California Seedsman have been boosting the Hopi Lima. This is a Bean which I first obtained some twenty years ago through one of the Indian Agents, which is a true Lima and which has been grown by the Indians as far back as we have knowledge.

In addition to the little native Tobacco grown here I am keeping alive a related variety from the Crow Indians and two quite distinct types, one from the Winnebago and one from the Omaha, of the Rustica Tobacco. It is interesting to note that this species which was grown throughout the woodland area was the plant carried from the Iroquois Indians to Europe and which was the ancestor of all of the Turkish Tobacco.

Sunflowers were grown by the Indians all through the Great Plains from North Dakota well into Mexico and were food plants held in great esteem all through that area. It is queer, therefore, to think that the White Man's development of them has been confined almost entirely to Russia, whence came back to us most of the cultivated varieties that are grown in this country.

In spite of the encroachment of civilization it seems to me that the original Indian agriculture is likely to persist for a great many years yet although it is doubtless continually modified. I do know that a number of the fairly well educated women among the Arikara tribe, as well as among the other tribes, are among the best gardeners today and that they take a very great deal of interest and pride in growing and using the old native plants which have demonstrated their value through so many years and which, by the way, have furnished the foundation for so many of the plants which the White Man is raising in the Northwest. I have



# NORTH AND SOUTH DAKOTA HORTICULTURE

AUGUST 1936



OUR PRESIDENT, MR. WALLNER INVESTIGATING THE PEAR CROP OF MR. BLOCK, AT ORTONVILLE, MINN. FORTUNATELY FOR THE OWNER, THE PEARS WERE NOT RIPE.

634.05

27.13





riculture and their histories preserved. And basically their philosophy or religion, call it what you will, is closely linked with their agriculture.

In most cases, in spite of the fact that the people through long years of dealing with white traders have become shrewd, suspicious and sometimes even rapacious, I was furnished with samples of different plants and varieties either with no charge or a very small one and with an understanding of the purposes for which I wanted them. I remember only one real holdup when a fair haired, blue-eyed Arikara matron wanted to charge me \$5.00 for a single head of the Arikara sunflower variety which she was growing in her garden. In contrast I obtained the sacred yellow flour corn of the Mandans and the sacred white flour corn of the Arikaras both as gifts.

As I have mentioned my interest in agriculture gradually established me as a 'mash-shihsh', 'good white man' to the Mandans, and stories, legends and religious accounts were more freely given in my presence. Thus I came to gain from both tribes a rather complete picture of their material culture, including agriculture, as well as a picture of a naturalistic and rather beautiful philosophy of life and a system of religious ceremonies and observances of rather high dramatic quality. In these agriculture played an important part—sacred ears of corn, yellowed with age are prominent in the observances, the native tobacco and the old style bone hoes hold important places in the medicine lodge and the latter are carried by women in the great Mother Corn ceremonial which is the culmination of the Arikara celebrations. I have found that there is much of real beauty in the simplicity and kindliness of many of the Indian people, in their reverence for nature in all its manifestations, in their complete resignation and lack of bitterness under the misfortunes which come to them from the Great Chief above, and in their general inclination and ability to live in harmony with their surroundings in the land where they find themselves.

### MY FRIENDSHIP GARDEN

Mina Merritt Saeger

I planted a Garden of Friendship  
Where once had been but sod,  
With roots sunk deep in Mother-earth  
And flowers upturned to God.

A garden grown from friendship's gifts,  
Both friends and flowers were fair,  
An incense sweet of love arose  
From blossoms blooming there.

In growth they make from day to day  
Life's miracle I see,  
Through symbolism friends changed to flowers  
That share my life with me.

Here soul meets soul in garden-home  
Their blossoms kissed with dew,  
And wealth of life is mine indeed,  
When my flower-friends I view.

Beauty and Truth are heaven's own gift  
That live forever and aye;  
The soul of love, which cannot die,  
Blooms on for me always.

My spirit knows, without my sight,  
Your presence now is near,  
By sweet communion that I feel  
And fellowship most dear.

Heart of my heart, you live again  
When perfume fills the air,  
It is your soul that blooms for me  
To bless my loving care.

### NORTH DAKOTA NEWSLETTER

(Continued from page 75)

effect on the yield of peppers and egg plants on clay soil than it does on sandy soil.

MARKET GROWERS JOURNAL says that sweet corn shipped in bags first dipped in ice water then iced for shipment will arrive in good condition some distance away.

Professor C. B. Waldron says that Florida, which has no commercial lemon industry, may be able to compete with California and Europe in the production of this comparatively high priced citrus fruit by the use of a new variety, the Perrine lemon, commercial plantings of which are now being made.

Your secretary has been much concerned during the past 3 years to note that while some steps were being taken toward the planting of more forests and the re-establishment of some old ones, at the same time the forested areas in the Lake Regions of Minnesota are being rapidly cut away by new settlers who have moved to this region because of unemployment. The best that can come from such a process of clearing and plowing will be an area of low quality farming land. Certainly these natural forest areas should be retained as forests and not be turned into more submarginal farm land.

### Outside of That, We Are Alright

I still think your rooms are too hot, your children too precocious, your cities too noisy, your trains too slow and your automobiles too fast, your make-up too thick, your tobacco too sweet, and your glorious pies all too plentiful and fattening.

—J. B. PRIESTLEY.