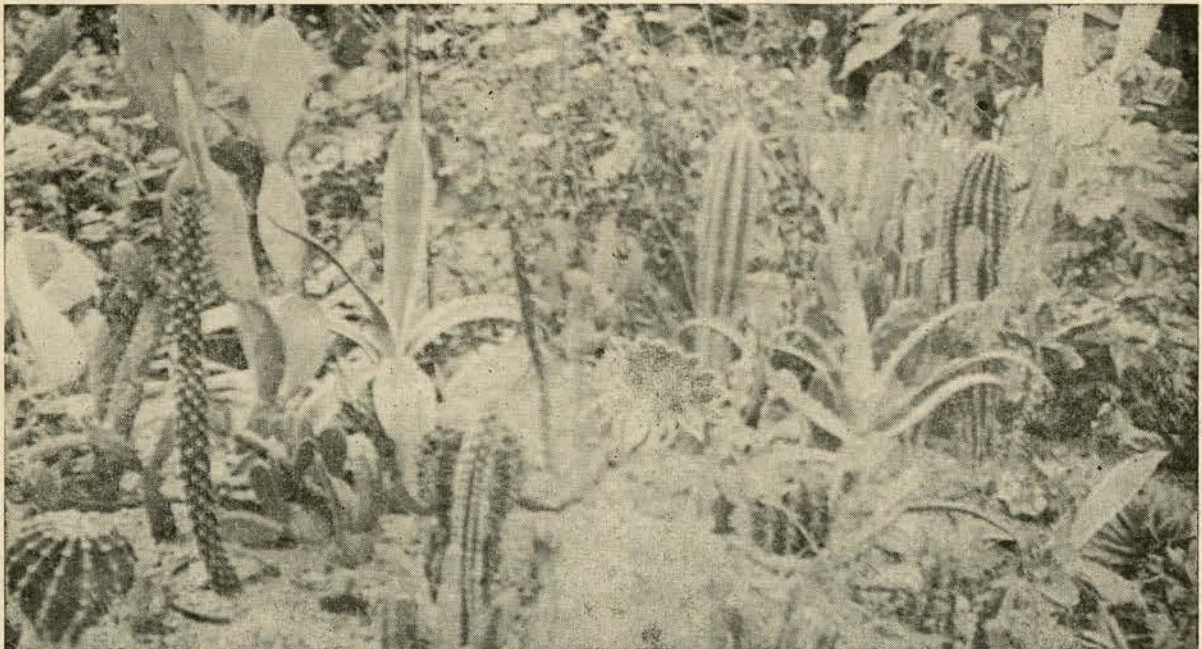
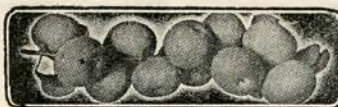

NORTH AND SOUTH DAKOTA HORTICULTURE

OCTOBER, 1943

South Dakota State
College Library



The cactus bed of Mr. C. W. Heinson, Sioux Falls.

**SMITH'S LONGSPUR**

By
O. A. Stevens



O. A. Stevens

This bird was described by Audubon and named for a friend, Dr. Gideon B. Smith of Baltimore. Later, his specimens were found to be immature birds of a species described thirteen years before by Swainson from a single specimen taken at Carlton House, Saskatchewan. Thus, it is one more species for which Audubon's name has persisted though the credit for first description goes to another author. Audubon stated that he found the birds common about a lake on low prairie at Edwardsville, Illinois. It is quite possible that most of the birds which he saw were Lapland longspurs, since most observers in northern United States see but few of Smith's longspur, and then usually a few birds in flocks of the other species. However, some later writers have also reported the birds common in Illinois in migration.

Smith's longspur is a bird of limited distribution. It nests in the Arctic regions from northern Mackenzie to Hudson's Bay, migrating in winter to Kansas and central Texas. It is rarely seen farther east or west. Coues wrote that the birds appeared in northern Dakota the latter part of September and were usually associated with the chestnut-collared longspurs. However, their distribution and habits are more like those of the Lapland. Personally, I have identified the species only a time or two in the late fall with Lapland longspurs or snow buntings.

In appearance, it is a large, streaked sparrow, more buffy in color than either the Lapland or chestnut-collared longspur. The male in spring plumage has the top of the head black, a large white stripe over the eye and a smaller one below it. The black is on top of the head only and does not extend to the throat and breast as in the other two longspurs. The females lack this head marking and would be difficult to recognize.

More careful observations might show this species to be more common than supposed, though the evidence is that it is uncommon or at least quite irregular. Minnesota records are few, and it would be expected only along the western edge of that state. Along the northern boundary of North Dakota in 1873, Coues saw it but once when he collected two specimens near the Mouse River on October 1. H. V. Williams at Grafton

Vol. XVI

October, 1943

No. 10

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, So. Dak.

SOUTH DAKOTA OFFICERS

Dr. N. E. Hansen, President Emeritus	Brookings, S. D.
H. J. Donaldson, President	Sioux Falls, S. D.
Geo. W. Gurney, Vice President	Yankton, S. D.
W. A. Simmons, Secretary	Sioux Falls, S. D.
H. N. Dybvig, Treasurer	Colton, S. D.
Mrs. F. Briley, Librarian	Dell Rapids, S. D.

MEMBERS OF THE EXECUTIVE BOARD

E. A. Gates, five years	Rapid City, S. D.
F. X. Wallner, four years	Sioux Falls, S. D.
Dr. S. A. McCrory, three years	Brookings, S. D.
J. C. Anderson, two years	Eden, S. D.
J. B. Taylor, one year	Ipswich, S. D.
Mrs. G. M. Jorgensen, Garden Club	Dell Rapids, S. D.
Mrs. E. T. Michels, Garden Club	Vermillion, S. D.

NORTH DAKOTA OFFICERS

P. R. Owens, President	Grand Forks
W. P. Baird, 1st Vice Pres.	Mandan
Mrs. H. O. Sauer, 2nd Vice Pres.	Devils Lake
H. A. Graves, Secretary	Fargo
E. L. Shaw, Treasurer	Fargo

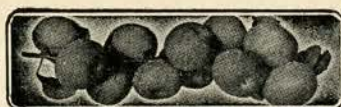
TABLE OF CONTENTS

	Page
Smith's Longspur, Dr. O. A. Stevens	110
Newsletters, H. A. Graves	111
Manitoba News Letter, W. R. Leslie	112
Garden Notes, W. E. H. Porter	113
Big Trees, H. R. Woodward	114
Garden Club Gleanings, Mrs. G. M. Jorgensen	115-116
New Hampshire Experiments, Dr. A. F. Yeager	117
President's Corner, H. J. Donaldson	118
Fruit and Vegetable Notes, F. X. Wallner	119
Secretary's Corner, W. A. Simmons	120

recorded that he first secured it in 1914, not again until May 4, 1923 when many were seen. Adrian Larson did not record it in McKenzie County. The late Elmer T. Judd in Towner County, regarded it as a common migrant, but seldom seen unless flushed from the stubble fields where they feed.

In the Arctic regions, the nests are built on the open tundra. In 1861-1866, R. MacFarlane collected many nests for the U. S. National Museum at Fort Anderson, latitude 68° 30'. The

(Continued on Page 119)



NEWSLANTS

By
Harry A. Graves



H. A. Graves

Congratulations are in order to Secretary Simmons for the fine job he did in printing the Fortieth Annual Report of the South Dakota State Horticultural Society. Many favorable comments have been heard since the report has been received. The South Dakota Society itself is to be congratulated on forty years of activity.

The listing of what in my opinion were the best ten lilacs, has brought letters from a few folks, one of them as far away as Philadelphia. John C. Wister, Landscape Architect and the man largely responsible for compiling the publication "Lilacs of America" has written a very friendly letter. "Lilacs of America" was mentioned in a recent issue of "North and South Dakota Horticulture."

The Fargo Garden Society held its annual Fall Show this year in connection with the Cass county fair. Observers believe it to be the best show since 1936 in spite of the fact that many garden in the Fargo area were drowned out this year. Prizes were in war stamps and bonds. The Vegetable division was especially good.

In "The Readers' Corner" of the September issue of the "Flower Grower" are found a couple of correspondents putting the English Sparrow on the black list. Harold Orchard of Miami, Manitoba, and others believe that the Cedar Waxwing has been responsible for spreading fire blight on apples trees over much greater distances than it would likely be spread by bees. Personally, I have never had much love for English sparrows, but I do hate to see the waxwings charged with any misdeeds.

Mr. F. X. Wallner in his corner last month added his bit to the campaign to prevent any more planting of Kochia. It is to be found almost everywhere and if it ever was attractive it certainly has lost most of it since it has escaped to roadsides and farm yards. I would like to add another to the list of "plants that become weeds." Some folks call it "Creeping Charlie" but Professor Stevens points out that there are about twenty plants known as "Creeping Charlie." This particular one happens to be Ground Ivy or *Glechoma hederacea*. It has crept into our back yard from a neighboring rock garden and since it roots at

regular intervals in a similar manner to strawberries, it is very difficult to eradicate. I can think of a better name for it!

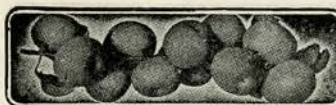
Small hand dusters and pyrethrum or rotenone dusts are becoming popular in home gardens. People have found them handy and quite efficient for destroying most bugs. Particularly good results are experienced in controlling cabbage worms since the dusters blow the very fine dust down between the leaves, making it difficult for the worms to escape. That dust does its work in a relatively short time. A shower an hour or two later will not destroy its effectiveness as is often the case with stomach poisons.

The Firesteel tomato continues to make friends in North Dakota. It looked especially well again this year. And while we are on the subject of tomatoes, Septoria blight has been quite destructive this year again. Someone's suggestion recently that long vined tomatoes outgrow the disease may have some truth in it. We had a few plants of Ventura tomato in our garden this year which bore an abundant crop, many of which ripened before the light frost of September 10, while John Baer, which we might expect to have some resistance, succumbed early.

A couple of interesting new bulletins have come to my desk recently. One of them, "Garden Flowers," Bulletin No. 155 from Michigan State College Extension Service at East Lansing, Michigan, deals with flowers of many kinds, both annual and perennial. Another bulletin that perhaps will interest many people is Cornell Rural School Leaflet No. 4 with the title "Wild Foods" which can be secured by writing to Cornell University, Ithaca, New York. Most horticulturists, I think, will stick to the wild plant foods, which run the gauntlet from dandelions to wild onions through hackberry and the Kentucky coffee tree, rather than to indulge in some of the wild meats suggested. For example, fricasseed muskrat, roast woodchuck, or pot roast of skunk are some possibilities suggested with directions for preparing same. Crows are even suggested as a possibility to be used in pie or several other ways listed in this leaflet. All joking aside, the use of wild plants and berries appears to be covered very thoroughly. Many of the plants listed grow here on the Northern Great Plains.

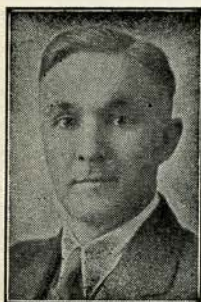
Past President J. H. Gerbracht, of Hettinger, wrote one of his usual short letters, but still packed with food for thought, recently. It appears that John has had his share, or perhaps a little more, of winter injury to his fruit trees this past year. He does point out, however, some fine philosophy as follows: "Just about the time that

(Continued on Page 120)



MANITOBA NEWS LETTER

By
W. R. Leslie



W. R. Leslie

Winter injury was so widespread and disastrous this past season that many persons seek deeper understanding of what takes place during winter-killing, what are the different forms in which it is encountered, and what treatment should be accorded stricken trees.

Death from freezing does not come, as might be expected, from the bursting of the cells by internal liquids expanding upon freezing and ripping the cell walls from within. The fact is the cells shrink. Where the ice crystals form is in the spaces outside the cells. As freezing intensifies, these crystals enlarge by withdrawing more water through the cell walls. The resulting pressure may become sufficient to disrupt the cell walls by pushing them inward. If the atmosphere rises before death comes, the crystals outside the cells melt and water re-enters the cell and is absorbed by the protoplasm. On the contrary, if freezing temperatures not only persist but lower, the sappy plant is likely to die.

Death of actively growing plants by freezing may be explained by the withdrawal of water increasing the acidity of the protoplasm to such a degree that the protein materials coagulate. When this condition develops they are not capable of regaining their normal character. Succulent tissues may be killed by sheer excessive loss of water. The change of woody plants from their tender condition of mid-summer to their hardy state during the dormancy of mid-winter is thought to be one of water-retaining capacity of the cell-sap, or protoplasm. This ability of the dormant tree to retain cell water is explained by the protoplasm building up colloid substance that is capable of hanging on to much water. The hardy plant is said to retain much "bound" water.

The plantsman looks for woody plants that ripen up their wood early in autumn. Heavy manuring, excessively heavy pruning, August irrigation, prolonged late summer cultivation and other practices that encourage vigorous vegetative growth are common causes contributing to winter injury, in that they delay ripening of the wood tissue. Late growing trees often injure even though the winter season be one of but normal weather. This fact explains why young trees in the nursery row are often killed back in the

tips while trees of bearing age of the same varieties are unharmed. The larger trees grow less luxuriantly and ripened in September. In many fruit growing sections cover crops are sown in July to compete with the trees for soil moisture and thus assure early wood ripening.

Root Killing is caused by severe frost reaching the tree roots and by the alternate thawing and freezing of the roots. Dry soil and absence of snow expose the roots to undue freezing. The precautions are to use only hardy crab seedlings for understocks, irrigate in October, if the soil be dry, and have a ground cover to blanket the soil over tree roots.

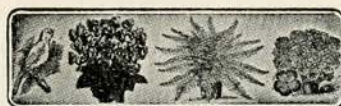
Killing-back is common in trees too tender for the region, and in semi-tender varieties after they have been run-down by bearing a very heavy crop of fruit. Thinning the fruit in June assists in avoiding this serious lowering of vitality. Young trees may tip-kill due to failure to ripen their wood before advent of freezing weather. Cultural practices should be chosen that induce early formation of the terminal buds of growing trees.

Black Heart: Newly formed wood tends to be more tender than the cambium and bark. In very cold weather its frost injury may cause it to appear water-logged. Later it becomes brown or black—hence the name. Growth the following year is usually scant. However, the tree may largely recover and have many years of usefulness. The chief danger from black heart is the ease with which rot organisms grow in the discolored wood after they gain entrance through a broken branch or pruning wound. All such wounds should be promptly given a protective covering.

Bark Splitting is common on young trees. It occurs in succulent trees when there is a sudden low dip in temperature in autumn. The bark near the ground is where the splitting is generally noted. Avoid it by encouraging early ripening of the trees in summer.

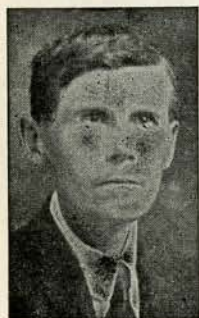
Trunk Splitting is sometimes encountered. It is probably a result of the medullary ray portion of the trunk contracting to a greater degree than the other wood of the tree during a period of abrupt freezing temperatures. Here again the orchardist may escape trouble by treating his trees so they ripen early.

Discoloration of Sap Wood to a dark hue or brown shade commonly occurs in young trees when a keen frost strikes in autumn before wood ripening is complete. It is related to Black Heart but is much less severe and, if discoloration be slight, no serious results are expected. The present day fruit grower gains information on the state of the wood and buds of his trees by making cutting tests with budding knife in early spring.



GARDEN NOTES

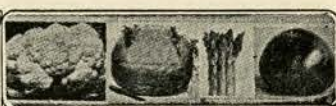
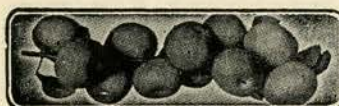
By
W. E. H. Porter



October genial days are here again and what flowers remain no longer wilt under a torrid sun and now summer's dying flame paints tree and shrub in rainbow colors marred only by the foreboding that winter's sudden descent is poised like a sword of Damocles! July 29th. A few days absence from the garden in interests of haying and what a change. As if by magic fresh weeds everywhere, bloom on first spike of pink domino mullen; individual flowers are rhodamine, pink with darker rayed central ring, something like the passion flower, purple-haired stamens topped with brick-red anthers, many other spikes arise from basal rosette of leaves, viewed either close or at a distance it enhances the beauty of the garden, one of Wayside's English importations. Everyone should have Oscar Will's Minnesota crab, adaptable, rapid grower, its large leaves resemble those of the oak; note some blight on horse chestnut. An inspiration prompted me to accept Wake Robin Farm's invitation to find out something about Nature's gifts in Pennsylvania. The Nursery handles select wildings from that region and a beautiful countryside it must be, some of things are suitable for indoor decoration also. The rattlesnake plantain, an orchid that needs pine needles as part of a growing medium, a shining club moss *Lycopodium obscurum*, rather like a dwarf araucaria—dark green tipped with pale yellow green *Convolvulus sepium*, Rutland beauty, a fence climber and many other things, including selected ferns, about which more later. The ebony spleenwort has kept right on growing even in sun. We welcome Wake Robin Farm as a new member, which is quite in keeping with wild flower research, carried on by our South Dakota friends. March sown *Galium setonicum* in flower, a rather spreading bedstraw, white as our own boreale poetically described by Rex Pearce as sea foam. The last sedum to flower is *Eversii*, bright pink cymes that practically hide the thick steel blue foliage. The sun-loving forget-me-not *Borago laxiflora*, a butterfly blue like that of the more difficult *Myosotis* brightens wherever it happens to be, volunteers readily. My raspberry crop has arrived in its casual way, supplying both my personal needs and that of many birds. Aug. 6th. Blazing sun with intense heat, planted a clump of

dragon's blood, *Sedum spurium* on my wife's grave noted the large everspreading mat of *Phlox subulata* still in bloom, also *dianthus neglcrus* slowly spreads so densely that not even a dandelion can establish itself. The cemetery of Hansboro is bleak on high and very dry ground where at the end of April the prairie grass is starved with *Anemone patens*. Aug. 8th. A near cloudburst at dawn finds the hay all safely gathered in under perfect conditions. Had first dish of that table delicacy the English call French beans, it is the pod of Scarlet Runner bean sliced and cooked, rating even higher than our snap beans that in no way to be classed with the so called sugar pea which is best described as a practical joke. First annual periwinkle out—white with a red eye; my two gentians, *septemfida* and *gracilipes* come into flower, the latter a new introduction of Borsch's from Kansu, China. Flowers are a pale cornflower blue, inch long and inch wide at summit with heavy rosette of willow like foliage, does well in our soil in full sun where many flowering stems up to 16 inch long radiate from a central rosette carrying from 8 to 19 flowers each. Aug. 13th. A strong N. W. tempers sun heat to 64 in shade. Wayside's English cottage carnation *Sylvia* fulfills expectation—flowers very double, fragrant, a dark carmine rose streaked with silver and no split calyx, carried in twos and threes on 2 ft. stems, the heavy blossoms need stem support but one's admiration is sobered by the query "What of the winter?" Aug. 18th. Our pleasant weather of the past few days with even a white frost, turns summer, the clambering monkshood having reached summit of a 4 ft. fence tops this with a veritable chevaux de frise of hooded dark spectrum violet flowers and by contrast a dense mound of cup flower *Nierembergia coerulea*, a pale bishop's violet, spreads lavishly with our long and warm summer days, a condition unobtainable last winter. On 2 ft. stems of recent growth the Dr. Merkeley rose colorful and fragrant blooms; flat very double and somewhat ruffled reminding one of the Damascus, better known as York and Lancaster, an old favorite that blooms at Christmas time in Ireland. Bailey lists it as hardy north and Wayside's still have it, slated as one of my 1944 experiments. The only other rose is also the best of all, I mean the Geo. Will, now in bloom. My bush is 5 ft. tall and still growing, tidy and upright, with flowers of 3 inch diameter and one large hip, size of a crab apple. Aug. 21st. 77 in shade, dry and sunny and to be continued according to that poor man's weather glass the pimpernel; countless flowers make a blaze of glory in copper red, dark sea blue and pale imperial pur-

(Continued on Page 119)



BIG TREES

By

H. R. Woodward



H. R. Woodward

The student at Stanford University gets off the train at Palo Alto, which in Spanish means "tall trees." This tall tree standing alone along the Southern Pacific tracks is several hundreds of years old and was named by the Spanish explorer Portola more than 200 years ago, when apparently it was about as large a tree as it is today. It was enough larger than the other trees in the vicinity to serve as a landmark to the Franciscan Padres and as a stopping place which they called "Palo Alto." It is the symbol of Stanford today, and is incorporated in the seal of the University.

We have been told that the sequoia gigantea or the sequoia sempervirens are the oldest living representatives of the plant world. It is true that so far as is known they are, and rings have been counted in the former which definitely show they are more than 3,000 years old in at least several instances. In going down into the redwood forest at La Honda south of San Francisco, I noted that a giant redwood had fallen some years before and the tree instead of dying had remained alive and each branch was definitely becoming a tree. Some of them were as high as forty feet and other branches near the tip were becoming trees but much smaller ones. In going through Chinatown and stopping at some of the shops, I noted that knots and burls of redwood had been gathered and placed in a pan of water and sprouts like giant ferns were appearing from them. They seemed to be doing well in the dark but moist atmosphere. We bought one of them and proceeded forthwith to bring it back to South Dakota only to see it wither and die, no matter how much pains we took with it.

I learned later that redwoods do that way and reproduce vegetatively, while the giant sequoia of the other species reproduces only by seeds. I learned that the redwood would thrive only within the fog belt of the Pacific Ocean, and any attempt to have it grow elsewhere would be fruitless. I also learned that the general impression that a wet winter meant a heavier growth of sequoia during the following summer was false. In the cross-sections of the sequoia that showed rings back a great number of years proved the reverse was true.

The winter of 1905-06 was an exceptionally

wet one, and the snow piled up under the giant trees to a depth of 20 feet. As late as July 4th, the snow was still 12 feet deep in the more protected spots. As a result the trees did not start to grow until about the first of August and by the first of September they had ceased to grow. The result was that the rings produced in the trees during 1906 were among the smallest represented in the trees. In the winter of 1923-24, there was very little snowfall and was considered one of the driest winters experienced in recent years. Most of the snow had melted by the middle of March and the trees started their summer growth in May and continued until September. The result was larger rings. It might be safe to state that the seasonal growth is inversely proportional to the snowfall. This is not exactly true, however, because there are some other factors which may interfere. It is true that the size of the rings are directly proportional to the length of the growing season and the length of the growing season is quite definitely influenced by the amount of snowfall.

I have noted other trees that take root and grow when the branches are weighted down to the ground by snow. In the northern Rockies, the balsam fir, *abies lesiocarpa*, has been seen in many instances growing in rings and circles, with sometimes a larger ring on the outside of a smaller one. In the center would be a bare spot where an old tree had once stood, but had long since passed out of existence. These are called snow mats and occur only among the firs since they are the only conifers that take root when the heavy snows bear the lower branches to the ground where they can take root and become trees.

Throughout the West there are many fossil forests of trees that have been definitely determined as redwoods. In Arizona there is a magnificent display of prostrate logs of petrified trees of the redwood type. In the Yellowstone National Park several forests of petrified trees have been noted one above the other as mute evidence of the tremendous span of time since the formation of the first forest. Some of these are several feet in diameter and are standing erect, just as they were buried by the ashes and cinders from the volcanoes of millions of years ago. Many will ask why these were not burned by the ashes and cinders. The truth of the matter is these ashes were thrown so high above the mouth of the volcano that they had time to cool off before they again struck the earth.

What about the size of the present-day sequoia? The General Sherman tree in Sequoia National Park has a base of 37 feet, 3 inches.

(Continued on Page 120)

GARDEN CLUB GLEANINGS

By
Juanita E. Jorgensen



Mrs. Jorgensen

State Federation Formed

The amazing thing about these garden clubs is not what they do, but that they accomplish results with so much ease and dispatch once they get started.

We have been editing this page exactly one year, hesitantly and hopefully inviting garden clubs to greater unity and co-operation with the State Horticultural Society, with negligible results. For several years, too, Mrs. Ernest Michels, prominent club leader of Vermillion, has dreamed of a state federation of garden clubs; and has corresponded with club officials and horticulturally minded individuals over the state to this effect.

But when H. J. Donaldson, president of the Sioux Falls Garden Club, reared into action things began to hum. At a preliminary meeting his dynamic personality captivated delegates from eight garden clubs and captured their unanimous approval to form a federation. It took this fluent-speaking champion of garden clubs just fifteen minutes to present the new concept of a united garden club front to the Horticultural Society meeting this year, and it was all over but the shouting a few minutes after he left the floor.

The South Dakota State Federation of Garden Clubs affiliated with the State Horticultural Society is now a fact. The victory was complete; the capitulation to every demand of the clubs was absolute. We had made history; and the ease and speed with which it had been accomplished left one wondering why some groups hesitate to take needed action in forming a little garden club.

Following approval by the Horticultural Society, representatives from the clubs present, the Sioux Falls Garden Club, South Sioux Falls, the Wednesday Afternoon, Brookings, Centerville, Vermillion, Clark and Dell Rapids, met and elected Mrs. Ernest Michels first president of the State Federation of Garden Clubs. Elton Shanck, former president of the Brookings Garden Club, was elected vice president, and Mrs. Geo. M. Jorgensen, Dell Rapids, secretary.

Mrs. Michels is sincere and earnest in her desire to make a success of this organization, and already has many ideas which she will present to the clubs on this page each month, the first of

which follows. May I introduce our first president, Mrs. Michels:

The President Speaks

It was a rare privilege to have been a member of the group of garden lovers who gathered at the Park Pavilion in beautiful Dell Rapids on August 23d, to discuss the feasibility of organizing the South Dakota State Federation of Garden Clubs.

This meeting was arranged through the combined efforts of Mr. H. J. Donaldson and Mrs. George M. Jorgensen and several others. A constitution was drawn and adopted; officers were elected. The delegates from the Garden Clubs pledged their united efforts "to co-ordinate the interests of the Garden Clubs of the state; to encourage the extension of gardening interests, civic plantings and beautification; to further the preservation of the natural beauty of the state, its wild flowers, trees and wild life; and to foster greater love of the fine art of gardening." These are our objects.

The South Dakota State Horticultural Society has granted us the opportunity to vote at their annual meeting. Our affiliation with them entitles us to receive their splendid magazine, which has finer reading and more practical gardening advice than many magazines three times its size, and other periodicals may be purchased at reduced rates.

Help with our programs, year books, club papers, flower shows and committee work will be furnished upon request by Mrs. Jorgensen, our secretary, whose enthusiasm, efficiency and knowledge is of inestimable value in our coordinated service.

Individually we shall benefit from our association and acquaintance with other garden club groups. Because the garden club affects the home so vitally and makes for the health and happiness of the family, it finds favor with men as well as with women. Thus through organization and concerted effort, we have pledged ourselves to civic pride and an unselfish loyalty to the conservation of the beauty of the land on which we live.

I was chosen as your first president. Words cannot express my gratitude and thanks for this honor and privilege. So seriously do I take my assignment that I am asking help from all of you. I shall need your suggestions. Only through the guidance of our members may your officers keep interest on the increase, for no matter how wisely plans are made, it will take the united efforts of all of us to keep them enlarged and perfected, to see them through to accomplishment. Let us



keep in mind the little verse from Untermeyer:

"From compromise and things half done,
Keep me, with stern and stubborn pride,
And when, at last, the fight is won,
God, keep me still unsatisfied."

On behalf of the members of the new organization, I wish to thank the South Dakota State Horticultural Society for the privilege of meeting with them, for their guidance, understanding and approval. In time, we shall have many memories, happy memories of lessons learned, of work accomplished, of friendships formed, which will go with us through the years.

—Mrs. E. T. Michels.

Now that the framework of this Federation has been set up we want more clubs all over the state, all clubs, clubs new and old, big and little, amateurs and specialists, to help build the structure solidly. This is the first real getting together into a body representing garden clubs in the state, and their needs will be given all possible study. Enthusiasm ran high among the delegates present at the Federation meeting, and other clubs which were not represented will want to get in on the ground floor of this thing. All you need do is to contact this office and we will send you a copy of the Constitution, and any other information desired. If your club is unorganized, we will help make you a going concern; and if you have never had a club at all, we will back you up in forming a live group in your community. This office acts as a storehouse for your records, and as a library from which you may seek information and helps. Use it as such.

Sioux Falls Garden Club was first under the wire in signing the Constitution; and just this minute, the postman arrived with the newly signed papers which make the Iroquois Garden Club a bona fide member of the South Dakota State Federation of Garden Clubs. Thank you, Iroquois! Who's next? Step in line, but don't crowd!

Sioux Falls Garden Club rates the four-star award this past year as the state's most outstanding gardening group.

Under H. J. Donaldson's leadership, the club began the Sceney Island Park restoration project at Sioux Falls, planting trees, shrubs, and wild flowers to re-beautify the site and reclaim it from the wilderness into which it had grown.

Then in August they conceived the idea of preserving the original Statue of Liberty model for Sioux Falls and South Dakota. Through Mr. Ellefson, far seeing superintendent of McKennan Park, arrangements were made for its purchase and placement in a prominent position in the park. Funds were solicited through the local pa-

per—and no sooner said than done. In fact, I had a dollar all ready to help, but it was all over and paid for before I got around to send my contribution.

To cap the climax, the club has had the honor of having their president, this same "Crusading Herb" Donaldson, elected to the president of the State Horticultural Society at the annual meeting in August. We had hoped to have him lead the newly formed Federation, but with such high honors in store for him, meekly let him go.

First Reports

With the ink scarcely dry on their Constitution, the Iroquois Club, through its secretary, Mrs. H. D. Harrington, sends me their first report. She says, "We haven't anything in particular to report," but goes on to tell about a paper given at their last meeting on the biography of Dr. N. E. Hansen. Does anyone think that isn't interesting or important? Dr. Hansen is South Dakota's Grand Old Man of Horticulture, nationally known and recognized, emissary to Russia from our United States Department of Agriculture; and several magazines with international circulation such as Country Gentleman, have featured his life and works. Every club will do well to familiarize themselves with his biography as Iroquois has done.

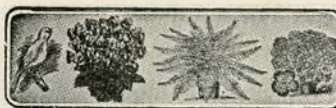
Victory Garden Harvest Shows

South Sioux Falls, Dell Rapids and Brookings held their Victory Harvest Shows the fore part of September, with Dell Rapids reporting a profit of forty dollars. This will be contributed to the Red Cross during their coming drive, according to Mrs. F. Briley, president of the club. May we have other reports?

Yucca Year Book

Never have I seen a more complete year book than that of the Beach, N. D., Garden Study Club, with its lovely Yucca cover design. It has fine workmanship, artistic beauty, verses appropriate to the month and the club, an inspiring garden creed, detailed study programs with an exhibit each month, and a list of practical aims to accomplish for the year. But what struck my eye the most was a provision for Nature Lore each month besides the regular program topic and a complete list of sources of information for Nature Lore in the back of the booklet. Most of the topics were taken from National Geographic magazines, and the nature title, the magazine, month and year when the article was printed are given in the appendix.

Foxtail says: This world is full of funny people, but none of 'em half so funny as them that can't find nothing to laugh at.—Prairie Farmer.



NEW HAMPSHIRE EXPERIMENTS, 1943

By
Dr. A. F. Yeager



Dr. A. F. Yeager

There are, perhaps, some who wonder whether there is a place for Agricultural Experiment Stations during war time. Two examples will, perhaps, serve to prove their importance. Within a few days after Pearl Harbor the University of New Hampshire had a trans-Pacific airmail request from Hawaii asking for tomato seeds of our extremely early varieties to be tried out there, hoping that these might make it possible for them to raise tomatoes. One of our former New Hampshire staff members, now in Northern Africa, wrote that he had visited a French Experiment Station there and that they wanted seed of the new varieties to test out in that section. Thus we see that even in battle areas experiment stations are operating and are serving a useful purpose. I have just been visiting an important blueberry section in the mountains of New Hampshire, and seen there the development of a modern industry, from a sideline crop. These berries are of the lowbush species and must not be confused with highbush which are sometimes cultivated. When one sees \$300 worth of blueberries per acre being harvested in half a day, from land which a few years ago was poor grade cow pasture, one cannot help but be impressed by the possibilities, especially when the cost of such a change is almost nothing. One of our projects is a study of the possibility of maintaining present blueberry pastures and re-establishing blueberries on abandoned cultivated fields. We are working on methods of planting, the rate of spread from such plants once they are established, the control of insects and diseases and the possible use of fertilizers or chemical agents in the rejuvenation or re-establishment process. Berries from selected plants are being tested in the chemical laboratory for vitamins, so that in case propagation proves practical some of those selections which are high in food value may be chosen. High quality productive strawberries which mature later than the present varieties is the objective of a considerable strawberry breeding project at New Hampshire. Such varieties would not only put berries on the market later, when prices are high, but the consumer would have strawberries on his table over a longer period. This year, from four thousand bearing seedlings, one hundred and sev-

enty were selected for continued tests. This particular project is under the leadership of Dr. Latimer. Incidentally, modern methods of strawberry breeding so greatly increases the speed of the operation that we now do in two years what once required five.

We have a fine crop on the new shell beans Brilliant and Flash, which were introduced this year. Our entomologists are using the seed field as a place to try out new chemicals which may replace the scare rotenone for killing bean beetles. Some look very good. Of course the largest operation on the Horticultural Farm is the apple orchard. Tests are being conducted with Fermate, a new chemical, for the control of apple diseases and with phenothozine, a material non-poisonous to man, for the control of the railroad worm or apple maggot.

Cultural experiments with apples include a pruning test where the ordinary type of pruning is being compared to thin wood pruning. The results of this test will undoubtedly influence recommendations put out in the future on how to prune your apples. Mulched trees are visibly better than unmulched.

Last year we sprayed all around the edge of the orchard, with ammonium sulfamate for poison ivy. The ivy is now practically all dead. We will go over it again this year to catch the few weak shoots remaining. This has saved twenty-five dollars this year for ivy vaccinations.

Three years ago we asked for the best butter-nuts in New Hampshire. The many samples received were cracked and examined for quality. Seeds of the very choicest were planted in 1941. The trees are now eight feet high and we hope may bear a few nuts next season.

Among the raspberry varieties Taylor shows the most promise, considering productiveness and quality of the fruit.

A squash storage experiment has been going on for a year. This project is typical of the attack being made on some of our problems nowadays. It is not handled as a one man job or even by one department, but by a committee from the departments of Horticulture, Plant Pathology, Entomology, Home Economics and Agricultural Chemistry all working together to determine how best to keep squashes and what effect the various kinds of storage has on the quality and food value of squash.

Here are some of the things learned last year. First, the common practice of piling squash in the field, and allowing them to cure a couple of weeks beneath the vines before storing, is bad. It increases the amount of disease and materially

(Continued on Page 118)



PRESIDENT'S CORNER

By
H. J. Donaldson



H. J. Donaldson

Well, folks, the President is talking and since he cannot speak to you, all in one room, he is going to use the spece generously provided by the editor. Was looking over the roster a few days ago and came to the conclusion that many of you are keeping the Horticultural Society too much to yourselves. A very few of you use the library. Some of you save the price of your dues by ordering your magazine thru the Secretary. Many of you send for the premiums. All of you receive the year book and magazine, and I hope you digest them. All of you are interested in your association with the Horticultural Society and, with other members, or you would not continue digging up that dollar every year. Now, how about giving several thousand other horticulturally minded people in this state the benefit of the doubt and saying that they too would be interested, if they knew about it. Then the problem comes up, how are we going to inform them? Obviously we can't reach everybody. I have attended various types of meetings with F. X. Wallner and seldom does a meeting pass that he doesn't bring up some influence of benefit, from being a member of the Horticultural Society. I've heard him deliberately, tell his customers of some of the things the organization stands for and does. The Society is ever in his thoughts and he constantly works to get new members. If every person who is now a member will discuss the influence of the Horticultural Society with his friends, acquaintances and neighbors, even his enemies, they won't be for long, we can make this organization one of the leading horticultural elements of the state. We have recently broadened our sphere to include the members of garden clubs. We can spread the message of horticulture further yet, if each of you talk it up, wherever you are and wherever you go. Are you game? To make this a little more interesting I am going to challenge every member, whose name appeared in the 1943 annual report, to a race to see who can send in the largest number of new annual members between the last day of the 1943 convention and 10 a. m. of the first day of the 1944 meeting. Each life member will count as 10 annual members, renewals do not count. Mr. Simmons will be the umpire. To put a little spice into this

race, there is on deposit with the Treasurer \$5, \$3 and \$2, which will be given to the three persons turning in the highest number of new members, in that order, on the first day of the 1944 annual meeting. I'll keep you posted in this column, on who is making the best showing and on who is being the deep, silent type. I would like to start a new department in this magazine, "Unusual Horticulture in South Dakota," but the powers that be, claim that I would not get enough response, so I'm going to make that part of this column. I've got a green, warty Hubbard squash vine which is 49 feet long and still going strong. The squashes are not worn out from dragging on the ground, either; can anyone beat that? I've got a few other things, too. Send your letters to me at R. F. D. No. 3, Sioux Falls and I'll tell everybody about some of the things of unusual interest we have in this state. This is not a liars club.

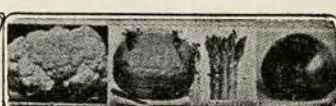
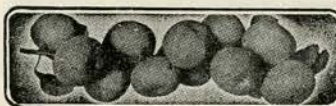
(Continued from Page 117)

shortens the storage period. Dryness is more important in the storage itself than any other one single thing. Squash can be kept in a room at ordinary house temperature if it is kept dry. It will keep better, however, if it is kept cooler, in dry air, and the quality is better. Keeping the air dry, which is the first essential, is more difficult at lower temperatures. Over-ripe squash do not keep quite as well as those just well matured. On the other hand while green squashes may keep fairly well they have poor quality. Medium or small squash if well matured store better than the large ones. As for varieties Butternut, a comparatively new variety, keeps pretty well up until about Christmas time. Buttercup or Hubbard will keep later.

Spangcross and Seneca 60 were the earliest sweet corn varieties this season. The first produces larger ears, the second is perhaps a bit sweeter.

Among the edible soy beans, Agate is full of pods; Bansai, Funk's Delicious, and Mendota have none; New Hampshire Hybrid Eggplant still holds its place as the earliest. Two new bush string beans, one green, one wax, from Maine Experiment Station look unusually good. Early Chatham is our earliest good tomato and is ripening well from seed sown in May.

Witch grass in well cared for gardens is now greatly weakened. It can be cleared out for good if you will dig out the plants with a fork and shake out the dirt when you harvest the potatoes or clean up the area after other crops. If left alone each plant will become a patch before spring.



FRUIT AND VEGETABLE NOTES

By
F. X. Wallner



Iowa will harvest 194,000 bushels of sweet potatoes this fall, 4,000 more than last year. The Iowa growers will harvest 5,700,000 bushels of potatoes, 1,100,000 less than last year, and the apple growers will harvest only 52,000 bushels, compared to 302,000 bushels last year. There will be only 3,000 tons of grapes, while last year there were 3,200 tons. Today we had four new soldiers helping in the garden; two were picking up potatoes and two came down to help me gather onions, but I happened to be still gathering grapes and one of the boys came up, asking if that was the way I gathered onions. When we got to the onion patch and they had to crawl along and gather the onions on their knees, in the weeds, they soon left, saying they had not breakfasted yet. Sept. 10th. Yesterday a friend gardener marketed at Sioux City, 100 bushels of selected tomatoes and received \$325 for the load, surely an unheard of price for tomatoes in September. For the last week we have not picked any, on account of labor shortage, but the four patches were stripped of ripe tomatoes by people anxious to put them up and they only cost them \$1.25 per bushel and most of them had a 60-pound bushel. A patch of late beans was also picked by people that had not canned any earlier in the season; a few drove away without paying for the produce. More than half of our onions are gathered and most of them are in storage, and most all of them are of good keeping quality, so I do not look for the losses we have had in past seasons. Maine will harvest about 60 million bushels of potatoes, about 15 million over 1942 crop. Sec. Fitch and Sam Kennedy of Iowa, say to sell your potatoes to Uncle Sam if you can sell no better elsewhere. Eastern Iowa growers will get \$1.75 for 85% No. 1 during September, and October, \$1.65 for 80% No. 1. If this surplus potato crop could be given to the starving people of the world without cost of transportation, Uncle Sam would not have to dump them. Sept. 18th. We began topping the last patch of onions; these are for storage and not to be sold until April, but usually we are sold out and these go on the market before that, but I want to keep them for April or May market.

BUY WAR BONDS AND STAMPS.

(Continued from Page 113)

ple, each individual $1\frac{1}{2}$ inches in diameter—an annual everyone should have. Just received report of our 60th annual meeting at Dell Rapids, S. D.; to a resident member in the hinterland of N. Dakota it is all most informative, stimulating and encouraging and let me say that I heartily endorse every word of Gov. Sharpe's Memorial day address. It seems invidious to select any one item from such a splendid total. I do so only by reason of special personal appeal. Leslie's "Gardens in Winter" should be memorized by those whom fate has placed on a prairie farm showing how winter dreariness can be transformed into real beauty. Oh yes, and under fruits approved only for favorable locations, Oscar Will's Scugog crab shows more vigorous growth than any other spring planting with heavily leaved shoots from 13 to 18 inches long all down main trunk, foliage at tip of each shoot is pink tinged. Under "Long Bloomers," Mrs. G. M. Jorgensen mentions a perennial sunflower, wonder whether this is H. multiflorus fl. pleno of Wayside's which I intend to grace my 1944 garden? I liked our President's address by G. W. Gurney, which gives us both dignity and encouragement, for our magazine has indeed a high cultural rating. We owe so much to our S. D. contributors' knowledge, nourished by missionary enthusiasm, a needed stimulant when one sees neglected opportunities by those who, having every facility for home beautifying take not the slightest interest in such, but it is encouraging that of late many individuals after being introduced to a copy of HORTICULTURE promptly, of their own volition, become members and so we recall those lines quoted, I think by Churchill, during the Battle of Britain when one's own country was doing all it could as a neutral to help stem the forces of evil:

For tho' the tired waves vainly breaking,
Seem here no painful inch the gain,
Far back thru creek and inlet making,
Comes silently flooding in, the main.

(Continued from Page 110)

eggs resemble those of the chestnut-collared longspur. They are about three-fourths of an inch long, light clay color with indistinct brown markings.

This species, like other sparrows, feeds largely upon seeds during the winter, more upon insects in summer. Specimens from Illinois had eaten chiefly grass seeds and beetles.

Foxtail says: I' sure glad the bakers is slicin' our bread again. My wife was getting so handy with a knife that I didn't feel no safer in the house than a sandwich loaf.—Prairie Farmer.



SECRETARY'S CORNER

By

W. A. Simmons



Lost, one perfectly good writer! No doubt our readers have missed the bright articles that Mr. H. E. Beebe wrote for us and have wondered where he is. While no word has come to me, directly from him, his office secretary at Ipswich writes that he is in California and is employed in the Lockheed plant, in weight analysis Dept. of P-38s. Mr. Elford, of Roscoe, writes that Mrs. Beebe is leaving to join her husband on the 23rd of Sept., so it looks as though we have lost them, for some time, anyway. Mr. Elford also writes that their first frost, on the 10th of Sept., killed most of the things in the garden. This has been a very cold September, so far; the Minneapolis Journal says: "Only nine Septembers in the last 52 years (as far as records go) had average temperature as low as 59.1, the average for September so far this year. And that's only for the first half of the month which, in September, is usually the warmer half." Our old friend, Mr. A. L. Ford, writes: "After living in Brookings for 24 years, we now live in Huron. Naturally I didn't like to move, but I find South Dakotans are much alike, wherever you go; there are a lot of good folks here in Huron, the same as in Brookings. The war has made Huron the gardeniest town I ever saw. It's my guess this war is going to put people, high and low alike, back into the home gardening business, in many cases for keeps. That, in my opinion, constitutes one good thing as the result of this cock-eyed war." In sending in his dues for the coming year plus an extra dollar for a new member he secured for us, Rev. E. L. Jackson, of Moberge, tells of moving enough iris from his former home in Mitchell, to make 11 ninety-foot rows, as well as a barrel full that he sent to Dr. G. F. Will, of Bismarck. He also moved 35 peony clumps and many day lilies. He was fortunate in inheriting a fine patch of tomatoes, which he has covered, to thwart Jack Frost. He added that South Dakota wouldn't seem just the same with the Beebes gone from Ipswich.

(Continued from Page 111)

everything goes out, is a good time to start over, in my opinion since several good years are bound to follow."

Last year the south wall of our garage was

almost entirely covered by Virginia Creeper. Tendrils of this vine persisted in getting under the shingles and one of them even thrust its way through reasonably tight siding. This spring all the vines were removed and dug up as far as possible, and Scarlet Runner beans inter-planted with three morning glories—Pearly Gates, Heavenly Blue and Scarlet O'Hara—planted instead. For some weeks now, we have been greeted each morning with a beautiful and colorful sight from our kitchen window since all of these plants have grown and flowered abundantly with the exception of Scarlet O'Hara. In addition, the Scarlet Runner beans have borne a good crop of beans, which upon cooking we found delicious. Even though some of these beans appeared rather mature in the raw state, they cooked into a tender, tasty dish. We are glad to find another good use for this ornamental flower.

(Continued from Page 114)

Boole in Converse Basin has a base diameter of 35 feet, and the height of the largest branch is 130 feet above the ground. The bark on one of these trees may be from one to two feet thick, and the resistance of the tree to various adverse conditions including fire is remarkable.

The PIONEER SEED HOUSE

NURSERY-GREENHOUSES OF THE
NORTHWEST

Founded at Bismarck, in Dakota Territory,
in 1882

Specialists in Garden Seeds, Trees, Shrubs,
WILL'S Fruits and Flowers, adapted in
SEEDS Hardiness, Vigor and Drouth Re-
GROW sistance to Dakota conditions.

FREE CATALOG

Ready January 1st of Each Year

OSCAR H. WILL & CO.
BISMARCK, N. D.