

NORTH AND SOUTH DAKOTA HORTICULTURE

JANUARY, 1951

THIS BOOK DOES
NOT CIRCULATE



Dr. J. H. Schultz, Chairman of the Dept. of Horticulture, N. D. A. C., and his class in fruit growing, visiting the orchard of R. L. Wodarz, of Wyndmere. For details of names see page 12.

GOLDFINCH NESTING

By

O. A. Stevens



O. A. Stevens

The goldfinch was discussed in the September, 1934 number. A recent study at Madison, Wisconsin by Allen W. Stokes (Wilson Bulletin 62: 107-127) seems worth reviewing to summarize the nesting habits. The area on which this study was made consisted of 16 acres of marsh without trees and an adjoining 8 acres of park on higher ground.

In three years 150 pairs of birds were studied. They laid 696 eggs which produced 338 young, not quite a 50 per cent success. Slightly less than two-thirds of the eggs hatched. The only mortality of young which could be determined was from weather.

Goldfinch habits have been intriguing because the birds are often seen in winter as far north as southern Minnesota and yet are late about migrating and nesting. Mr. Stokes believes that the late nesting is determined by the food supply. The nestlings are fed exclusively on seeds but these are somewhat digested at first by the parent. Canada thistle is the most important food plant and the birds delay nesting until it blooms so there will be a supply of seeds for the young. Before this plant was introduced into America they presumably depended upon the less abundant native thistles. Alexander Wilson wrote: "The seeds of the lettuce, thistle, hemp, etc., are their favorite food."

Nest building at Madison began about July 1 and reached its peak in two or three weeks. Occasional nests with eggs are found as late as the end of September. Mr. Stokes concluded that if a female succeeded in completing an early brood by August 20 she would start a second nest. In one year he found 6 out of 30 banded females raising a second brood. If the first one were delayed there would not be time for a second.

Trees were little used for nesting

places. More than two-thirds of all the nests studied were located in elderberry bushes. Dogwood ran a poor second and box elder, thistle and sunflower were the only other plants which were used frequently. This was partly due to an abundance of elderberry but elm, willow and poplar trees in the area were not used. Nests in territory nearby (where elder was not present) were found in dogwood or saplings of willow and poplar, occasionally in other trees and shrubs. Late in the season coarse weeds were more popular. Two interesting items are the following. The weight of the berries causes the elders to droop and displace the nest. Locations in coarse weeds were usually where insect injury had caused the growth of several short branches.

Fibers from old stems of swamp milkweed were popular for nest lining. Sometimes belated birds borrowed material from old nests or even from neighbors' nests. Early birds spent nearly two weeks in nest building while late in the season less than one week was sufficient. July nests averaged 5.3 eggs each but August ones only 3.7. This decrease was presumed to be the result of repeated attempts at nesting.

Considerable of the paper is concerned with courtship, establishment and defense of territory. Other authors had disagreed about conflict between pairs. Stokes found them fairly active in chasing intruding goldfinches up to 30 yards. He tested them with a stuffed bird and found that they usually flew at it the females more violently than the males, if it were close by. If he left the dummy in position they soon deserted it.

It was a long, lazy afternoon and two Indians, one on each side of a wide valley, had struck up a conversation, using smoke signals. This went on for quite a while till one of the Indians, growing bored with the whole thing, dozed off to sleep. An atomic explosion out in the middle of the valley awakened him with a start. Gazing awestruck at the huge mushroom of smoke rising into the air, the Indian shook his head and murmured, "I wish I had said that." —Banning Live Wire, quoted in Desert Rat Scrap Book.

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South Dakota ♦ HORTICULTURE

NEWSLANTS

By
Harry A. Graves



H. A. Graves

One could glean plenty material for a column from the babel and gab one hears as he rides a bus to and from work. My bus ride (when my Ford won't start) is two miles each way. So far, the rapid transit authorities have agreed that MacArthur is usually right. The poll is about 60-40 that he should not have dashed up to the Yalu river—but probably the planners of master strategy have something in mind that the man on the street—or the man on the bus, for that matter—hasn't foreseen. . . . Eisenhower is a smart operator—if they would only give him a free hand . . . Acheson should resign (39 opinions) . . . that opposition to him is Bull Moose Republican and unimportant (36 opinions). One also can simmer down that what some of the slightly post-bobby soxers would like in their dream man is some sort of an impossible combination having the dash and romance of Errol Flynn on a yacht cruise and all the virtue and high ideals of Sir Galahad. . . . If the cold weather of the holiday season prevails much longer, I will have some more copy later.

Just this morning a letter arrived from past President R. W. Smith. It is too interesting for me to condense so I shall include certain paragraphs intact:

"There is much of horticultural interest here, such a wealth of strange flowers, fruits, shrubs and trees. One has to begin all over the process of learning the names, uses and how to care for them. The horticulturist in the Dakotas has some advantage, however, over those in California. He doesn't have to spray for harmful insects or diseases or pull weeds during about half of the year, while here the pests are apparently active all the year. It is nice to see flowers all around at this time of year. We still have a few raspberries and strawberries on our vines also one orange and about 20 lemons on our

two year old trees.

About half of our one-third acre lot is on a terraced hillside where the soil contains many small round rocks or stones that were once rolling around under water. The soil is said to be fine for citrus trees and avocados. I am digging holes for setting about a dozen fruit trees and find that the practice in digging glacial rock on the North Dakota home-stead comes in handy now.

In traveling about one is impressed with the need of information on landscaping the home. An increasing number of homes are well landscaped but one still sees where the wrong placing of shrubs and trees mars the beauty of many a home.

LaMesa is a growing city of about 12,000 just east of San Diego. It is located in the foothills between the coast and the Coast Range of mountains. We have a beautiful view across the valley of the hills and low mountains in the distance."

Our new garden variety leaflet for 1951 will be off the press early in January. It will be completely revised and brought up to date. Recommendations are based on the extensive trials carried on by the North Dakota Agricultural Experiment Station, observations in the 60 demonstration gardens planted in 1950 and reports of cooperating home gardeners. Drop us a card if you would like a copy or stop in at any County Agent's office in North Dakota.

J. D. Winter and Ted Weir of the Department of Horticulture, University of Minnesota, have stimulated interest in rodent control on fruit trees by their report on the successful use of aluminum foil to wrap the trunks and lower branches of young trees. After two years the foil had successfully repelled rabbits and mice and was intact in spite of extremely high winds. Now, to complicate the picture—foil has become a scarce article. Long, narrow strips crimped about the trunk is recommended over a spiral wrap.

Dr. Schultz is well along on a most worth while project. It is his intent to maintain at the North Dakota Agricultural College foundation lines of seed propagated horticultural crops such as Buttercup squash, various tomato varieties, etc., which originated here.

Through the cooperation of Presi-

dent Wodarz of the Horticultural Society, Dr. Schultz was able to secure some creditably pure lines of Buttercup. These have been re-selected here until it is now believed that quality and type of the original Buttercup has been recaptured. Some further selection will be made for size—or more correctly sizes—since there seems to be some demand for an even smaller squash than the original Buttercup which weighed three to four pounds.

Seed of these purified lines will be made available to seedsmen for increase and resale to the retail trade.

A service of this kind by stations originating new varieties was one of my suggestions to the Minnesota Horticultural Society at their annual meeting in Hibbing, in October, 1948.

From Secretary Bill Collins' News Report for December we have lifted the following interesting information on Christmas trees.

"Your Christmas tree was just one of 26 or 27 million trees harvested annually. Interesting figures about this 50 million dollar business are discussed in the December, 1950 issue of American Forests. The harvest is itself a thinning operation which permits proper development of the remaining trees. Half of the harvest is from farms specializing in the growing of Christmas trees and nine-tenths are from private timberland. About 5 million of the total are shipped in from Canada. The popularity of the different evergreens based on the number of each kind sold, runs about like this:

1st—Balsam Fir—(*Abies balsamea*) (6½ million).

2nd—Douglas Fir — (*Pseudotsuga taxifolia*) (a close second).

3rd—Black Spruce—(*Picea mariana*).

4th—Red Cedar—(*Juniperus virginiana*).

5th—White Spruce—(*Picea canadensis*).

P. S. A USDA Daily Release dated December 5, 1950, estimates that "28½ million Christmas trees will be marketed this season."

Also this big apple story from page 2. "Big One-Tree Yield, Yakima, Wash. Nov. 24. The apple crop here was far larger than anticipated, as V. W. Compton, Yakima district grower, will testify. He had 94 boxes

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MANITOBA NEWS LETTER

By
W. R. Leslie



W. R. Leslie

Doctor N. E. Hansen departed this life on his beloved prairies the first week of October. Born at Ribe, Denmark, in January, 1866, he came to New England States in 1873 and moved to Iowa in 1876. Thus for 74 of his 84 2/3 years the renowned Scandinavian dwelt busily on the Great Plains. He was a remarkable citizen and his good works benefit everybody in North America as his plant hybrids are grown far and wide on this continent. They are used also across northern Europe and Siberia.

These notes take form to record some of the triumphs of the esteemed bold plant breeder. He was a philosopher, poet, artist and linguist. His robust constitution stood him in good stead during his eight international plant hunting trips. Gifted with a keen imagination, a rich humor, and a resolute bold attack he was destined to perform many distinctive accomplishments.

In 1941 a book was written by Mrs. H. J. Taylor on the life and work of Niels Ebbeson Hansen "To Plant the Prairies and the Plains." Some quotations are:

"All Nature intrigued him."

"Hansen had a greed for learning and succeeded in all he undertook."

"Hansen was always geared to action; seemingly he never tires."

"Professor Hansen is very human—no man ever lived more unselfishly to benefit mankind than has he."

"His talk is seasoned with rare humor."

"Hansen always worked with Nature."

"Plums are the best known and widely distributed of all fruits hybridized by Hansen."

"Professor Hansen's life has been a great adventure. Not only in America but the whole world has been benefited and enriched through the life of America's first Agricultural Explorer and plant breeder for

the prairies and the plains."

The following statements are Dr. Hansen's:

"Budd was truly the Columbus of the uncharted seas of western horticulture."

"Self-complacency is not the road to progress."

"The Hansen bushcherries are the result of 42 years of untiring selection work."

He strongly urged the use of very large numbers of seedlings in effort to attain improved varieties, pointing out that there had been very many Englishmen before a Shakespeare came to being.

1883—Was a freshman at Iowa State College, Ames. Here he had as teachers two renowned scientists, Dr. Charles E. Bessey in botany and Prof. J. L. Budd in Horticulture. The latter had gone to Russia for fruit stock in 1882.

1887—Won his B.S. degree. Worked for Silas Wilson Company, a large grape nursery. 1888-1891, worked with the Watrous Nursery Co., Des Moines. Here he started to hybridize the native prairie crabapple. In 1891 became Prof. Budd's first assistant and remained for four years, being awarded his Master's degree in 1895. His thesis was "A Study of Apples."

1895—Went to South Dakota State College, Brookings, as Professor of Horticulture.

1898—Married Miss Emma E. Pammel, B.Sc.

1894—Made his first of a number of European plant-hunting trips, with 4 months leave from Ames.

1897—Was Plant Explorer for the United States Department of Agriculture. He was to search the Old World for plants, especially fodder plants that would benefit people living in the colder and drier regions of the United States. In the 10 months he covered Turkestan, China and Siberia. Among his prize plants were Turkestan alfalfa, Crested wheat grass, Persian melons and Chee grass for the dust bowl.

1906—Again for the U. S. D. A. In 6 months he circled the earth. At Irkutsk obtained yellow-flowered alfalfa, "the hardest alfalfa in the world," also Cossack alfalfa, Medicago media.

1908-09—Made third trip for the U. S. D. A. During 9 months he was

in North Africa, the Caucasus and Mediterranean.

1913—He was plant explorer for South Dakota for 3 months. He brought apricots, pears and apples from Manchuria.

1930—Went to Europe to attend the International Congress of Horticulture held in London.

1934—Accepted an invitation of the Soviet Union. "He was called by the Russian government, through the Lenin Academy of Agriculture to Russia for advice on the problems of re-creating agriculture in Soviet Russia." His visit of 4 months included Siberia. This was his eighth plant trip back to the Old World and his seventh for plant exploration.

1937—After 42 years as head of the Department of Horticulture at the South Dakota State College, Brookings, he became Professor Emeritus of Horticulture in charge of research experiments in breeding hardy fruits and roses.

1938—Went 540 miles north of the boundary line in Alberta to seek hardy rose stock. He had 16 acres for roses at Sioux Falls, and 35 acres for sandcherries at Watertown, South Dakota.

1935—Received at the Experimental Station, Morden, the Manitoba Horticultural Association's award of the A. P. Stevenson Gold Medal for meritorious contribution in plant improvement for the Northern Great Plains.

Among other recognitions have been 1917 honorary degree of Doctor of Science, 1917 George Robert Gold Medal from Massachusetts Horticultural Society; 1929, Marshall P. Wilder Silver Medal from the American Pomological Society.

Dr. Hansen was the first president of the Great Plains Group, American Society for Horticultural Science formed in 1918 and he served a second term 20 years later in 1938.

His plant output was prolific. Here are mentioned only a few of those which have made most obvious impress on Canadian prairie horticulture:

Plums—Pembina 1917, Manitoba wild plum x Red June—early large attractive hardy dessert plum. Ojibwa 1917, Shiro x Manitoba wild plum—hardy productive canner. Kaga 1909, Native x Apricot plum of

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BREEDING HARDY ROSES

By

F. L. Skinner, M.B.E., L.L.D.
Dropmore, Manitoba, Can.



One of the biggest problems that faces the breeder of hardy roses for the Great Plains area is the fact that a large percentage of hybrids between garden roses and the hardy species have proved more or less sterile and as the wild species

is usually the dominant parent very few of the first hybrids come up to their raiser's ideal of a good garden rose.

When therefore one comes across a wild species that will interbreed with a wide range of garden roses and give a fair percentage of hardy hybrids that are not only fertile but will also mate with a wide range of garden rose types, I feel that it is a matter of considerable importance to the breeder of hardy garden roses.

From the work I have already done with the true *Rosa laxa* I believe I have found just such a species; the first hybrids of *Rosa laxa* raised at Dropmore, though they produced seed freely if left alone, refused to set seed to the pollen of the garden roses which I used on them; however, their pollen was effective on some other roses on which I used it and some of the resulting seedlings flowered during the past summer. Five of these were selected for further experimental work, one fully double, three semi-double and one single, all flowering throughout most of the summer. Pollen of a wide range of garden roses was used on them; the fully double form set no seed at all, two of the semi-double forms set seed on some of the flowers that had not been emasculated and the remaining semi-double and the single form set seed to practically the whole range of pollen I used on them. The pollen used came from a wide range of roses, including Patricia Macoun (seedling of *Rosa Helenae*) a dwarf white polyantha, and an unnamed very double white rugosa hybrid. Seed was also set to the pollen of a variety of *Rosa alba* that I secured from

Scotland as the result of my visit there in 1947. The previous winter had been very severe over in Britain and in the north of Scotland most of the Hybrid Tea Roses had been cut to the ground while this form of *Rosa alba* was growing to a height of six feet and alive to the tips. It is of much more slender growth than such other varieties of *Rosa alba* as Maiden's Blush or Celestial and by bending the branches down so that they were covered with snow all winter they have survived the past two winters without injury. The flowers are pure white, fully double, very fragrant and unlike Maiden's Blush, it sets seed quite freely.

I also got seed to set on these laxa hybrids, from the pollen of a hybrid of my own that was flowering for the first time. This had a hybrid perpetual as seed parent with a hybrid between *Rosa acicularis* and *R. hispida* as pollen parent. Its flowers were fully double of very good form and the white buds opened to a very pale blush pink. It continued to bloom from early July until October. *Rosa hispida*, by the way, is closely allied to *R. altaica* but the stems are clad with fine prickles instead of thorns.

Unfortunately, the unexpected August frosts caught most of my hybrid rose seeds in an immature state and I am afraid few of them were ripe enough to germinate; the fact remains, however, that these hybrids of *Rosa laxa* set seed to the pollen of a wide range of garden roses in 1950 and will most likely do so again.

While *Rosa laxa* (Retz.) and its hybrids have opened up a promising new field for the raising of good hardy roses in white and pale shades, I believe that the hardier forms of *Rosa gallica* are likely to play as large a part in the production of hardy Red roses for the Great Plains area as they have already done in the production of the Hybrid Perpetual and Hybrid Tea Roses.

I have had little success in raising good hardy red roses by mating the garden varieties directly with the hardy wild species, the first hybrids were usually of poor quality with a high incidence of sterility. However, I have succeeded in raising fertile hybrids between *Rosa rugosa* and both *R. blanda* and *R. acicularis* and both of these have given me seed-

lings to the pollen of *Rosa gallica grandiflora*; *Rosa gallica grandiflora* is hardy enough to flower annually without protection and the semi-double flowers are a bright red in color. The first of these seedlings to flower have never set seed but lately their pollen has proved viable. Last year, however, one *gallica grandiflora* hybrid, which is perfectly hardy, set an abundance of fruit and next summer I plan to use pollen of a wide range of red H. P., H. T. and polyantha roses on it.

During the past summer several hybrids have flowered that had this *gallica* strain in their pedigree and two of them had very fragrant full cabbage type of flowers of a good deep rose color, apparently they were fully hardy, at least to the snow line. Though they are summer flowering only, both their form and color is good. Moreover, these new roses give promise of being quite fertile and when mated with dark red H. T. and polyantha roses should give us red roses of as good form as the H. P. varieties that will bloom on new wood and be sufficiently hardy at the crown to stand our winters with only the natural snow covering.

NEWSLANTS

(Continued from Page 3)

of Jonathans off one tree. He wants to know if anyone can top that figure."

This morning's post has also brought word of a very high honor—in fact, two high honors being bestowed upon one of our members.

Adrian C. Fox, on the staff of the Soil Conservation Service in the Lincoln office has been awarded the 1949 Nebraska Conservation Trophy, donated by Dr. Herbert B. Kennedy of Omaha. He has also been given the Award of Merit by the National Association of Conservation Education and Publicity.

Adrian, formerly of Leeds, North Dakota, holds both Bachelor and Master of Science degrees from the North Dakota Agricultural College. He has been well known throughout the Northern Great Plains the past decade for his work and writing in the field of conservation. The North Dakota Horticultural Society congratulates Adrian Fox for his fine record upon which these awards were based.

PRESIDENT'S MESSAGE

By
Mrs. G. M. Jorgensen



Mrs. Jorgensen

This month we salute the Colome Federated Garden Club of Colome, a new member in our family of federated garden clubs and the second newcomer to bridge the gap between 35 clubs in 1950 and our goal of "51 in '51." Credit for the new club goes to Mrs. Frank McKenzie, membership chairman of district 12, where Winner was the only club in the district, and is itself one of the youngest clubs in the state. District 12 is also one of the least populous, and Mrs. McKenzie is the first of the appointed chairman to produce results. There are prospects in every district if you just get to work on them.

Biggest thrill of the month was the telegram from Mrs. A. W. Davidson, Garden Traditions chairman. "Traditions are on their airmail way. Relax. Me too." Reading the absorbing traditions of South Dakota gardening as portrayed by her pen, and knowing that our state will be represented in the historical book of gardening to be published by National Council of Garden Clubs, is the first recompense for this job as president. Many of these stories are being published monthly in the National Gardener, and it will be well worth the subscription price for each individual of every club to order the magazine if our stories appear there. The cost is \$1.00 per year, and the address is National Council of State Garden Clubs, Essex House, 160 Central Park South, New York 19, N. Y.

A letter from Mrs. F. S. Mattocks, vice president of National Council, says, "We have had a busy time since we were at Huron as we have attended four other conventions, which explains my delay in writing to thank the South Dakota Garden Clubs for their kind hospitality and many kindnesses while there. Please convey the thanks of myself and my husband to your organization." Whatever we did was all too little in

return for their presence.

This month also marks the first appearance of a series of personal messages from your state chairmen. These chairmen are the real leaders and workers in the various departments of your federation, and are there to help you. Write to them when a problem arises. A letter from Mrs. H. B. Crandall, Junior Gardens Chairman, carries with it such an inspirational program for work among the school age group that I want to quote from it for other clubs to adapt or adopt her ideas. "This week our Junior committee from the In and Outdoor Garden Circle attended the school principals' meeting to ask them to allow us time to get Junior garden programs to the upper four grades during school hours. We are going to show the Living Earth series of films to all schools in February. March will be seed planting study with each child receiving tomato seeds to plant at home; May, home gardens, and April will be identification program of shrubs and trees which might be planted at the Children's Home. We plan to make a city wide Arbor Day program of it for the schools, sponsored and arranged by the four clubs of the Sioux Council." You will have a message on this page from Mrs. Crandall in February or March.

The American Iris Society has made a change in policy which will interest all growers of fine iris, and be of benefit to all gardeners. It now makes its Silver and Bronze Medals for exhibitors of good iris available to winners in any show in the United States. Heretofore these medals were available only at iris shows sponsored by the Society. Because of the increased number of clubs expected to apply for the medals, and the resultant increase in the demand for judges, they are revising their list of accredited judges. At the request of Mrs. Fern Irving, the Society's Exhibit chairman, we want the names of the following South Dakota people who had finished the two courses in the Flower Show Schools and might be interested in becoming judges of the fine points of exhibition iris:

Mrs. D. S. Baughman, Mrs. Margaret Bjornsen, L. S. Bush, Mrs. H. B. Crandall, Mrs. Menholt Christensen, Mrs. Robert G. Ferris, Mrs.

Clarence Freed, Mrs. Anton Hyden, Donald E. Johnson, Mrs. Geo. Jorgensen, Mrs. Frances Nelson, Mrs. M. E. Schirmer, Mrs. Lewis Severance, Miss Laura E. Sexauer, Mrs. Lee Thompson and Mrs. Paul Weber. We hope many of them will take advantage of the opportunity to study about iris when they receive notice from the iris society.

Mrs. Irving is also president-elect of the Nebraska Federation of Garden Clubs for 1951. Congratulations. And for all our South Dakota gardeners we are wishing a green and good year of gardening for 1951. Happy New Year.

The board of directors of the Hemerocallis Society met in St. Louis on the 10th day of November. The following officers were elected to serve during 1951:

Mr. J. W. House, Little Rock, Arkansas, president.

Mr. F. E. Rice, Bartlesville, Oklahoma, first vice president.

Mr. Robert E. Allen, White Plains, N. Y., second vice president.

Mr. Robert Schreiner, Salem, Oregon, third vice president.

Mr. George E. Lenington, Kansas City, Mo., secretary.

Dr. Edwin C. Munson, Rock Island, Ill., treasurer.

Other members of the board are:

Mr. Elmer A. Claar, Chicago, Ill.

Dr. Philip G. Corliss, Somerton, Arizona.

Mr. Geddes Douglas, Nashville, Tenn.

Mrs. Charles F. Kindman, Avon Park, Florida.

Dr. J. B. S. Norton, Hyattsville, Maryland.

Mrs. Merrill Ross, Minburn, Iowa.

The 1951 annual meeting will be held June 8, 9 and 10 at Little Rock, Arkansas. Mr. and Mrs. Walter Vestal and Mr. and Mrs. J. W. House will be hosts.

Hesperus (H. P. Sass) has received the first Stout Award. This will be awarded annually to the variety receiving the highest recommendation from the Society's accredited judges. Painted Lady (Russell) received the highest vote for the Award of Merit; Georgia (Stout) for Honorable Mention; Painted Lady (Russell) for the Popularity Poll.

New kodachrome slide collections will be available after January 1st. These are designed for Garden Club

programs, etc., and contain many good garden shots. flower arrangements and closeups of many fine varieties, with notes on culture, garden value and descriptions. Rental price, \$2.50 plus mailing charges. Address Mrs. Leslie L. Conant, 533 Glen Park Drive, Bay Village, Ohio, Slide Custodian.

Letter from the Slides Custodian

By Mrs. A. R. Schamber. 38th and Sunset, Rapid City.

This is an appeal to every member of the South Dakota Federation of Garden Clubs. Will your club take part in the worth-while project of collecting slides?

During the 1950 annual S. D. F. of G. C. convention, Mrs. Jorgensen, as newly elected president, appointed me as Loan Library Slide Custodian. This is a new committee, so let's give it a good start.

I am asking all members to help gather slides pertaining to horticulture interests. These should be accompanied with a short paragraph about the slide to be used as "Legends for Lectures." You should get quite a thrill when the picture you submitted is shown at some future date (say ten or fifteen years from the time it was taken).

Up to date, Mr. Atkinson, past president, obtained slides from the Rapid City Camera Club and individual members to be donated to the Federation. One set is entitled "Flower Gardens and Wild Life" (about forty slides). Another is Black Hills Scenes (about forty slides).

Mrs. Jorgensen has donated slides of the 1950 convention. She has also sent me two slides of flowers to be used in our third set. If you know of someone who wishes to contribute slides to this cause, although not a

member, please accept them and send them to me. Remember, we must work individually and collectively to make this new department in our Federation a success.

Slides are to be 2x2 inch, to be shown in a slide projector. They are not movies. Write me enough in advance if you care to have any of the slides for your future programs.

MANITOBA NEWS LETTER

(Continued from Page 4)

China—roundish, fragrant, firm dessert and canning plum. Tecumseh 1918, Shiro x Surprise—early attractive general purpose variety. Waneta 1913, Apple plum x Terry—a 2-inch dessert plum. Tokata 1912, Apricot plum of China x DeSoto—a fragrant general purpose plum.

Cherry-Plums—Sapa 1907, Bessey cherry (or western sand cherry) x Sultan plum, a roundish purple-skinned, purple-red fleshed fruit of excellent quality for canning, jam and juicing. Opata 1908, Bessey cherry x Gold plum—a sweet purple-skinned, green-fleshed early fruit. Oka 1924, a seedling of Champa—a sweet prune like fruit. Cistena 1909, Bessey cherry x prunus pissardi—with purple-red foliage making a unique shrub.

Crabapples—Dolgo 1917—a seedling from Russian stock. A small long bright red fruit which makes a favorite jelly of high color. Suger 1919, a seedling of Antonovka(2-inch yellow fruit, sweet in flavor. Hopa 1920, Malus niedzwetzkyana x Siberian crab—a red-flowered crab-apple with small decorative fruits.

Pears—Many hybrids of Siberian x commercial were introduced but at Morden the fruits have been smallish and lacking in sweetness. They are useful as stocks.

Apricots—1936, grown from seed collected is Manchuria. Most impressive at Morden have been Sing, Ninguta, Anda and Sunsin.

Raspberries—Sunbeam 1906, Shafers Colossal x wild red raspberry, a hardy purple-caned variety. Ohta 1912, wild red x Minnetonka Iron-clad—early, light red. Starlight 1922, sister of Ohta, a red variety of great hardiness.

Gooseberries—Sunset 1924, European x select native, productive medium size. Kataga 1925, sister of Sunset fruit large light red.

Roses—Totonkaha 1912, wild prairie rose x Siberian rugosa, a tall bush with deep rose pink, semi-double fragrant flower. Yatkan 1927, likely Gruss an Teplitz x La Melusine, tall robust bush, semi-double rose pink. Thornless roses 1938—three named, Pax Apollo, Pax Amanda and Pax Iola.

A score of other valuable woody plants have come to the Canadian prairie gardens from the plantations of South Dakota. Visitors enjoy the beauties of Mayday tree, Spearfish chokecherry, Russian Silverleaf willow and Manchu walnut.

Dr. Hansen made three journeys to the Morden Experimental Station to pursue his further fruit-breeding. This permitted the staff to revel in his fellowship as well as in his plants with fuller intimacy. The plants he developed and introduced form a wide solid foundation for prairie horticulture. Further improvements will continue to be achieved from year to year but all plantsmen will happily cherish in mind, from now on, their debt to Dr. N. E. Hansen of South Dakota who blazed the trail boldly and skilfully wrought astonishing improvement in native and imported fruit and ornamental garden plants.

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Yankton, South Dakota

THE RUDDY RASPBERRY

By

A. L. Truax, Crosby, N. D.



A. L. Truax

Not the least of the great gifts to the far northern States made by that truly great plant wizard, Dr. A. F. Yeager, is the Ruddy raspberry. Its adaptability and value to the short growing seasons of our region are as great as those of the Buttercup squash, the Bison tomato and the Sunshine sweet corn, not to mention many of his introductions. I do not believe that the Ruddy raspberry has been exploited as much as it should be. Some people have even told me that where the Latham raspberry can be grown there is no use for growing any other kind. The best reply I have to this is my own experience.

In 1918, wishing to find out if any raspberries were hardy in this northwestern corner of North Dakota, I

planted a number of varieties the names of which I have mostly forgotten. The twenty-two years between 1918 and 1940 were a good testing period, for most of them were drouth years in this region. My experience was that the bushes would grow fine and blossom and even set fruit until the hot, dry weather of late July came, when they began to dry up, were attacked by red spider, the leaves turned white and the unripe fruit withered on the bushes. I got a little fruit some years, but not often. From 1933 to 1940 we were away from home, and when I returned in the latter year all that was left of my raspberry patch was a few straggling Lathams at one end. That they survived all those twenty-eight years while the rest died seems pretty good proof of the Latham's hardiness, although it might be that they had the best end of the patch.

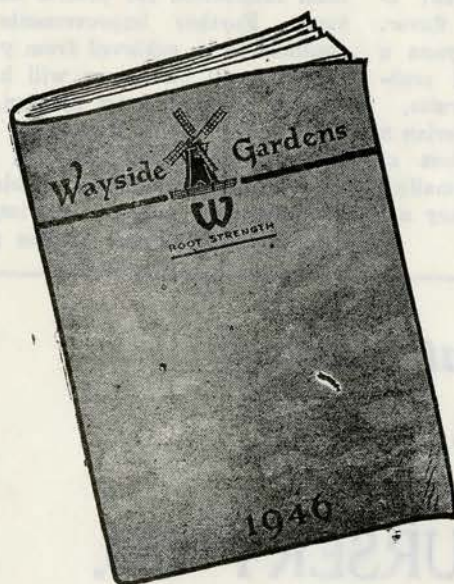
However, the picture changed in 1940, when the North Dakota Horticultural Society sent me ten plants of the Ruddy raspberry for trial. These I divided and transplanted in the spring of 1941, and on July 14 of that year I had my first picking of raspberries from them and they bore

continuously during the hot weather of late July. About August 1st, the Lathams, which I had trimmed out, reset and cared for, came into bearing and I picked my last Lathams on August 24, thus having fresh berries every day over more than a five week period.

In 1942, noticing that there was a slight gap between the last bearing of the Ruddies and the first bearing of the Lathams, I planted some of the Chief variety which is earlier than the Latham and later than the Ruddy. The result has been extremely pleasing. In 1943 I picked the first Ruddys July 18 and the last Lathams August 26. This bearing period of between five and six weeks has kept up uniformly ever since. Probably the banner year was 1946, when I picked the first Ruddies July 7 and the last Lathams August 28—a full six weeks period of fresh berries every day. Farther south the season would be lengthened for the Ruddies would begin to bear even earlier. I have kept no record of the Chief, for though it is a good berry its principal value to me is as a filler-in between the time that the

(Continued on Page 13)

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Wayside Gardens

Mentor, Ohio

WHAT'S AHEAD IN HORTICULTURE

By J. H. Schultz, Chairman

Department of Horticulture
North Dakota Agricultural College
State College Station, Fargo

(Presented at the annual meeting of the North Dakota Horticultural Society at Fargo, N. D., October 6, 1950).



Dr. J. H. Schultz

The title assigned by your secretary, Mr. Graves, apparently was worded in such a way that I could feel free to speak on a number of different items. Perhaps it would be in order first to give you all a picture of what our horticulture staff consists of, our budget, facilities, and last but not least, our deficiencies in any of the above.

Considering the horticulture and forestry staff in a broad sense, it consists of our secretary Mr. Graves, who as you all know, has been Extension Horticulturist for about thirteen years; Mr. John Zaylskie, Extension Forester, since early in the war; Mr. Harold Mattson, Associate Horticulturist; Mr. Robert Johansen, Assistant in Horticulture, and myself. Mr. Mattson and Mr. Johansen devote all of their time to experiment station work and my time is more or less equally divided between experiment station work and teaching.

I believe our extension work is being conducted very effectively and we have a fairly strong experiment station or research program on fruit and vegetable production and breeding. In the teaching end we are however, somewhat deficient and it is by no means modesty that prompts me to say this. Actually the entire regular teaching load in horticulture is carried by myself and obviously one individual cannot do justice to courses in fruit, vegetables ornamentals, and landscape gardening.

During the 1950 college summer session we had some most welcome and capable assistance in ornamental horticulture and landscape gardening from Mr. Donald Hoag, whom you all know. Mr. Hoag is in the Depart-

ment of Botany and was able to help us only as a special instructor for the summer session. Because of his teaching load in botany, he is not able to teach these courses during the regular school year when the demand is of course the greatest. These courses are in considerable demand and I believe any sound teaching program in horticulture for North Dakota should offer such courses. Our people should, and have a right to, expect assistance as well as effective teaching in these fields of horticulture.

While our work in extension forestry is adequately provided for, we do not have anyone available to teach courses in forestry, consequently our forestry courses have not been taught since the death of Professor C. B. Waldron several years ago. I feel that we should be in a position to offer at least a course in farm forestry for students of agriculture and preferably also a course in general forestry which would be of interest primarily to pre-forestry students who attend the North Dakota Agricultural College for two years and then transfer to a regular School of Forestry to complete their work and for students in horticulture and certain fields of botany.

It may also be in order to say a few words about our facilities for horticultural work at the College. So far as physical facilities at the College are concerned, they have not changed materially for about the last twenty years except that there has been some reduction in office space and field plots due to the general growth of the College. At the present time a new research greenhouse is being built and this should help materially in reducing the competition for greenhouse space whether or not the Department of Horticulture will get part of this new greenhouse. For a number of years we have been renting a considerable amount of greenhouse space from commercial growers in Moorhead during late summer and fall. This has not been entirely satisfactory and this year we have reduced our potato breeding in particular so that we could release at least one of the commercial houses that we have been renting. Even so we still are renting more than 3,000 square feet of greenhouse space in Moorhead and this is almost

equal to the total new area that will become available for the entire Experiment Station in the greenhouse now under construction.

The operating budget which we now have is essentially satisfactory for our present staff and facilities. Our weakest spot is in ornamental horticulture and landscape gardening. We hope that this can be improved during the next biennium and have requested funds for doing so.

The most interesting part of what I have to say has to do with our present experimental work and our plans for the future. As always we are placing considerable emphasis on breeding work since this appears to be the most promising approach for improvement of horticulture in North Dakota.

Potato breeding has received by far the major emphasis for ten years or more. This might be expected since potatoes are the most important horticultural crop commercially. We can report only progress with this crop and no new varieties have resulted from potato breeding work in North Dakota. Mr. Mattson now has a considerable number of rather promising selections, and as a result of improved facilities in recent years we are looking forward to some new varieties in the not too distant future.

Tomato breeding work has continued on a large scale ever since Dr. Yeager demonstrated the possibilities of improved tomato varieties for the Northern Great Plains. Mr. Mattson has also been doing the tomato breeding until the past year and he has now turned this work over to us while he is devoting all of his time to potato breeding. We have some very promising advanced tomato selections which I believe are distinct improvements over Bounty. One of these is being given the final tests and increase of seed in preparation for its possible naming after the 1951 growing season. Many of you have grown this selection as ND 49, although it was not developed to its present state when you grew this in 1949. This selection appears to be slightly earlier than Bounty. The fruit is considerably less flat and the average weight as a result is somewhat heavier.

We are also continuing work on earlier tomatoes of better size and

quality. This has included some additional selection in the lines which eventually resulted in the variety, Early Chatham. Our object here has been to select lines having fruit that are large and vines which continue to produce until frost. Some of these appear to be distinctly superior to most of the commercial strains at least for this area.

One of the most interesting new developments in tomato breeding is breeding for high vitamin C content. Our work on this material is cooperative with Dr. A. F. Yeager of New Hampshire who first developed and introduced tomatoes having high vitamin C content. We are giving this phase of tomato breeding a considerable amount of attention and I see no reason why it should not be possible to have early, high quality, and large size tomatoes with at least twice the vitamin C content of the present standard varieties. This would put the tomato at least on par with, or possibly better than, the orange as a source of vitamin C.

With vine crops we are doing breeding work on squash and muskmelons. Both have promise of giving results which will be a major step in the improvement of these two crops. In squash we came upon a variety this summer which is a true bush and does not develop any vine whatsoever. The fruit is medium sized, green and of poor quality. We have crossed this with Buttercup and Banquet and hope to develop a squash the size and quality of Buttercup and with a bush type of plant.

In muskmelons we are working with a genetic character which results in all of the blossoms being perfect and capable of setting fruit. By transferring this character to our present varieties it should be possible to make them produce ripe fruit at least two weeks earlier than they do with the normal type of blossom.

The steady increase in rural electrification and the use of frozen fruits and vegetables will create a stronger demand for vegetables which are adapted to freezing and do not require an excessive amount of work in preparation for freezing. Crops such as peas are ideal for freezing but on a home garden scale the job of shelling them is extremely time consuming. It seems that there is a

need for vegetable varieties adapted to our conditions and to home freezing without any special preparation equipment. One of the crops that we have been doing some breeding and selection with for this purpose is green sprouting broccoli. We now have some selections which appear to be fully as reliable under our conditions as is early cabbage.

In fruit breeding we are of course continuing variety tests and this phase is especially interesting during recent years because of some new high quality fruits that have been developed by some of our neighboring stations such as Morden and the University of Minnesota. We are also continuing apricot breeding and this work looks more encouraging every year. Some of the third generation selections resulting from Dr. Yeager's original crosses are quite promising.

We are not doing any breeding work with plums or sand cherry hybrids but we are starting work with some of the true cherries such as the Vladimir sour cherry and the Korean and similar bush cherries. These appear to have much to offer under our conditions and eventually I think they will contribute as much towards better cherries as the sand cherries have in the past.

Last year we started some work on the use of hardy stocks such as Mr. Wodarz has already discussed. In addition to Siberian Crab we are using Dolgo, Hibernial and Robusta No. 5 for interstocks and top-working them with Haralson Wealthy, and Mantet plus most of the newer varieties from Minnesota and elsewhere which may be on the border line of hardiness here. If the work of Mr. Wodarz and others along this line is any indication it should be possible in this way to grow many of the varieties that are of border line hardiness when grown as standard trees.

You may be interested in some work with the true dwarfing stocks of apples. Mr. Crane arranged for some Dolgo grafted on eight of the East Malling stocks a number of years ago. Last year we made a careful check of these and found that without exception the Malling stocks were free of winter injury and thriving when Dolgo was used as the scion variety. This certainly indicates that

an extremely hardy variety such as Dolgo may impart greater hardiness to relatively tender stocks such as Malling apple stocks.

We are also growing some varieties on Clark's Dwarf which is a rather hardy dwarfing stock selected in Iowa some years ago. This appears to be almost as dwarfing as the extreme dwarfing stock, Malling No. IX. Last spring we obtained another extremely dwarfing stock from the Central Experimental Farm at Ottawa which in their tests this has been very hardy. If it should prove to be so here we might eventually expect to grow some true Dwarf apple trees which would probably be better adapted to the climate and needs of the Northern Great Plains than the present standard trees.

An essential but minor part of our work is the maintenance of foundation stocks of the varieties that have been developed at this station. This is usually a simple matter with varieties grown from seed. In the case of Buttercup squash, however it was quite a job due to deterioration of commercial stocks during the war. Mr. Wodarz came to our rescue with a very fine early strain that he had grown from original foundation seed and we have reselected and increased this until now we have a large quantity of first class Buttercup seed available for distribution.

PERFECTION CAN BE DULL

I hired myself an Artiste'
with an e'
To decorate my home for me.
He went through our home with the
greatest care
Then shook his head in deep despair.
They don't use this—
They don't use that.
THEY were important in all of our
chat.
Suddenly I said, "Say—
Will you tell me WHO ARE THEY?"
He looked annoyed—couldn't say,
So I sent him on his way.
Because I am "me" and THEY are
they.
Still hodge-podge—guess I'm stuck
With priceless treasures mixed with
truck.
But such perfect splendor would be
waste
Just look on me—who has no taste.
—Louise Kinyon.

FRUIT AND VEGETABLE NOTES

By

F. G. Wallner



F. X. Wallner

The last week of November has always the big stock show in Chicago, and before the first day 140 cars of cattle, 60 of hogs and 20 of sheep, about 11,000 head, will be unloaded. 4-H clubs are entering more than 700 head of the best stock ever shown. The oldest exhibitor, now 91, has again two car loads of Herefords; he is the only exhibitor who showed at the first International, back in 1900. A blue ribbon special of 60 cars, mostly cattle, came in from Iowa points. This train has been bringing in prize winning stock since the earliest days of the show. Purdue college has 86 head of stock at the show, 134 entries of wool from 11 states but mostly from Michigan, Illinois and Indiana, the prize winning sample looking like spun glass. Most exhibits in all classes seem to come from Indiana, Illinois and five producers of Canada. North Dakota Department of Agriculture again brot in the usual fine display of grains and grass seeds, winning several prizes for the growers. South Dakota exhibits were few, but a Mr. Collins from Dell Rapids, and Dr. Donahue of Sioux Falls got some ribbons on cattle. Two samples of shelled corn, the poorest at the show, looked like it was scooped up from a commercial load and could not win at a county fair. One kernel of green corn or other seed broken, or light seeds of any kind, has no chance of a ribbon. Canada again has the best wheat. The same Indiana man wins best highest corn honors; strange how many exhibitors can win so often with so many exhibitors in all classes. Canada has had the oat champion 18 times, and the states 8 times. Rye: Canada 14, Michigan 9 and other states 4. Wheat: Canada 16 times, Montana 2 and other states 9 times. The top wheat was not so heavy as last year's sample of 67½

lbs. per bushel. Lily. S. D. had the champion flax, previously won by North Dakota 11 times, Canada 2 times and other states 17 times. Field peas: Canada 27 times, States 4 times. Hybrid shelled corn: Indiana 4, Illinois 2, Ohio 2, Minnesota 2. Barley is the only grain the states have won most—Montana 17, Canada 7, others 8. Crested wheat grass: Montana 4, Canada 2; brome grass: N. D. 4, Canada 1; hay: Indiana 7, Nebraska and Michigan 5 times each, Wisconsin 3. The 19-year-old Texas boy got top award for champion steer over all; \$12 per lb. is again a record high, so he won \$12,300 with his \$140 Hereford. Before extreme top he had won six firsts and about \$2,000 more; the income tax will be about \$3,050. So many judges working in many classes, during the show, it seems like many got ribbons but hundreds never got any, and it seems the worst blow is to the exhibitors, especially the boys and girls whose animals and pets are weeded out before the show and are sold to the packers, before the show. The evening horse show and prize stock parade is perhaps the more interesting to the general public. The largest class, or contest of about 100 horses jumping over 12 tricky hurdles, but it was a Chicago girl that got her mount over all hurdles a perfect score and 2 Canadians 2nd and 3rd places, but their horses knocked down one or more sticks. The little sheep dog brot the sheep into four different places in record time. This to me, seemed the most thrilling act of the show, tho of course, the singing of the 4-H clubs of the world was the outstanding act. The husky 225 lb. sheep shearer that shears about 16,000 sheep a year, or one in 2 or 3 minutes, is expected to be the winner again; commercial shearers get 35 cents a head. The outstanding act of all breeds of horses was the performance of the quarter horses, mounted by Texans, working among and cutting out cattle from the herd. They must be quicker than the cattle cut out, in order to win the prize, and applause of the vast crowds. The combined interests of this show make it the biggest affair for farmers and producers on this continent. The main show at Garfield park is still larger and better than the past two years, if that is possible, a little

different arrangement, tho the flowers had faded some after 4 weeks of the show. They made special note of it being the "flower of the month," There have been 2,500 varieties produced in America but only about 250 have been cataloged and offered for sale. The temperature of these two big rooms is kept down to 50. The main reason why those blooms are kept in fine condition for over a month. It is also why the small ornamental peppers are kept in perfect condition all the time, as the temperature is always under control. There are 4 lines of a poem, placed in several places, that I copied, as many others were doing. This used to be given at some of our old Hort. Society meetings, but it may be new to some of our readers:

The kiss of the sun for pardon,
The song of the birds for mirth;
You are nearer God's heart in the garden

Than anywhere else on earth.

—Dorothy F. Gurney.

The ending of the first line don't make much sense but probably the author had to use the word pardon, so as to get something to rhyme with garden.

The seasons are like house guests. We're glad to see them come, we're glad to see them go. Fall is one of our four favorite seasons, and sometimes in September we think that summer has outstayed its welcome. —Herald-Progress, Ashland, Va.

Fifty per cent of the women spend all their time trying to make a fool of some man. The other fifty per cent spend all their time trying to make a man out of some fool.—Pierce County Herald, Ellsworth, Wis.

Old J——— L———, who spends the winters in Florida, says he never expected to see the day when girls would get sunburned in the places they do now.—Reporter, Shannon, Ill.

No wonder babies cry when they are born into this world—naked and hungry, and they find they already owe the government \$1,700 in taxes. —Advocate, Olney, Ill.

GARDEN CLUB GLEANINGS

By
Mrs. L. N. Brakke



Mrs. L. N. Brakke

From reports of different clubs, Christmas decorations, arrangements, corsages and Christmas customs have been the main theme of the programs.

The Brookings Garden Club held their combined November and December meeting at the home of Mr. and Mrs. Roy Cave. Their home was decorated for the season and each member brought an arrangement, all lovely and original. An interesting program on "International Christmas Customs" was given.

Mr. Atkinson, program chairman of the Rapid City Garden Club, brought an ample supply of Christmas greens to their meeting, each member taking part in making an arrangement.

Prizes were given for the most beautiful business place and for inside and outside home window decorations, by the Sunshine Garden Club of Highmore; they also brought gifts for an orphan child. At their November meeting they had family night, a potluck supper, also entertained with a talkie-movie. The following officers were elected for the next year's club work: President, Mrs. Arthur Rehr; vice president, Mrs. Margaret Tagg; secretary, Bertha Christensen; treasurer, Mrs. Nellie Coates.

A candle Christmas tree centerpiece was of special interest at the Mobridge Garden Club. After the new year books were distributed they were entertained with colored slides of beautiful garden spots in Mobridge and other parts of the U. S. Pictures were taken and shown by Mrs. Miller and Mrs. Harcastle. Mobridge Garden Club will have the following officers next year: President, Mr. Al Bastian; vice president, Mrs. Edgar Miller; recording secretary, Mrs. F. Briley.

The Lyons Garden Club held their annual Christmas party. A paper on the "Poinsettia" was given by Mrs.

H. B. Olson. A poinsettia plant was given as a door prize. A seed guessing contest was held. Pot luck lunch was served and gifts exchanged.

Christmas decorations and appointments were used at a luncheon at the Ramstad home, for the members of the Rural Garden Circle. A Christmas program with gift exchange, was enjoyed by all present. The Watertown Garden club started their new year with the following new officers: President, Mrs. Frank Bramble; vice president, Mrs. John Headley; secretary, Mrs. Howard Evenson; treasurer, Mrs. Emma Gilmore; librarian, Mrs. Andrew Melham, and Mrs. J. F. Korte, program chairman. At their December meeting an interesting lesson on Christmas decorations was given, for both inside and outside of the home. The program committee brought the "makings" for Christmas novelties, which were made and given to the local hospitals, to be used on the patients' trays, on Christmas day. Each member brought a plant, and at the close of the meeting they had a plant gift exchange; everyone went home with a different kind of plant.

The Madison Garden Club received honorable mention and a five dollar cash prize for their program book, from the national contest sponsored by the Massachusetts Horticultural Society. There were more than 300 entries.

The new garden club at Madison has been named Town and Country Garden Club. Their first meeting included several interesting topics: Color and Design in the Garden, Thanksgiving Arrangement, Study on Compost Heap, Putting the Garden to Bed, and bringing samples of dirt for testing.

The Fair City Garden Club, Huron has the following newly elected officers: President, Mrs. L. B. Severence; vice president, Mrs. F. R. Hoffman; secretary, Mrs. E. R. Mathews; treasurer, Mrs. E. L. Shanahan. Meeting was held at the Y. W. C. A. cottage where several arrangements of flowers, fruit and vegetables were on display. A book review on "Dirt Roads of Stone Posts" by Romeyn Berry was given.

Mrs. G. A. Schnaidt gave a very interesting paper on "Indoor Gardens" to the Sioux Falls Garden Club.

The club voted to give ten dollars to the building fund of the Y. W. C. A.

Mrs. Lee Thompson, leader of the Hurley "Jolly Gardeners" junior garden club reports a membership of 11 members.

In October the Brookings Garden Club was invited to a flower exhibit at the Sexauer home. Mrs. Sexauer had her home decorated with lovely flower arrangements suitable to the various rooms, using many lovely vases and accessories.

OUR COVER PAGE

By
H. A. Graves

Dr. J. H. Schultz, chairman of the Department of Horticulture, N. D. A. C. and his class in fruit growing visiting the orchard of R. L. Wodarz of Wyndmere.

One of the most interesting fruit plantings in the Upper Midwest can be seen on the farm of R. L. Wodarz, farmer near Wyndmere, North Dakota. Mr. Wodarz is also the current president of the North Dakota Horticultural Society.

Pictured left to right are: Leo Stuckle, Jamestown; Frank Askew, Casselton; Neal Holland, Halstad, Minn.; Irvin Hillyer, Thief River Falls, Minn.; Frank Noice, Lisbon; Robert Dobervich, Ironton, Minn.; J. H. Schultz, N. D. A. C.; R. L. Wodarz, Wyndmere, N. D.; Gordon Hanson, Valley City; Douglas Johansen, Edinburg, N. D.; Arthur Askegaard, Comstock, Minn.; Harold Vettle, Cummings.

(The tree in the background has been topworked to 25 varieties.)

Two of the most interesting features of the Wodarz planting are the topworking of semi-hardy apples on sturdy, strong crotch trees such as Siberian crab and Hibernian and the large number of interesting seedlings Mr. Wodarz has grown. Many of these seedlings carry McIntosh blood and carry the well known McIntosh aroma.

Visiting the Wodarz orchard is to a certain extent a homecoming for Dr. Schultz who grew up on a nearby Richland county farm from where he left to attend the North Dakota Agricultural College, Michigan State

(Continued on Page 14)

THE INTERNATIONAL PEACE GARDEN

By

LeRoy Pease

in North Dakotan

The Greatest Idea in the World

Great ideas which move men to unusual action are few. In North Dakota, however, we have the expression of a great idea, perhaps the greatest idea in the world.

For 135 years, 3,987 miles of boundary line between the United States and Canada have been a boundary line of peace without warship, fort, soldier or gun. This practical demonstration is proof positive that peace between nations is more than an idle dream—it is an accomplished fact. To commemorate the 136 years of peace between Canada and the United States the International Peace Garden was established, located in the Turtle Mountains astride the boundary between North Dakota and Canada.

Inscribed upon a cairn erected in the garden the people of the United States and Canada have pledged to each other

"To God in His Glory

We two nations dedicate this Garden and pledge ourselves that as long as man shall live, we shall not take up arms against one

another."

In this world of ours characterized by strife and now aggression on the part of Russian Communism it is striking to find an ideal such as this coming from the hearts and minds of the people of two nations who have learned to live as neighbors at peace with one another. Yet, there it is. This noble ideal written in stone on the cairn at the Peace Garden stands as a guiding light, pointing the way to men in this time of chaos and confusion.

The strangest thing about it is that the ideal should be born here. The people of both the United States and Canada are not alike, they are of many different nationalities. In both of these nations all of the cultures of the world are poured together, all the known ideals and patterns of thought are to be found. Under such conditions it is difficult to settle upon a course of action which banishes war and establishes peace as a way of life. In spite of this difficulty the idea of memorializing the 136 years of peace and neighborliness between Canada and the United States and holding it up as a pattern for the world to follow was born here.

It is an ideal which should be perpetuated. The living proof that peace is possible between nations

should be carried to every corner of the earth. It may be that out of this ideal will come projects similar to the International Peace Garden dedicated to perpetuating peace among nations. If such action should follow—if men could catch the gleam of light thrown out from the International Peace Garden the idea symbolized by it would indeed be "the greatest idea in the world."

THE RUDDY RASPBERRY

(Continued from Page 8)

Ruddy ceases to bear and the Latham is not quite ready.

As most of you know, the Ruddy is a purple berry when fully ripe. It is not a market or shipping berry but is unexcelled for home use, and if picked in the red stage it will keep for a long time. Its delicious flavor when fully ripe is unsurpassed. It is the earliest berry I know and will bear over the longest season, as well as being absolutely hardy and drought resistant. If you have room for but one berry, plant the Ruddy for it will bear when all others fail. If you have room for more than one kind, then plant the three mentioned in this article and enjoy, as we do, delicious fresh raspberries and cream all summer long, as well as quarts and quarts to can up for winter.

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SECRETARY'S CORNER

By
W. A. Simmons



W. A. Simmons

He were sorry to learn of the deep snow in Ohio and Pennsylvania in November, but doubtless the authorities there now have plenty of machinery to quickly clear it up. Had such a storm occurred while the poor Indians were in control there would probably have been great suffering, as the Indians would have been unable to get out and collect a bunch of American scalps and sell them to their allies, the British, their usual method of raising a grub stake. Nathan Schwarting, Gladiolus tester of the Syracuse, N. Y., club, quoted in the Earthworm, magazine of the Elmhurst, Ill. men's garden club, advises deep planting of the corms of this flower, as follows: "Planting the corms at a depth of eight inches has proven superior to the more conventional depth of four inches. A corm planted deep is more readily able to support the tall and heavy spikes of the newer varieties without additional support. During a dry summer, too, the deep corms can more readily find the water for sustaining the heavier growth of the foliage. Irrigation of the planting of gladiolus during the dry spells is a must if all large spikes are desired. One inch of water per week appears to be about correct, so there will be about three times during the normal summer when it will be necessary to use water from the tap." According to the daily press, our friend Mr. H. E. Beebe has inaugurated a contest for the best poems on "Beauty of Winter in South Dakota," offering prizes of \$8, \$5 and \$2 for the best effusions. While we have no inside information, we wonder if his object is not to find out how much the poets can be induced to lie about our delightful (?) winter weather for the amount of money offered. Wonder if H. E. has been in California so long that he has forgotten what our winters are like. Have been unable to corroborate the persistent rumor

that anyone caught singing "White Christmas" in the east, this season, is given 90 days at hard labor. What people there are longing for is a snow shoveler, without being too particular as to his color. It seems about time to lay that song to rest in one of those caches that are not to be opened for a thousand years. Probably by the time it is dug up it will again become popular. A letter from Mrs. P. L. Simmons, of White, says: "This afternoon I'm attending the funeral of Mrs. H. E. Beebe's mother. She was a wonderful woman and we will miss her." Our sympathies go out to the Beebes for this great loss, snapping another tie to their native state. However, news from them is not all bad, for two grandchildren were born in December. Thus despite losses, life goes on and the tribe increases. A short time ago a very interesting Christmas card arrived from our good friend Dr. F. L. Skinner, of Dropmore Manitoba Canada, showing the picture of a very much alive youngster. On the reverse side Dr. Skinner wrote: "This is F. L. Skinner, Jr., at ten months old; now at fourteen months, he is running around, getting into as much mischief as boys of that age usually do. He is quite interested in flowers and of course, we are trying to encourage that interest." It is very gratifying to see the population of our northern good neighbor increasing, particularly when the increase consists of such desirable material. Dr. W. D. Armstrong, horticulturist of the Kentucky Experiment Station, advocates the use of DDT for borer control. He explains that the old paradichlorobenzene treatment is far from satisfactory, and that three sprays, on the tree trunks of 4 to 7 lbs. of wettable 50 per cent DDT to 100 gallons of water, seems to do the work completely, if applied at the right time. He advises applications on July 1st, August 1st and September 1st. These applications kill the wasps that lay the eggs on the tree trunks, before they have an opportunity to lay them and kill the young borers before they can bore to safety inside the tree. Jan. 1st. Am celebrating the day by working today partly to clean up a lot of work and partly to get used to writing 1951 instead of 1950. We hope you were all good, last night,

so you will not require great quantities of water today, but the article quoted below while not mentioning this use, gives many other uses of water.

"Water, quite distinct from its place as Number One Necessity in human, animal and plant life, has come to play an increasingly important role in modern industry, says the U. S. Department of Agriculture.

George D. Clyde of the Soil Conservation Service points out several striking examples of water reequipments in industrial production.

A large paper mill will use 50 million gallons of water a day, enough to supply a city of 500,000 people.

It takes from 600 to 1,000 tons of water for each ton of coal burned in a steam generating plant.

Production of a ton of steel calls for use of 65,000 gallons of water, and a ton of rubber about 85,000 gallons.

Each gallon of aviation gasoline requires about 25 gallons of condensing water.

Primitive human life, and plant and animal life under natural conditions require adequate water supplies, but "civilization" involves a great increase in the allowance for humans. Clyde points to sanitary sewers, modern plumbing, spinner type washing machines, and air conditioning equipment as examples of modern developments that "have greatly increased the use of water by the human family."

These reminders emphasize the interest of the city dweller in abundant and reliable supplies of water, and the concern that urban dwellers need to feel in regard to the supply and conservation of water as well as of soil."

OUR COVER PAGE

(Continued from Page 12)

College and Washington State College. During the tour of these institutions of higher learning he earned a Bachelor, Master and a Doctor's degree in Horticulture. Our readers can appreciate the sentiment connected with this field trip.

Governments have not been able to fix wages of sin. Nor have they found a substitute for profit or other personal stimulants.—Herbert Hoover.

JUNIOR GARDENERS

By

Lona Crandall



Lona Crandall

The program of the Junior Garden clubs was given real motivation in the fall through space allotted them by the Sioux Empire fair for exhibits of their work. Thru the premium list clubs were given new ideas for projects. By the elimination of any competitive spirit, good will was maintained. Judging is done, in junior fairs, not one exhibit as compared to another, but each exhibit as compared to perfection. Consequently several exhibits in a class can be given blue ribbons. Likewise, no blue ribbon may be given in a class in which no exhibit comes up to blue ribbon quality.

Huron is working on a Junior Garden club organization. It is hoped that during this year all other adult clubs, especially those in the larger towns and cities of the state where the 4H program is not active, will take up work with juniors.

Will those clubs which are interested in starting a junior club or in undertaking any kind of junior project keep the junior club chairman informed of their progress? Their experiences will be of help to other clubs.

There are awards offered by the National Council for work with juniors and for achievement by junior clubs. Clubs interested may obtain information from the awards chairman.

The junior club committee from In and Outdoor Garden Club of Sioux Falls was given fifteen minutes time at the December principals' meeting to present their ideas for introducing junior garden work to the upper four grades of the schools of Sioux Falls. The committee expected that the program would be considered until the January meeting, but the idea was met with spontaneous enthusiasm by several of the principals and it seems assured that the work of the garden clubs is off to a good start in the schools. Without further delay, ar-

rangements were made to show the film, "The Living Earth Series," to all of the upper four grades of the city in February. Additional programs, if the plan is finally accepted by the entire group of grade school principals, will include tree and shrub identification, starting plants indoors, and junior home gardens. The last should provide material for the junior exhibits at the Sioux Empire fair next fall.

BOOK REVIEW

By

Mrs. L. G. Elsinger



Mrs. Elsinger

Manufacturers' Practical Recipes. General editor, G. S. Ranshaw. Published by the Chemical Publishing Co., 26 Court St., Brooklyn 2, N. Y. Price is \$10.50.

A large book of 400 pages. This is a book of processes and recipes for the manufacture of commodities used in all the industries, arts and professions. Editorial consultants include on cosmetics pigments and enamels, textiles, veterinarians remedies, paints, etc., soaps, vet foods and remedies, fertilizers, beverages, flavors, laundry helps, explosives, inks, polishes for furniture leather, printing, metals and so on. It is truly a manufacturers' book. Quoting, "While the publishers have taken every precaution to insure the accuracy of the information contained in this volume, they cannot accept responsibility for any failure or accident resulting from the use of these recipes. For example, recipe for family biscuits. Flour 70 lbs. sugar 12 lbs., glucose 3 lbs., corn flour 4 lbs., butter 6 lbs., margarine 6 lbs., salt 4 ozs. ammonia 2 ozs., soda 8 ozs. acid 4 ozs. No baking directions are given. Evidently used in the days when "good cooks were born, not made." Cattle marking ink must not be lard, contains Russian oil, lampblack, paraffin wax and rosin. A recipe for cornplasters results in 100 lbs. of plaster. The chapter on fertilizers discusses phosphates, nitrogen, potash, miscellane-

ous compounds for lawns, flowers, vegetables, vines, fruit trees and general fertilization. The book is very interesting to browse thru for something very different. Good pastime for the man of the house during these long cold evenings. He may find something of interest, even of value like "Ye olde almanac" proudly announced. Get this book for your horticultural library. Be the first to pick it up for something different to read.

INTRODUCTION OF POTATOES IN NORTH AMERICA

By

J. H. Schultz

In N. D. Bimonthly Bulletin



Dr. J. H. Schultz

Potato growers who feel that the potato is being unduly abused by economic or agricultural experts and politicians need not feel that their crop is suddenly being singled out for attack. It has been the subject of controversy since the white man first grew it. Even today historians and students of the potato cannot all agree as to its earliest introduction to North America.

It is generally agreed that our cultivated or "Irish" potato originated in South America. It is not native to North America and was not grown in North America previous to its introduction by the early colonists. The so-called "Potato of Virginia" was not even related to the potato but is in the Legume family and is now known as Groundnut (*Apios americana*, Medic.)

The most commonly published account of the "first" introduction of the potato to North America is to the effect that potatoes were first grown in this country at Londonderry, New Hampshire, in 1719 from stock brought from Ireland. As a result, it is said, the name "Irish" potatoes developed. However, this was not the first introduction of potatoes to North America, nor did the name "Irish" potatoes result from this in-

PROGRAM CHAIRMAN'S LETTER

By

Mrs. D. S. Baughman, Madison

Mrs. Jorgensen's Convention Review in the November issue of this magazine listed me as Chairman of Program and Lectures. I feel very humble and inadequate in this capacity but I will do my best and it is my earnest desire to be of help to you in making up and carrying out your program. This chairmanship is new and will be, in a way, starting from scratch. Mrs. Jorgensen is turning over to me material from her own library and I am trying to sort and classify my own. If everyone helps, we may soon have something very worthwhile and would seldom need to go beyond our state for help. I do hope that you will send me copies of papers given in your club, and accounts of new or different programs, novel entertainments, activities which will help other clubs.

In answer to my request our National Chairman of Program sent copies for each of our garden clubs of Garden Club Information (two sheets) and Garden Club Horticulture (half sheet) all of which I have sent to club presidents.

We have program yearbooks from state garden clubs to loan you, including the winners of this year's contest. The winning books are much in demand and I hope you will request them only when making out your programs and return them very promptly. And by the way, Madison Garden Club yearbook which placed first in the state, won Honorable Mention in the nation wide contest of over 300 entries sponsored by Massachusetts Horticulture Magazine. With the rating was also a year's subscription to their magazine and award of \$5.00. The December issue of this magazine has their contest rules. Entries for the next contest must reach the office of Horticulture, 300 Massachusetts Avenue, Boston 15, Mass., on or before October 1, 1951.

I have reviewed all of the 20 yearbooks displayed at the state convention. What a store of information and inspiration! I have taken notes from these and want to get this information in condensed form to distribute to each club—with your permission. If you have any objection

to having any of your material used in this way, will you kindly inform me—a post card will do—and very soon, please.

This magazine has many good books which have been reviewed in its columns and some not reviewed. They have been listed in the magazine but for the benefit of new clubs I have sent the list to your presidents. Mrs. Jorgensen says send a dime when you write to Mr. Simmons for books.

Your public library is sometimes a source of good material for garden clubs and they might be glad to add books you desire if there is enough demand for them.

Not all of our federated garden clubs sent in programs this past year. We miss them and hope that this year they will let us know what they are doing. Books ranged in size from four pages to 29 and were printed, typed, mimeographed or in long hand.

The first aid to Indoneisa under the U. S. Special Economic and Technical Assistance Program was an authorization for \$35,000 worth of insecticides.

Something's going to slip sooner or later. The world is standing on Uncle Sam's shoulders, he's standing on the American taxpayer's back and the American taxpayer is standing on the ragged edge.—Cincinnati Enquirer.

INTRODUCTION OF POTATOES IN NORTH AMERICA

(Continued from Page 15)

roduction. The growing of potatoes at Londonderry, New Hampshire, in 1719 is not questioned but at best it was merely a later introduction.

The first and best authenticated account of the introduction of the potato to North America shows that potatoes were brought from the Bermudas to Virginia in December, 1621. Furthermore, some of these potatoes were planted, as confirmed by letters sent from Virginia at the time and by later accounts. The account, in part, as cited by Laufer (1938), is of interest:

"On the second of December, 1621, Captain Nathaniel Butler, governor of the Bermudas, sent—to the governor of Virginia (Francis Wyatt) two large cedar chests 'wherein were fitted all such kins and sortes of the country plants and fruits, as Virginia at that time and until then had not, as figgs—potatoes—red pepper—and the like.' In the following year a Virginian barcke took from the Bermudas twenty thousand waight (ten tons) of potatoes at least."

There is one other account, written in 1624, referring to the above introduction and subsequent growing of potatoes in Virginia.

Reno: Where the cream of the crop goes thru the separator.—H. G. Oliver.

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