

DAKOTA HORTICULTURE

SOUTH DAKOTA
STATE

JANUARY - FEBRUARY, 1953

JAN 27 1953

LINCOLN
LIBRARY

THIS BOOK DOES
NOT CIRCULATE

SENTINEL ROCK *on*
NEEDLES HIGHWAY,
BLACK HILLS of
SOUTH DAKOTA.

•
—Courtesy of the
Chamber of Commerce,
Rapid City.

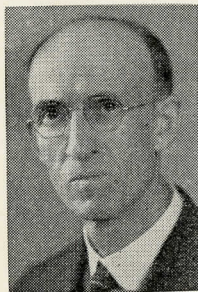


1971 75
1905
1963
1926
19142

THE RED-BELLIED WOODPECKER

By

O. A. STEVENS



O. A. Stevens

The name of this bird began with Mark Catesby, that famous writer of the Natural History of Carolina whose books contained the best information of that time. The name is rather misleading because the under-

parts of the bird are only tinged with red and are not bright red as we expect to see in woodpeckers. The underparts are mostly a sort of dirty gray, the upper parts closely barred with black and white. The top of the male's head is red but the female has only a little red on the back of the neck and at the upper base of the bill.

The bird is smaller than a flicker and about the size of a red-headed or hairy woodpecker. Its status as a North Dakota bird rests on one collected at Stump Lake in Nelson County in 1897. This bird must have wandered far from its home for the species is found mostly from Southeastern Nebraska south and east. Dr. Roberts reported it in southeastern Minnesota. He said it had been increasing and extending Northward, but was not reported in the state until 1893.

It is mostly a non-migratory species and stays farther south where the winters are milder. I recall it from Northeastern Kansas where it was fairly common but I do not recall many details, especially as to winter habits. Dr. Roberts reported it rather shy during summer but bolder in winter. However it was on a later visit to Kansas in the summer when the birds were regular visitors to a mulberry tree which grew about a rod from the house and the much used back door.

Like other woodpeckers the red-bellied makes a nesting hole in dead trees, sometimes in a telephone pole or fence post. Through the southern states they use a great variety of trees, apparently with no preference. Usually four or five eggs are laid. They are white, just about an inch long and three-fourths of an inch wide, usually a

little larger at one end than the other. Both sexes work at making the nest and incubating the eggs.

A summary from 22 specimens showed the birds food to be about one-fourth animal and three-fourths vegetable material. The former consisted chiefly of ants and beetles. The vegetable part included many kinds of berries and other fruits. Some corn is taken and some nuts are used. Much of the food taken is hidden in holes, cracks and various cavities. Apparently the birds do not make holes for this purpose as does the California woodpecker.

In general the red-bellied is considered a beneficial bird. Most of the fruit eaten is of wild or unimportant kinds. Several reports have been made of their eating oranges. Some reported that they damaged fruit on the trees, others that they ate only fruit lying on the ground. One mentioned that having once begun on a fruit they continued until it was all eaten. Other kinds of birds seem prone to sample as many fruits as possible.

MY JANUARY GARDEN

By

B. BYRON BOBB

Before my window spreads subarctic zone:

Festooned are spruce and pine with wreaths of snow,
And laden cedar boughs are bending low,
Disconsolate the leafless elm moan.

Each sumac shaft is topped with copenery cone,
And wahoo pods with unquenched fire glow,
The bittersweets vie the dogwood's ruddy row,
And bridal-wreaths flaunt hoarfrost bloom, full-blown.

Among the conifers prim waxwings flit,
And glints of crimson in the snowscape sheen.

By blue-berried junipers vain pheasants sit
Arrayed in gold and bronze and aqua green.

The driven snow my shelter belt revets,
Carrara marble gleam the parapets.

January-February, 1953

Vol. 26

Nos. 1 and 2

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

Membership in the South Dakota State Horticultural Society is \$1.50 per year. The subscription rate for affiliated organizations is 75 cents 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, Courthouse, Sioux Falls, S. D.

South Dakota Officers

Russell Rulon, President.....Yankton
Dr. S. A. McCrory, V. Pres....Brookings
W. A. Simmons, Secretary...Sioux Falls
F. X. Wallner, Treasurer....Sioux Falls
Mrs. L. N. Brakke, Lib.....Hartford

Members of the Executive Board

H. N. Dybvig, Chmn.....Dell Rapids
E. A. Fletcher, 4 yrs.....Garden City
H. R. Woodward, 5 yrs.....Pierre
A. R. Schamber, 3 yrs.....Rapid City
C. I. Keck, 2 yrs.....Sioux Falls
J. M. Atkinson, 1 yr.....Rapid City
Mrs. Leo Monteith.....Brookings
Mrs. R. G. Ferris.....Sioux Falls

North Dakota Officers

R. L. Wodarz, President....Wyndmere
Dr. J. H. Schultz, 1st V. P..... Fargo
Henry Biel, 2nd V. P.....Lefor
H. A. Graves, Secretary.....Fargo
Earl Shaw, Treasurer.....Fargo

TABLE OF CONTENTS

	Page
Red-Bellied Woodpecker.	
Dr. O. A. Stevens.....	2
Poems. B. Byron Bobb.....	2
Manitoba News Letter.	
W. R. Leslie	3
Newsletters. H. A. Graves.....	4
Can Wild Roses Be Improved?	
P. H. Wright	5
President's Message.	
Mrs. Leo Monteith	6
Garden Club Gleanings.	
Mrs. R. G. Ferris	7
Sea in Our Blood—(continued).	
W. Earl Hall	8
Experience in Horticulture.	
R. L. Wodarz	9
Book Review. Mrs. L. N. Brakke....	9
Your Yard and Garden.	
Dr. Leonard Yager	10
Soil Conservation.	
Mrs. Harriet Martinson	11
Fruit and Vegetable Notes.	
F. X. Wallner	12
Want to Win an Award?	
Mrs. G. M. Jorgensen	13
Secretary's Corner.	
W. A. Simmons	14
Book Review. Mrs. O. A. Stevens....	15

DAKOTA HORTICULTURE

MANITOBA NEWS LETTER

By
W. R. LESLIE



W. R. Leslie

The Morton Arboretum at Lisle, Illinois, displays a remarkable collection of ornamental trees and shrubs. More than 4800 species, varieties and hybrid woody plants are established. As the arboretum is in northern Illi-

nois it appeals to plantsmen on the more westerly great plains area. The 835 acre institution is being very helpful to the Morden Experimental Station arboretum which has 47 acres. It is gratifying that a number of new shrubs developed in Manitoba have earned high esteem in the plantations at the renowned Morton Arboretum.

During a journey about the expansive acres at Lisle in company with Mr. Roy M. Nordine, Propagator, the following notes were made:

Canby pachistima, native to the Smoky Mountains, tends to grow well only in dense shade. A special strain has been selected under the name "Sunburn-proof." At Morden, pachistima has behaved well as a rich green dwarf spreading evergreen even in southern exposures. This good report may be due to the local winter snow cover.

A very dwarf Alpine currant, *Ribes alpinum pumilum*, is highly regarded. It bears bright red fruits.

Mr. Nordine considers death of woody plants on the prairies to be caused most often by cold drying winds. Most young plants do not have enough structure substance to withstand the trying winds. Many plants of semi-tender nature will grow and establish well if set out as a sizable plant. Small skinny plants may fail consistently. Some small evergreens take the deep winter temperatures but are lost in the wind. It is vital to have shelterbelts or groves. Mulching with ground corneobs, aged sawdust, acid peat or sphagnum moss usually is beneficial to important degree.

The Manyflowered Cotoneaster, *Cotoneaster multiflora*, is rated highly as a medium large berried shrub. It does not

require any facing shrubbery as the arching branches dress the area down close to the ground.

Pagoda dogwood is a valuable native plant. Having branches in stratified formation, it is harmonious to the prairie scene. It is especially attractive when loaded with its numerous small fruits. This hardy large shrub, which is native to eastern Manitoba, deserves wide employment.

The Rusty Black Haw, a southern form of our nannyberry, exhibits some of the showiest autumn foliage. The leaves are distinctive also in summer.

In gravelly spots the following plants do well—yucca, aralias, securinega, buffaloberries and caraganas. Some of these do not thrive in rich soil, particularly where precipitation is plentiful.

The Arnold Arboretum in Jamaica Plain, Boston, Massachusetts, has been worthily called "America's Greatest Garden." It is a branch of Harvard University. It was founded in 1872 for the sole purpose of acclimatization, cultivation and study of hardy trees and shrubs. It exists for services, which service knows no boundary. The Morden Experimental Station has shared well in its bounty. A number of shrubs have been introduced successfully into Canadian prairie horticulture from the Arnold Arboretum by way of Morden. A sample is seen in the Three-lobe spirea, the shapely showy small bush is much hardier than its hybrid daughter, the Vanhouttee spirea. A large number of various kinds of seeds were gathered in mid-September through the kindness of Dr. Donald Wyman, Horticulturist, who has been a helpful friend for years. The seedlings which result will be divided with other institutions in the prairie province.

There is a wide opportunity to further explore the suitability of hundreds of kinds of trees, shrubs, vines and flowers not yet tested on the prairies. Foreign arboreturns are graciously ready to supply materials.

The Arnold Arboretum has an area of 250 acres. It has another property of 150 acres a few miles distant for its nurseries and test work. The natural features of the Arboretum are varied. It exhibits ponds, hills, valleys, steep cliffs and an attractive ever flowing stream known as Bussey Brook. The original holding was the Bussey Farm. Bussey Institute for plant research is

near the southeast gate. Close at hand are the greenhouses and plant houses under the charge of L. F. Lipp, Propagator. The Director, Dr. Carl Sax, spends much of his time in the propagation area where he has some rather wonderful and most unusual new methods of developing dwarf fruit trees to show visiting plant specialists. The Administration Building is by the Jamaica Plain gate in the northeast corner. In that building the renowned botanist and author, the late Dr. Alfred Rehder, built up the renowned herbarium of pressed specimen. Many of America's most authoritative books on woody plants have here been written. The first Director, Dr. Charles Sprague Sargent, was in charge for over fifty years. Besides his valuable volumes, there are those from the pens of Dr. Ernest H. Wilson, famous plant explorer, Dr. Rehder and Dr. Donald Wyman.

Plantsmen find the Arboretum open free to them from sunrise to sunset every day of the year.

The Brooklyn Botanic Garden is a beautiful place. As such, there is little surprise in the report that during the past forty years nearly 50 million visitors have come to the garden. The 50-acre institution had its birthplace in 1911 on an ash dump and adjacent waste land. The creation of new landscapes was tied inseparably to botanical and horticultural research. The land and buildings belong to the City of New York. The total support is derived about equally from the City and private sources. Every plant on the grounds has been bought from private money. The long-term educational and scientific work of the Garden has been supported largely from private funds—gifts, bequests, and memberships.

Some excerpts from booklets follow:

A place of solitude and beauty in the heart of a great city.

An educational program that enables thousands of city school children to gain first hand knowledge of plant life.

A model children's garden is now 38 years old.

One of the world's great collection of living plants.

An outstanding library that contains approximately 50,000 volumes dealing with every phase of horticulture and botany.

Open 365 days a year. . . . Never a charge of admission.

(Continued on page 12)

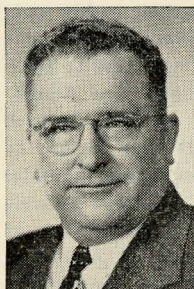
DAKOTA HORTICULTURE

1074 72

NEWSLANTS

By

H. A. GRAVES



Graves

Last issue we promised a report on the behavior of the varieties grown in the 1952 Demonstration Gardens.

Instead of a considerable number of gardens as has been the practice for several years, the number of gardens was limited to 15. By mid-June the lack of moisture was cause for consideration of abandoning the Demonstrations. However, abundant rains during the first week in July brought several of the gardens back. One garden was irrigated from a pond. Meetings were held at nine of the fifteen gardens. Average attendance at these meetings was 47.

General remarks about the behavior of some of the varieties may help you make up your mind in buying your garden seeds.

The behavior and quality of Topcrop and Wade green snap beans indicate that they should replace other green pod beans in our Dakota gardens. They may not excell Tendergreen in quality by too much, but Wade is reputed to be the best of the green pods for freezing. Disease resistance in Topcrop and Wade is their strongest point, perhaps. There was evidence in at least one garden that Wade was more rugged when the weather was unfavorable. Personally, I wouldn't want to plant anything but Wade or Topcrop for a green bean. I have a slight preference for Wade.

Miniature, early; Earligold, mid-season; and Golden Cross Bantam, late, provided an excellent demonstration of the desirability of planting three hybrid sweet corns of different maturing dates on the same day. Where moisture was available in late May and June, all three varieties did well. The season was plenty long to bring Golden Cross Bantam into roasting stage long before frost. There are several other hybrid sweet corns that could be combined into a "three man" combination, but in our opinion Golden Cross Bantam

should still be the late variety in the group.

National Pickling cucumber and Surecrop hybrid cucumber, growing side by side, demonstrated well that the hybrids have resistance to the vine diseases that have made it nigh impossible to grow the old open pollinated cucumbers in many gardens. If you have been having cucumber troubles, I suggest you try a hybrid, either Surecrop or Burpee.

Generally the folks preferred Slobolt lettuce over the newer Salad Bowl. Salad Bowl is a beautiful plant and slow to go to seed. However, lettuce is not generally grown as an ornamental and Slobolt is even more reluctant to bolt to seed.

Little Marvel and Lincoln Peas again indicated that they are the peas to grow in North Dakota. Most of the gardeners favored Little Marvel for early peas for the July table with Lincoln for the main crop later and for processing. Both freeze well, but Lincoln shells out a higher percentage of peas per pod. One lady favored the quality of Little Marvel to the extent that she recommended them exclusively.

Early Chatham and Cavalier tomatoes indicate that they are good companions for North Dakota gardens. Early Chatham will make it if any variety can. The small fruits of this variety are favored by some home canners because a large number of the fruits will slide entirely through the mouth of an ordinary Mason jar. Cavalier is new—on the market for the first time in 1953. It gives promise to replace both Victor and Bounty as a slicing variety for our home gardens.

We hope to have our 1953 recommended variety list out early this year. Stop by your County Agent's office for a copy if you live in North Dakota; or drop us a line. We will put your name on the list and send you a copy as soon as it is ready.

A recent issue of the **New England Homestead**, published at Springfield, Massachusetts, contains an article on French hybrid lilacs. The article winds up with the French hybrid variety recommendations from the Dominion Experimental Station at Morden, Manitoba. Good evidence that the Morden Weekly Newsletter is widely read—and also quoted.

The Morden Station has been carrying an extensive lilac variety trial for

years. Just to refresh your memory we are going to list these French hybrid lilac varieties as recommended by the Morden Experiment Station and copied from this Massachusetts publication. The capital **S** and **D** refers to whether the lilac is single or double.

White: Vestale—S; Edith Cavell—D.

Pink: Lucie Baltet—S; Mme. Antoine Buchner—D.

Magenta, reddish: Mme. F. Morel—S; Paul Thirion—D.

Violet: DeMiribel—S; Violetta—D.

Blue or Bluish: Decaisne—S; Oliver de Serres—D.

Lilac: Marengo—S; Leon Gambetta—D.

Purple: Monge—S; Ludwig Spaeth—S.

A man from Logan County wonders if he can keep the peelings from some fancy Red River Valley Potatoes for seed next spring. Dr. Schultz was consulted. He reports that it is difficult to use peelings for seed even when kept for only a few days. The corking-over process dries out the entire peeling so the eyes cannot grow. Keeping them until next spring is out!

To forestall some of the letters we get each spring, blueberries are not to be grown in North Dakota. I have learned some time ago not to tell people they can't grow a certain plant. That merely challenges some folks and they go to unbelievable ends to try and make a liar out of me. However, the man who tried growing Quincies and the lady who tried growing tender apples in an espalier system on the side of her garage did not!

I have seen my first fruit of the Osage Orange. Some tourist picked it up in Michigan along the highway and brought it home to confound his County Agent. The fruit is difficult for me to describe. Looks a bit like an overgrown green walnut with goose pimples.

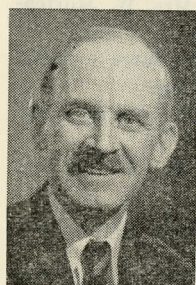
Tain't Funny Department: Lutefisk, 25c per lb.; Airwick, 69c. I like Lutefisk!

Cable. A non-metallic cable that resists breakdown from flames, moisture, oils, acids, alkalies, and abrasion is small, light and highly durable due to special insulation. The cable's conductors are first wrapped in paper, then in glass braid and finally encased in a smooth thermoplastic sheath. (General Electric)—CAPPER'S FARMER.

DAKOTA HORTICULTURE

CAN THE WILD ROSES BE IMPROVED?

By
PERCY H. WRIGHT



Wright

The other day, as I drove along a country road lined with wild roses in full bloom the thought came to me that here in the wild rose, as God made it, was beauty supreme, and that man's efforts to "improve the rose" were of the order of trying to gild the lily. A sort of humbling thought, was it not, for a man who has spent twenty years trying to improve the hardy roses?

It is true, of course, that the merits of single roses are overlooked, whether these single roses be wild roses or single Hybrid Teas. Only when a rose flower has more than the usual allotment of petals does there come in a chance to reveal some of the finer features of "form," for single roses are always of good form. Actually, one of the advantages of doubleness is that the individual flower is longer lasting. The beauty of the native wild rose is intense, but fleeting, and as doubleness increases, so commonly does the life of the individual flower. The Double Cinnamon rose, with its small, extremely double, rather wellshaped flowers in mauve, lasts longer than any other hardy rose I know. This is an extremely vigorous grower, hardy to forty-five below zero or thereabouts, and if the pink were really a clear pink, and not mauve, the variety would be more valuable than it is. One of my own hybrids had a flower that lasted four days in good condition, and for a time I thought I had a find, but later on the plant revealed a LACK of vigor, and I decided to discard it. There is quite an assortment of reasons for discarding seedling roses.

In the case of the lilac, flower lovers accept singles and doubles without assuming that one is "better" than the other. In the case of the rose, if the rose bush were always thought of as an ornamental shrub comparable to a lilac or a honeysuckle, to be valued as a

feature of the landscape, we should naturally give the singles a larger place.

So far I have spoken of "the wild rose" as though it were of just one species. The native roses of prairie areas of Canada and the northern prairie States, meritorious though they are, have faults that not only lower our opinion of them in competition with the wild roses of other lands, but that are transmitted to their hybrid progeny. In brief, they are of poor color, being too strongly "rose colored," that is, pink with a violet tone, and second, they fade rapidly and disagreeably. The red element of rose fades more rapidly than the blue element, and so the flower tends to become more and more violet with age. It is largely owing to this differential fading that we dislike the rose color in comparison with the clear pink. Actually, when a flower of *Acicularis*, one of our hardy native species, first opens in the shade of trees, the color is so rich and of such good tone that it is difficult to imagine another color that we should prefer. Unfortunately, the third possible element of color in a rose, yellow, fades even faster than the red element.

One wild rose that should be valued (and is valued by many) is the Altai rose, *Rosa spinosissima altaica*, with its cascades of large pure white flowers, a hardiness equal to that of any of our natives, and strong, erect growth. After a visitor once sees a good plant of this species in flower, he wants it, and seems to lose then and there a great part of the usual prejudice against single roses. It cannot fade, of course, being white, and so there is never anything of that handicap of pink roses, two shades of color on the one plant at the one time, and half the flowers looking aged in comparison with the other half. Why has the Altai rose not achieved even greater popularity than it has? One reason is probably that it blooms so early that relatively few persons come around to look at the rose varieties in time to see it at its best. The other is that the true species is rather hard to obtain. All too often, seedlings of it are sold as the true species. When a bush of Altai rose has no proper mate beside it, it will accept pollen of the ordinary Scotch roses, or of Harrison's Yellow, and the seedlings of such par-

entage, whatever their merits of color or doubleness, do not have that strong, erect growth that all observers find so pleasing, but they grow more as do the common Scotch roses, with fine branches and many of them, lower, more bushy, and profusely suckering. It is only the true Altai rose that is so supremely beautiful like a bride decked in white.

Blanda species rose, which is native from Manitoba to Quebec, has the same erect growth, and the additional merit of thornlessness in many strains, but the flowers are small, pale mauve-pink, and the same habit of fading rapidly disfigures them as it does our three prairie species. Blanda itself is hardly the perfect wild rose that we seek.

The Nitida species rose, native to the Maritime Provinces of Canada and the New England States, is an exception among wild roses. First, it has shiny foliage (as indeed, the name tells us), and second, this foliage turns a beautiful bronzy red in the autumn. Third and most important of all, the flower has fewer violet tones than has any other wild rose. I know of, and in addition there seems to be a gene for non-fading that Nitida is able to donate to a proportion of its hybrid descendants. Unfortunately, the flower stem of Nitida is very slender and weak, and the plant is anything but adapted to dry lands. It grows to only some 18 inches at best, and suckers rapidly.

When pollen of Nitida is put upon flowers of the Rugosa Hybrid Hansa, the seedling descendants reveal an improvement in color, and an improvement in form. By improvement in color, I mean that the disagreeable violet tone of many of our Rugosa Hybrids, and particularly noticeable in Hansa, is much reduced. By improvement in form, I mean that the untidy effect of the numerous petaloids of Hansa is also reduced. I have raised numbers of Hansa-Nitida hybrids, and their average quality is remarkably high (except for the weak stems), and a few are excellent. Aylsham is the rose that I selected from this parentage that seemed the best. The plants of its parentage grow only about thirty inches high, and sucker freely. The foliage of many is shiny, but I have

(Continued on page 15)

PRESIDENT'S MESSAGE

By

MRS. LEO MONTEITH

Brookings



Our highways are our "Show Windows." View them with pride and let visitors share our enjoyment. We should try to make them what we hope them to become—beautiful, safe, unlittered lanes leading to the land of our inheritance, this land, once the haven of our earliest pioneers, now the great Sunshine State, South Dakota. In order that our garden clubs may share in eliminating roadside blights, will every garden club appoint a Roadside Improvement Chairman? Use these winter months to plan a spring and summer campaign against the "litter-bug."

Our State needs outdoor good manners. Let garden clubs campaign for beauty, neatness and cleanliness along our country roads and highways. Since education is far more efficacious than passing laws, let us teach children to respect both town and country property. Can't we fight against the habit of throwing papers and bottles into streets, along the highways, and in picnic places. Such a campaign need not cost money. No funds need be solicited, only the individual cooperation is essential to rout the "litter-lout" from our midst.

The Litter-Lout loves beauty, so
You find his traces when you go
In search of some secluded spot
Where Nature reigns and man is not.

It is pleasant to learn the names of things

As the years march on through the passing springs,

So don't forget that you've heard about The animal called the Litter-Lout.

If your garden club is looking for a worthwhile project to sponsor, one which will add to its accomplishments and at the same time contribute greatly to the beauty of our roadsides, I urge you to consider the Roadside Development project.

Are you looking forward to that next garden club meeting? Are your meetings conducted so that every member takes an active part? Part of the joy of belonging to a garden club is the opportunity to express yourself and your pleasure in gardening. Roll call provides the opportunity for individual topics or personal opinions on one topic. Make it an enjoyable and worthwhile part of your garden club meeting. Bring a favorite poem, a picture of an arrangement you like a lot of gardening conversation will sprout from it. Just try it. Are the topics interesting? It will help any member to read about the topic previous to the meeting, rather than depend upon only the speaker for all the information. The more you know about flowers, their history and their legends the more pleasure you get from them.

The new garden club letterheads and garden seals are ready. If you would like a supply for your members, please write to me.

Here is a list of State Chairman:

Awards—Mrs. George Jorgensen, Dell Rapids; Mrs. L. Brakke, Hartford

Publicity—Mrs. Albert Martinson, Brookings

Conservation—Mrs. L. G. Elsinger, Dell Rapids.

Historian—Mrs. F. Briley, Moberg

Membership—Mrs. Frances Nelson, Hurley

Garden Center—Mrs. Andrew Melham, Watertown

Flower Shows—Flower Schools—Mrs. L. S. Bush, Yankton

Parliamentarian — Mrs. W. E. Drummond Sr., Dell Rapids

Bird Chairman—Miss Ruth Hagar, Madison

Radio Publicity and Slides Chairman—Mrs. Ross Oviatt, Watertown

Horticulture—J. M. Atkinson, Rapid City

Blue Star Highway—Mr. H. N. Dybvig, Dell Rapids

Ways and Means — Mrs. Harry Kennard, Brookings

Garden Therapy—Mrs. W. Mortenson, Sioux Falls

Programs and Lectures — Mrs. Baughman, Madison

Historian—Mrs. F. Briley, Moberg

Perennials—Mrs. C. W. Moyer, Winner.

Garden club Presidents are as follows:

Britton—Home Garden club, Mrs. H. Carlson;

Britton—Start a Plant club, Mrs. Henry Collignon;

Britton—Ever Growing club, Mrs. Leonard Eikamp;

Brookings—Brookings Garden club, Miss. Laura Sexauer;

Brookings—Good Earth club, Mrs. Fred Aeilts;

Brookings—Petal Pals club, Mrs. Ray Johes;

Centerville—Centerville Garden club, Mrs. P. A. Alexander;

Centerville—Country Garden club, Mrs. Richard Lindvall;

Claremont—Triangle Garden club, Mrs. Jake Stohr;

Colome—Colome Garden club, Miss Hazel Smith;

Crooks—Rural Circle club, Mrs. Pearl Nelson;

Dell Rapids—Dell Rapids Garden club, Mrs. H. N. Dybvig;

Flandreau—Mrs. C. E. Brown;

Groton—Groton Garden club, Ed. Paeth;

Highmore—Sunshine Garden club, Miss. Thelma Christensen, Secretary;

Hurley—Green Thumb club, Mrs. Francis Nelson;

Huron—Huron Garden club, Mrs. J. R. Robertson;

Huron—Fair City Garden club, Mrs. E. C. Erickson, 853 Beach S.E.;

Irene—Irene Garden club, Mrs. Earl Dickerson;

Iroquois—Iroquois Garden club, Mrs. Ralph Joseph;

Kidder—Kidder Garden club, Ella Impeccoven;

Lake City—Lake City Garden club, Mrs. Chas. Olson;

Langford—Langford Garden club, Miss Alice Platt;

(Continued on page 10)

DAKOTA HORTICULTURE

GARDEN CLUB GLEANINGS

By

MRS. R. G. FERRIS

Route 3, Sioux Falls

I want to give to you, in this first report of the New Year, samplings of activities reported to me lately to show how busy the garden clubs have been. It seems that garden club members have never been more energetic in their work.

Originality was shown in the arrangements and displays at the Winter Flower Show given by the Madison Garden Club. Visitors were shown what can be done for decorations at this time of the year with the material available. Much ingenuity and resourcefulness were revealed by entrants in the selection and use of dried materials, evergreens and fruits designed for the holidays. I believe it is the first Winter Show to be held in this part of South Dakota.

Mrs. Frank Mock, of the Home Garden Club in Britton, sends an interesting account of a Nature Trip to the Sand Lake Game Refuge, "there were thousands of geese and ducks inside the refuge and they had certainly learned that they were safe inside. As we drove up to the tower, a little deer came up to meet us and followed us about. She had been hurt and the men there had raised her. We found the wardens very accommodating and instructive. Near by was a large granite marker, and as we read the inscription we found we were on the historic site of the Cuthead Indian Village and here in 1845, the first Mass in South Dakota was given to the Indians by a French Priest."

Mrs. Erwin Suther of the Langford Club writes about their accom-

plishments in beautifying the city park. It will be their project again for the coming year. This club will be two years old in February and is one of the most active organizations in the town. Besides the park work they held a tulip show, plant sale, Peony and Flower show, judged the Christmas light decorations for the Booster Club, gave a Holiday party and now are working toward a good representation at the State Convention, only 16 miles away.

The Ever Growing Garden Club of Britton has decided to specialize in growing tulips, and of course, are looking forward to this year's convention in June, and are working in conjunction with the other two clubs to make it a "howling success."

The Tri-State Garden Club of Valley Springs sent in their new slate of officers and reports an interesting meeting on birds and winter feeding stations. "A sleet storm is especially deadly for the 'furniture cleaners' who subsist on the grubs and beetles in the crevices of tree trunks and rocks. They must be fed promptly or valuable bird life is lost. Three kinds of woodpeckers, the chickadee, nut hatch, creepers, kinglets and titmouse can only survive a very brief icing of tree trunks."

The Pierre Garden Club met in the new nurse's home at St. Mary's Hospital. Gifts were distributed to elderly shut-ins. The Sisters had charge of the program, showing motion pictures of trees and bulbs, and the student nurses entertained with folk dances, music, and a tour of the new nurse's home.

Thelma Christensen of the Sunshine Garden Club in Highmore sent in copies of the minutes of five of their meetings. This club sponsored the Christmas lighting contest, awarding cash prizes in each division. Also sent a box of

gift stockings to the Children's Home at Sioux Falls.

The Pasque Garden Club of Wakarusa held their first show of flowers, fruits and vegetables this fall. L. S. Bush, Yankton, acted as judge and his comments were very congratulatory for this first flower show. Registered guests from surrounding towns numbered 234. At their Christmas party beautiful decorated baskets were made and filled with fruit and delivered to 12 shut-ins.

Mrs. A. Schamber of the Rapid City Club writes, "I'll challenge any club in the state to say we have the best food and the most educational programs. Our program committee, Mrs. F. Jeffreyes and Mr. J. Atkinson see to it that it is a well balanced program. Also at each meeting we have a question and answer period.

The Yankton Garden Club, Groton Garden Club, Community Garden Club of Miller, The Rural Garden Circle of Crooks, Lyons Garden Club, Watertown Garden Club, Sioux Falls, and South Sioux Falls Clubs all sent in the names of their new officers and descriptions of Holiday parties but space does not permit a detailed account of these individual activities.

No garden, unless it contains a pond tucked away in a far corner, can be called a perfect place. Not that I would have a stream running through it, however much I like the idea of water. My water must be still, looking up to heaven with a quiet adoring eye, even as I do myself."—W. H. Davis.

Whoever has a garden has three things which are needed: exercise for his muscles, food for his eating and a spirituality, for his soul."—Clifford & John's Almanack.

HOME OF *Seeds and Trees That Grow
and Satisfy*

Gurney Seed and Nursery Co.

YANKTON, SOUTH DAKOTA

WE ALL HAVE SOME SEA IN OUR BLOOD

By

W. EARL HALL

Editor, The Mason City Globe-Gazette

PART TWO

(Continued from last issue)

Tides Were Furious

The movement of the water is assumed to have been so violent as to make life on land impossible. The fury of the tides, as a matter of fact, may even have swept away the cliffs and mountains. But all the while the moon, on the basis of a natural law, was moving away from the earth.

Where once it took the earth only four hours or so to rotate on its axis, rotation now requires 24 hours. This retardation process, according to mathematicians, will continue until the day is about 50 times as long as it is now.

And all the while the tidal friction will be pushing the moon farther away, just as it has already pushed the moon more than 200,000 miles out into space. And as it recedes it will have less and less power over the tides. It will also take the moon longer to complete its orbit around the earth. The end result will be no lunar tides—that is, if you go along with the Carson story.

But I still haven't got around to explaining why it's the moon rather than the sun that fashions our tides.

How Close, Not How Big

Well, there was a tip off on that story when I pointed out that the lunar tide was eight times as violent when the moon was one half its present distance from Mother Earth. That's the mathematical and physical principle involved in the matter.

While it's true that the sun's mass is 27 million times that of the moon, it's the proximity factor that counts. When all the mathematical calculations have been completed, we find that the moon's power over the tides is more than twice that of the sun.

Now on to those rivers within the oceans. They're referred to as "currents" or as "streams." If they originate in warm climes, as the Gulf Stream does, they mean temperate climate for all lands within their influence. If they originate in frigid waters, as the Humboldt Current does, the effect is just the opposite.

It's assumed that there have been ocean currents as long as there have been oceans, while they undoubtedly change their courses, it's a commentary on their stability to reflect on the fact that the Gulf Stream as it now exists is some 60 million years old.

Franklin's Genius Again

Incidentally, we're told by this amazing little volume, "The Sea Around Us," that the first chart of the Gulf Stream was prepared in about 1769 by whom do you think? That most fabulous personage who bore the name of Benjamin Franklin. That was when he was deputy postmaster general of the colonies.

His exploration into the subject was prompted by complaints that mail packets coming from England took two weeks longer on their westward crossing than did the Rhode Island merchant ships. A Nantucket sea captain took Franklin into his confidence, explaining that it was knowing the Gulf Stream that made the difference.

One of the concluding chapters of the book deals with the vast mineral wealth to be found in the sea. Salt and other substances are dealt with in some detail but eventually Miss Carson gets around to the thing most of her readers undoubtedly are waiting for—petroleum and the part played in it by ancient oceans.

Petroleum Came From Sea

Exactly what geologic processes have created this one most valuable legacy bequeathed to modern man by the ancient seas isn't known, and perhaps not knowable. But this much, Miss Carson writes, seems to be true:

"Petroleum is a result of fundamental earth processes that have been operating ever since an abundant and varied life was developed in the sea.

"Exceptional and catastrophic occurrences may now and then aid its formation, but they are not essential.

"The mechanism that regularly generates petroleum consists of the normal processes of earth and sea—the living and dying of creatures, the deposit of sediments, the advance and retreat of the seas over the continents, the upward and downward foldings of the earth's crust."

It's a notable fact, as Miss Carson points out, that wherever great oil fields are found, they are related to past or present seas. This is true of the inland fields as well as of those near

the present seacoast. The great quantities of oil that have been obtained from Texas and Oklahoma fields, for example, were trapped in spaces within sedimentary rocks laid down under seas that invaded this part of North America in Paleozoic time.

There's Sea in All of Us!

"So," she adds, "our search for mineral wealth often leads us back to the seas of ancient times—to the oil pressed from the bodies of fishes, seaweeds, and other forms of plant and animal life and then stored away in ancient rocks; to the rich brines hidden in subterranean pools, where the fossil water of old seas still remains; to the layers of salts that are the mineral substance of those old seas laid down as a covering mantle over the continents."

And now for a final excerpt from "The Sea Around Us," which I hope will draw you to its amazing story if you haven't already read it:

"When they went ashore the animals that took up a land life carried with them a part of the sea in their bodies, a heritage which they passed on to their children and which even today links each land animal with its origin in the ancient sea. Fish, amphibian, and reptile, warm-blooded bird and mammal—each of us carries in our veins a salty stream in which the elements sodium potassium and calcium are combined in almost the same proportions as in sea water. This is our inheritance from a day untold millions of years ago."

FULL AND PART TIME SALES REPRESENTATIVES WANTED

To Fill the Demand for
Landscaping, Orchards,
Windbreaks.

Write me today for money-
making details.

H. L. BARDIN
Sales Manager

CASHMAN NURSERIES, Inc.
Owatonna, Minnesota

ESTABLISHED 1898
and STILL GROWING

DAKOTA HORTICULTURE

MY EXPERIENCE IN HORTICULTURE

By

R. L. WODARZ



I have in mind to relate some of my experiences in Horticulture, but before I do this at some later date, I am going to report on this year's performance in my orchard while memory is still fresh of what happened last season.

By way of clarification, will say: Location, some 5 miles southeast of Wyndmere, N. D.; size, 5 acres; kind of trees, several kinds of plums but mostly apple trees, standard varieties as well as seedlings. It should qualify as an experimental orchard. Now for the past season's history of this fruit plantation: we started with plenty of moisture from a record fall of snow. Precipitation at this farm, as read on the local rain gauge being: April .5, May 1.6, June 2.9, July 4.5, August 2.8, September .65, total 12.95.

Temperature was high from April on through most of September. Barring a few varieties of plums, all the fruit trees came out of the winter in fine shape. Rabbit injury was worst since the dry years and mice were also hard on the trees. Some gnawed trees had only a surface peeling of the bark and nicely came through, others were girdled to the wood and unless bridge grafted, were hopelessly done for. In this latitude, plums will blossom, on the average, about the 15th of May, apples the 20th of May. This year plums opened their blossom buds the last week of April and apples were in full bloom on the 2nd of May. I feared that there would be no fruit in 1952. Frosts did come with bad effects further north and parts west but in this vicinity we got by and we had a nice fruit crop this year. Now as to the variety of plums, carrying a good load were, La Crescent, Fiebing, Redwing, Toka, Superior set some fruit, Redcoat was due for a crop but failed: this fruit's heavily every other year. It had a rest in 1951. Selected native and wild plums did well. Here we come to the apple crop: scion wood of a number of

fruit breeding stations was collected through the many years and as time went on, trees of many varieties of apples began to fruit, along with some seedling trees. All in all there are upwards of 60 kinds. This has been my hobby, as I make my living raising grain and keeping some livestock. It is surprising what North Dakota's soil and climate will produce if given a chance. The following apples have fruited well: Lowland Raspberry, Melba, Duchess, Erickson, Beacon, Wakpala, Haralson, Milton, Red Sauce (N. Y.), Kendall, Wedge, Prairie Spy, Minjon, Fireside, Redflesh, Linda Sweet Sweet Russett, Ivan, Dolga. Some others not named, did well too. McIntosh on top grafts surprised me. Some specimens were brought to such perfection that the state of Michigan or New York could be proud of, 3½ inches in diameter and a polished red all over. As to rating in hardness as grown here, will come later. Watching those many trees, one will observe at times some queer behavior. There is one apple tree in the orchard, its fruit is only the size of a small cherry; evidently a baccata seedling. In 1945, if you remember, we had a cold rainy backward spring. All apple trees but that one, were in full bloom the 26th of May. Also the two grafts on the baccata seedling blossomed with the rest of the trees, but this baccata seedling itself did not open the fruit buds until the 6th of June. Every other tree was through blooming, in fact fruit had set when this tree in question burst forth in all its glory. Years following it kept step nicely, blossoming with all the rest of the trees. However, this year, 1952, it was behind again. Weather was just opposite this spring here with us. Heat forced the trees to bloom May 2nd. This baccata seedling waited till the 17th of May. The contrast of the white bloom against the green all around, made a beautiful sight.

Young Lem Hunnicutt failed to make a single team at the university. He returned home after three years in college with nothing to show for it but an education.

Adam was a gardener and God, who made him, sees that half of all good gardening is done upon the knees.—Rudyard Kipling.

BOOK REVIEW

By

MRS. L. N. BRAKKE



Mrs. Brakke

Soil Microbiology, by Dr. Selman A. Waksman, recipient of this year's Nobel prize in Chemistry. Published by John Wiley & Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 356 pages, price \$6.

This is a book about the life in the soil, the cultivated and uncultivated, from which we produce our food. The first historical mention of the possible presence in the soil of microscopic organisms which may directly influence the life of man, dates back to 60 B. C. Actual observation of the presence of micro organisms in the soil was reported by Athanasius Kircheus in 1671, but only since the discovery of the microscope has it been possible to recognize them. Decomposition of organic matter is known to produce humus, which was believed to be one of the fundamental factors in soil fertility. The residues of animals and plants find their way back into the soil in the form of manures. Thus the cycle of life is completed, "For dust thou art, and unto dust thou shalt return." Genesis, III, 19. Without this transformation life would soon come to a standstill. Numerous groups of micro organisms inhabiting the soil form only a very small part of the soil mass; they are responsible for the chemical and physical changes that take place in the soil, making it a living system rather than a mass of dead debris. This book follows along the general lines of two previous volumes, Principles of Soil Microbiology, and The Soil and the Microbe, which were written by the same distinguished author.

Miss Prudence Pilkins gave a party late Friday to celebrate the tenth anniversary of her 29th birthday.

To have ones own spade in ones hands eating into ones own earth is an occupation for a king."—Robert Lynd.

YOUR YARD AND GARDEN

By

LEONARD YAGER

Extension Horticulturist
Montana Extension Service



Foundation Plantings

One of the important phases of landscape development around a home is the planning and planting of the foundation planting. These are the plantings of shrubs and flowers about the foundation or base of the building.

The function or purpose of a foundation planting is to tie the house into the rest of the grounds or surroundings. A home possessing good plantings about it looks as if it belongs in the setting. Plantings about the foundation help to soften harsh, angular corners and other prominent architectural features. The kinds of plants used in the foundation planting will depend upon the architecture of the house, and upon the basic landscape design followed.

Shrubs give a more permanent and year round effect than do perennial and annual flowers. Dwarf evergreens are popular because of their effectiveness at all seasons of the year. A combination of evergreens, deciduous shrubs and flowers might be decided upon to give the greatest all-round appeal and effect. The shrubs should be placed at the more important locations, such as at corners and on either side of the doorway. In between places may be planted with flowers and low shrubs. If the foundation of the house in itself has attractive line or design, it may be unnecessary to fill the entire foundation with plantings.

When planning a foundation planting, these are some of the places to put plantings: at corners, within corner areas, on either side of the doorway to focus attention there, and in small groups or masses to break, long, monotonous expanses of foundation.

In choosing shrubs for foundation planting, one should use plants that will grow to a size in keeping with the size of the house. Many desirable dwarf and medium size shrubs are available for this purpose, making it unnecessary to

use plant materials that grow too large and soon become out of proportion with the house.

The shrubs and flowers should relate in texture qualities to that of the house. Likewise, there should be harmonious color relationships between house and planting materials. Mugho pine, *Arborvitae*, varieties of the Silver or Scop Juniper, Pfitzer and Savin Juniper are some of the very popular evergreen materials. Japanese barberry, Alpine currant, Pigmy caragana, the Peking and European cotoneaster, spireas are but a few of the dwarf and medium deciduous shrubs in popular use for foundation planting.

Trees in the Landscape

Trees are an important element in landscape design. In a practical way, they provide shade for human comfort. From a landscape standpoint, they fulfill several functions. They enframe gardens, and provide backgrounds and settings for our landscape picture.

Since trees are the longest living elements in the landscape plan, their placing should be given the utmost of attention.

Frequently, trees are wrongly used in the landscape plan. In many cases, one attempts to overcrowd a yard with trees, giving each tree little room to develop and display its individual beauty. Spacings from 30 to 50 feet apart are necessary for many of our species of trees, if we hope to give them sufficient room to develop.

Other folks do not give sufficient attention to the selection of desirable species. Unfortunately, the majority of faster growing trees are not the most desirable. A great majority of the fast growing species such as poplars and cottonwoods have soft, brittle wood, that breaks easily. In some cases, the roots are aggressive and damage sewer lines and house foundations and raise walks. A number of these species become too tall and grow out of proportion with the size of the house and property.

The Green Ash, American Elm, Hackberry, Hard Maple, Norway Maple, Flowering Crabapple are but a few of the more desirable trees used on properties. The Russian Olive is a valuable species to use in areas where rainfall is light. Evergreens are not quite so valuable from the standpoint of shade, except some species of Pines. Evergreens, such as spruce, should be used with restraint and should be used main-

ly in background or corner-of-the-yard plantings.

In urban plantings, shade trees in the front yard are unnecessary if the boulevard is already planted, unless the house is situated on a very large property. Shade trees may be planted 15 to 30 feet diagonally out from the front corners of the home in a rural yard. These trees will help to enframe the house as it is viewed from a front road.

A few other trees placed in the back yard will help to give a pleasing setting to the entire landscape picture.

PRESIDENT'S MESSAGE

(Continued from page 6)

Lyons—Lyons Garden club, Mrs. L. N. Brakke, Hartford, Route 3;

Madison—Madison Garden club, Mrs. Milton Schrepel, Route 2;

Madison—Town & Country Garden club, Mrs. Joe Turley, Route 2;

Miller—Miller Garden club, Mrs. Charles Breeding;

Miller—Blossom & Bulb club, Vivian Hartman;

Miller—Garden Gate club, Mrs. Wm. Sanger;

Mobridge—Mrs. F. Briley;

Parker—Miss Ann Morris;

Pierre—Pierre Garden club, Mrs. E. N. Ove;

Platte—Fleur-De-Lis Garden club, Mrs. George Chamberlain;

Rapid City—Rapid City Garden club, C. A. Gray, Box 574;

Sioux Falls—Sioux Falls Garden club, Mr. C. I. Keck, 215 S. Menlo Ave.;

Sioux Falls—South Sioux Falls Garden club, Mrs. D. Taute, 103 W. 41st St.;

Sioux Falls — Wednesday Garden club, Mrs. A. Brager, 605 S. Lake Ave.;

Valley Springs—Tri-State Garden club, Mrs. J. R. Crawford, Beaver Creek, Minn.;

Vermillion—Vermillion Garden club, Mrs. Edith Abell;

Viborg—Viborg Garden club, Mrs. Orville E. Johnson;

Volga—Hoe & Hope Garden club, Mrs. Oscar C. Oines;

Wakonda—Pasque Garden club, Mrs. B. Jacobsen, Volin;

Watertown — Watertown Garden club, Mrs. F. Bramble;

Winner—Winner Garden club, Mrs. C. W. Moyer;

Yankton—Yankton Garden club, Mr. O. A. Grosshuesch.

SOIL CONSERVATION BEGINS AT HOME

By

HARRIET MARTINSON

Soil conservation is the prevention of soil erosion. By soil erosion we mean the loss of soil ingredients which makes plants grow. Winds blow away top soil which is the richest layer holding most of the organic matter. Water not only washes this top soil and humus, but also leaches out the plant foods such as nitrogen and lime which are soluble in water. Over cropping by one type of planting will also use up certain plant foods in that area, unless they are replaced by rotation or renewed by fallowing.

There are many kinds of soil from very light sandy to heavy clays. The ideal is a balanced loam which is a workable mixture of sand, clay, and organic matter.

Organic matter is the decayed plant life which bacteria feed on and transform into plant food. It is added by gardeners in the form of manure and compost, peat, or leaf mold, vermiculite and sawdust.

Water and nutrients move fast through light and sandy soil which has large air spaces between each particle. Nitrogen is soon leached out. Crops grow fast and then stop growing when water is low or the plant food is used up. Adding manure to such soil is similar to mixing many small sponges into it, which hold the water over a longer period giving more even growth.

Heavy clay soils may be rich in raw nutrients but they lack air in the soil which is needed for the bacteria to make plant food—when manure is added, little air spaces are created between the tightly packed clay particles and the plant foods are transformed into a kind that the plants can use.

The 12 elements essential to plant growth are: nitrogen, phosphorus, potassium, sulphur, calcium, magnesium, iron, manganese, zinc, copper, boron and molybdenum.

Of these essential elements in the plant diet, a few are used in great quantity and the others are merely trace elements. However, the absence of any trace element may upset the entire plant digestive system.

The nitrogen supply is increased by adding manure, commercial nitrates, leaf mold and such materials. In com-

mmercial fertilizers the potash and phosphorus are also included and mixed in proportions necessary for the part of the country in which they are to be sold—always follow instruction on the label. Vigoro and other plant foods are a sample of those we use—commercial mineral fertilizers may stunt and burn plants. Don't over fertilize with them.

Roots of most annuals and most vegetables fill every inch of top soil with their root systems. Deep cultivation cuts off these feeder roots and reduces growth. Vegetables must be thinned to allow for development of a root growth.

If you remove leaf growth you cut down the food for root growth and any pruning during the summer is taking away food which the plant is storing for the next year's growth.

The plant is a manufacturing plant with the purpose of producing seeds to start new plants. The roots are channels carrying water and raw plant food from the soil to the leaves. The leaves and stems use sunlight to change these ingredients into usable plant food for growth.

There is an important balance between top growth and roots. The size of the leaf that is receiving sunlight will determine the size of the root and they tend to be equal.

Perennial and biennial vegetables store most of their food for next year's flowering. We eat the storage roots of beets and carrots.

Every garden is large enough to follow a rotation plan. Members of the same plant family are subject to the same diseases which usually leave a bug or spore in the soil and they also use the same food elements.

Thus, cabbage, cauliflower, broccoli, radish and turnips should never be planted in the same soil in successive years. Rotate them with beans, lettuce, corn or tomatoes.

Working the soil should be done when the moisture content is right; if it is too wet, the soil lumps and the texture is ruined. Therefore do not work the soil too early in the spring nor too soon after a rain.

If you must have water, soak deep, forcing roots deeper to prevent drying out of tiny roots near the surface which develop with many light sprinklings.

A newly set plant needs all the moisture it can get; **never** hill up the soil around the root. Leave a saucer-like

hole around each plant to trap the water and hold it for slow soaking in.

A fall cover crop in the garden area serves many purposes. It adds humus to the soil and acts as a binder to the soil to prevent frost cracking and erosion.

The main contribution is that it forces the gardener to clean up garden trash early and present a nice green picture through late fall, winter and early spring.

Destroy hollow stem weeds and stalks and burn dahlia stems and foliage as many borers and insects stay over winter here.

To make compost, make a pile of alternate layers of leaves, soil, garden trash, and complete plant food plus a commercial preparation which hastens the decay. Spread this an inch or two over your lawn or other spot to be fertilized. Ordinarily fighting weeds is like milking, washing dishes and such jobs—you are never done.

However mulching will help to keep the soil from crusting so that rain will soak in instead of run off. It holds moisture in the ground and helps to maintain an even temperature around the plant roots.

Mulch is not expensive—use waste products such as straw, old hay, shredded fodder, or ground up corn cobs, or leaf cuttings. Some folks lay opened cardboard cartons around certain plants.

A good mulch makes a clean resting place for tomatoes, cukes, squash, and strawberries—no more mud splashed lettuce or spinach. Put on a mulch as soon as the soil warms—between rows of the asparagus after first cultivation, strawberries in fall, raspberries early spring.

Potatoes will come up through a mulch—so put 2 inches over the whole patch after it is planted—no need to hill or to cultivate.

The ground should be moist but not wet, when the mulch is applied; if you spread fertilizer on top it will wash down to the roots.

Hay is a good mulch—you may have to hand weed but don't you always? Just turn the mulch under when you plow in the fall and you have added more humus to the soil.

Prevention of soil erosion in any form is soil conservation. Plant rows on contour or horizontally across the grades, to prevent washing.

FRUIT AND VEGETABLE NOTES

By

F. X. WALLNER



Wallner

On my way to Chicago I noted little change in the eroded farm land along the Milwaukee line. It seems to me that the western third of Iowa should have a few conservation-minded farmers like we have in Minnehaha county. Little snow or moisture and the large wheat and rye fields are not in view from the train. First place of interest, the science museum, where we walk thru a human heart 16 ft. high, designed to teach the public about heart disease; the exhibit occupies 3,000 square feet and comprises 17 different display units. "Learn to live longer by knowing your heart," is the theme. On entering you hear the heart beat, and you check your own then walk thru and up some steps and down and again check your heart after this exertion. The heart pumps a little tiny car on trucks and you learn this out lasts seven powerful automobiles each driven 10,000 miles for ten years. I missed the interesting Christmas show at Garfield Park this year. The first day of the biggest show of the year in Chicago is the livestock show. The whole city and surrounding cities or counties vie with each other for this big event. Cows, steers, horses and sheep are brought into hotel lobbies. Milking contests, put on in Hotel Hilton lobby by top actresses, perhaps the best way to report this show is to divide it up into children's divisions and the regular show and to just headlines of the press. While this is the 53rd annual livestock show, its only the 31st. annual 4-H congress and 48 winners in many fields were selected. Top interest is a time when a boy or girl's pet animal is in the open class and wins over older exhibitors. The sad and heartbreaking time is really the first day when hundreds of youngster animals are weeded out and never get into the show because there is not room for them and any more to be entered. It surely seems there should

be a way of having more state contests so that there would not be so many disappointed children going so far, at great expense. Girls seemed tops as there were 33 girls and only thirteen boys housed in one section although in another section 38 boys and 23 girls, won prizes. An Iowa girl won Junior Champion; she is the seventh girl to win top place in the history of the show. Another girl, from Oklahoma, won over 180 men, the stock show crown. Another girl, got a top prize at the horse show, the first evening. The big firms of the nation are very liberal with scholarships and other big prizes for those future Farmers of America, 198 of these youngsters won National bonuses and awards, but live in Chicago, like me, no thank you. A week of this speed and high tension is enough until next year, when most of the losers figure on being winners. A large number of the two-million 4-H members get high honors at Chicago annually; the woman that has mothered the club the past 35 years was given an award for her council and guidance for youth achievement. I had a book filled with notes, but left it on the car seat at Delmar—part of St. Louis, when I made a dash for another train for Moberly, Mo. I do remember one winner that coaxed his steer back into condition by giving him beer, which would make a fine item for the advertising writer for some brewery, if he learns about it. The North Dakota exhibitors have been showing for that state for many years, but there were very few South Dakota exhibits. The attendance was also larger than a year ago but auction for top steers has dropped from past high prices. The champion of the show brought \$4.50 per pound and second top \$2.50. Canada finally lost the wheat championship to Michigan but Indiana again won the corn championship for the 25th time. Iowa won it once and Illinois, all other years. A fourteen year old girl from Indiana won grand championship corn award; her brother, 20, won it last year. Many families seem to win several times in some contests; it seems to become a family habit. The two Chicago slickers that have had a lot of fun the past four years, winning fourth, third and second finally got a blue ribbon on their city fed pigs. They admit that they are through as the city fathers have condemned the raising of pigs in the city. The evening pro-

gram, the horse show, is a thrilling entertainment. The three large wagons, each drawn by six large horses and later the two smaller wagons drawn by six Shetland ponies, at a fast clip, sure looked as though they would get tangled up. Mr. Allen with his two border Collies, puts on the best act of all, moving a flock of sheep in the large arena. A new act is moving a flock of geese, from place to place. Am sorry I will not be able to be with you during the Legislative session, but I am confident that you will be, able to convince the legislators of the educational value of our Society, and that they won't want the Society to die from lack of money.

MANITOBA NEWS LETTER

(Continued from page 3)

Many gardens within a garden.

The Cranford Rose Garden, the Wild Flower and Oriental Gardens are but a few of the charmingly landscaped areas that are scattered throughout the vast, scientific plant collections. In addition there are many mass plantings of ornamental trees, shrubs and flowers.

Wide lawns, flower-covered meadows and shady lanes form the connecting links between the gardens. A stream winds down most of the length of the garden disappearing at the lower end in a small pond.

The entire fifty acres are designed to provide year round beauty.

In late April or early May it seems as though everything but the Flatbush Avenue trolley tracks is in blossom.

As to the best time to visit the Garden, it depends largely upon definite likes. But the best advice is: come often and miss nothing.

"As far as possible men are taught to become wise, not by books, but by the heavens, the earth, oaks and beeches. . . ."

A visit in mid-September was considered a fine privilege. The Japanese Oriental Garden is unique. It was built in 1914 and exhibits caves, waterfall, twisted trees, wistaria vines and other features from the far East.

Have you ever stopped to think what a wonderful thing the human brain is? It never ceases to work for you from the time you are born until the moment you stand up to make a speech.—THE EARTHWORM.

DAKOTA HORTICULTURE

WANT TO WIN AN AWARD?

By

JUANITA JORGENSEN

Award Chairman



Jorgensen

Will your club be proud and happy to display a winning trophy? Last year 14 beautiful ribbons were won by South Dakota garden clubs, and two more went begging because no one took the trouble to send in

their entry. More garden clubs than ever will be eligible for recognition for outstanding work in 1953, but you have to send your data to the Awards Chairman before June 1, 1953.

The committee is indebted to several garden club members who sent suggestions after the list of awards appeared in the November-December *HORTICULTURE*, and we have acted on some of them accordingly. Revised scoring on yearbooks as follows:

1. Well-organized club20 points
2. Format of yearbook.....10 points
3. Contents of yearbook.....50 points
4. Utility of program.....20 points

We have also changed the Special Achievement award to an award in Garden Therapy in order to encourage this phase of garden work, so the total list of awards reads:

1. National Council ribbon for flower shows.
2. State Flower show achievement.
3. Horticulture achievement.
4. Junior achievement.
5. Garden Therapy achievement.
6. Civic achievement (including conservation).
7. Scrap Books.
8. Year Books.
9. Lona Crandall Plaque for juniors.
10. Junior club scrapbook.
11. Junior club yearbook (instead of achievement).
12. Junior individual scrapbook.

Thus far we have received just one entry for a contest, a Junior yearbook from the Dell Rapids club. If you have any questions which must be answered at once, write to Mrs. L. N. Brakke, Hartford, as I shall be out of the state again until sometime in March. You

may mail yearbooks or other material any time as it will await my return. So, until another gardening season begins, may I wish you all a Happy New Year and a delightful planning for the season!

Scrapbook Rules—1953

1. Make your scrapbook large enough so that clippings, ribbons, and pictures need not be doubled up, or project beyond the edges; small enough to be handled with ease, not smaller than 10 x 12 inches, though it may be larger.

2. Make it sturdy so it will not fall to pieces with handling; see that it has stiff covers and easy manipulation of the pages. Use cement glue where possible and fasten all material in some way so it does not fall out and become lost.

3. Make it neat with margins at each side of the page. Clip news items with care, paste securely, and fasten ribbons or other material firmly to the pages. Do not overlap unless material must be viewed on both sides, when it may be fastened along one edge with Scotch tape.

4. Keep material in chronological order for one year, beginning at the same time as your yearbook, not from one convention to another. The year must be completed by or before June 1st.

5. Label all clippings with name of publication and date. Tell us what it's all about; no judge can guess. Use uniform colors and printing throughout for the artistic value.

6. The first page of your scrapbook must give the name of your club, town, year covered, and the name of your scrapbook chairman.

7. Make it significant; a scrapbook is essentially a history, and as such is a valuable record for your club, and to check progress against goals. It must tell the story of your year's study and interests by means of all publicity given the club, pictures, snapshots, awards, ribbons, programs, slides, sketches, etc.

8. Your scrapbook must also include: A brief history of the club (summary of size, age, etc.) not more than one page in length.

A copy of your yearbook to coincide with material exhibited.

A record of all programs that were given: news of your tours, civic plantings, flower shows and schedules, junior work, conservation, therapy, any other project or activity undertaken or par-

ticipated in by the group; and a record of participation in state or national by any of your club members. Pictures help, pictures of your president, your flower shows, your outstanding gardens and gardeners, and before and after pictures of projects accomplished.

9. Your scrapbook may contain clippings of state and national news that is pertinent to club work or in which your members have participated, such as flower show schools, lectures on horticulture or arrangements they attended; tours, etc. It may contain clippings on horticulture that were actually presented to your club as a program; or it may contain whole papers delivered by members; the president's message, etc.

10. It must not contain anything added for purely sentimental reasons if it is not related to garden club work. It is not a garden scrap book, so do not add garden articles or poems unless they have been written by your members or were a part of a study lesson as explained above.

Judging will be about the same as last year:

General make-up according to above six rules	10%
Historical value and scope of coverage, rules 7 and 8.....	30%
News interest, inspirational effect on reader	30%
Horticultural value of programs and projects to the club and the community in increased interest in gardening	30%
	100%

"The welfare of the nation is to a large extent dependent on the perpetuation of our forests."—Herbert Hoover.

A garden is an awful responsibility. You never know what you may be aiding to grow in it.—Charles Dudley Warner.

Fathers, instill into your children the garden mania. They will grow up the better for it. Engaged in planning how to shade a glen or in contriving how to divert the course of a stream, one is too busy ever to become a dangerous citizen an intriguing general, or a caballing courtiers.—Charles Joseph, 18th Century.

107472

SECRETARY'S CORNER

By

W. A. SIMMONS



W. A. Simmons

Am severely handicapped today from the loss of the use of my watch, due to main-spring failure. It prevents me from finding out when I should be hungry. This is especially hard on me who have always considered

myself a true western man of whom it has been said "they never miss a meal or pay a debt."

Was very glad to receive a nice letter today from an old life member and good friend Dr. Manly J. Champ- lin, one time assistant to Dr. Hansen, at State College, then Head of the Field Husbandry Department of the U. of Saskatchewan till retired at 65, and now living at Santa Cruz, Calif. He enclosed a photo which showed the folly of having any arbitrary retirement age, as the picture suggested that he could still lick his weight in wild- cats. He wrote: "Thank you very much for changing my address for the DAKOTA HORTICULTURE. I received the first copy that I had seen since I retired in '51 and found many familiar faces and names in it; W. R. Leslie, of Manitoba, Percy Wright, a former student of mine from Saskatchewan, and O. A. Stevens of North Dakota, as well as your own. Mabel and I travelled about a year and visited the old home state of South Dakota for a while, before settling down in Santa Cruz, Calif. This is a horticulturist's paradise but we have plenty of insects, mildews, etc. to keep us busy. I am glad to tell you that my health is good and I am hoping to continue that way for a time, at least."

We are glad to learn that our friend Mr. Graves has been elected a director in the North Dakota Institute of Regional Studies. "This organization is very new, just learning to walk," Mr. Graves writes, "and as a result we aren't too sure of just how big a territory we are going to cover. We have a great many activities started already, and I am trying to feel my way around.

This volume of Mr. Truax's is one of the things we have on file."

Here is an interesting item from CAPPER'S FARMER: "Another idea on tomatoes has been garden-tested by Harry Graves, Cass County, North Dakota. Instead of pruning or staking vines, he used an old tire as a support. The light tires work well with short vined tomatoes such as Bounty, Victor and Firesteel. Taller vines can be held off the ground by slipping blocks of wood under the tires. Graves says the tomatoes are easier picked, ground rots are reduced, and some insect pests are, at least, confused."

January 1, 1953: Under ordinary circumstances I try to start the new year right by doing no work on New Year's day, lest I acquire bad habits, but on account of spending a day at Brookings Tuesday, at a directors meeting, this was not possible this year. The first piece of business at that meeting was settling the dates of our coming annual meeting at Britton. Mrs. A. C. Bonham was contacted, via the telephone and it proved mutually satisfactory to set these dates at June 22nd, 23rd and 24th. The first two days will be devoted to the programs, with the banquet on Monday night, the 22nd. We hope all the directors will go to church early Sunday, then arrive at Britton in time for a meeting that night, as there never seems to be any time for it after the meeting starts. By setting the Monday meeting time of opening at 9 o'clock, we are usually able to get it started at 10. The pro-

gram sessions will end Tuesday night and on Wednesday a tour has been arranged for, so our members can view some of the beautiful lakes that adorn that corner of the state. The tour will then move east through Fort Sisseton, then to F. L. Block's splendid orchard at Ortonville, Minn., and then on south to Canby, Minn., where one of our faithful members, Mr. Eldred Buer has perennials that are worth driving a long way to see. We hope as many as possible will arrange to take part of their vacation during this week. Britton has three large garden clubs and they will give us a good time, and we hope to lure down some of our North Dakota friends to this meeting as it is so near their state.

One of the fine things Santa Claus brought me was three jars of jelly and preserves, sent by Mrs. Flora S. Kicken, of Ellsworth, Nebraska. The fruit from which they were made were all raised by her on the "Old Jules" orchard, started by her father and mother many years ago and which she has increased and improved till residents of that part of Nebraska come annually to pick their own fruit, from a radius of 100 miles around. Of course those poor people can't raise their own fruit, or think they can't, which is much the same thing.

Santa Claus didn't forget the Horticultural Society either, or at least our friend Dr. M. Alden Countryman, formerly of Sioux Falls, now of Glenview, Ill., did not, sending in a generous

(Continued on page 15)

The PIONEER SEED HOUSE

Nursery-Greenhouses of the Northwest

FOUNDED at BISMARCK
in DAKOTA TERRITORY
in 1882

WRITE FOR CATALOGUE
NEW CATALOG READY JANUARY 1st
MAILED UPON REQUEST

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

ACQUIRING KNOWLEDGE BY OBSERVATION

By
DR. W. E. OVER
In Museum News

We urge every young person to acquire a college education, but when you graduate not to contend that your education is complete. Your mind then is in a receptive mood to continue your education throughout life. This is by observation, reading and thinking. Whether you are walking around in your own dooryard or travelling over the highways anywhere in this world, there is something interesting and different every day. You should notice and wonder why most of our common birds are grayish on their backs. Finally you will notice that this is protection from enemies, as their backs blend with their grayish nests and surrounding environments. Then you will notice that our common toad is in color almost identical with the soil in your garden as this helps to protect it from its enemies, such as snakes. The whole outdoors of nature is wonderful with the trees, wild flowers, birds and all forms of wildlife. If you keep your eyes open and think, there is something every minute to attract your attention and add to your knowledge, as you go through life. I recall that when I was a small boy and wandering along a dry creek bed looking for pretty pebbles and arrowpoints, I found a large square tooth. What large animal could have a tooth like that one? I had never heard of fossils, even had there been any in that region. But I must find out, so months later I was wandering through the woods near our home and saw, lying among the leaves the skeleton of a horse. It took only a minute to see that the square tooth I had found was a molar from the upper jaw of a horse. After being here in the museum for a few years we made the statement that if anyone would send a single tooth of any recent mamal we could determine the species. This was because while travelling over the state we had saved the skulls and teeth of every mamal. We have been able to add a little to many inquiries of this nature. One experience we had was when a veterinarian took a tooth to the late Doane Robinson at Pierre and asked him to send it here for identification. It too was an upper molar of a domestic

horse. We had often heard people say that prairie dogs, burrowing owls, and rattlesnakes lived together in the same burrow. I did not believe it but had to prove it. While wandering around over the prairie dog towns I would see mamals, reptiles, and birds lying or perched at the entrance of the burrows. Upon further investigation I found that there were many vacant or abandoned burrows and that these were ideal nesting places for the owls and hiding places for snakes. It is possible that rattlesnakes have in some cases run the dogs out and taken possession of the burrow. Then I had often heard people of the plains claim that jackrabbits never drank water. I was standing near my tent one morning and saw a jackrabbit hopping toward the tent. He stopped at a small water-hole nearby and took a good drink. I have been told also coyotes never drank water but did not believe it. One day while living in Perkins county I went with my shotgun down to a small dam where there was a good sized water-hole. There I saw a coyote trotting down on the opposite side of the creek from me and I kept hid, wondering if he was after ducks too. He came right down to the creek bed and began to lap water. One could go on indefinitely about problems of nature that we do not understand, and this is written to encourage our young people to look, listen and think. Thinking is the point to emphasize, to help us to acquire further knowledge. One writer on the subject has left this with us: "Look Man—the only price of admission to nature's living theater is a pair of good eyes with the secret of using them."

CAN WILD ROSES BE IMPROVED

(Continued from page 5)

observed none that has inherited the fine autumn coloration of Nitida.

A second generation hybrid of this line, which is probably Aylsham by Hansa again, is the little rose I have named Quardon. The flower is richer and darker and more velvety-shiny than I have ever seen in any other rose, a striking maroon-red that catches the eye immediately, and is non-fading. I would introduce the variety for its color alone, despite the single petals, if the plant were stronger in growth and the flowers more numerous. Unfortunately, the flowers are few

and far between and the plant lacks vigor, at least when on its own roots.

If I could transfer the color to a wild rose adapted to our dry climate, I should "have something." In fact, even if only the gene for non-fading could be transferred to a wild rose, or, for that matter, to any other rose, one would make an achievement to be remembered.

The Redleaf rose, Rubrifolia, a Canina-type rose native to the Alps of Europe, seems also to have a good deal of the same genes for slow-fading and for suppression of the violet tones in petals. Unfortunately, its hybrids have small flowers as a rule, often extremely small flowers, and the petals are narrow, especially at their bases, so that the flowers seem rather open at the centre. The faults, presumably, could be left behind by judicious backcrossing.

In any case, the genes that we should value at the present stage of things, I believe, are those for non-fading and for elimination of violet tones. Such genes probably exist in the Hybrid Tea class, but I doubt if there is any source of such as good as those in Nitida and Rubrifolia.

SECRETARY'S CORNER

(Continued from page 14)

donation of \$5 to help our failing bank account. May his tribe increase and our thanks go out to him.

Don't forget to contact your legislators and impressing them with the importance of giving the Horticultural Society a state appropriation at this session.

COMMERCIAL SANTA

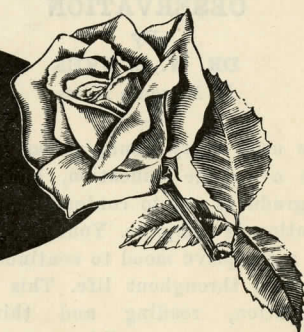
A gay old bird—with a big white beard,
Dearly loved—yet slightly feared
By the very young—as they shyly try,
To get what they want from this queer old guy.

Mother standing fondly by—
Urges as she winks her eye.
"Tell Santa, Sammy"—what you want
About the big red e-l-e-phant.
The slight, skates and skooter, too.

Cat got your tongue, what's wrong
with you?

But junior stares with big round eyes
His chin then crumples and he cries
So this is how he is led away,
Poor Santa surely earns his pay.

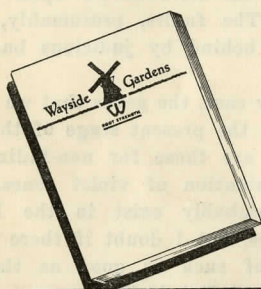
Wayside.....splendid new flowers



Don't let your garden lose its bright appeal—keep it vibrant and beautiful with the many *advanced* garden fashions offered in Wayside Gardens' new Catalog. No other catalog in America features the vast selection of test proven, worthwhile new shrubs, roses, bulbs and hardy "*pedigreed*" root-strength plants.

... and remember, when you order from Wayside Gardens, you are assured of getting only the finest quality, top-notch, "*pedigreed*" stock. This guaranteed superior quality is the deciding factor in garden success, it is your protection against garden failure.

SEND FOR THE WORLD'S FINEST HORTICULTURAL BOOK-CATALOG



Almost 200 pages, with hundreds of flowers illustrated in their natural colors. Thousands of gardeners rely on this book, year after year, as their source book of ideas and the finest worthwhile new plants. Complete cultural instructions for each item. To be sure you get your copy it is necessary that you enclose with your request 50¢, coin or stamps, to cover postage and handling costs.

MENTOR AVE.

MENTOR, OHIO

Wayside Gardens



LETTER FROM FLORIDA

By
C. RICHARD HARTMANN
Route 2, Box 56-C
Dade City, Florida

Horticulture is always welcome. Everything in it is highly interesting to a lover of nature, no matter where he lives. The magazine really is far above many commercial publications on gardening.

What you said, Mr. Simmons, in the Sept.-Oct. issue, page 77, in regard to enriching soil with humus, strikes me particularly. It is a subject close to my heart. I was brought up in Germany and in Switzerland where, in by boyhood time at least, chemical fertilizers and stimulants were not used, just natural compost made by systematically piling every kind of garden, yard and kitchen refuse and all sorts of animal manure, leaves and twigs, also stone meal of various kinds. On Saturday evenings, and also on other days if found necessary, every owner of property or renter swept his part of the street or road painstakingly, adding the sweepings to the compost pile. Burning

them would have been looked at almost as a crime, as well as being offensive and inconsiderate of the neighbors.

I noted with pleasure what Mr. Claude Barr, in his article, "My Black Hills," said about the mariposa tulip (*Calochortus gunnisonii*). He is right in his admiration of this wild flower, it is truly exquisite to look upon. When I lived in Colorado there were many growing on my place. One time as I called a visitor's attention to the beauty of them, he plucked one and exclaimed, "Why, looking at this flower is like looking into a wonderland!" Mariposa is the Spanish word for butterfly.

In "Storing Bulbs and Roots" I missed mention of the little known *Achimenes*, a summer flowering bulb of great beauty and interesting shape, and of very easy culture. Under trees, in leaf mold, kept moist, they bloom unceasingly till in the fall they die down. The tiny bulbs should then be lifted and stored in very dry sand and kept frost-free. I let them sprout while in the sand, before planting in spring, as I think they know better when it is

time to look for sunshine and moisture. In color they range from a rich, almost velvety purple through lighter shades, violet, pinkish orchid, to the purest white. They are closely related to the *Gloxinia* and I presume up North they had better be treated like the latter and kept in pots.

Coming back once more to, "My Black Hills," I think the whole article is very impressive. Mr. Barr is very observing and sees the beauty not noticed by many who go through life not grasping the mysteries of nature and of the vastness and unity of all creation.

Beavers are the top engineers of the animal kingdom. Many lakes in Wyoming are formed by dams built by beaver labor. Bureau of Game Conservation reports credit beavers with halting erosion in some areas. Inaccessible backwoods streams of Idaho and Colorado are being stocked with beaver. They are flown in and parachuted to their new locations in boxes which automatically open as they reach the ground. CAPPER'S FARMER.