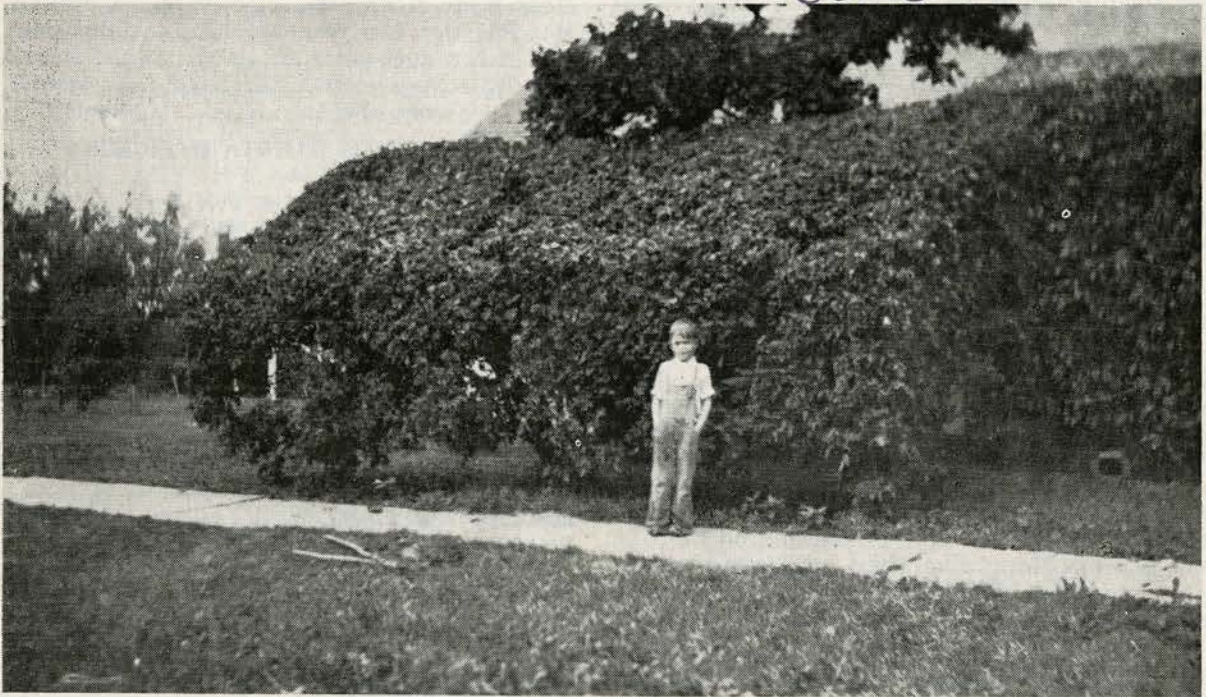


NORTH AND SOUTH DAKOTA HORTICULTURE

NOVEMBER, 1938

South Dakota State
College Library



Under the loving care of the veteran druggist, Mr. E. D. Holmes, this arboreal Davenport was evolved from a single boxelder tree, at his home at Havana, N. D.

We are expecting to see you at our Annual Meeting at Aberdeen, November 30th and December 1st

634.05



THE GOLDEN EAGLE

by
O. A. Stevens



O. A. Stevens

This eagle has probably been known longer and better than any other since it has inhabited all of Europe and was the principal one in that region. Thus it is the eagle of our familiar literature. The British writer, H. H. Hudson, suggests that vultures and albatrosses may be as large and as good fliers, but when at rest they are unattractive. No doubt it was the piercing gaze and kingly mien of the eagles which distinguished them above others.

The eagle feathers were an important item to the Indians of the northern plains for the decoration of their enormous war bonnets. Old timers in the Dakotas point out the eagle pits on exposed hills, where the braves hid until the bird came to the bait exposed on the covering of brush. Here he was seized and drawn down but often not vanquished until he had done some damage with his claws.

The domain of the golden eagle included most of the northern part of the world—all of Europe, Asia to the Himalayas and Japan as well as northern America. Early writers had considered the Scottish eagle distinct from the continental one. America furnished a third form and later writers separated the Asiatic birds into several races. They are associated with rugged country, especially the mountain ranges, where nests can be located in tall trees or on inaccessible sides of rocky cliffs. They often remain in their nesting territory during winter, though frequently wander to a considerable distance. In eastern United States they appear in the central latitudes and occasionally as far south as Alabama and Florida. In the Rocky Mountains they are found as far south as central Mexico. They nest in western North and South Dakota. Minnesota has no nesting records, though the birds are seen frequently in winter especially in the northwestern part of the state.

The nests may be two or three feet wide and half as high the first season, but by yearly additions become several times this size. The larger sticks may be as much as two inches in diameter. Nests built largely of cactus stems have been described. The lining is especially variable. sometimes only small twigs, weeds or roots are used; sometimes moss, fur, grasses or plant fibers. James B. Dixon of California reported that he always found a few leaves of eucalyptus or pepper trees and he thought perhaps these were used to discourage insect pests. The use of nests in alter-

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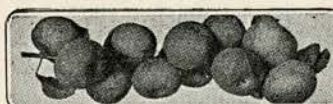
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nate years, which has been described, may also serve this purpose.

The eggs are from three to three and one-half inches in length, dull white, creamy or pinkish, variously spotted with brown. Usually two are found, frequently only one, and occasionally three. Incubation is believed to last five weeks or nearly so, the young remaining in the nest about ten weeks. At first the mother bird carefully prepares the game, feeds only small bits of meat to the young and carries away the uneaten portions.

The life of the eagles seems to present strange contrasts. Notwithstanding their large size, power.

(Continued on Page 132)



NEWSLANTS

by
Harry A. Graves



H. A. Graves

In addition to the Canadian points of horticultural interest mentioned in last month's column, I had the pleasure this fall of visiting "Glenorchie," the farm of John Orchard at Miami, Manitoba. I regret that more of our folks have not been able to visit this planting of fruits and ornamentals, since space and my powers of description are not enough to do the place justice.

Located on one of the beaches of Old Lake Agassiz, the farmstead nestles among 20-year-old and Lodgepole pine and white spruce that are 25 feet high and thrifty.

The fruit planting of over 15 acres is devoted largely to apples and plums. Trees of Haralson were fruiting heavily. Mr. Orchard considers this one of the best. "Mount," a new apple variety of which there is little stock in existence was a real eyeopener. This variety carried a heavy crop of fall apples that would average about a 60-pack size. To be more clear, they would compare favorably with a kittenball in size. The tree appeared hardy and I am sure we will hear more of this variety in the next few years. Dr. Hansen's Sugar Crab, with its suggestion of pear flavor, was prime the day we were there and is to be considered where a rather mealy fall apple is desired. McPrince, a McIntosh x Prince cross, was also prime but very different in type. This variety was also very tasty, but in contrast to the Sugar was sharp and juicy. This variety is dark red in color and excellent out of hand.

Influence of the Morden station was noted in the many numbered varieties on trial from that station.

Rosilda could not be compared with these above varieties since it was past, but there appears to be no question in Mr. Orchard's mind regarding the high quality of this variety. This variety fruited this year from a bud on Juneberry stock.

With so many fine varieties growing happily, there was no difficulty in understanding why our host dismissed Whitney with the remark, "It is all right the day it is ripe!"

Omaha, a red freestone, somewhat like Red Wing in appearance but hardier, was outstanding among the plums. Minn. 56 and 89 also were commended.

Among the sandcherries, the "Glenorchie" selection of 0-12 and "Ofive" appeared worthy of

trial. The Fannie Heath black raspberry was thrifty and has done well for several years. This, too, is worthy of notice since this variety has not been stressed in recent years with us here in the Dakotas.

We did not spend much time in the vegetable plots, but Red River tomato is grown and preferred still.

A thrifty bed of *Juniperus horizontalis* was noted at the feet of a planting of taller conifers.

Mr. Orchard has no new weed problem. Our old friend purslane causes him concern as it does everyone who has met up with this pest.

Mr. and Mrs. H. C. Blankenship, of Williston, who have raised a very fine garden the past several years with the aid of a snow trap, have repeated again in 1938. Quite unusual in the Blankenship garden are 15 mulberry trees that bore several quarts of fruit this year. Who has seen this tree bear this far north before?

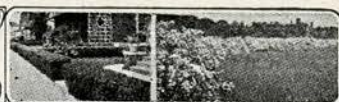
* * *

Hardy perennials may be seen in profusion in the garden of W. E. H. Porter of Hansboro. Since Mr. Porter has contributed many fine articles to North and South Dakota Horticulture, I will take little space to describe the material as we saw it. The Chas. Wilson aster was very attractive. *Phlox subulate* and *Alyssum montanum* were noted as doing very well. Several plants of Golden Leaf privet were apparently hardy. Mr. Porter has not found Amur privet so with him. Lovers of unusual and beautiful perennials would do well to visit Mr. Porter if they find themselves in the vicinity of Hansboro. They can be assured of a hearty welcome.

* * *

Considerable use has been made of a sub-surface tree irrigator we received about a year ago. It consists merely of a 30-inch hollow needle about 3-8 inch in diameter with a hose connection on the upper end. The needle enters hard packed soil easily, providing the water is first turned on. It is especially valuable in applying water around new set trees. Trees so watered in last spring came through in fine shape this year. Established trees should receive water this time of the year also. Practically no water is lost through evaporation when applied in this manner.

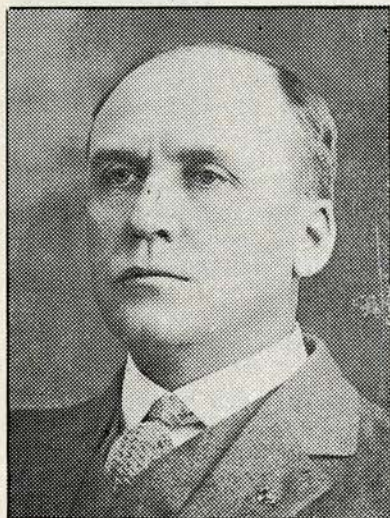
Pollen is being outmoded by stimulating chemicals which, when sprayed on flowers, fertilize them. Tomato blossoms, freed of all pollen, develop full-sized fruits when their ovaries are treated with indole-acetic acid. Female holly flowers, untouched by pollen, produce prize berries after being sprayed with water carrying naphthalene-acetic acid. However, these chemicals failed with self-sterile Starking apples, because their flower styles were too long.—Dr. Firman E. Bear, in Country Home.



NATURE DEPARTMENT

by
H. L. Hopkins

Buster and Bingo (A Study in Dog Psychology)



H. L. Hopkins

I am a lover of dogs. Nearly all dogs that I know are my friends and I am proud to know them as such. I find real pleasure in studying them, cultivating their acquaintance and comparing their variable traits and vagaries with those of humans.

Dogs possess a very high degree of intelligence. I am strongly inclined to believe that they think and reason in a

limited way. They are highly susceptible and reciprocal to kindness. They react and follow up strongly to the influences of early life, like humans. Through lack of training and because of bad associates some dogs, like some humans, form disagreeable and sometimes vicious habits, but a very large percentage of dogs are faithful in their allegiance, constant in their love and loyal to their principles.

There are dogs of the proud, patrician type, and also the lowly plebeians. There are many other types graduating all the way from one extreme to the other, but most dogs, of every degree, are inherently good. With proper education and experience they readily become wise to the ways of their world.

Under variable conditions they plainly show fear, bravery, happiness, sadness, jealousy, anger, caution, boldness, stealth, sympathy, craftiness and cunning. They have their pet peeves and favorite pastimes. They early learn to communicate their needs and wishes to human companions by sign language and voice. They instinctively respond to the varying moods of humans.

When taught certain duties and responsibilities they perform them exactly as taught and as faithfully as any human could. Certain breeds learn the habits and traits of sheep perfectly. They are the most dependable guardians and protectors of other domestic animals, of lesser intelligence than themselves, known to the whole world. Their deathless loyalty to their human friends,

under all conditions, makes them, by precept and example, ideal pals and comrades, especially for boys.

A dog will not only risk but will gladly give its life for the protection of its human master. No human being, regardless of station in life, could be paid a more exalted compliment than to have it said of him, that he was as faithful, true, steadfast and loyal as a dog.

This is introductory to the relation of a very amusing and highly tragical little stunt affecting the lives of two dogs.

Buster is an aristocratic collie, of medium weight and size and of very dignified bearing. He is delicate and choosy in matters of food and eating, in fact, he is a patrician, exclusive in his choice of associates and a proud gentleman of quality.

Bingo is a little roly-polly, bob-tailed, rusty mongrel. He is a crafty, scrappy, snappy, sassy and provoking little rascal. He probably weighs about one-fifth as much as Buster. Bingo and Buster are not soul mates or not even moderately friendly. Buster seems to regard Bingo as a roughneck and treats him as such. They live quite close together. Occasionally Bingo discretely shows himself near the Buster bailiwick, and, in testy dog language, shouts at his larger enemy, "Hello! You big cheese," and then scoots for home at his liveliest clip. Buster gives chase, scolding the little pest at the top of his big voice. Bingo craftily gives himself enough leeway in the race so that he can scuttle to safety.

Bingo pulls off one stunt that always works and nearly drives Buster batty. With his equally crafty young master he gets into the rear seat of an old open tin lizzie and rides in state past the Buster home. From this safe vantage point, in loud and lurid dog language, he scorns, defies, taunts and grievously insults big Buster and dares him to meet him half way. Poor old Buster instantly loses all constraint and dignity and goes into a perfect frenzy. He crazily chases the outfit, jumping and yelling his head off.

The little midget and his boy companion enjoy it hugely and laugh explosively. Old Buster returns from his fruitless chase with his dignity sorely assaulted, big brush dragging, eyes blood-shot and much crestfallen in general. Bingo and his boy pal have worked this hot whizzer on Buster over and over.

It is easily the extreme high and low in the lives of these two dogs and furnishes a highly amusing and intriguing little study in the cunning and psychology of dogs.

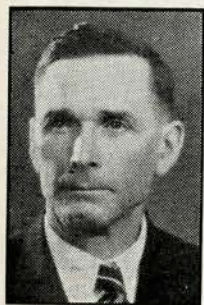
One of our philosophical friends says that before 1930 we lived in the horse and buggy days and now we live in just the buggy days.—Delano Eagle.



PRESIDENT'S CORNER

by

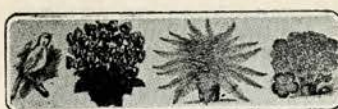
F. X. Wallner



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

The grasshopper that gets caught in a spider's web has little chance of escape. Today I saw a hopper get caught by one leg; the spider was there in a flash and had him wound round and tied in a short time. Mr. J. A. Munro, State Entomologist at the Fargo station, thinks that bees will not be killed by the grasshopper bait but that they would be killed if dusting were done when sweet clover, or other bee pasture was in flower. I feel sure that we will not make any headway fighting the hoppers unless the state or federal men use airplane and large power dusters on the thousands of acres of waste land and roadsides, but it must be done early, when the hoppers are small, long before sweet clover is in blossom. Sept. 14th. In my address at the 54th annual convention at Clark, last November, I said that the WPA should be employed to clean up dead trees along the highways and on the farms of the state. Today Mr. Frank I. Rockwell, extension forester, stated that WPA labor may now be secured to clean up dead trees on private or public lands. This should be made known to all, so that the old dead trees can be cleaned up this fall or winter. Another job that should be undertaken by the WPA and the CCC boys, is to stop the erosion of the soil by the rains. On many farms the gullies are so deep that they cannot be crossed by machines and soon they will be beyond repair. The soil erosion group is neglecting very important work in the state, or perhaps they cannot do everything at once, and the damage to many farms, the past year, has been very great. The total grape production for the U. S. is 2,776,770 tons, a little less than was grown in 1937. The cabbage yield is 56% larger than in 1937. The apple crop is 2% less than last year, while the potato and onion yield is just a little above the 1937 crop. The Winsor A pepper is the most prolific pepper we have ever grown and the Scarlet Dawn tomato is also a very good tomato. Both are worthy of a trial for the market grower or the home gardener. North of the State Hospital at Yankton, there is a fine roadside planting that is doing well. North of that is a fine farm home with evergreen trees along the highway, several of which have been scorched by the careless burning of roadside weeds. The highway department is very careless about burning piles of thistles

and other weeds along the highways where there are live trees. Sept. 26th. Today at 4:30, the last onion, an 18 ounce Jumbo size, rolled down the topper. So ends the topping and grading of onions for this year and it is the finest crop of onions I have ever produced. The bulk of the crop is yellow Sweet Spanish, although we have red, yellow and white globes. I have stood at the topper three or four days of each week since the middle of July when the first set onions were harvested. Then came the early type seed onions and later, the regular globes. The past two weeks the Spanish types that will be the main storage crop and these have been sorted into three grades, extra select jumbo, all about 1 lb., regular jumbo size, all over 2 in. to 4 in. and the regular run of medium size good grade. It is quite a relief to be through with this job this early, as I have never forgotten the time I had all my onions pulled and drying in the fields when a heavy frost ruined all of them. Reports are that some have suffered loss in this way farther north last week, where the frost was quite severe. A horticulturist that grafted a pigtail to an apple tree to produce apples stuffed with pork sausage, won the Illinois liars' contest and she was a woman. A farmer in Ohio puts a pipe filled with glycerine in the center of his haymow and when the thermometer at the top registers 180, he begins to distribute the stack, as he says that at 185, there will be spontaneous combustion. The Flying Farm Lad that sprays 100 acres on hour, at an expense of \$1 to \$2.50 an acre, is the solution of the grasshopper menace of the northwest states. If the vegetable and potato growers can afford this method of spraying and dusting for diseases and insects, surely county, state and federal agencies will soon see that this is the only way to destroy the grasshoppers. A trade paper reports that advertising "Home Grown Produce" week was the cause of increased sales of from 10 to 2000%, but still the imported green top carrots sell at 5 to 10 cents for less than 1/2 lb., while washed mature bulk carrots are offered at 50 to 75 cents per 50 lb. bushel, but are slow sale because the green tops always look fresh while bulk carrots are allowed to wilt in the store and the old time root cellar or storage for vegetables is a thing of the past. Thursday of Farm and Home week, Nov. 10th, at State College, Brookings, the S. D. State Horticultural Society will have a full day's program, now being arranged by Professor L. L. Davis. A fine display of product will be on exhibition and a potato picking contest by the horticultural students and others that wish to enter the contest. Good speakers will be on hand from our country and Canada to discuss the more important phases of the work and it will be decidedly worth attending



AUTUMN BLOSSOMS

by
W. E. H. Porter



W. E. H. Porter

With the tang of autumn once more in the air, one looks back somewhat wistfully to vanished mid-summer beauty with the ever present hope that our choicest flowers of late summer and fall will mature seed for an increase of beauty next year. I have in mind especially those durable and long season flowers such as erodiums, mallows, yarrows, etc., that emulate our best annuals for continuance of bloom. Aug. 18th. Although the continued heat and drought showed its effects on most of the garden, Gentian displayed its lovely blue, continuing till the end of the month and echium creticum, a large spreading plant with marbled foliage, also commenced with its tubular brick red flowers and in late September, will still be growing. Sept. 2nd. A shade temperature of 87. Undoubtedly the redeeming feature of floral display is our new annual sunflower *Helianthus cucumerfolius*, var, excelsior; 6 to 8 ft. tall, a fine top branching habit, very erect and large zonal flowers 5 inches across. The yellow background forms a perfect relief for zonal bands of red, brown, fawn, etc. Our Heavenly Blue has to be seen early to be appreciated for the sun's rays soon scorch it up. *Erodium manercavistill* yields its unremitting display of large pink red flowers much like its cousin *Geranium sanguineum*. The graceful arching fern like nature of plant and the fact that blossoming seems to be continuous, makes it most desirable. Rex Pearce of New Jersey records blooms at Thanksgiving time; classes it with other erodiums as one of our best perennials. The dry heat has completely ruined my Glads, which is particularly disappointing in connection with the new blue, purchased from Michigan in the spring. It appears nothing short of a miracle that the sedums provide such a thick fresh green blue, bronze, red carpet considering their shallow rooting system. Another unsolved mystery is why my different violets, said to require shade and moisture (well, let's leave out the moisture), all show thrifty growth. *Liatris scariosa*, gay feather, rose purple, 4 ft. tall with flowers 22 inches down the stem, from top. Candor compels admission that *Veronica spicata*, while very beautiful in early summer, cannot take the later heat and drought, different from its near relatives *teucrium trehane*—also blue but somewhat trailing and the rose *pectinata*, a downy grey-leaved ground cover which, by the way, combines well with sedums.

Both these latter keep green and fresh. Sept. 4th. *Lobelia cardinalis* coming into bloom; this is encouraging. Last Oct. I purchased from H. Dreer of Philadelphia the two lobelias, *cardinalis* and *syphilitica*, *cardinalis* listed as a bog plant, was set out with some misgivings in partial shade and rather heavy, but dry humus. *Syphilitica* never showed up at all but *cardinalis* is about 1 ft. high, yellow green foliage and an exquisit vermilion flower. Sept. 9th. Weeping mist, 56 in the shade; garden shows relief from tribulations of heat, drought, grasshoppers and crickets. The *Ipomea* over lych gate has 10 blooms which for the first time, lasted all day. *Delphinium cinerea* alone of perennial delphs has put out a strong new growth with flower spike. I believe this species came from the Hilalayas. While on the subject of delphs, my sport delph from Colorado species unknown to me, had its usual percentage of dark and pale blue flower spikes; seedlings, however, though individually constant, show considerable variation among individuals of 33 plants. There are so far four dark blue, two medium, two pale blue and one plum; this blooming from May germination is exceptionally good. Sept. 13th. Eighty-five in the shade and sultry. *Eupatorium Graseri* (snake root), white in flower from May sown seed. Sept. 16th. 68 in the shade with cool north wind and cloudy; 18 Heavenly Blue morning glories in bloom, also red Chas. Wilson aster. Snow white chalices of *Campanula isophylla* form a very beautiful carpet. Regrettable that this Italian bell-flower is not winter hardy in N. D.; under ordeal of heat, droubt and grasshopper attacks, the English bell flower *latifolia*, also *sarmatica* have completely vanished; let's hope for a re-appearance next May. A steady, relentless battle rages over downy leaves of *Salvia turkestanica*; the attacking army is grasshoppers, but it is already evident that the vigorous growth of this desert sage will prove victorious. The most advanced sunflower heads now provide an attractive menu for small birds. They balance on flower head bracts and reach over to extract the seeds. My climbing honeysuckle is again in flower. For

(Continued on Page 130)

N. O. MONSERUD

**Landscape Architect
Tree Surgeon**

Office—First National Bank Building
SIOUX FALLS, S. DAK.
PHONE 555



SECRETARY'S CORNER

by

W. A. Simmons



W. A. Simmons

"A recent communication from Sec. Wallace, U. S. Dept. of Agriculture, announced that effective Sept. 19th, 1938, the lead tolerance was raised to .025 grain lead per pound of fruit. The U. S. Food and Drug administration will not institute action under the Food and Drug act against fruit moving in interstate commerce containing .025 grain per pound of lead or less. The old tolerance for lead was .018. The tolerances for arsenic and flourine have not been changed and remain at .01 grain per pound of fruit. Relaxing the tolerance on lead has followed recent findings of the Public Health Service of the U. S. Treasury Dept., who have recently prepared a 'Progress Report on the Results of a field study of the effects of inhalation and ingestion of Lead Arsenate on the Human Body.' They used a group of 600 actual human consumers at Wenatchee, Wash. Those experiments failed to reveal evidence of untoward effects on human beings from ingestion of lead arsenate in excess of present tolerance." F. H. Beach in Ohio News Letter. Thus is an old bogey partially laid and common sense beginning to enter into bureaucratic rulings".

An air mail card under date of Oct. 7th, postmarked from Fort McMurray, Alberta, Canada, just received, says: "Minimum 70%, Collecting wild fruits and roses at Fort McMurray, 540 miles north of the line. Many airplanes every day, freight and passenger, for far north." Signed (Dr.) Niels E. Hansen.

A neighbor, Mrs. Bell, has had good success this summer growing plants in water, with the nutrient solution added. A few days ago she brought me a number of the new double nasturtiums in a milk bottle, with the necessary drugs added and they are continuing to bloom in the office window, making a most welcome splash of color there. Growing plants in the nutrient solution, without soil, makes a very interesting experiment and probably many of our members will be doing it next year.

The second New Fruits Show, for late ripening fruits will be held at Louisiana, Mo., by the Stark-Burbank Institute of Horticulture on Nov. 10th to 12th. The summer New Fruits Show was held Aug. 18th to 20th, the grand sweepstakes winner being Mr. J. G. Sparks of New Castle, Colo., a 75-year-old retired butcher, with an unusually large and fine apricot, selected from seedlings started

seven years ago. Perhaps watching these seedlings come on has been a big factor in prolonging Mr. Sparks' life and now he will be encouraged to start more.

Mr. E. I. Farrington, talented editor of Massachusetts Horticulture, is attempting to evaluate the losses New England suffered in the late hurricane, particularly of the many historic trees. In a recent issue he says: "Many of the historic elms on Boston Common and in the public gardens of Boston were reduced to splinters. Some of the famous old elms in the Harvard University yard in Cambridge, Mass., were damaged, too, as were those on the campus of Dartmouth College at Hanover, N. H. However, the greatest loss, horticulturally, was suffered at the Arnold Arboretum, often called "America's greatest garden". It is estimated that 1,500 trees were uprooted or broken so that their removal will be necessary. On another page will be found our premium list for the coming year. As the supply of some of the things offered is limited as to quantity, members are urged to send in their renewal and selection of premium as soon as possible. The premiums will be sent in the spring so as to reach the member at the proper planting time and the "early birds" will be sure to receive the premium of their choice. The time for our annual meeting is fast approaching and we hope as many as possible will attend. Mr. H. E. Beebe, chairman of the program committee and his able helpers, Mrs. W. J. Tiffany and Mr. J. B. Taylor, have prepared a very interesting program, including talks by Dr. N. E. Hansen of Brookings and Dr. Alderman of Minnesota, on the new fruits of each state. Our President, Mr. Wallner, will tell of the newest things in vegetables and many amateur gardeners will tell of the newest things in flowers. The meetings will be held in the Dakota Farmer building, through the kindness of Mr. Allen and the banquet, on Wednesday night, will be held in the Northern Normal dining room where our good friend Mr. Erickson always provides the best of food. Mr. Latham, when secretary of the Minnesota society, used to always say, "Make this your winter vacation," and I am glad to make use of his slogan. In the sudden and unexpected passing of Mr. Chas. Benike of Clark, S. D., the society has lost a long time and faithful member and a true friend. Against great odds he had built up a fine orchard on his Clark county farm, the excellence of its output being attested by the numerous premiums it won at the state fair. In his early fifties, his loss was most unexpected.

A Chinese cook was walking through the woods. He turned around to see a grizzly bear following him, smelling of his tracks. "Hh," said the Chinaman, "you like my tracks? Velly good, I make some more."—Wisconsin Horticulture.

MANITOBA NEWS LETTER

by
W. R. Leslie



W. R. Leslie

It is always news when Dr. N. E. Hansen, of Brookings, South Dakota, arrives at Morden. He came on the 23rd to gather the fruits resulting from the fruit cross breeding performed in late May. The crowd of stockmen and home-makers were treated to an address from this remarkable fruit breeder, who has made eight plant hunting trips to Europe and Asia.

Dr. Hansen explained the value of Crested Wheat Grass, which he brought from Russia many years ago, stating that it has much greater carrying power per acre than the native buffalo grasses native to the steppes of central North America. It has value for soil binding and is nutritious and palatable.

Speaking of new fruits, he remarked that the most recent trend is to develop strains of low stature and early fruiting. As an instance his Anoka apple often has a crop of fruit the second year after planting out the nursery whip. Productive apple trees obtainable that do not attain greater height than 8 to 12 feet. Such are desirable in keeping down out of wrecking winds and in general ease of husbandry.

Sand cherries are native to the prairies and are low bushes. Most of the hybrids between sand cherries and plums are bushy and commonly bear the year after planting, and carry notable quality. Some of the newer cherries from Asia are lowly and promise adaptability.

Dr. Hansen touched on many types of fruits, describing the respective accomplishments of modern plant breeding, such as removal of thorns from the canes of raspberries and from the shoots of gooseberries. His final fruit comment was on apricots, saying that the apricot is already a reality. South Dakota has named 12 seedlings developed from seeds brought from Manchuria. He considered the Scout apricot, introduced by the Morden Station, which he had eaten at lunch, a very good fruit and worthy of recognition by prairie fruit growers. New hardy apricots withstand warm dry seasons better than other tree fruits.

One of the latest tasks the visitor has set himself is to declare war on the thorns of roses. Much progress is recorded. It was not difficult to eliminate thorns from the shoots but trouble was considerable in getting rid of those on the midrib of

leaves. Now he has some hybrids 100 per cent thornless.

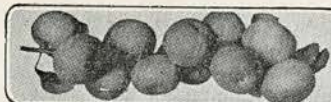
On October 6 and 7, a distinguished horticulturist gratified a keen wish, which has been nurtured by the workers of the Morden Station for the past 15 years, by paying his first visit. A hydro engineer by profession, but one of the most tireless and effective prairie fruit and tree growers by avocation, A. Griffin has achieved substantially for prairie people in both fields.

Brooks has been called an Alberta oasis by the wayfarer. Blessed by the benefits of irrigation, it became a renowned centre for alfalfa seed, for peas and other specialized crops. However, it is for its thrifty trees, shrubs, flowers and for its productive orchards and vineyards that the traveler from Manitoba to Calgary remembers Brooks so impressively.

During the years Mr. Griffin was stationed at Brooks as chief engineer, he was obliged to travel widely. He did not suppress his California-bred appreciation of well planted and thoughtfully groomed gardens, nor did he feel sorry for himself being transplanted to the Alberta prairies. He forthwith did carry with him envelopes for gathering seed and packing material for plants and roots. These were carried to the Canadian Pacific railway maintenance station at Brooks, and skilfully tended. He tapped resources far and wide across the habitated parts of the earth, as well as the foothills, mountains, ravines, coulees and creek bottoms, which he himself frequented for plant materials. The results are well known. Brooks is now one of the best treed points of the prairies. Its home gardens are noted for their fancy apples, good pears, excellent grapes, walnuts, and a number of other esteemed bounties unusual to the central plains.

The special accomplishments of Mr. Griffin are numerous and might well bulge a series of news letters. Among the distinctive things he has donated to the plantations at Morden are nine natural hybrids of cottonwood and balsam poplar, yellow fruited thornless buffaloberry, very early black elderberry, Brooks sand cherry—the first pure sand cherry to measure over an inch in length and still carry pleasing quality, many new hybrid lilies, hardy tamarix, fountain birch, a hybrid sand cherry—Nanking cherry, three large fruited red flowered crab apples, and several dozen other good things.

When his company disposed of the Brooks property to the province, M. Griffin moved his offices to Strathmore, Alberta, and is again busily working and playing at his hobby. Now he is narrowing his garden emphasis chiefly to fruits. He has started hundreds of people upon the practice of fruit gardening, and continues quietly but richly to be a rare friend to home-making citizens of today and of tomorrow.



FALL PLANTING

by
C. B. Waldron



C. B. Waldron

At this time of the year, as usual, we are getting inquiries as to the advisability of fall planting of trees and shrubs. We have done more or less fall planting ourselves for many years with very good results, but we do not recommend it as a common practice.

Fall planting should be done as early as possible after the plants become dormant; that is, as soon as they have shed their leaves. The root growth of woody plants continues long after the growth of the top has ceased, so if they are planted a month or so before the ground freezes, they have time to make considerable root growth before winter sets in. This, of course, is possible only if the ground is kept moist. This is probably one reason why generous fall watering is good practice for all plants, as it helps them to develop their root system.

We do not know that it is necessary, but we recommend that a mulch be put around the trees sometime before the ground freezes so as to delay the freezing as long as possible. The mulch is removed early in the spring so that the roots will not be in frozen ground when the leaves start to develop.

Probably there is no particular advantage in fall planting in this latitude except that it enables one to get that much work out of the way before the season closes; and if one is digging his own trees; he will not encounter frost as he may do if digging is done in the spring.

It is a common practice in some nurseries to slip the leaves off the trees that are late in maturing so that the wood will ripen earlier and permit early fall planting. Our experience with the fall planting of evergreens has not been so successful. In fact, we do not recommend it at all except in early fall. The evergreens become dormant in July and can be planted anytime during August or early September. We have noticed that they make a growth of fine white roots at that time of the year. When planted later, they do not have the opportunity to do this and the trees lose so much moisture during the winter that they fail to start growth in the spring; at least, that has been our own experience.

Doubtless, most of our readers know that fall planting is the common practice farther south, and in the states of the far south no trees are planted after the holiday period.

We also receive inquiries from time to time as

to the advisability of seeding lawns in the fall. There is no particular advantage in this except that one gets the work out of the way and the ground may be in better condition for seeding than it is likely to be in the spring. Theoretically, the best time to seed a lawn is in August or September, but this year it would not have worked out so well unless one could have kept the lawns constantly watered. Grass seed sown any time after this date will, of course, remain in the soil unchanged and will germinate in the spring. One is apt to get a somewhat earlier start than he would by waiting for conditions favorable for spring seeding.

If one is situated so that he can keep the lawn watered constantly after seeding, it does not matter so much as to when the work is done. It is very good practice to cover the lawn over with a half inch, or so, of very well rotted stable manure, or other compost, as that greatly facilitates the germination of the grass seed and the development of the young plants.

The black walnut trees at the station this season produced several bushels of nuts, most of which have been disposed of. We still have a few for distribution that will be sent out, with carrying charges only, upon request of anyone who will plant them and take care of them.

The strain of black walnuts that we are growing here seems to be perfectly hardy, but of course the black walnut is not suited to all conditions and the site should be carefully selected. Those growing on lower ground have made several times as much growth as those a short distance away growing on good soil which is, of course, not so moist as in the low spots.

The nuts can be planted any time, preferably in the place where the trees are to grow, although we have had good success in transplanting them. A depth of from two to three inches is satisfactory and they can be planted at any time now. Some of our trees are beginning to attain a pretty good size, having a diameter of some 10 inches, a height of 20 feet, and a spread of about 15 feet.

Next to the human form the most beautiful unit in nature is a tree.—Prof. F. A. Waugh.

A fruit-of-the-month club, organized by a fruit growing company at Reseda, Calif., is the latest thing in farm marketing. Each month, members of the club receive by parcel post a container of the California fruit that is at its peak. This varies from quavas and nectarines to pomegranates and avocados. There is no membership fee, members paying only the price of the fruit they receive, plus postage.—Country Home.

BOOK REVIEW

by
Mrs. F. Briley



Mrs. F. Briley

Our Shade Trees, by Ephraim Porter Felt, published by the Orange Judd Publishing Co., 15 East 26th St., New York. Price \$2.00.

This is a relatively new story. Pertinent statements as "The standards of a community are reflected in its trees," "Shade trees are not thine or mine; they are ours," give us food for serious thought. The purpose of the book is to outline the relation of trees to suburban life, the needs of shade trees under

prevailing conditions and to advise methods which will permit the owner, in some measure to offset the present day perils of shade trees. The general theme of the whole book is: plant more trees, for the author impresses upon the public in a forceful way, the importance of planting trees and more trees and caring for them properly after they are planted. The writer succeeds in getting across to the reader the solution of many tree problems, which is the result of keen interest in shade and ornamental trees for over forty years, together with close association with other practical and professional tree men. Trees are plants and like them have needs and limitations. Under this subject the author discusses various points such as pruning, cavity filling, soil, moisture, etc. Trees are the mothers of rivers, partly because they cannot grow in the absence of moisture. Other subjects that are interesting and vital are, the language of shade trees, the troubles of shade trees, lightning and the advisability of placing lightning rods on valuable and feature trees, for safety; the selection and planting of shade trees. It is encouraging to read the article about "Insects control insects." "Our Shade Trees" contains thirty-one beautiful illustrations, also a map showing the main climatic areas of the United States and an accompanying list which indicates in which areas the most important shade trees may be grown successfully.

Experiments at Wenatchee, Wash., show that size and quality of the apple depend upon the number of leaves it has working for it. When apples were grown with 10 leaves to each fruit it took 215 apples to fill a standard box. But when each apple had 30 leaves on the job, 127 apples filled the box. Cutting leaves to 10 per fruit resulted in complete failure of next year's crop. At least 30 leaves are required to grow good commercial apples and store the necessary food re-

serves for fruit-bud formation.—The Country Home.

AUTUMN BLOSSOMS

(Continued from Page 126)

continuous late summer and fall blooming there is nothing better than oxeye daisy, from the Colorado mountains. The flower measures 3½ inches across and has long ray florets with small eye, like a yellow disc. Two yarrows *Achillea ptarmica*, white double Pearl, with good root run and *ageratum* sweet maudlin, rich yellow flat topped crown of flowers, both good border plants for N. D. My two year silver downy mat like plants of *Achillea chrysocoma* have not yet flowered. The climbing milkweed is a good vine for wire netting trellis, etc., having a close leaf system, leaves elongated with veining and netting, like English ivy, though of course deciduous and spreads freely from root. Strange that though hardy in N. D., its range does not seem to extend north of Illinois. Sept. 18th. An ice making frost last night definitely terminated any prospect of bloom from *Tithonia speciosa* (Mexican fireball); flower buds were just nicely shaped. However, hardy annuals and perennials were not damaged at all.

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SMALL FRUITS

by
F. M. Schwab



F. M. Schwab

In 1937 we learned a great deal about June bearing strawberries, in particular as to late frost injury and frost resistance of different varieties, as we had a killing frost on the 9th of June in 1937. This late frost gave us valuable data on all varieties grown because none of the strawberries received any frost protection during the night.

The following June bearing varieties were grown: Grand Champion, Catskill, Clermont, Dorsett, Fairfax, Beaver, Chesapeake, Oak Hill Special, Ambrosia, Fugeima, Premier, Frost Proof and Goldheart.

On the 8th of June, the day before the frost, one of the nursery inspectors called and made the inspection of the premises, and many notes were taken down and particular attention was paid to the different sorts of strawberries as to their productivity as they were all loaded more or less with green berries. We found that Clermont, Catskill, Dorsett, Fairfax, Chesapeake, Oak Hill Special, Ambrosia, and Fugeima had a very light crop and many large strong plants of these varieties had no fruit stem at all. We also found that Grand Champion bore a somewhat better crop than the foregoing varieties, and premier bore a good crop, while Beaver was bearing a heavy crop; but right here I will add that Beaver did not do anything for us the last four or five years. During this inspection we also found that Frost Proof was bearing a heavy crop, and Goldheart was loaded down with such a heavy crop it seemed that almost a quart of berries was hanging to some of the plants, this greatly impressed the nursery inspector, who took down notes and commented on the heavy crop the Goldheart was bearing.

Now comes the day after the frost. We had watched all night and made arrangements to protect the berries, but the temperature stayed high until late in the night, and in the early morning when it was too late it got real cold all at once.

After the frost we found that the crop of Clermont, Catskill, Dorsett, Fairfax, Chesapeake, Oak Hill Special, Ambrosia, and Fugeima was entirely destroyed and only a berry here and there was left; Grand Champion had about a 10% crop left, and Premier and Beaver had about a 25% crop left; Goldheart had about a 75% crop left, while Frost Proof had practically a full crop left. Goldheart is an extra early variety, and Frost

Proof is an extra late sort. We have now fruited the Goldheart and Frost Proof for about seven or eight years and like these two varieties better each year, because they never failed to produce a crop. Goldheart will suffer from late frosts, but it is nothing compared to the frost injury of ordinary varieties, while Frost Proof, practically speaking, will suffer no frost injury at all. The last few years we are discarding all other June bearing varieties and plant nothing but Goldheart and Frost Proof, with the exception of a few new sorts we are testing out all the time. We have tested out nearly every strawberry variety that has been originated in the last 30 years, both June bearing and everbearing.

A year ago we planted a combined acreage of about three-fourths of an acre of the following varieties: Grand Champion, Clermont, Catskill, Dorsett, Fairfax, Chesapeake, Oak Hill Special, Ambrosia and Fugeima. All these varieties were highly recommended by many nurseries and some by nearly all nurseries, but, of course, these recommendations cannot be taken too seriously. We had planted these sorts mostly on the strength of reports of home growers, and thought that at least a number of these varieties would be outstanding, but we got badly fooled.

Dorsett and Fairfax we have grown a number of years and find them to be **not** hardy, they will suffer severe winter injury, and at their best will only bear a very light crop. Beaver is hardy and the berry is large and of good quality, but many times it will produce only a small crop, although some years it will yield a good crop. With us it yields about the same as Dunlap.

Most of the new sorts mentioned we have not grown long enough to pass judgment as to their hardiness.

Raspberries

We have fruited the Newburgh for three years and found it to be absolutely worthless with us. We fruited the Ulster one year, but this suffered such severe injury last winter 1936-37, that it only produced a few berries which were very similar to Chief or Latham.

We also fruited the Taylor one year, and while this suffered quite a lot of winter injury, it still bore a fair crop. The berries are large, attractive and of good quality, but the vine seems to be subject to disease. The Potomac Purple raspberry, which we fruited one year, suffered very little winter injury and produced a good crop of medium sized berries. This variety looks promising. The North Dakota purple raspberry No. p117, now named "Ruddy" did not suffer any winter injury and seems to stand a lot of drought also. This produced a heavy crop of large berries of high quality, but the fruit is somewhat soft although very good for home use and nearby mar-

(Continued on Page 132)



South Dakota State Horticultural Society Premium List for 1939

Annual members, in addition to receiving our magazine for a year, are entitled to receive one premium in the plant line, or two, in the seed line. Please make your selection before May 1st and send your selection and your dollar to W. A. Simons, Court House, Sioux Falls, S. D.

Our good friends, the nurserymen, are donating these premiums and when in the market for anything in their line, it will pay you to deal with these firms.

The Dybvig Nursery, Colton, S. D., offers the following:

- No. 1—6 Coral (*tenuifolium*) lily bulbs.
- No. 2—2 Double Tiger (*tigrinum*) lily bulbs.
- No. 3—2 Elegans lily bulbs.
- No. 4—3 Hybrid Delphiniums.
- No. 5—2 Spice bush seedlings.
- The Gates Nursery, Rapid City, offers:
- No. 6—6 Sandcherry seedlings.
- No. 7—6 Chokecherry seedlings.
- No. 8—1 Red Flesh Crab.
- No. 9—1 Winnipeg Plum.
- No. 10—6 Black Hills Pine seedlings, 3 years.

The Geo. W. Gurney Nursery, Yankton, S. D., offers the following:

- No. 11—5 Sedums, hardy.
- No. 12—12 Gladiolus, named or assorted.
- No. 13—1 Peony, red, white or pink.
- The House of Gurney, Yankton, S. D., offers:
- No. 14—1 Mordena Cherry Tree.
- No. 15—1 Gurney's Winter Wealthy Apple Tree.

- No. 16—1 Hansen's New Bush Cherry.

In addition they will send to each one securing a new annual member for the Society 1 tree of Hansen's new hardy Apricots.

Mr. J. B. Taylor of the Northern Seed & Nursery Co., Ipswich and Aberdeen, offers:

- No. 17—Seed of the giant Zinnia.
- No. 18—Seed of Crown of Gold (scentless) Marigold.
- No. 19—Seed of the Bison Tomato.
- No. 20—Seed of the Golden Bison Tomato.
- No. 21—Seed of the Jumbo Tomato.
- No. 22—Seed of the Golden Gleam double Nasturtium.

President F. X. Wallner, Sioux Falls, offers:

- No. 23—6 Iris roots.
- No. 24—2 Tawney Day Lily roots.
- No. 25—Seed of Buttercup Squash.
- No. 26—Seed of Banquet Squash.
- No. 27—Seed of Pinkheart Tomato.
- No. 28—Seed of Fargo Yellow Pear Tomato.
- No. 29—2 lbs. of Warba Potatoes, for planting.

SMALL FRUITS

(Continued from Page 131)

ket. This variety also forms a more vigorous bush than Potomac.

Black raspberry No. 262 from the Minn. Fruit Breeding Farm seems to be very promising. We have fruited this two years now. The fruit is large, of good quality and appearance, and the bush seems to be very hardy and productive.

We are also trying out the Sodus, Marcy and Indian Summer from the New York experiment station. The Sodus seems to be very promising as it is a very vigorous grower and seems to be very hardy; this is a purple variety. The Marcy seems to be worthless here as it froze clear back to the ground last winter, in 1937 to 1938. The Indian Summer everbearer is of no value here as it ripens its main crop in October when hard frosts occur and the fruit is small and crumbly.

We are trying out many more new fruits of which you will hear later on.

THE GOLDEN EAGLE

(Continued from Page 122)

erful flight and piercing eyes, they are relatively silent and non-aggressive birds. Mr. Bent states that he finds no record of their attacking a person who has approached the nest. He gives a quotation from Milton S. Ray of California stating that an eagle returned to a nest to which he had climbed but promptly flew away when alarmed. On another occasion he narrowly missed being struck by an eagle which he believed had seen him partly concealed in the brush and mistaken him for an animal.

In motion pictures of the Scottish eagles shown in Fargo a few years ago, Capt. W. R. C. Knight called special attention to the mother eagle, tenderly feeding bits of meat to the downy young. He showed also the fact which has been observed by others, that the larger of the two young often attacks and kills the smaller, apparently without interference from the mother.

The economic status of the golden eagle has been much discussed. They feed upon small mammals and birds and thereby destroy some deer, game birds, lambs, etc. At other and probably the majority of times, they feed mainly upon rabbits, prairie dogs, ground squirrels and snakes. From the best information it seems that they cannot actually fly away with an animal weighing more than about ten pounds, but when hungry they may kill much larger ones. The harm which they do in a community is certainly small and an insignificant fraction of their value as part of the scenery. Still the loss of one or more animals is a distinct loss to an individual farmer. If a possible method of administration could be found, compensation for animals so destroyed would be the logical solution.