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# NORTH AND SOUTH DAKOTA HORTICULTURE

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October, 1942

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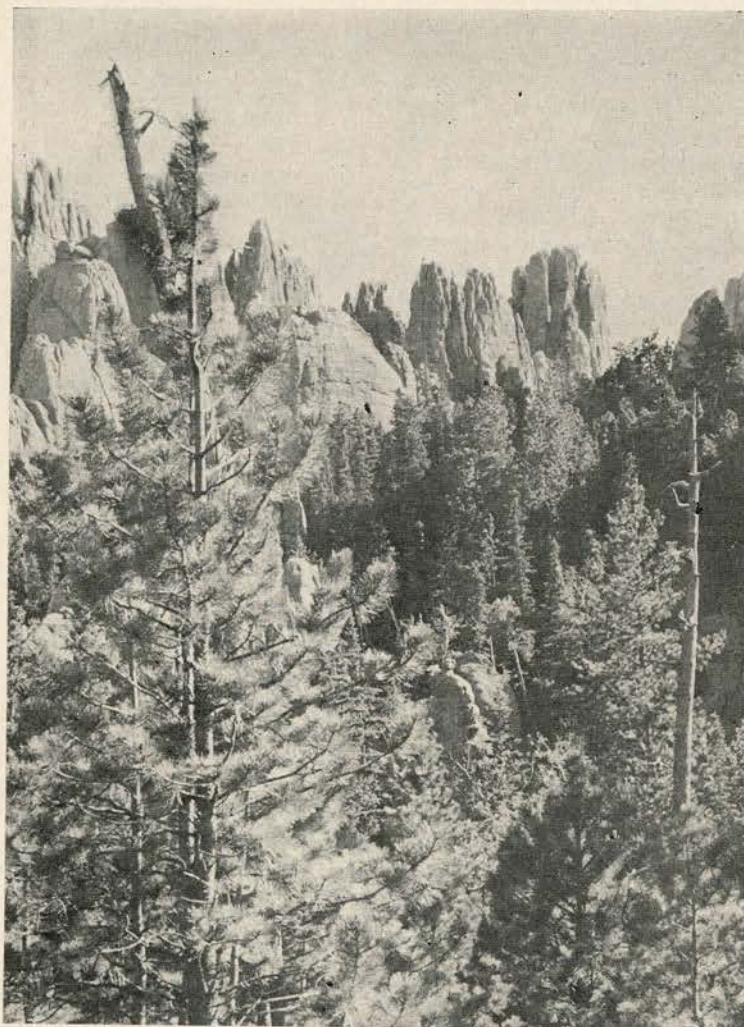


Photo taken by Dr. L. C. Snyder

The needles, near Harney Peak in our beautiful Black Hills.

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## THE RUDDY DUCK

By  
O. A. Stevens



O. A. Stevens

This is one of the most characteristic of our ducks, a fairly common one, yet less well known than several of the popular sorts. Its small size and early fall departure have contributed to its lack of popularity as a game bird, but a local name of "butter-ball" indicates that some hunters are familiar with its qualities.

It is slightly smaller than the blue-winged teal. As the name suggests, the general color of the male is a bright reddish brown. The top of the head and neck are black, the sides of the head and throat are white, the bill is blue. The female is much more plainly colored with brownish back and only a trace of red on the breast. She has a dark line cutting across the white of the head and neck. The most conspicuous feature is the short, sharp tail feathers which are carried erect when swimming so that the birds remind one of toy boats gliding over the water.

These ducks are found during summer on the prairie lakes and ponds from British Columbia and northern Manitoba to central Texas and Arizona, but chiefly in the northern part. In winter they appear along both Atlantic and Pacific coasts and from southern Illinois southward. The nests are described as large, basket-like structures, made of reeds or rushes well woven together, attached to the cattails and bulrushes which grow in shallow water. Mr. Bent states, "The man who found the first ruddy duck's nest must have been surprised and puzzled, for he would never suppose that such large eggs could belong to such a small duck". The eggs are about two and one-half inches long, slightly larger than those of a mallard. They are dull white or creamy at first but become stained during incubation, and have much thicker, rougher shells than those of other ducks. Usually 9 or 10 are laid but as many as 20 have been reported, and with these larger numbers they often are deposited in two or even three layers.

The male ruddy is a quite remarkable bird. He is usually accused of being vain of his brilliant plumage and is described as "showing off" to an unusual degree during the courtship period. Still he remains with his mate and young instead of leaving her as soon as the nest is built as do many other ducks. He loses his gay feathers in late summer and becomes a dull colored bird.

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### TABLE OF CONTENTS

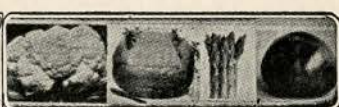
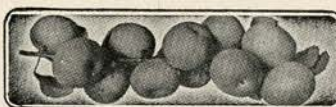
	Page
The Ruddy Duck, O. A. Stevens.....	110
Newsletters, H. A. Graves.....	111
Manitoba News Letter, W. R. Leslie.....	112
Fruit & Vegetable Notes, F. X. Wallner.....	113
Garden Notes, W. E. H. Porter.....	114
Secretary's Corner, W. A. Simmons.....	115
Beekeeping Notes, Dr. J. A. Munro.....	116
Letter from Iowa, Elmer Reeves.....	117
Questions & Answers, S. A. McCrory.....	118
Garden Club Gleanings, Mrs. G. M. Jorgensen.....	119
Book Reviews, Mrs. F. Briley.....	120

This is one of the diving ducks and feeds upon various water plants. One peculiarity of the bird is that it often dives instead of flying when approached, thus behaving more like the grebes than most other ducks. Audubon wrote that in pursuing wounded birds in shallow water, he saw them using their tails as rudders.

The ruddy duck and a few others form a special group in the duck family. The musk duck of Australia and the white-headed duck of southern Europe are two of these. One other occurs in Africa, three in South America. Our bird was first described by Alexander Wilson who had seen a single pair

Continued on Page 120





## NEWSLANTS

By

Harry A. Graves



**H. A. Graves**

to obtain resistance to *Septoria Blight*, *Bacterial Spot*, etc. There is good evidence that a thorough spray program using Bordeaux will control *Septoria*.

Along with some other folks, I was disappointed with the new Vegetable Celtuce. In the early stages of growth, it is a poor substitute for leaf lettuce, and the sliced stalks which are supposed to be celery-like, did not appeal to us. It will have to make room another year for good head or leaf lettuce. Likewise, common spinach, made famous by Popeye, will not be in our garden again. Ours bolted to seed giving us only one meal. For greens we prefer young beets for early use and New Zealand spinach or Swiss Chard for summer use.

After a sad experience with our cauliflower this year, I have come to the conclusion that unless a garden can be visited each day neither cauliflower nor cabbage should be attempted.

The North Star variety of sweet corn planted July 7 was usable September 9. A pale yellow hybrid with medium length but stout ears, it was very welcome since our other corn varieties were through.

Cottonwoods have been having a rough time this summer. Early in the season, leaves on new shelter-belt plantings of cottonwoods began to dry up—later, old established trees began to suffer. One planting that showed this condition in 1941 was entirely dead this August. Can all these blights and rusts or whatever they are, mean the end of our countless thousands of "Sudden Sawlogs?"

Sorry to notice in the September issue that F. X. Wallner had been ill. His annual talks on vegetable varieties at the South Dakota meetings are always a high spot.

W. R. Leslie's presentation of the vitamins in vegetables, also in the September issue, is the most in-

teresting of any I have read. Anyone interested should clip it out for handy reference.

Clyde Cunningham, Ass't. County Agent in Jackson County, lists four ways to keep rabbits from eating the bark from fruit trees. I disagree with point No. 1 (See page 101, September issue). On our old home farm we have close to seventy acres of native timber, including everything from hazel to Bur Oak, and still the rabbits "hop a mile" for a feed of Scout apricot bark. See your county agent for rabbit repellent TP-96, which our Extension Forrester just tells me will be available again this year from the Federal Fish and Wildlife Service.

Mr. Porter has a nice article on "Linarias in North Dakota" in the September 1 issue of Massachusetts "Horticulture."

Over 8½ inches of rain in Pembina county during August apparently confused one of our Rothomagenssi lilacs since it has already bloomed in late August, and is carrying a large number of buds. So much rain has retarded maturity on many of the garden crops. Tomatoes are much later than at Fargo, where we had a very dry July. While at home to help with harvest for a few days, we were presented with a head of cabbage weighing over thirteen pounds. It came from the garden of Mrs. Eli Taillon, long time member of the society, and one who has enthused many Pembina county residents in things horticultural.

Mother has made plum picking sorties into our farm woodlot for over forty years. In a few cases, trees that bore back in 1901 are still yielding fruit. The common, or so-called "Pig Plums," are soon forgotten but a few outstanding trees have been watched and visited annually. One of these landmarks has been a tree known to the family as the "Big Plum Tree." This title was applied both because of the size of the tree itself, and the size of the fruit. Partly because the tree must be fifty years old, and partly because of overcrowding, the Big Tree began to show signs of age a few years ago. Suckers were rare about its base, but luckily I found a thrifty specimen three years ago. It fruited this year and yielded a few gallons of plums. The sucker of three years ago now has a dozen or more suckers of its own. We now think of giving it some name for purposes of identification, and offering these suckers as Society Premiums next spring. The fruit, while not a Fiebing for size, is large for a wild plum. Delicious out of hand, it is not found wanting as sauce or jelly.

Two rows of tall growing sorghum are planted along the south side of his garden in Union county, by Art Limoges to keep hot winds from blasting tender vegetables.—Capper's Farmer.



## MANITOBA NEWS LETTER

By  
W. R. Leslie



W. R. Leslie

Most fruit trees are started by the planting of seeds to produce seedlings. The resulting seedlings may be allowed to develop so that in due time they produce their own fruits. Such seedlings bear fruit which may vary much or little to that of the mother tree. Hence seedlings are the source of new varieties. However, most tree fruit seedlings are grown to supply roots on which to bud or graft named varieties of apples, pears, plums, cherries and apricots.

At the Morden Experimental Station a series of treatments of fruit seed have been underway for twenty years. It seems best to depulp all seeds as soon as the fruits are soft mellow ripe and then wash and air dry off surface moisture. Siberian crab with up to 77,000 seeds to a pound, apple with about 11,000 seeds, Ussurian pear with about 15,000 seeds, apricot seed with upward of 260 and sand cherry with about 2,200 seeds to the pound may be then placed on a shelf in a dry cellar and protected from mice by wire screen until January. Then it is stratified by being mixed with damp sand and acid peat in a box which is placed in cool storage. The seed is removed and planted in April, not more than an inch deep in well-prepared friable soil.

Stratifying with an inch of sand-peat mixture then a layer of burlap, a thin seam of seed, a second layer of burlap, another inch of sandpeat, and repeating of the burlap-covered seed etcetera, until the box is filled, makes for ease in regaining re-possession of the seed for planting. Temperatures must be low to prevent sprouting before the soil is fit for planting in early spring. A range of 34 to 40 degrees is satisfactory.

Good results have come also from September and October sowing in a seed-bed. The bed is thoroughly wetted down after the seed is covered. A mulch of shredded Sphagnum moss is helpful. The mixing of an inch of acid peat in the upper six inches of seed-bed earth is beneficial in preparing the soil for seed sowing.

Sour cherries are to be kept moist at all times. Upon cleaning they are sown at once or stratified in a damp sedium and placed in a cool cellar. Immediate sowing in damp soil seems best.

Plums should be sown promptly or stratified to be sown later in autumn. If allowed to dry, they may not germinate until the second spring. Some-

times dry seed loses completely its power of germination. Wild plumseeds run from about 600 to 800 seeds to the pound. They may be sown in a protected seed-bed, or in a trench from 1 to 2 inches deep. A layer of sharp sand in the bottom of the trench is desirable. Stratified plum seed should be damp but not moist and kept near freezing, particularly after January. If the box is buried a foot deep in the earth to the north of a hedge in October, it usually winters favorably.

Hazelnuts, black walnuts, butternuts and horse-chestnuts are not to become dry. They are sown about 2 inches deep, usually in October. A little sand in each hole or trench assists germination.

None of these fruit seeds require freezing, nor cracking of the shell or seed coat. All may be sown with good results in the autumn. Control of conditions may be greater when seeds are cellar stratified. More work is involved in spring sowing.

The number of seeds per pound refer to cleaned seed. The counts are based chiefly on data assembled by the Soil Conservation Service of the United States Department of Agriculture.

American elm 94,000 seeds per pound, Dwarf Asiatic elm 55,000, and Silver maple 2400 ripen in late May and early June, and are planted at once in moist soil. Elm seed revels in moist conditions.

Among the subject that do well when seed is harvested as it becomes mellow ripe, stored dry over winter, and sown in spring are actinidia, alder, caragana 15,500, Jersey-tea Ceanothus 114,000, Western Virgins Bower 93,000, bush honeysuckle, Palo blanco, salt-tree, Siberian larch 42,800, Chinese matrimony-vine 170,000, mulberry 200,000, hop-hornbean 30,000, Lewis mockorange 8,000,000, white spruce 142,000, Scotch pine 70,000, spirea, hemlock 159,000 and Yucca.

The following require autumn sowing in moist soil, or stratification in damp soil in cool storage through winter and sowing in early spring—saskatoon 63,000, Thunberg barberry 28,000, canoe birch 668,200, bittersweet 25,000, hackberry 2,800, dogwood 17,000, rose daphne 10,500, Russian-olive 2,300, silverberry 3,600, Bur oak 68, Manchurian angelica-tree, Dahurian buchhorn 24,000, Wahoo or burning-bush 40,000, white ash 6,200, green ash 16,000, boxelder 13,000, sea buckhorn or Russian sandthorn 25,000, Amur honeysuckle 193,000, tatarian honeysuckle 128,000, Virginia creeper 12,000, Amur maple 19,000, Amur cork-tree 36,000, lead-plant 88,000, bitterbrush 22,600, smooth sumac 22,000, prairie rose, rugosa rose 52,000, elder, silver buffaloberry 35,000, false spirea, mountain-ash 83,000, lilac, arborvitae, and grape.

Seeds that benefit from scarifying the seeds

Continued on Page 117





## FRUIT & VEGETABLE NOTES

By  
F. X. Wallner



F. X. Wallner

Gabe, of the ARGUS-LEADER says a Buccaneer is an awful price to pay for sweet corn, but a buck is all we get for a big sack full of 100 ears. There are still 28 life members, residing in Sioux Falls and more than one fifth of the annual members, are also from Sioux Falls. Two of the best articles in the 39th annual report are from the gifted pen of Mr. W. R. Leslie of the Morden Station, in Manitoba, and "Local Style Trends in Ornamental Gardening" and Can-

adian Maples." Dr. W. F. Buchholz, of Brookings, also has a good article on wilt in melons, that should be read by all growers of vine crops. I was preparing my exhibits for the Sioux Empire Fair when the infection in my knee began to pain me and, before I got thru judging the girls 4-H exhibits, 23 in number, my knee had swollen considerably. I was able to drive home and got back to the hospital for another stay of four days. The first morning breakfast was rather light, so I wrote on a card, for the kitchen, "Husky, hungry farmer not an invalid," and it got results, as I had full meals the rest of the time. (Editor's note: No wonder they discharged him in record time.) I want to thank Mr. Bernes, of the South Sioux Garden club, for the beautiful bouquet of flowers.

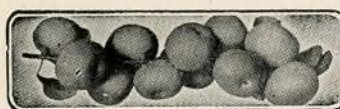
The following headlines in the ARGUS-LEADER means much to the producer and vegetable growers, "Victory gardens crimp vegetable business. Trade falls off in food stores." Last winter we were instructed to plant more ground to main crop vegetables and many of us asked would we get a fair price for the produce grown. Now we find few customers and trucks are very few, while in the past ten years, trucks from the west, handled much from this district. The past several days, the mosquitos have been so bad they have driven the boys picking tomatoes and gathering onions, from the field. Early this morning and late last night, while topping onions they were also bad. The other morning I saw a man swinging a club over his head, going down the street; when I got close to him I saw it was Chas. Vitak, President of the Garden club. He said they followed him all the way from his home. The Caragana shrubs, around the place, are all bare, long before any frost, while the lilacs and most other shrubs are still nice and green.

Portland Ore., has a celery famine, what is available costs 29 cents per bunch, lettuce, 2 heads for 35 cts., beans 19 cts. per pound and tomatoes 10 cts. per lb. during August and September and other produce very high, some not on the market. I will have a little seed to spare of that new, fine, pink tomato that attracted so much attention at the Fair and at the meeting at Brookings. We have grown it the past two seasons and think it the best pink tomato grown and will name it "Dakota Pink." trial packet 25 cents. Son John brot canteloupe from Van Buren, Ark., early in the season, of fair quality; later from Kansas and Nebraska, then I got some from the southern part of the state but none were as good as are our own and Burpee's Spicy is the best of them all. We had a splendid meeting at Brookings, everyone doing all possible to make our stay there pleasant. When meetings of this sort are resumed, and there may be no more of them till the war ends, we plan to meet there at least every 5 years. Professor McCrory made up the fine program and had general charge of the meeting and banquet. Of course Dr. Alderman's presence would make any meeting a success and some of us were with him till the "wee sma hours" every evening. Few horticulturists combine the gentlemanly, urbane qualities with great funds of information to the extent of Dr. Alderman. We hope he has caught up on his lost sleep, by this time. In line with other elections all over the country, the voting was light and all "ins" were kept in. If conditions make a meeting possible next year, the Executive Board decided to hold the meeting at about the same time and at Dell Rapids, where a very live Garden club ensures the success of any meeting. Incidentally it is within walking distance of our city, if no gas from our pipe line, is allowed for our cars, and we are down to our rims. Am sure our Garden club members will enjoy the page of the talented Mrs. G. M. Jorgensen and we hope it will make many Garden clubs desire to affiliate with us, as we have room for a few more good readers.

I'm fed up with singing plaintive songs—I want to sing battle songs. Don't tell me there'll be bluebirds over the white cliffs of Dover. To hell with bluebirds. Tell me there'll be vultures and a deathly silence over Berchtesgaden.—Walter Weir, in Printers' Ink.

The Hawaiian Language has an alphabet of only 12 letters. Imagine conducting a war with governmental agencies and bureaus limited to the number of letter combinations one could obtain from so stingy an alphabet.—The Kablegram.





## GARDEN NOTES

By

W. E. H. Porter



W. E. H. Porter

How imperceptibly summer's glory fades as in October, twilight shadows of Nature's exuberance fall, but at least and, at last, there comes a rest from this endless weed pulling. Personally, like the Russians, I have had to make an orderly retreat in the face of overwhelming odds, abandoning much garden territory to the enemy, tho unfortunately, in my case, a scorched earth policy was impractical. It seemed better to retain and concentrate on a percentage

of territory, clean and cleared of 5th columnists and all such trash, than ineffectually take on too much and have to admit partial defeat everywhere and so we await the summer of 1943 with lines intact.

July 28th. The rain has returned in abundance, breaking with a violent thunderstorm and so modify recent unbearable heat. Flowering onions now in their full glory from tall, large, fragrant white tuberosum to the less than foot high yellow flavum and the still dwarfer veronica violet cyaneum and also one plant of what appears to answer the description of *Allium stellatum*, about 18 inches tall with large spreading umbel of rather dark mauve, very beautiful. Also Burgess' so called fragrant pansy from May sown seed, the ground color yellow with large black blotch, which is sometimes replaced by sepia to brownish striae. Flowers of the latter much more fragrant that the former and the scent distinctly resembles that of a stock, a very good pansy with large bloom appearing remarkably early from seed which germinates well and speedily.

July 30th. Another downpour follows stifling day. Pearce's bell flower border plants of 1942 sowing in bloom; these are not really campanulas but lady bell *Adenophora confusa*, distinguished from true bell flowers by disc at base of style which subtends expanded base of stamens. This from that Bible of Field botanists Bailey's *Hortus 11* and from the same source I classify Irish bells, *Molucella laevis*—native of tropical Asia, a fragrant annual, stem packed with 5 spined green bells (calyx) the clapper being a white and pink snapdragon flower. *Galium verum* now flaunts yard high masses of yellow bloom over dark yew green foliage, a heavy bedstraw scent even more pronounced than our native boreale. The annual raspberry contest between me and the birds commences and like the race in

Alice in Wonderland we all seem to be prize winners.

Aug. 1st. Rain again with ground soaked to saturation point. Lovely veronica incana rosea gives of its all too short blooming period, elf-like fuchsia pink spires from a tracery of gray foliage. Reluctantly one withdraws from a contemplation of its beauty. Do we realize the debt we owe to those plant collectors and hybridists who have made possible such aesthetic pleasure for us and all posterity?

Aug. 3rd. Surprised to note one of Pearce's seedling geraniums in bloom, flowers clustered at head of stout grooved stem, large palmate 5 to 7 parted leaves, seems to be *G. striatum*. Also butterfly blue forget-me-not *Borage laxiflora* and tall stately albino moth mullein *Verbascum Blattaria* that will probably attain its registered height of 6 feet. I cannot locate Borsch's mint *Mentha gattefossea* now in bloom, close white tufts in leaf axils, creeping stems that root readily at nodes, foliage linear and fragrant.

Aug. 5th. Northeast breeze, dry and sultry, 82 in the shade, the unreclaimed prairie is brightened with foot high, nodding pink umbels of *Allium cernuum*.

Aug. 12th. Borsch's rare *Salix bockii* producing catkins in fall received and planted in May has grown 14½ inches to date. The first rock cress to renew fall bloom is pink, fragrant *Arabis carmineus*. In slough near the barn I notice a hen pintail with brood of small ducklings, must be a second hatch. The edge of this same slough is favorite scratching ground for all the poultry.

Aug. 15th. 70 in the shade, reminding one of late May, a hint not lost on some roses. A resurgence of bloom showing on George Will, Hansa and Neyron and 2 inch single peony, purple cup-like flowers expand on trailing stems of poppy mallow *Callihoe involucrata*, seeds sown indoors in late March. Also reaching over ground and up a fence are 2½ inch dark mauve clusters of *Verbena venoza* which possess a sweet fragrance and, one hopes that the designation "hardy" applies to both these North Dakota residents. Borsch's *semperflorens* violet is just that, a vigorous stoloniferous plant seemingly happy under any conditions, the numerous small violets have the haunting fragrance of English violet of blessed memory, a species that I have never had success with.

Aug. 18th. We are in the throes of another heat wave which is ripening the grain as by magic. Suddenly and without warning that terrible scourge encephalitis has struck down a fine horse in perfect health and condition, terminating fatally in

Continued on Page 116



## SECRETARY'S CORNER

By  
W. A. Simmons



W. A. Simmons

A short time ago a request came from Dr. Donald Wyman, Horticulturist of the Arnold Arboretum, for the "low down" on the Hansen crabs; not knowing very much about them I sought information from Mr. T. M. Bailey and, as others may also desire it, am giving the results of his extensive experience, here. "Have been raising them for about seven years. The following are worthwhile. Hopa. Early spring bloom, pink. Fruit small. Hangs on the tree most of the winter. Is usable for a tart jelly to serve with meat. Dolgo. Probably the best commercial crab which Dr. Hansen has introduced. Blossom white. Fruit valuable for pickling and jelly. Has high pectin content. Zelma. Larger tree than Hopa or Dolgo; compact growth, very hardy. Fruit about an inch in diameter, highly colored and makes acceptable jelly and can be used for preserves or pie. Spectacular bloom. Tree has a nice compact habit of growth and does not require much pruning. Red Silver. I regard this as Hansen's best flowering crab. Early spring, dark pink, semi-double flowers followed by usable small fruit which hangs to the tree. Its principal fault is that it is inclined to suckers profusely. Alexis crab. Dr. Hansen tells me that this is one of his best, but I have had no luck with it. Does not seem to be completely hardy like the others. Probably worth a trial in a less exacting climate. Fruit much like Dolgo.

A letter from Dr. Alderman says: "I am taking the first opportunity of writing you to express my appreciation for the fine entertainment you provided at the S. D. Horticultural Society meeting. I greatly enjoyed my stay with you and the chance to renew acquaintances with you and the other "wheel-horses" of the S. D. Society." We certainly enjoyed every minute of the stay of this well informed and splendid Gentleman. We acknowledge with much thanks, a gift from Mrs. Chas. McCaffree of the horticultural library of the late Chas. McCaffree consisting of 31 valuable books, only one of which was before in our library. We were glad to see that Northwestern Pomology, by the late Col. C. W. Gurney, a very interesting book, long out of print and of which but few copies are in existence at this time was among them. This book was originally presented to the

Society's library by our President, Mr. Geo. W. Gurney in 1922 and reached Mr. McCaffree when he became Librarian of the Society. As it was not among the books turned over to the Society at the expiration of Mr. McCaffree's term as Librarian, we had long mourned it as lost and could not be replaced. As Pres. Gurney has informed some, the remainder of my page will be sub-let to him.

"I spent the week at the Fair in Huron as I have done each year for more than 35 years and as usual always find plenty of things of interest to look at. Machinery and livestock was rather scarce this year, but agriculture and horticulture were as plentiful as usual. The attendance was light, due in a large way to the immense amount of grain as yet to be harvested in that locality, and the surrounding territory. Due to abundant rains, the crops and the yards are looking better than ever before. One cannot help but notice the large number of Bent Grass lawns in Huron. They seem to have the best of the other towns in growing Bent Grass. I think this is no doubt due to the rather light sandy soil. All of these lawns seem to have been planted from small divisions of the grass commonly known as "plugs."

In the Horticultural building there was a very complete line of plums exhibited although the season was rather late. The Waneta was, as usual, in evidence more than any other variety. The Superior was shown more than usual. This variety seems to please the average planter. Twenty-seven varieties of plums were exhibited.

The pear exhibit was outstanding. There were fine specimens of the following varieties:  
Briar Sweet—a very high quality, Iowa pear, from the Robertson Nursery at Hot Springs.  
It is not a hardy variety and needs considerable protection.

Parker Pear—Minnesota pear	Patten
Mendel	Tate's No. 1
Flemish Beauty	Hansens Peter Piper
Keiffer	Ming

### Several Other Hansen's Varieties of Pears

Many of the old varieties of apples are disappearing from the exhibits and their places are being taken by some of the newer varieties. The Anoka, although an early apple, was much in evidence. Several samples of Goldo were exhibited and also many other Minnesota and Iowa new productions were shown. The Wealthy, due to the particular season of the year, was at its best, showing lots of color, while some of the later varieties lacked this par-

Continued on Page 118





## BEEKEEPING NOTES

By  
J. A. Munro



J. A. Munro

What to do with your bees now that cold weather is at hand may be a problem to some folk. Our advice is to winter them over in a good cellar or else protect the hives with plenty of insulation material and leave them where they are. Any good cellar is satisfactory for wintering the bees provided the temperatures hold at about 40°F. to 45°F. during the winter months. The important thing is to have the colonies in good condition from the standpoint of plenty of young bees and enough honey left in the hive to last them until spring. If not enough honey was left with the hives, then it might be well to unite such colonies right away. This procedure should insure enough for their needs. Uniting is done by placing the one hive on top of another, with a sheet of paper (single thickness) between. The paper allows the two colonies to unite so slowly that practically no fighting among them results. If one of the queens gets destroyed in this process it usually makes little difference which queen is lost.

Hives to be wintered indoors should be placed in the cellar as soon as possible after the last spell of warm weather, in fall, suitable for bee flight. Usually for this locality (Fargo) the hives must be moved into cellars about the middle of November. The portion of the cellar occupied by the hives should be partitioned off and kept dark, at all times, so that the bees may remain undisturbed. Mice should not be allowed to exist in the same cellar with overwintering colonies for the reason that they disturb the bees. Trapping or baiting, of course, will get rid of the mice.

Where a good cellar is not available, or the owner prefers for other reasons, to winter his bees out of doors, then all that is necessary is to see that all colonies are in good condition, have enough honey on hand for their needs and given the necessary protection for the winter. For winter protection the hives are usually placed in wooden packing cases, so as to permit filling in a space of six to eight inches of dry shavings or leaves all around the hives. A tunnel entrance, of course, must be provided. It is well to have the hives additionally protected by a shelter-belt of trees. Where hives are to be wintered out of doors the protection should be given at least by the middle of October.

There has been a growing trend of late years to avoid the wintering problem by removing all the

honey in the fall, killing the bees and storing the equipment over winter; then re-stocking the hives with package colonies of bees in the spring. We have tried this idea on a small scale but are not in favor of it, except where the owner has no other alternative. Where the owner has no satisfactory place for wintering his bees or he has failed to leave enough honey for their winter needs, then there may be some justification for killing his bees in the fall.

A recent government report points out that the wartime sugar restrictions have greatly increased the demand for honey as a sweetening ingredient. Prospective demand for honey, the report says, will far exceed the recent average production of about 200 million pounds. The need for beeswax especially for war industries has greatly exceeded the supply. Beekeepers will do well to market every pound of honey and beeswax produced because both commodities are needed more than ever before.

This year the North Dakota Experiment Station used a multiple frame extractor for the first time in removing the honey crop. Heretofore, we had used a small 2 frame hand cranked extractor. The new one holds 20 frames and is operated by a one-half h. p. motor. It is certainly a great improvement over the old 2 frame device.

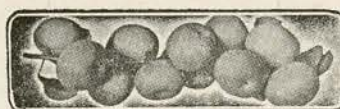
## GARDEN NOTES

Continued from Page 114

less than 24 hours. A well built affectionate mare that a small child could ride without fear and, at the same time, willing with speed if required and well mannered on all machinery, and now this beautiful animal has passed away forever.

August 20th. 92 in the shade, high hot wind from the southwest. Aug. 22. Pleasant, cloudy, 56 in shade; as potato blossoms fade our early autumn flowers come into their own. The orchid purple Mrs. Fanny Heath aster amethyst violet biennial Gentian Septemfida that in an undisturbed shady spot will sow itself, 2 inch fringed bottle shaped tansy aster, the very beautiful easy, lime tolerant French blue flowers expanding from garnet brown buds, lobelia blue veronica caucasica, a speedwell of the upright spicata type aster violet balloons of Codonopsis ovata, a bulbous bellflower, dark spectrum violet of hooded, clambering Monkhood, ivory cups with dark maroon center of Hibiscus trionum, also known as trailing hollyhock or flower of an hour, an African species that as an annual, perpetuates itself even in North Dakota. It only requires a first sowing, and an imposing clump of turks-cap lilies with their large threefold reflexed, black-spotted burnt orange waxen flowers clustered round the sundial as if to remind us that summer glory is no exception to the motto expressed thereon that "Time takes all but memories."





## LETTER FROM ELMER REEVES

Waverly, Ia.

Have not written to you for a long time but have continued to enjoy the magazine and read it thru as soon as it comes. Have read the last annual report and find a lot of good things in it. Would like to attend your meetings but do not have the energy I did in past years. I'm still in the same place and running the nursery but find it difficult to keep the pace it requires. Of course I am interested in all fruits and am glad to note that Dr. Hansen is being recognized as one of the great men in horticulture. His work is of lasting value. I have tried about all things that promised to give value, and grown seedlings of about all the fruits, but never had the joy of producing anything valuable enough to introduce. Most of my old orchard is gone but I have a lot of the later things and among them I find a large list of the apple well worth planting. Windsor Chief is my favorite winter apple and I believe it would do with you. Underwood and Hanska are the two best plums. Lincoln and Seckle pears are the best but I have a seedling that is of better quality than any of the more than sixty varieties I have tried but I wish it was a little more hardy. Dolgo crab is a favorite here. I have kept planting some of the old varieties of the apple, such as Lawrence and Sops of Wine and they have done well which leads me to believe that we have neglected some good things. In our climate we may expect losses every few years but the right course is to replant and keep the orchard going. Just now and in fact every fall there are so many apples grown that there is little sale for them. I only grow Downing and Poorman gooseberries. The apricots and some others of the fruits you grow will bloom so early that frost takes the bloom but I have succeeded in growing some peaches and, especially one that I grow from seed that comes quite true but the fruit is not up to market requirements. I have never done much with irrigation but a man living in a village near, is having great success with the Gem strawberry under irrigation. He sets new beds each spring and mulches with straw and keeps blooms picked until July. He has a complete system of overhead pipes and starts use of water soon after planting and keeps it up, whether it rains or not. On about a quarter block thru August, he picked up to 50 quarts each day and the plants were still blooming. We have had good crops here but the frequent rains caused the loss of considerable hay and the moisture is keeping trees growing so we may look for an unusual amount of damage to trees and shrubs,

the coming winter. Have had no frost here so far but with the cool weather we are having we may expect it any time but most corn is well along and will not be hurt. Am glad to see that George Whiting is so favorably mentioned and the memory of him made secure. I got acquainted with him at about his first attendance at the meetings and shot much of him. He lived to a good old age and was always useful. You have had and, still have, a lot of good men in your society and it will be well for the state to give even more attention to the growing of fruit and much more to planting of trees. The walnuts should be generally planted and it takes but a few years to make a bearing tree of either the Butternut or Black Walnut.

You certainly have some enthusiastic growers of flowers to judge from some of the printed articles. I wonder what W. E. H. Porter does with all his spare time after growing the list of flowers he tells about. I hope you will be able to continue your good work with the society for many years and so add to the value and beauty of the state.

Bonfires of leaves are less than ever appropriate this fall, say fertilizer specialists of the U. S. Dept. of Agriculture. Until the war is over there is urgent need of getting full value from such wastes which can, in part, take the place of some of the nitrogen fertilizer materials now going into explosives. Either dig or plow them into the soil or pile them into a composite heap.

## MANITOBA NEWS LETTER

Continued from Page 112

before sowing in autumn include woodwaxen 140,000, honey locust 2,800, Scotch broom 44,000, and Kentucky coffee-tree 230 seeds to the pound.

Seeds to be sown before they are allowed to become dried are horsechestnut, hazelnut, and beech.

Some seeds commonly require a year of stratification and do not germinate until the second spring. In this class are Glossy Cotonaster 18,500, Thicket hawthorn 10,000, fleshy hawthorn, Rocky Mountain juniper 28,000, redleaf rose, basswood 3,500, Pembina or American cranberrybush, and nannyberry. In some cases treatment with sulphuric and other acids spur this type of hard seeds to germinate the first spring instead of the second.

Beech and Scotch broom have proven uncertain at the Morden Station. The Kentucky coffee-tree tip kills some seasons but survives. It is noted for its beautiful foliage.





## QUESTIONS AND ANSWERS

By  
S. A. McCrory



S. A. McCrory

**How may tulip bulbs be handled in the home so they will produce flowers in mid-winter?**

Tulips are rather difficult to force in the greenhouse, and I believe they would be most impossible to grow in the average home. They will likely not be as satisfactory for forcing as are hyacinths and narcissus. This is due in part at least to the long period of preparation required by the tulip. It is the practice for commercial growers to place the bulbs in pots and then bury the pot of bulbs in the soil to a depth of 18 inches to 2 feet. It is well if they be subjected to freezing temperatures until time to bring them indoors. It is better if they have a few weeks in the pot at temperatures a little above freezing. When they are brought inside it is well to invert an empty flower pot over the container until the leaves and bloom stock start crowding. One should also use much care in keeping the temperature below 60°F.

**How may ash rust on cottonwood leaves be controlled?**

It would not seem practical to attempt the control of ash rust by the use of spray chemicals. This disease is not a problem unless the season has been favorable for its development. The abundant rainfall of this season has been most favorable for its spread. Should we have warm dry weather another season the infection will likely be so light that it will not be noticeable. Should the disease make repeated appearances over a period of several years the trees may be damaged. It may be well to remove low growing branches and perhaps thin out some of those more closely spaced. This will permit the leaves to dry out more rapidly and be less subject to the disease.

**Should a straw mulch be placed on strawberry plants before the first frost?**

If a straw mulch is applied to a strawberry planting while the plants are green and still in a vegetative condition they will be "smothered." The mulch should not be applied until growth has stopped. Plants should be exposed to some freezing before covering with the winter protection.

**Can a poinsettia plant growing in the garden be potted and brought inside?**

If poinsettias are lifted from the garden and potted at this season they frequently drop much of their foliage. Two years ago we reduced the leaf drop on plants treated in this manner by adding a

little vitamin B<sub>1</sub> to the water given the plants. My experience is not enough to recommend this as a general practice. By lifting the plant with as much soil as possible you should be able to successfully transplant it.

### SECRETARY'S CORNER

Continued from Page 115

ticular color.

A Mr. Maxwell of Vermillion, S. D., had an exceptionally fine exhibit of fruit which he grew mostly himself. If he is not a member of our Society, he should be. I suggest that the secretary get in touch with him. A letter addressed to Mr. Maxwell, Fruit Grower, Vermillion, S. D., will reach him.

Fine beds of asters, snapdragons, dahlias, and cannas were in evidence in the Horticultural grounds and were admired by everyone."

## NEW APPLES SUCCEED THE OLD

About 40 years is the age deadline for the trees in a profitable apple orchard—50 perhaps, in the northern parts of New England, New York, and Michigan, where trees develop slowly. Horticulturists of the U. S. Department of Agriculture consider that most commercial orchards should be replaced at least by the time they are 40 years old.

Fruit of the best size and quality grows on relatively young trees. It is difficult to spray large trees thoroughly because of their height, expensive to prune them and to thin and pick the fruit. Systematic renewal of the orchard permits planting the best new varieties, discarding old varieties that have given way to better ones.

Since it takes about 6 to 8 years before apple trees even begin to bear, and about 10 before they bear heavily, one-fourth of the life of the trees is over before they are good producers. Therefore a grower practicing systematic renewal has about one-fourth of his acreage under 10 years of age all the time. As that one-fourth comes into bearing an equal number of worn-out trees are removed and new stock planted near—though not in exactly the same planting spots. Sometimes the young trees are planted between older trees when the orchard is about 35 years old. Five years later the old trees come out, when the young ones grow to need the space.

The campaign has hardly started, but already candidates is cryin' because voters don't pay hardly no more attention to 'em than candidates pays to voters after election.—Foxtail Johnson in THE PRAIRIE FARMER.





## GARDEN CLUB GLEANINGS

By  
Juanita E. Jorgensen



J. E. Jorgensen

At long last the portals of the South Dakota State Horticultural Society have been opened wide to welcome in the ladies. Why is it that this organization has always been predominantly masculine when everyone knows the women do most of the gardening (was that a snort of derision coming from the opposite page?) is more than I can see.

Perhaps the "petticoat brigade" has taken to slacks and even "long bloomers" they are being given more recognition; but at any rate we are happy to find that this page has been dedicated wholly to the garden clubs and their problems. Because the balance of power in these clubs usually lies with the ladies we feel that this page is peculiarly their own, and will be devoted to the problems of the average gardener who likes to grow things but who is far too modest to consider herself a horticulturist.

We want to hear from garden clubs everywhere with stories of their organization, meetings, flower shows and how to conduct them, of past accomplishments and future aims. We will publish good programs you suggest, papers written for club meetings, excerpts from some, and other gardening helps. With co-operation, this page will become a round robin of information of great help to us all. Clubs from over the state as well as individual gardeners will become acquainted so that we can better conceive the vast extent of this horticultural work and its influence on the world today. We hope to encourage the formation of more garden clubs and become more closely allied through the pages of this little magazine.

It was a big disappointment not to see many garden club representatives at the Brookings meeting of the Horticultural Society; and especially not to see Mrs. Michels from Vermillion who has been working for an organization of such clubs in South Dakota. Much of the program was of practical value to gardeners and it is always a joy to talk about plants to an attentive listener, and to visit the gardens of others as we do on the horticulture tours. The Clark Garden Club with Mrs. Banks and Mrs. Keating as the main enthusiasts, still holds the record for attendance at the meetings of the Society, with Vermillion and Dell Rapids next on the success list.

With the transportation system being what it is

today gardeners, more than ever, need a common ground whereon to meet and grasp the friendly hand of other garden fans; and the answer seems to be more clubs and greater interest in your state's Horticultural Society.

Is there a gardener with soul so dead

Who never to himself hath said,

Let's have a garden club!"

If there is a woman who doesn't like to talk about what she has raised, I have never met her, and it is from this desire to share our successes and air our griefs that garden clubs come into being. It was just so that the Dell Rapids Garden Club was formed.

Since 1932 when fourteen people met to form an organization of garden fans, the group has been continuously active and earnest in its striving to increase the planting of home yards and gardens, and its influence has spread to many communities throughout the state. Through the flower shows it has raised the standard of floral excellence in the town and country, has introduced many new plants among the growers, and has interested many more people in the growing of trees, shrubs and flowers than there ever were before; in fact, Dell Rapids has become Garden Club conscious.

Accomplishments credited to the organization are its flower shows, three of which have been held every season the past several years; the annual distribution of free zinnia seeds to the school children with cash prizes for those who produce the best results; the donation of 100 Ponderosa Pine and hackberry trees, one or two to anyone who would plant and care for them; planting another hundred trees along the walk to the cemetery; the gift of perennials for planting in the park beds; the annual bird house contest with cash prizes; planting a tree as a dedication to the life of a leading citizen of the town; promoting the preservation of the Dry Dells for birds and wild flowers and endorsement of the National Wild Life Restoration Week.

The club affiliated with the Horticultural Society early in its career, and has entertained that organization at one winter convention as well as a summer meeting, and expects to play host to them again next year. Several times we have been honored by having our members speak at conventions, and one member of our club, Mrs. Frank Briley is the only woman on the executive board, as she is librarian of our State Horticultural Society. Mrs. Briley was at one time a member of the State Park Board, and is now president of our club.

This sounds like big doings for a small-town garden club with dues of an all-high 50c per, but by dint of study and co-operation the burden has not been heavy, and an enthusiastic few can sometimes accomplish more than an unweildy larger group.





## BOOK REVIEWS

By  
Mrs. F. Briley



Byways to Adventure, a Guide to Nature Hobbies, by Edwin Way Teale. Illustrated with photographs by the author. Published by Dodd, Mead and Co., 443 Fourth Ave. New York. Price \$2.75.

This book has impressed me as containing more everlasting joy than any book that I have read for a long time. I only wish it were possible to place it in the hands of all those people who feel they have nothing to do with leisure time. In it the lame, the halt, and the blind can find a hobby, and what's more "something different", than, say, antiques old glass or what have you. Take for instance the chapter on Pageant of weather. It contains a world of possible hobbies; weather predictions clouds, checking old folk-lore ideas.

The seventeen chapter heads do not begin to give an adequate idea of the number of hobbies that are suggested by the author. In Journeys to Lilliput, we realize that amateurs can find, in the habits of insects alone, hundreds of riddles to solve. Deserted Homes is not a chapter on bird nests, but on sea shells.

In World of Trees, oddity hobbies of the tree world are revealed, such as; a collection of tree-branch pieces which form all the letters of the alphabet, collections of odd roots, pieces of bark, tree seeds, leaves grafting. At the end of each chapter is a very good bibliography of magazines and books in which you will find articles directly relating to the chapter subject.

Riddles of natural history lie all about us and your own backyard is virgin territory. No other volume, so far as I know, covers the same territory as Byways to Adventure.

Chemical Gardening, by D. R. Matlin, Ph.D. published by Chemical Publishing Co., Inc., 234 King St., Brooklyn, N. Y. Price \$2.25.

The aim of the book is to show in a simple and practical way the methods of chemical gardening so that anyone trained or inexperienced, can benefit directly from soilless culture. Soilless growing is now possible for all because a new system of soilless agriculture, developed by the author, eliminates the expense and professional skill previously required. Now anyone who is able to grow plants in soil can achieve better results without soil. This is made possible by a new accumulation which has

proven to be an ideal growing medium for plants. Read about it in Chemical Gardening. Of special value are the charts the purpose of which is to point out symptoms so that the grower will be warned in time to prevent serious damage to his plants.

Commercial chemical gardening, as a brand-new hobby sprang up overnight and people everywhere enjoyed the thrill of watching plants grow in water. Although only ten years old improvements have been made by leaps and bounds. Since the author's first book, Growing Plants Without Soil, was written two years ago, many new developments have been made. So if you are a true horticulturist you will want to get this 1942 book on Chemical Gardening by Matlin and keep up to date on this new field of making things grow.

## THE PIONEER SEED HOUSE

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### THE RUDDY DUCK

Continued from Page 110

secured on the Delaware River. Recent authors regard it as a form of the West Indian ruddy duck which is not migratory. The latter was described first, which is the only reason why ours is a form of it instead of the reverse. The masked duck of the West Indies is a simliar, non-migratory species.