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NORTH AND SOUTH DAKOTA HORTICULTURE

AUGUST 1940



Pembina River at foot of Walhalla Sandslide, in Pembina Mountains

The Annual Meeting of the North Dakota State Horticultural Society will be held at Fargo, N. D., August 21st and 22nd. Plan to attend.

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THE GREATER YELLOW-LEGS

by

O. A. Stevens



O. A. Stevens

It is hardly more than mid-summer when some of the birds are on the move southward. In late July and early August the shore birds appear again along the borders of our ponds and if we are favorably located, we may see many different kinds. The greater yellow-legs is one of the larger sandpipers. When approached, it flies up with a loud cry and we note a large patch of white on its rump as it flies away from us. From

data compiled some years ago, W. W. Cooke commented that the last ones were seen at Long Island about May 28 and the first again about July 19. Norman Criddle in southern Manitoba found their average dates of spring and fall arrival to be April 25 and August 8.

They are off now for their winter resort which includes a vast extent of coast, creek and lagoon, the Gulf States, Central America, even Brazil and Argentina to the Straits of Magellan. When traveling in South America in 1920, Wetmore found these birds "distributed throughout the open pampa wherever shallow ponds offered suitable feeding places. * * * They are rather silent during the winter season but when the northward journey begins are as noisy as is their custom in the north. The species is large so that it is attractive to pot hunters and many are killed. I saw a number of crippled birds during the last two months of my stay in Argentina and considered that it is these injured individuals * * * that are recorded on the pampas from May to August when all should be in the Northern Hemisphere."

In northern Argentina, Hudson noted that they arrived at the end of September and left in March. Thus they are noted in every account of the birds of the southland, and for some reason, whether it is due to wounds as Wetmore suggests, or otherwise, the reports of their being seen during our summer are almost equally numerous.

The true summer home of the bird is at the northern edge of the prairies in Canada from Newfoundland to Alaska. E. A. Preble in 1903 saw only a few of them during his explorations in the Athabasca-Mackenzie region and commented that the breeding grounds were practically unknown but supposed to be between

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TABLE OF CONTENTS

	Page
The Greater Yellow-Legs, O. A. Stevens	86
Newsletters, H. A. Graves	87
Manitoba News Letter, W. R. Leslie	88
New England Notes, Dr. A. F. Yeager	89
August, W. E. H. Porter	90
Secretary's Corner, W. A. Simmons	91
Questions & Answers, L. L. Davis	92
Book Reviews, Mrs. F. Briley & Simmons	93
Success With Trees, E. H. Everson	94
Fruit & Vegetable Notes, F. X. Wallner	95
Horticulture Travelogue, A. L. Truax	96

Great Slave Lake and Hudson's Bay. Twenty years later, A. C. Bent commented: "Few nests have been found, in spite of the fact that it does not go very far north to breed and its breeding grounds are fairly accessible. I know from personal experience that its nest is very hard to find. * * * The male is very noisy and solicitous, * * * and the female sits so closely on the nest that it is only by the merest chance that she can be flushed."

Bent found one nest after hours of search on the high tundra of central Newfoundland, a hol-

(Continued on page 93.)

NEWSLANTS

by
Harry A. Graves



H. A. Graves

Mr. Porter well thru his many fine contributions to NORTH AND SOUTH DAKOTA HORTICULTURE.

In my travels this spring, I have noticed very severe injury to many of our elms by the spring canker worm. Some of these trees have been defoliated for two or three seasons in a row. One wonders how much more of this they will be able to stand. John Thompson, our Extension Forester, has some interesting pictures of the control of the wingless moth responsible for these canker worms by the use of tanglefoot bands about the trunk of the tree. Some of these pictures show the tanglefoot bands completely covered by the beetles.

Peonies this year, in Fargo at least, were not up to their usual standard. Dr. C. I. Nelson, who is one of our leading peony fanciers, has been very disappointed with the showing made by his numerous plants.

While we are on the subject of peonies, it might be of interest to list a few of the winners at the Fargo Peony Show. The three grand champion blooms were all white peonies. The grand champion bloom of the show was a Kelway's Glorious. The runner-up for the grand champion double was the white peony, Baroness Schroeder. Mary Brand was first in the class for the best three reds; Kelway's Glorious first in the class for the best three whites; Sarah Bernhardt tok first place in the class for the best three pinks.

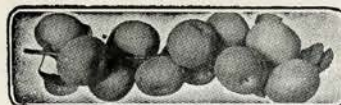
Anyone in northeastern North Dakota wishing a good lesson in practical horticulture would find it well worth their while should they visit the home of Chris Geir, who is located just a short distance west of Highway 32 about halfway between the inland towns of Mountain and Gardar in Pembina County. Mr. Geir has lived on this farm continuously since 1880. Since we

only had an hour or so to spend visiting with Mr. Geir, we only saw a part of his horticultural plant material. An interesting tree that I had not seen before and which I understand is not common at all this far north, is the Smoke tree, **Rhus cotinus**. While not completely hardy, it was making a good growth and had bloomed quite profusely this year. Growing near by were two good specimens of the Kentucky Coffee tree which have not set fruit, possibly being of the same sex since the Coffee tree is dioecious.

We were much interested in Mr. Geir's success with strawberries and observed several varieties which we shall list. The Red Gold variety, a Junebearer from Oregon, has not proved to be hardy; Wayzata has done quite well but is a shy plant setter, and in the words of Mr. Geir, is a good lazy man's berry since it does not need to be replanted as often as some of the other varieties. Among the everbearers, he prefers the variety Gem, which is a good heavy bearer and a very heavy plant setter. This variety has proved, also, to have a very short midseason breathing spell between the June crop and the fall crop.

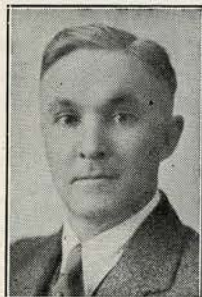
As has been the case with Franklin Page, of Hamilton, Chris has found butternuts to be hardier with him than the black walnut. This is just the opposite from the results we have had here on the experiment station plots at the college. Since these trees are all raised from seed, a great variation in individual hardiness can be expected. Grapes of several varieties were growing on trellises, and, for the most part, doing well. We were interested in the comparison made by Mr. Geir between the Alpha and Beta. He has found the Alpha to be a heavier bearer and somewhat hardier than the Beta. The Red Lutie was by far the best for table quality and very sweet, but rather touchy as to hardiness. Among his plums, which were carrying quite a crop of fruit, he favored LaCrescent and praised it for its apricot flavor; however, if limited to one variety, he believes he would grow the Fiebing or Superior. In the apples, he believes that the Haralson would be the one to grow if limited to one variety in this fruit. He grows and likes the Cumberland for a black raspberry and Latham and Chief as reds. Part of Mr. Geir's good success with fruits can be laid to the fine soil he has to work with, which, in spite of dry weather, was not showing signs of cracking. Also, a high water table within six or eight feet of the surface was an important contributing factor. These are only minor factors, however, and it is only thru the continued effort of Mr. Geir and his family that such a

(Continued on page 89.)



MANITOBA NEWS LETTER

by
W. R. Leslie



W. R. Leslie

That disease so destructive to many pome fruits, such as pears, apples and Saskatoons, known as Fire Blight, was rampant last summer at the Morden Experiment Station.

This disease is caused by the bacteria, *Erwinia amylovora*, and when it breaks out suddenly it may work havoc so widely and quickly in the orchard that it has earned the name Fire Blight. It attacks blossoms, young fruits, tender tips of

twigs and shoots in rapid growth as water sprouts, and less frequently branches and trunks of the tree.

Fire Blight is favored by moist hot weather and is retarded by drought, cool temperatures and slow growth of the infected tree. It appears at blossom time and is apt to continue until July. That is it develops during the period that growing conditions are stimulating in the orchard. It is carried from place to place on the tree by plant lice and other insects, and sometimes by rain washing the bacteria down. The infection may dry up and become impotent, or it may form moist cankers on the branches, or trunk and hold over winter to cause a new outbreak the following season.

A tell-tale of infected branches is when the leaves have turned black and curled up but continue to cling to the twigs. If only a few trees are grown, blighted blossoms and twigs may be removed as soon as infection is noted. A sharp knife is employed and the cut made in the healthy wood several inches below the discoloured bark. After each operation the knife is dipped into a solution of corrosive sublimate, one part to a thousand of water. The disinfecting solution is corrosive so is carried in a glass jar, earthen crock or wooden pail. The knife is wiped dry when the work is concluded. Formalin solution may be substituted.

In large plantations cutting out the numerous infections from day to day is not practical. However, in late summer all trees are gone over and blighted twigs removed through healthy tissue. Large branches showing bark cankers are cut out and the wounds sterilized with the 1 to 1,000 corrosive sublimate, which is applied by sponge or cloth. Later these wounds are painted with a creamy paste of Bordeaux mixture and raw oil, or with white lead and raw oil.

Next April the trees are inspected and any remaining cankers removed and the wounds treated.

The year following an outbreak of blight the orchard may be helpfully sprayed with 4 pounds of Bordeaux mixture to 40 imperial gallons of water when three-quarters of the blossoms are open. Shortly after a spray of one-half pint of nicotine sulphate to 40 gallons of water is given to combat aphids. Sowing fall rye or oats in the orchard lessens three growth and may be desirable in wet summers.

The choice of resistant varieties of pears and apples is very important.

In reviewing plant behaviour this spring at the Morden Experimental Station, an observer is deeply impressed with soil moisture being a prime factor in winter hardiness. The soil was very dry when, belatedly, freezeup arrived about mid-December. Winter temperatures were considerably less low than average.

On the score of hard freezes little winter damage would be anticipated. Snowfall was negligible during most of the heart of winter. Such condition might be expected to mean root-killing to many trees and shrubs. However, root-killing is not apparent among fruit or ornamental trees or shrubs. There is more widespread tip and topkilling in trees and shrubs than ever before recorded at Morden. The obvious explanation is that the injury is due to sheer drying out of the tissue. Snow Garland spirea is usually considered comparatively hardy and the Vanhoutte variety partly tender. This spring the former is rather hard hit in most locations but the Vanhoutte is plump to the tip. It would seem the latter is more winter drought tolerant. Some Snow Garland along a ditch is in good condition whereas some neighbour plants in the shrubbery on drier soil are discouraged and weakly foliated.

Sugar maple is of much concern as the leaf of that splendid hardwood tree is the national emblem of Canada. Trees originating as seed or seedlings in the Thunder Bay hills near Fort William, Ontario, have been doing well here for sixteen years. This spring most of the Sugar maple in close plantings have dry tops. Some specimens in moist ground are in good vigor.

Among the trees and shrubs in thrifty condition are elms, apricots, apples, plums, pears, cherries, caragana, ash, cotoneasters, tamarix, potentilla, crataegus, lilacs, honeysuckles, viburnums, prinsepia, maackia, aralia and hackberry.

Ornamentals more or less winter injured include maples, native basswood, poplars, willows, gleditsia or locust, some birches, elders, butter-

(Continued on page 89.)

NEW ENGLAND NOTES

by
Dr. A. F. Yeager



Dr. A. F. Yeager

We have now been back from our trip through New York and Pennsylvania some ten days. We struck Geneva at about the height of the strawberry season so that we had an opportunity of seeing some of the new varieties of fruit. They looked very good. Strange to say Catskill which has made quite a record over a good part of the eastern United States is not as good at the New York station where it originated as many others. Culver and Dresden, for example, both look considerably better at Geneva than did Catskill. Premier while still a standard berry in many places in the East does not produce as fine a looking fruit as many of these new sorts, and hardly bears as much as many of them. In our own variety trials here in New Hampshire, Pathfinder has made an excellent record during the past two seasons, and I find that other locations in this section likewise consider Pathfinder to be an unusually good variety. It might perhaps be worth trying out in the Dakotas.

One of the interesting things that I have noted this spring which I believe I have said nothing about before is an orchard of apple trees transplanted when 15 years old. Several acres were set out using trees which had been placed as fillers in an old orchard. These were moved year before last. None were lost, and this year the trees seem to have a pretty good crop of fruit on them, and are making a good growth. Adjoining this orchard is another one set with trees of the same type last year which was considered to be the most severe drought they have had for some times. Nevertheless, only one tree was lost out of several acres, and the trees seem to be making fairly good growth this spring. Certainly this is something that could not be recommended under semi-arid conditions but which seems to be quite possible here.

Last week I visited a greenhouse plant a short distance from here in the State of Maine given over entirely to the breeding of new varieties of carnations. There are 5000 seedlings coming into bloom for the first time this fall, large numbers of one-year-old selections from last year's seedlings, fewer number of two-year-olds, and some of the varieties introduced by this grower, a Mr. Sim. Mr. Sim is a Scotchman, and not only knows how to do a fine job of

breeding work, but also knows how to make enough money out of it to support him which is a thing that very few plant breeders are able to do.

I did not have the opportunity of visiting Dr. Slate at Geneva, but did notice a good many lilies at Ithaca, New York, and have been watching lilies with interest here at Durham. Many varieties not hardy in North Dakota came through the winters well here. In fact I have a large clump of *Hansonii* which was planted this spring and is now in full bloom.

NEWSLANTS

(Continued from page 87.)

thrifty, weedless fruit plantation can be maintained.

At long last, one of the Russel Lupines that Ole Grottoadden and I have babied along for months is in bloom with one or two more showing buds. They have not made the height growth I observed in this variety in Manitoba, but I understand they don't care for our high calcium soils.

Plans are going forward in nice shape for our Horticultural Society meetings to be held here in Fargo August 21-22. Already, we have replies from several people we have contacted as potential program material that they plan to be with us at that time. The Fall Show of the Fargo Garden Society will be held in Festival Hall on the campus of the North Dakota Agricultural College on the same dates. If it measures up to the high standard it has maintained in the past, it will be a very definite attraction in itself. Attending the meetings, and taking a prominent part in the program, will be Mr. A. M. Brand from Faribault, Minnesota.

It is to be regretted that we feel it necessary to hold our meetings this year at a time when the Northern Great Plains Section of the American Association for Horticultural Science is convening in nearby Manitoba. This will rob us of many of our professional horticulturists, but because of other conflicts in the month of August, we feel we cannot change these dates.

MANITOBA NEWS LETTER

(Continued from page 88.)

nut, walnuts, mockorange, roses, some spireas, ornamental quince, genista, cytisus, alders, hydrangeas, and glossy buckthorn.

Indications are that a thorough irrigation in dry autumns is of vital benefit and should be performed to prairie plantings where possible. Trees and shrubs give off moisture into the air in winter as well as in summer.



AUGUST

by

W. E. H. Porter



W. E. H. Porter

With the advent of June, leafage darkens and thickens, throwing a dense welcome shade from the beating sun, the wanton abundance of white bloom as on cherries, chokecherries and crabs, scenting the warm air for an all too brief period. Only occasionally is leafage visible on the white robed boughs of *Pyrus baccata*, the lovely massed bloom of the latter reached its zenith during one of life's great tragedies that plunge one into utter despair and today, June 9th, after the last sad rites have drawn the curtain of darkness over an epoch of life that can never return, only a few isolated blossoms survive an overnight, wind driven, drenching rain. In the words of the officiating minister, flowers remind us of the brevity of life. June 2nd. All perennial herbaceous *Phlox* look equally grand during late summer bloom, but alas, what a difference the following spring; of my two dozen or more varieties the only three to show up, so far are Oscar H. Will & Co.'s Ada Black, Boughen's Pink and Pyramid white. *Veronicas repens* and *pectinata* now star their mats of green and green-grey foliage with blue and pink respectively. Heard, but did not see a humming bird among the rockets, now in full bloom. June 6th. The divided clump of Lakeside daisy *Actinea*—herbacea coming out, the flower is much like marigold! also the never failing catmint *Nepeta mussini* and annual *Asperula azurea*, that apparently only has to be sown once, the former heliotrope, the latter lobelia blue. Also the butter-yellow globular cups of *Ranunculus montanus*. *Violas* in about every color, the most attractive is a variety of Rex Pearce's *saxatilis*, low, neat and with myriads of flowers, the two upper petals imperial purple which shades down to lemon yellow on the fan-shaped lower with a purple tip. This is easily the finest viola I have ever seen: The species is a native of Greece but winter hardy in North Dakota and fragrant. June 12th. A daily garden inspection reveals new blooms; flowers of lovely low alpine *Geranium subcaulescens* carried high above rosette-like foliage, each stem holds a pair, somewhat over an inch in diameter, color a dark orchid purple with black anthers, center and petal veining. Also *Penstemon crandalli*, an evergreen

ground hugger whose salver shaped flowers make a fringe of pale gentian blue. *Isatis glauca*, altho invasive and rather weedy as an individual, with its honey scented massed bloom of misty gold and a background of trees or shrubs beautiful beyond description, but holding the spotlight everywhere are the rockets, mostly purple violet and white. In this connection I have a hybrid, purely accidental, a clump of white *matrionalis* and brown *tristis* have been undisturbed neighbors for some years and in their midst a specimen carries a corymb of dark orchid purple flowers, an unusual color for rockets, the petals are narrow, reflexed and long as *tristis* but the color is more akin to *matrionalis* altho flowers have that heavy nocturnal fragrance like *tristis*. The size of plant would indicate last years seedling.

Lilac bloom has been perfect for a week and continues so. For the first time one of the Brand French hybrids, I have had it so long that I almost despaired of bloom, carries many large trusses of bloom, flowers large and single and very fragrant. Its extreme beauty rightly attracts much attention; in bud flowers are dark Peony purple that expands to pale petunia purple. But color appears everywhere, dragon tulips in red, pink scarlet, yellow with their gorgeous banding, blue masses of perennial flax. Dark bishops violet and flesh tassels of mullein *Verbascum phoeniceum*, nodding globes, pale bishops violet of a Nebraska native onion. *Heliotrope* cushions of catmint, Lotus clover with its all summer carpet of dark aureolin, the grass leaved buttercup *R. granineus* that follows the early *montanus* both color of June butter, pale blue carpets of *Asperula argurea* and dark lobelia clumps of star thistle *Cent montanum*, the lovely dropping spikes of *Salvia jurisici* lifted high above wooly fern-like fronds, all hardy as weeds. June 14th. Allred and N. D. No. 40 tomatoes sown outside May 19th are up, former much more vigorous than latter, also Buttercup squash, sown on the same date, is up and the broad leaved evergreen barberry mentor, leafing out from the bottom up, as is the way of barberries. June 18th. First annual from May sown seed in bloom, a California sage *Salvia columbariae*, a thick tuft of small French blue flowers carried well over gold suffused foliage. Enmasse the lobelia blue flower spikes of *Veronica amethystina* are very beautiful, a shade paler than the *montanum* star thistle. June 22nd. The weather vagaries of late are worth recording; two nights of ice making frost, 18th and 19th, killing some Russian thistles, weeds and burning other foliage, especially potatoes and tend sprays

(Continued on page 94.)



SECRETARY'S CORNER

by

W. A. Simmons



W. A. Simmons

Our sympathies go out to our friend Mr. W. E. H. Porter, of Hansboro, N. D., for the loss of his life partner of 42 years, on June 5th. Born in North Ireland in 1874, Mrs. Porter met her future husband, who was from London, at her home and they determined to come to America and take up land. This they did and after the home was established they were married at Winnipeg and moved at once to the home near Hansboro. As both were very fond of flowers, they built up a home that is the horticultural show place of northern N. D. Mr. Porter writes: "For me, at present, the most distressing reminder is the feminine touch thru the home without the personality", something we can well understand.

According to BETTER FRUIT apples are coming back. From a per capita apple consumption of 107 lb. in 1899, the 3 year period 1932-34 showed but 36 lbs., but this had increased to 42 lbs. in the 3 year period 1936-38, mainly as a result of a great advertising campaign and fine cooperation on the part of the great grocery chains. Oranges have shown a steady per capita consumption from 6.7 lbs. in 1899 to 31.7 lbs. in the 1936-38 period. Grapefruit too have shown a remarkable increase, from nine tenths of a pound in 1899 to 11 lbs. for the 1936-38 period and this is for fresh fruit alone and does not include canned grapefruit or grapefruit juice. For the past 17 months a very interesting magazine, KENTUCKY FRUIT NOTES has been coming to our desk, edited by Dr. W. D. Armstrong, of Princeton, Ky. By the June number we are sorry to learn that this publication will have to be discontinued, caused by a reduction in their appropriation from \$10,000 to \$4,000. Am sure the fruit growers of Kentucky will miss this magazine, as we will and we are sorry to see that the legislatures of the Dakotas are not the only ones that treat their Horticultural Departments as step-children. "Oh what so rare as a day in June" queried the poet, many years ago, the answer of course being, as pointed out by a speaker on the Club Matinee program, 30 days in February. This year, however, July days have been equally rare and lovely. There has been no extreme heat, weather made to order for the setting of tomatoes and

well being of about all other garden and farm crops.

We are in receipt of the following account of the recent joint meeting of the North Dakota and Minnesota Beekeepers Association, taken from the report published by the Fargo Forum:

Educating the public in North Dakota and Minnesota as to the value of honey in the diet is one of the important projects for the beekeepers association of the two states, they were told at a joint meeting at Detroit Lakes, Friday and Saturday, says J. A. Munro, NDAC entomologist.

Mr. Munro presided at the Friday meeting and Dr. M. C. Tanquary, formerly a North Dakota bee man, now head of the bee department at the University of Minnesota, was chairman Saturday.

"Miss Constance Leeby of the home economics department, N.D.A.C., gave an address on the importance of informing people about honey as a valuable sweet produced here in our own territory," said Mr. Munro.

"She presented information to show how honey may be used with excellent results in bread, cakes and other food products. It adds a fine flavor, helps to preserve these foods and could be used to advantage by many more housewives."

Mr Munro also reported two associations propose to seek lower express rates on package bees from the south, saying present rates are forcing much of this business to trucks. Northern growers buy large quantities of package bees from Texas and other southern bee farms to start their spring colonies.

Friday afternoon the group visited the Paul Johnson honey farm near Calloway, finding one of the most modern apiaries of the nation there. Mr. Johnson maintains about 1,000 hives of bees.

It was the annual summer meeting of the North Dakota and Minnesota Beekeepers associations. About 75 attended.

The best things of life are free—sunshine, the songs of birds, the air we breathe, the fragrance of flowers, the joy of helpfulness.—The Earthworm.

All cities, large and small, are more or less alike. Buildings, street cars, automobiles, people—not much to distinguish from there, or to make one city stand out from another. But—suddenly we come upon a town that realizes the commercial value of beauty. They realize the loveliness, the charm and attractiveness of health, vigorous, well-kept street trees.—Trees Magazine.



QUESTIONS AND ANSWERS

by
Prof. L. L. Davis



L. L. Davis

Is mulch paper of value in the vegetable garden?

In experiment conditions at South Dakota State College, the University of Minnesota, Iowa State College, much paper, spread on the ground to conserve moisture and to keep down weeds, has not increased yields sufficiently to pay for the extra cost involved. Both results were obtained with warm season crops like melons or tomatoes. A straw mulch of four or five inches can be substituted for a paper mulch at less expense. If you try a commercial paper mulch, do so on a small scale.

What can I do to improve my shelterbelt?

The principles involved in taking care of the shelterbelt are rather simple, providing they are carried out. If, however, as the problems arise, nothing is done to correct the conditions, then corrective measures are often involved. The following rules will assist you in caring for your shelterbelt in the succeeding years. First: Never permit fire to burn in the shelterbelt. Annual burning never improves a shelterbelt, even when the larger trees with thick bark appear not to suffer. Second: Keep livestock out of the timber. They trample the growth, eat young growth, and make conditions for tree growth impossible. Third: Weed out defective, diseased or undesirable trees as rapidly as they appear at any time of the year that they are noticed. Use the crooked, poorly formed or defective trees for fence posts or fuel. Cut the stumps low so that sprouts will come out near the ground. Fourth: Prevent competition from very closely spaced trees as they grow by removing the least desirable trees. Do not thin to the point where the soil cover is exposed.

Of course right now, farmers wish to raise grain or forage on their fields, so they have to pay for that privilege by keeping ahead of the hardy weeds which always threaten to chase them out if they relax too much. Nature wants those fields green. The kind of green it is, depends on who gets there first with the best plan of operation.—The Minnesota Horticulturist.

EAST MEETS WEST

by
Frank Thone, in Science News Letter

East meets West—if you go far enough south. That is one of the things Dr. Alexander Wetmore of the U. S. National Museum found during a six weeks expedition to study the birds of Gautemala, from which he recently returned. In the highlands of the Central American republic, the first birds that caught his eye were old familiar friends from the United States, down there for the winter, or in transit thru the funnel-throat of Central America on their way over into the wider forests of South America. Over 200 species of North American birds are known as winter migrants in Gautemala. And since Atlantic and Pacific are not very far apart in the Central American region, bird species characteristically at home in the Alleghenies there fraternize with other species that never nest east of the Rockies. Dr. Wetmore often saw, in the same Gautemala tree, birds that would never be found within a thousand miles of each other when they are at home. Dr. Wetmore also found in the pine and oak forests of the Gautemalan mountains many genera of birds close of kin to North American birds, but distinctively Central American, never straying northward. Such familiar fowl as woodpeckers, kingfishers, song sparrows, swifts, hawks and owls were found mingled with trogons, motmots, and other birds never found in the temperate zone. On one lake Dr. Wetmore collected six specimens of helldivers, or grebe, very similar in coloration to the common helldiver of the United States and Canada, but very much larger. This lake is the only place in the world where the giant grebe is found. An oddity of bird behavior was noted by Dr. Wetmore in one place he visited was the eating of avocados by a species of black vulture, which elsewhere feeds only on a flesh diet. The avocados of that particular locality are of extra choice quality, but since they retail for only a quarter of a cent apiece the growers do not trouble to harvest their whole crop. Hence, whenever a gust of wind shakes a grove, a lot of over ripe fruits drop to the ground and burst open with loud pops. Whereupon the waiting vultures in the treetops drop to the ground also, and feast on the rich pulp.

"Alice has decided to marry a struggling fruit grower." "Well if Alice has decided he might as well cease struggling."—Maryland Fruit Grower.



BOOK REVIEW

by
Mrs. F. Briley



Mrs. F. Briley

Grow Your Own Fruit, by M. G. Kains, published by Chas. Scribner's Sons, 597 Fifth Ave., New York, June 10th, 1940. Price \$3.50.

A book that tells us everything we need to know to grow 59 fruits is one that a gardener cannot get along without. And that is not all for entire chapters are devoted to such important subjects as soils, and their general care, training and pruning trees, pruning tools, insect and disease control, re-claiming neglected trees, grafting and budding. Many fine illustrations and line drawings add much to the book. The author refers to the work of Dr. N. E. Hansen, President Emeritus of our Society. In the chapter on the bush cherry, he says in part: "Not only has nature, unaided, produced several pure blood varieties, but Prof. N. E. Hansen of South Dakota, by nearly half a century of meticulous, indefatigable crossing and selecting, has originated many others. Still further he has used this species as one of the parents in hybridizing with many varieties * * with the result that he has put the whole plains section, adjacent to Canada, and similar climatic parts of the world unpayably in his debt." Many of Dr. Hansen's hybrids are mentioned by the author. Simple directions are given for successful growing of all desirable fruits for American gardens.

BOOK REVIEW

by
W. A. Simmons

The American Lily Year Book, published by The American Horticultural Society, 821 Washington Loan & Trust Bldg., Washington, D. C., price \$1.00.

Each year The American Horticultural Society brings out a lily year book, consisting of articles written by recognized lily authorities in our country and Canada. The articles in the 1940 book are from the pens of L. H. MacDaniels, E. F. Palmer, Philip Brierley, Howard A. Houser, Geo. L. Slate, E. P. Imle, Albert M. Vollmer, J. C. Foster, Donald Simmonds, Violet Niles Walker, Isabella Preston, Dr. L. Horsford Abel, Lela V. Barton, F. L. Skinner, Theron J. Liskey, and Mary G. Henry. This plan of the

book brings out the last word of experience from extensive breeders and growers of this loveliest of flowers and gives information not to be found elsewhere. The book is printed on heavy paper with ornamental board cover and contains 28 illustrations, mostly from photographs by Mr. MacDaniels and is edited by Dr. G. L. Slate, himself the author of a very valuable lily book, reviewed in these pages last year. Much is said about mosaic and in one of the articles Dr. Slate tells how to live with it. Mr. Palmer, in his article, tells of his breeding experiments, the main object of which is to produce desirable trumpet shaped lilies with the bulbil forming habit, as in the familiar Tiger lily, thus simplifying propagation. Mrs. Helen M. Fox, author of Garden Cinderellas, one of the most enjoyable of the lily books, tells of her success with the difficult Cordifolium lily. Mr. F. L. Skinner of Dropmore, Man., Canada tells of a heavy frost on June 8th of last year, when most lilies were up two feet, which prevented many of his lilies from blooming and seemed to seriously curtail the setting of viable seed by those that did bloom. This is a book all lily lovers should own.

THE GREATER YELLOW-LEGS

(Continued from page 86.)

low in the moss with four eggs. The eggs are about two inches long, quite pointed at one end, buffy or light brown marked with large spots of dark brown in various shades. Apparently the young are left to shift for themselves at an early stage, the old ones starting southward leaving the young ones to follow. They feed chiefly in shallow water, securing many minnows, dragonfly larvae, and other small aquatic animals.

The greater yellow-legs has long been a popular game bird and numbers were shot in the early days. In addition to being of good size and quality, its rapid flight and readiness to come to decoys made a strong appeal to hunters. Its wide distribution and well chosen nesting sites give hope that many of the birds will continue to be with us.

A European relative of our bird, known as the redshank, nests over a large part of Europe and migrates to Africa. Rev. Jourdain, who wrote an account of it for Bent's volumes, comments that they are very poor eating and that "the restless and wary nature of this very numerous species renders it very unpopular with shore shooters, as its loud yelping cry of 'took took' alarms every bird within earshot." The similar greenshank is apparently still wilder. All three species occasionally wander to the other side of the ocean.



SUCCESS WITH TREES

by

E. H. Everson, Secretary of Agriculture



As we said last month "The South Dakota Department of Agriculture sells trees," and each year obtains a report on the prior year's plantings. To continue:

From Miner County we got this splendid general review: "In regard to the trees planted, will say that owing to deficient rainfall and grasshoppers it proved nearly a failure, nearly all the trees were bark girdled, the Hackberry stood the ordeal the best of them all. One mistake I did make was subsoiling the row to a depth of nearly 20 inches before I planted the trees, this

stirring the soil left it too loose and it dried out too quickly. I have lived here in the vicinity of Carthage 52 years, have planted and tried out over 40 different kinds of trees and have found the Hackberry to be the hardiest of them all with the possible exception of the Red Cedar. Ash, Boxelder, Russian Olive, Elm, American and Chinese, in order named, as I have found them. By all means keep the Cottonwood on your list as it is the easiest of all the trees to start and make a showing in just a few years. The Cottonwood and the Boxelder are more free from damage by jackrabbits and cottontails than any other tree, where on the other hand the Hackberry and Ash seem to be favorite dessert for them. In low growing trees or bushes I have found the Caragana and Chokecherry the hardiest in this vicinity. They have weathered the storms of dust and drought and are still clinging to life with a luxurious verdure."

Another Miner County man says "Had good success." He had 92% survival of Ash, 95% of Cedar, 64% of Pine. He continues with "Plowed and harrowed ground, punched holes with crowbar, used forked stick to put roots to bottom of hole and packed the dirt around them. Cotton-

wood no good here, now, too dry. American Elm is good, so are Green Ash if not hurt by rabbits." (We shall send out some pretty fair advice next fall on how to protect from rabbits.) I like this man. He believes it is natural for baby trees to have their roots in a firm moist soil. So called nicely prepared ground with "plenty of loose places for the roots" is a poor place for baby trees, even though some manufacturers of the kind of subsoilers that "loosen" the subsoil are of a different opinion.

AUGUST

(Continued from page 90.)

of black walnut, but the terrestrial warmth protected all seedlings, including tomatoes and squash. Then early on the 21st, an hours welcome drenching thunderstorm on the parched land followed by heavier and of longer duration on the 22nd. Hansen's single Siberian rose in bloom, much like our wild prairie rose only more bush like, also another hedge rose, rubrifolia, the small carmine 5 petaled flowers blend nicely with red stems and shoots and bluish leaves. Hansa rose also in bloom and many garden flowers coming, including Penstemons, summer aster alpine, a lovely dark orange day lily and columbines in variety.

THE PIONEER SEED HOUSE

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FRUIT & VEGETABLE NOTES

by

F. X. Wallner



F. X. Wallner

Some of the gardeners here, planted corn in the tomato fields to protect the fruit from sunscald, but this may delay the ripening of the fruit unless we get warmer weather soon. Also it should not be necessary unless the vines lose their leaves, as they did last year, or among the very early types where the foliage is so sparse the fruit is exposed to the sun. As it is, the tomato crop is two to three weeks later than last year. By the looks of wilt resistant Bonny Best, it appears that the fruit will have plenty of protection and in fact the early types are thrifty, to date, altho I have heard of some going down, at this early date. We hear a lot about soil erosion and see the bald hill tops where the good earth is all gone, but little is said about the good top earth, several rods wide, being taken, along our modern highways for road building. The several rods of farm land, along the highway will be worked and planted, but for many years there will be no crops, where the top soil has been put into the road bed. On the new road bed being built on No. 81, south of Arlington, however, I see they are removing some of the top soil and returning it, after the clay or gravel soil has been put in the road bed. This method should be followed in all road building in the state; surely it is less work to do this than for the farmer to till these barren acres for several years, without a crop. On my trip to Watertown, a few days ago, I noticed the dead top branches on "Lone Tree" and wondered who, near by, would take enough interest, to remove the dead branches and prolong the life of the tree. On my return, I stopped to see our friend C. J. Bohl, at Dell Rapids, who promised to trim it this fall and again in the spring and perhaps take out some of the soil, to make a depression and sink a tile, to catch the rains from the pavement, on all sides. Professor Davis, please have Dr. Gilbertson answer this question: "What sort of moth causes the cabbage looper and, do the little butterflies, so numerous in meadows and grain fields, come from wire worms?" There being no white butterflies, there are no cabbage worms, so one can compare the damage of the looper alone, which I do not consider as bad as the cabbage worm as it does not

eat thru the leaf, in all cases. There will be 9,000 acres more peas grown this year for quick freezing, than last year, or a total of 39,000 acres, just for frozen pack. There is a gain of 16% over last year in the ten most important vegetables for frozen pack, over last year. Eastern and midwestern head lettuce predominated in all markets in the eastern half of the states. Iceberg from the western section has not been received so well with so much local leaf and head lettuce of good quality on the market, but one day with a temperature of 100 and a hot wind will ruin a field of head lettuce. We had fair results with early planted plants and a grower on the Omaha market sold several thousand crates of good stock.

A new pest, a black and yellow striped blister beetle, is very numerous in parts of our gardens and yesterday I found hundreds on tomato and pepper plants that were almost stripped of leaves. They do not seem to fly away, as some others, but move very fast on the ground, when disturbed. I swatted the only pair of white butterflies that I saw, some time ago in the cabbage field. Last year they were fluttering over the cabbages by the thousands, at this time; what became of the pests? It does not seem fair that the President is the only one that can get poetry into the magazine, so here is one that appeals to me, Shelterbelts, by Thelma Hill Ward, Woonsocket.

SHELTERBELTS

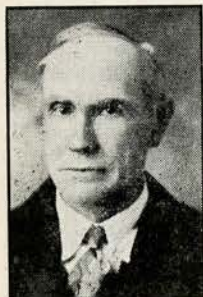
I like to think of them . . .
those mile-long lines of trees . . .
mile-long lines stretching far . . .
far into thousands of mile-long lines
across the Nation's prairie.
Green rustling cottonwoods
and elms and ash and cedars . . .
shady groves on farms
where thousands of little children play . . .
typifying America . . .
her noble gesture . . .
her gallant gift.
I like to think of them:
cottonwoods swishing
and shining in windy moonlight,
elms under a summer sky,
cedars green and festooned with snow,
beautiful and clean and new.
They are more than shelterbelts . . .
they are America's faith
in the future.

—Thelma Hill Ward.

Woonsocket, S. D.

HORTICULTURAL TRAVELOGUE

by
A. L. Truax



A. L. Truax

the world where Azaleas grow, are here thriving and blooming in the mild, moist atmosphere of Mobile Bay.

We were a week in New Orleans and while the gardens there are also beautiful, they, of course repeated what we had already seen in Florida and along the Gulf. Passing northward thru Baton Rouge we saw there the most splendidly landscaped State Capitol grounds that we have seen anywhere in the United States and a view of them from the top floor of the Capitol building should not be missed by anyone passing thru Baton Rouge. Thruout Mississippi the wild flowering Dogwood (*Cornus florida*), was in full bloom in the woodlands, making banks of snow in the hollow and on the hillsides, beautifying the otherwise bare landscape and throwing into bold relief the clumps of evergreens and lighting up the dark valleys like a Heavenly benediction. I never knew the Dogwood could be so beautiful until I saw it in Mississippi. We reached Natchez during Garden Club week when pilgrimages are conducted thru old time ante-bellum mansions and old time gardens, in which that old southern city is particularly rich.

At Hot Springs, Ark., where we spent a week, camped in a pleasant grove beside a running stream with bird songs all about, we saw on March 17th Bluets (*houstania coerulea*), blooming in the open woods and everywhere on dry hillsides the pansy-like flowers of the birds foot violet were growing in such luxuriance and profusion as I had never seen or imagined. This is the most beautiful wild violet that I know and I shall surely try to grow it if I ever have a garden again. We left Hot Springs on March 24th, and drove over the "Rim of the Ozarks" to St. Louis, Mo., my principal object being to visit the Shaw Botanical Gardens in the latter city. As we approached St. Louis, Forsythias were mak-

ing golden the gardens. The famous Shaw Botanical Gardens would require an article to themselves, but it was Daffodil time when we were there and the great feature to me was the fine display of narcissi in all the known varieties. I should like to have stayed there longer but the news came that the famous Japanese cherries were in bloom in Washington, D. C., two weeks ahead of schedule time and that we must hurry, to see them at their best.

Foolish of course, to drive a thousand miles and more to see the cherry bloom, but we did it, reaching Washington on March 28th, just in time for the Cherry festival and celebration on the evening of that date. You perhaps have all seen pictures of this scene. The great show is in the clouds of silvery pink single blossoms that border the shores of the Tidal basin, reflect themselves in the water and throw into sharp outline the gleaming white shaft of the Washington monument to the north. It is a never to be forgotten picture, but the show is alas, too fleeting. Two days rain and wind, and the shimmering fleeting petals were scattered and the show for 1938 was over. The double Japanese cherries come later. They are more varied and lasting than the pink singles, but do not lend themselves so well to mass planting. However, more of them are being planted every year, and it will soon be worth while to tarry for a week or ten days after the "big show" is over just to see the individual specimens of these wonderful double flowering varieties. Almost equalling the Japanese cherries was the big show put on by the Chinese magnolia, a variety of *Magnolia soulangeana*, which is planted in clumps in the grounds surrounding the Tidal basin. This *Magnolia* blooms in great profusion before the leaves appear. The petals are thick and lasting, purplish pink without and clear pink within. The effect against the leafless landscape is dazzling. Soon the *Amaryllis* show was on in the National Botanical Gardens in Washington. We tarried to see this great display, and then, the weather being cold and rainy, we turned southward into Virginia.

Plant Patent No. 371 has been issued to Max Reuter, Blue Point, N. Y. for a new perennial hybrid delphinium of the *Belladonna* type, resistant to mildew and producing four crops of blooms in a season.—National Seedsman.

A few days after election a prominent politician was called up and told he had just become the father of triplets. "Hey," he yelled, "I demand a recount."—Gabe Caffrey in *The Argus-Leader*.