
NORTH AND SOUTH DAKOTA HORTICULTURE

JULY, 1941



This gives us some idea of what Adam was up against. It is hard enough to resist either a fine apple or an attractive lady; combined, the temptation was irresistible. Cut loaned thru the courtesy of Mr. W. S. Compfield, Sec. of the Virginia State Horticultural Society.

The annual meeting of the S D. State Horticultural Society will be held at Yankton, August 25th & 26th. Plan now to attend.



THE LEAST FLYCATCHER

By
O. A. Stevens



O. A. Stevens

farm grove or in any city block where there are trees. It is found over a large part of North America except the far west and north in summer and in winter ranges from Mexico to Panama.

It is a member of a group of small flycatchers which are all much alike and difficult to identify. Alexander Wilson named one, Audubon another. The Baird brothers found two more (including the present subject) in the same territory. Spencer F. Baird described two more from western United States, other authors four or five additional. From the southwestern states into Mexico and Central America there are still more numerous forms of these small flycatchers.

The name of the genus is Empidonax, from two Greek words, meaning "goat king." The birds seem well named for we are most likely to recognize them by their behavior, as they nervously dart from place to place, seizing small flying insects in short flights. Besides the insistent chebec call, they frequently utter a querulous note, something like the alarm note of small chickens.

Their markings are distinctive only in general, gray-olive above, gray or yellowish below, two wing bars usually prominent, head tending to be crested. The general coloration is much like that of the ruby-crowned kinglet, but the flycatcher is larger and the snapping of his flat bill displays that very efficient insect catching device.

These little flycatchers begin to arrive in our latitude the second week of May but it is some ten days later before they become really abundant and noisy. Often during an early rainy period I see them perching for a moment on a low stick in the garden, darting here and there. Because of the possible confusion with two or three other species, I hesitate to name them unless I hear the familiar note. Often

We are proud to use names which are as simple as possible, and while this bird may not be quite the least of all flycatchers, it is about the only one of its group in our area with which the average person is likely to become acquainted and in general is well designated by the name. It is one of our common summer residents. Another name for it is che-bec, from its noisy call note which may be heard, especially in late spring and early summer, in any

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enough they are exasperatingly mute at that time.

The nest is built in a tree or bush, usually at a moderately low location. It is a small, well built cup of fine fibers or other material, firmly placed in close, upright branches. Once I caught a nest building bird by stripping nettle fibers from an old stalk and placing them in the trap. The eggs are three to five in number and are pure white. I suspect that they have two broods for I have found them still nesting in September.

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NEWSLANTS

By
Harry A. Graves



H. A. Graves

Many of our lilacs seemed to have a large number of blooms this season but individual blooms were small. Cedric Adams in his column in the Minneapolis Star Journal has the following to say about A. M. Brand: "If you get the itch to go someplace today and Faribault is within driving radius, there's a sight down there worth almost any trip. A. M. Brand, 72 now, has spent his lifetime developing peonies and his national honors would reach to the bottom of this page. Today he has acres of them in bloom together with one of the world's finest collection of French lilacs going full blast. Among his peonies you'll see the grand champion, Martha Bullock; the medal-winner of the country, Ruth Elizabeth; another single bloom winner, President Lincoln. His peony farm is a show in itself and a treat for your eye and nose department at this time of year. Twin Citians will find it an especially pleasant Sunday jaunt." Which reminds us that the grand champion bloom at the Fargo Garden Society Peony Show was Therese. Last year Kelway's Glorious carried off most of the honors.

Seed from Russel's Lupines carefully scarified this season gave much higher germination than unscarified. Mr. A. Griffin of Strathmore, Alberta, sent us a sizeable packet of seed last winter and several of our friends have plants started. Older plants in their second season are much more vigorous as two year olds. All in spite of the fact that Lupines are not supposed to thrive in this alkaline soil.

Successful Farming featured a North Dakota producer of certified seed potatoes on its cover page for June; Jens Letness, of Hillsboro, and his daughter, Marie, make a very fine picture in kodachrome against a background of a field of potatoes. We suggest President Beebe secure a copy. We know he will want to frame this picture, knowing him as we do.

Those of us from North Dakota who knew Charles McCaffree will regret his passing. The group from here that attended the South Dakota meetings in Sisseton last year got to know him quite well in the short time we spent there.

I am sure many people can sympathize with

Brother Simmons and his battle with boxelder seedlings. Several gardens with which I was familiar in my boyhood had these selfsame boxelders for the worst weed in the garden.

The drouth is broken for the present at least. Our personal tomato plants were completely under water last week and I fear some of them will not recover.

As far as can be determined now our annual meetings will be held in Bismarck. The date, while yet tentative, will perhaps be August 15. The Great Plains Section of the American Association for Horticultural Science is to meet in North Dakota this year and the plan now is to meet jointly with them on that date. The plan now is to have a speaking program in the forenoon and a tour to points of horticultural interest in the afternoon. A joint banquet to be held in the evening. More details later.

"DICK SEZ"

It's always nice to see a man, who does the very best he can; a gent who labors for a crop, that makes the meanest neighbors stop; an' puts an envy in their eye, an' makes 'em think they ought to try—yes try—to grow a tree or bush, or just strawberries for the rush. Then there are some who like the feat of growin' vegetables to eat; an' peaches, pears, an' things for pies, by zunks! it makes for waterin' eyes. Give me a piece of fertile soil, where if a man will gently toil, he soon can raise a goodly crop, an' if the prices do not drop, will have some dollars in his jeans—from selling cabages an' beans. A lot of people always buy, from stores at prices mountin' high, each single thing they have to eat, not knowin' gardenin' can't be beat.

Richard Ben Freiburger
Box 911, Sioux Falls,
South Dakota.

Staff members of the Sociedad Panamericana in Quito, Ecuador, have been making extensive experiments with Eucalyptus. They report a highly satisfactory smoking mixture of ground eucalyptus leaves mixed with a very small quantity of ground canela bark. Blended with pipe or cigarette tobacco on a ratio of one part to twenty five, it is claimed that an unexcelled aromatic smoke is attained, superior in flavor to the menthol blends and quicker acting in clearing nasal and throat passages. Another eucalyptus product developed by the research workers of the Society, is a tea believed to be highly beneficial in the treatment of common colds and catarrhal conditions.



MANITOBA NEWS LETTER

By

W. R. Leslie



W. R. Leslie

One of the good things to come from the cottage garden in early spring is rhubarb. This crop has changed in variety very beneficially during the past few years. The improvement has been in colour chiefly but also in texture and probably to some extent in lessened acid content.

Morden Station tests in May were on seven varieties, all of which are more or less red in colour. Another cherished newcomer, Shortcake, succumbed last summer to a withering attack of wilt. Early Sunrise, Valentine, Canada Red, Coulter, Ruby, Selection 5 and Macdonald rated in descending order as to richness of colour of the sauce. The same rating seems to hold when the stalks are made into rhubarb juice. In passing, a good word is here recorded for rhubarb juice as a pleasing forerunner to the evening meal served in the dining-room.

All three testers accorded Early Sunrise first place as sauce. The plants are vigorous growers and have light green leaves that carry many fine hairs. The stalks averaged $1\frac{1}{2}$ by $\frac{7}{8}$ inch in diameter and 16 inches in length. The rich red flesh was slightly shreddy but tender and the flavour rich and pleasing.

Valentine is a vigorous plant with dark green leaves on stalks averaging $1\frac{1}{8}$ by $\frac{3}{4}$ inch and 13 inches in length. Texture and flavour resembled Early Sunrise.

Coulter is a strong grower with stalks 1 by $\frac{3}{4}$ inch and 16 inches long. Texture is smooth and soft and flavour mildly acid.

Ruby has been growing taller than the others this season with thin stalks $\frac{7}{8}$ by $\frac{5}{8}$ inch stretching to 19 inches before spreading into dark green pointed leaves. The sauce was much like Coulter in its rather dull rosy pink colour, but the flavour was more tart and more sharply acid.

Selection 5 from the Beaverlodge Station in Alberta is a strong grower of upright habit and seems reluctant to push up seed stalks. The stalks pulled averaged $1\frac{3}{8}$ by $\frac{15}{16}$ with length of 17 inches. The sauce was of even consistency, smooth, tender, and a little flat in flavour.

McDonald, the old-timer of the group, brings up the rear in this test, chiefly due to its pale pinkish amber colour. Stalks measured $1\frac{1}{8}$ by $\frac{5}{8}$ and

15 inches. The sauce showed some fibre and lacked somewhat in flavour.

A second table test is to be reported about July 1, when rhubarb pulling should cease to permit the plants to store up food in their roots for the 1942 harvest.

Currants and gooseberries receive calls from several injurious insect pests and disease organisms. Most of these troubles are easily controlled by spraying promptly and thoroughly. Leaf-spot, the different foliage worms or caterpillars and aphids are most common. Spray just before the blossoms appear with 3-6-40 Bordeaux mixture, plus $1\frac{1}{2}$ pounds of arsenate of lead; or with lime-sulphur 4 pounds, lead arsenate $1\frac{1}{2}$ pounds, water 40 gallons. The second spray of the same mixtures is given just after the fruit is set. The third spray, with Bordeaux 3-6-40, is made to black currants two weeks after the second spray; and to red and white currants immediately after the fruit is picked to prevent drop of foliage. When aphids were numerous the previous year, give an early spray as the buds commence to burst with $\frac{3}{8}$ pint of nicotine sulphate in 40 gallons of water. These plant lice attack the underside of young leaves and cause them to curl up in unsightly forms.

In prairie Canada the Currant Fruit Fly is becoming unusually troublesome. The fly lays its eggs in the young fruits. The eggs hatch and infest the berries with maggots. The surest control is to enclose the plants in cages of wire fly screen or of cheese cloth to keep the flies off the fruits. At the University of Manitoba plantations spraying to poison the flies has been effective. A first spray of lead arsenate $1\frac{1}{2}$ pounds and water 40 gallons is applied when the common lilac is in full bloom. A second spray is given about a week to 10 days later. This spray has the added advantage of killing any currant worms present. If poultry is allowed the run of the bush fruit plantation after berry picking they will help rid the patch of the pest.

Mildew may be checked by dusting with Sulphuron, or wettable sulphur, as soon as the first signs of the fungus are observed. This form of sulphur may also be used as a spray, — $3\frac{1}{2}$ pounds in 40 gallons of water.

Raspberry foliage is tender to spray injury. To combat Anthracnose disease and scale insects give a dormant spray in April of dry lime-sulphur, 16 pounds in 40 gallons of water.

Where strawberries are infested with Red Spider, dust with 10 pounds of Sulphuron mixed with 10 pounds of hydrated lime, in the early afternoon when the temperatures is 70 degrees or higher.

PRESIDENT'S CORNER

By
H. E. Beebe



H. E. Beebe

Word has just come from Secy. Simmons and Vice President Geo. Gurney that the meeting of the State Horticultural Society of South Dakota for this year will be at Yankton on August 25th. and 26th. This takes the place of the usual "summer" and the "annual" meetings, the latter generally being held late in the year, when many Horticulturists are afraid of frost on the limbs.

We are expecting at Yankton the largest attendance in the history of our Society, and there will be many special features that will be worth the transportation of the entire family across the State. Put a red circle right now around these two dates, August 25th. and 26th. The flower and flowers of Dakota will be there.

One of the features of this meeting may be the presence of Mrs. Geo. H. Whiting, widow of one of our Presidents. The Whitings were very active in Horticultural work when they lived at Yankton, and they planted the beautiful pine trees east of that city.

Mrs. Whiting attended a summer meeting at Vermillion where it was suggested that the Society recognize these trees as the "Whiting Avenue of Pines." Mrs. Whiting writes that she may bring along some kind of monument or plaque, and if so, its dedication will be part of the program.

We will also honor at this meeting, Chas. McCaffree, who recently passed on, he was one of the main stays in the development of the Society in previous years, and acted as Librarian for over ten years. McCaffree is largely responsible for the beautiful landscaping of our State Capitol at Pierre, and was always a tireless booster for South Dakota.

We had the pleasure of his presense at the Sis-ton meeting last November the first one he had attended in about seven years. He was of great help in preparing the resolutions and will be missed. We are glad for the last visit with a grand man.

Who knows about the Forestry Section of our Society in earlier days? Joseph S. Illick head of Forest Management, of the New York State College of Forestry is making a national study of Forestry Associations.

An interesting visit a few days ago to F. G. Trefethren living in the south east part of Bismarck about 800 feet from the edge of the bench overlooking the truck gardens of the Missouri River flat.

About five years ago, I had the pleasure of attending a meeting of the Directors of the Peace Garden, and Joe Parmley and inspected the many ever greens on Trefethren's place. I was sorry to find quite a few of these taken by drouth, and Mr. Trefethren is planning to reduce his area and concentrate labor and water. He recommends Hansens Oka cherry, a good sized, black skin with a rich red flesh. He has also planted Hansen's dwarf cherry and these few years of drouth have not discouraged him.

His brother Eugene had the dream of a great reference library across the hollow north from my home in Ipswich. Jene lived for the gathering of books, and at his death five years ago, had over 40,000 volumns, showing what can be done by a person of small income but great determination.

Life Magazine, April writes of "Flower in the Spring," with some beautiful pictures in colors of spring flowers including those on the desert, which always seem to have just been or planning to blossom in the future when I am in that kind of country. Some of the Californians may retort, "Where are you?"

The President of Mens Garden Clubs of America, Hoyt F. Paxton of Chicago writes, "We are trying to build an organization that will be prepared to handle any situation that may arise during the trying days that seem to be ahead of us and above all, we hope to avoid the hysteria, waste of time, energy and money that occurred during the war garden campaign of the World War."

If the officials in Washington, would take every other week off and plant a garden they would probably have more tranquil ideas. These officials seem to be advertising all the time, the great strain they are under and the many decisions they are obliged to make. Apparently it never occurred to them that they are not obliged to decide. They are obliged to work.

DAKOTA LOSES DAVIS, L. L.

About the first of May, the Associated Press had a Brookings item stating that our friend and director Davis has accepted a position with the S. B. Penick Medical Drug Co. of New York City. Every one who has known Davis will regret this, but perhaps the supply of dollars is better in New York City, than in the agricultural part of the United States, and we all wish Davis great success.

It has seemed to me that Davis had a vision that inspired many young people at State, to take up Horticulture as a life work. Most of us walk in paths that are already made, we may have the choice of several paths, but few of us make new paths. Apparently Davis is one of the few path makers, we

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LOSS OF CHINESE ELM WIDESPREAD

By

Frank I. Rockwell, Ext'n. Forester



F. I. Rockwell

The recent death and injury of a large proportion of the Chinese elms the past winter has caused wide concern over the state. Well-cared for and well-grown shade trees dying or severely injured in many of the larger towns afford the most striking illustrations of the damage wrought. In some cases the trees failed to leaf, in others the leafing was but partial, very often the trees failing after the first effort. Those damaged may have been of any size. Others of identical size and age may have come through unscathed. Many fine, large Chinese elm shade trees were stricken. This species has been more or less subject to winter damage in northern South Dakota counties in past years but the winter of 1940-41 the damage extended way southward into Nebraska, and through western and central Iowa as well.

The damage has been traced chiefly to the Armistice Day storm and severe cold. The very sudden freezing of the top six inches of soil and imbedded tree roots was too much for the immature, unripened roots of the Chinese elm, which have a habit of continuing growth activity until stopped by frost weather. Some frost previous to November 11 had been sufficient to cause most species to lose their leaves, but with many Chinese elms root activity had not stopped.

Underlying cause of the susceptibility of the one species, while the native species mostly escaped unscathed, was the fact that the Chinese elm had not become climatically adapted during the period which has elapsed since its introduction.

Those of this species now growing in the United States are descended from seed introduced from many parts of Asia. Seed collected from standing trees and planted in nurseries produce seedlings which are hybrids of several strains. That a portion of these hybrids will be unable to withstand extremes of our climate is a result to be expected.

To guard against the disappointment of losing a large portion of entire plantings from extremes of weather or other causes, South Dakota forestry men generally do not recommend planting Chinese elm or other species in pure stand. The hazards and vicissitudes of extreme weather conditions in South Dakota is just one of the reasons why it pays to in-

clude a variety of several hardy species in a forestry plantation. Desirable hardwood shade trees which have withstood such extreme weather conditions without difficulty are the hackberry, green ash and American elm.

Further information on tree species adapted to various conditions of soil and climate are available from the County Extension Agents and the Extension Forester at Brookings.

PRESIDENT'S CORNER

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expect to hear more from him and about him. And we know that he will not forget his friends in Dakota. So Long, L.L. but not farewell.

ROBERTSON REMEMBERED

Readers of this magazine remember the review by Simmons in the May issue of the "Life of John Robertson," copies went to head of N. Y. A. and to Simmons. H. R. Woodward Supt. of the Hot Springs Public School writes, "We have planted some eighteen native pines on the Park this spring and weather conditions are such that I believe most of them will grow. We have some planted in other years that are coming along in good shape. I have been thinking a great deal about the possibility of a well, but I am not so sure that it should be undertaken right away. It might be a project that we could look forward to at some future time. I believe by that time that this area will be an attractive place.

The Horticultural Society, is paving for these trees, and if any members are at Hot Springs, they should drive out and check over the planting. If one small area there could be well watered in some manner, it would make an attractive oasis even in the driest summer and would keep John's memory as green there as it always has been and still is in our hearts.

EVERSON EVOLVES EPIC

Our State Secretary of Agriculture speaks weekly but not weakly over the Pierre Radio Station. On April 30th, he mentioned that all his party did in New Orleans was to spend a couple of hours in visiting the old French Cathedral. I wonder if he left out anything. I found lots of other places and this sounds fishy.

At least he was inspired to write the following which is our poem for July and which is entitled, "An Abundant Life."

Now for the poem—

"With some seeds and some plants and a plow and a hoe,

And with sunshine and rain we can help these plants grow,

To make clothes to protect all our people from cold

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SECRETARY'S CORNER

By

W. A. Simmons



W. A. Simmons

Organized in March 1939, the Lead Garden club is doing a very worthwhile work in educating the public about the preservation of wild flowers in the Black Hills. As all residents of the state that have seen them are as proud of this beautiful portion of the commonwealth as the people that reside there, we are reprinting, this month, excerpts from the articles club members have contributed to the LEAD CALL. Also we in other parts of the state have wild flowers which it is important to conserve. Quoting from the official report of Gen. Custer, made in 1874, of his exploratory expedition to the Hills, the article says: "Every step of our march that day was amid flowers of the most exquisite colors and perfume. So luxuriant in growth were they that men plucked them without dismounting from the saddle. It was a strange sight to glance back at the advancing columns of cavalry and behold the men with beautiful bouquets of flowers in their hands, while the headgear of the horses was decorated with wreathes of flowers fit to crown a queen of May. Deeming it a most fit appellation, I named this floral valley. Gen. Forsyth, at one of our halting places, plucked 17 beautiful flowers, belonging to different varieties, and within a space of 20 square feet. The same evening while seated at the mess-table one of the officers called attention to the carpet of flowers strewn under our feet, and it was suggested that it be determined how many different flowers could be plucked without leaving our seat at dinner table. Seven beautiful varieties were thus gathered. Prof. Donaldson, the botanist on the expedition, estimated the number of flowers in bloom at Floral Valley at 50, while an equal number of varieties had bloomed, or were yet to bloom.' Floral Valley, as named by Gen. Custer, is now called Cold Springs Canyon. U. S. highway 85 going to Newcastle passes thru the upper part of this Valley." Needless to say that this picture does not exist today. The coming of settlers and tourists, with their careless handling of camp-fires, cigarette stubs and matches and the early day coal burning locomotive which frequently puffed out great quantities of live coals, in going up heavy grades, caused many forest fires, another cause of our decreasing wild flowers. Now, in order to make the best of the situation as we find it, the Lead club advocates the

following: "1. Moderation. Do not pick all that you find. Many flowers must be left to develop seed for future plants. 2. Care. Never pull up the plant, for the roots are of no use in a flower arrangement and their destruction means the extinction of the plant. use sissors or knife. Our red Tiger lily, Mariposa tulip and Pentstemon are fast disappearing because of this reason. 3. Judgement. Many flowers such as wild roses, daisies, asters and golden rod may be picked with impunity, but when flowers are few or rare do not pick them. Do not pick flowers that must die before you reach home. This is especially true of our Pasque flower, Shooting Star, Thermopsis, Larkspur, Iris, Lupin and Mertensia. 4. Occasional Total abstinence. Do not pick any especially rare flowers such as Blood Root, Ladies Slippers, Wood Orchid, Alpine Clematis, Fritillaria and Columbine. Remember that ten thousand may look at a Yellow Ladies Slipper, but only one can pick it." The annual parade of the lilies is now on. The tenuifolium, whose pet name is Coral, the last lily to come up in the spring, led the show, closely followed by elegans and umbellatum. The pretty apricot colored lily, named by the originator Mr. Skinner and Dr. Will, for the Secretary, is now, June 17th., in bloom and I am glad to find that it has the delicate fragrance of the Coral. As our Regals had to be moved this spring there are few buds on them, seldom more than two. How house plants do enjoy escape from their imprisonment in small pots and being turned loose in good garden soil particularly if they may enjoy partial shade from some friendly neighboring annuals. They take on a new lease on life and store up energy to give many blossoms in the following winter. The program committee is busy getting up a program for your enjoyment at our annual meeting at Yankton, Aug. 25th & 26th. The Gurney's have always been charming hosts and I am sure all that attend will thoroughly enjoy the trip. Some of our members get badly chilled coming to winter meetings while others get cold feet and never start. It will be a pleasant change to have the meeting in pleasant weather when tours to the many places of interest near Yankton can be a real joy.

An elderly couple was charged with creating a breach of the peace in their country home.

"How did you come to cause this disturbance at your own fireside?" asked the magistrate.

"Well, it was like this," replied the old woman. "John and I were sitting at the fire. John was reading his newspaper and I was thinking. Then I turned to him and said, 'John, sheep are awful stupid, aren't they?' And John said, 'Yes, my lamb'."



FRUIT & VEGETABLE NOTES

By

F. X. Wallner



F. X. Wallner

They used 7000 lbs. of over-ripe bananas to launch a boat sidewise, last winter, at a southern shipyard; I suppose it would take about 10,000 lbs. of very ripe tomato plants that we have had this toes to do a good launching of a big boat. The rainy days of June 9th. to 14th., have been the best for set-season. In fact I cannot recall so many days so favorable for plant setting in several years. All tomatoes will be set including field grown seedlings that are a little difficult to transplant as there is so much top-growth and little root system. Most of the cabbage and celery will be out, at this time. Lots of seed that refused to sprout, is now coming up so that there will be a better stand than we had expected. Late plowing of rye patches was too dry to sprout sweet corn and other seed, in spite of the rain in early spring. The vegetable seed growers are expected to harvest about double the amount of seed harvested in 1940, so there will be plenty of seed next year and perhaps a drop in price in some varieties. Our venture in seed growing won't turn out so well as there is a very poor stand of carrot plants and the few pounds of seed will cost us more than the market price, next spring. A progressive vegetable grower adjoining me on the east, has put out about 30 acres of potatoes and sure makes short work dusting them with the tractor and a six row duster. Several of the vegetable growers have increased their potato planting and it is unexpected plantings, plus regular plantings that upsets the prospects of a profit for our produce. An outlet for surplus carrots or second grade stock is for poultry food. It is found that carrot fed hens produce eggs high in vitamin A content and there is also a healthy flock and less loss in chicks if fed steamed carrots.

Our early head lettuce that we started in March and transplanted and set out in April, could not stand the hot strong wind of only one day; the tip burn almost ruined it. The southern watermelon crop is suffering from the long drought but Oklahoma expects a big crop from 15,000 acres, and the peach crop for the state is expected to be the largest since 1931.

The largest potato chip factory in the world uses about 750 car loads of potatoes, mostly from Pennsylvania, where the factory is located, and

there are more than 4,000 car loads in the eastern states that go into chips.

Washington state apple growers did some special advertising and sold 2329 car loads, during May. Our annual meeting will be held at Yankton on August 25th. and 26th. We hope all who can will attend and can promise many interesting things to see, on the tours and many fine addresses, at the indoor meetings.

Good Gardener mine make garden fine,
Get garden peas and beans, if you please.
Get respis and rose; young roots of those.

Thomas Tasser, 1523-1580. From 500 points of good husbandry, 1573.

PRESIDENT'S CORNER

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And to feed them from childhood until they grow old.

When the seeds we have planted rise up from the loam

And with the house we have builded just makes us a home

What a glorious life 'tis to work with the soil,
And to gather in the harvests the fruits of our toil.
Ah, friends, this was God's purpose in creating this earth

And mankind to enjoy it, from the time of his birth,

Until the evening of life when the shadows shall fall

And our life's work is ended and we answer His call."

E. H. Everson.

THE LEAST FLYCATCHER

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I cannot help feeling that the food habits of this neighborly little fellow have been somewhat neglected for the more conspicuous kingbirds and even the pewees. An extensive tabulation by the U. S. Biological Survey in 1912, showed that 41 percent of the least flycatcher's food was from the group of insects related to wasps and bees, including many species which are beneficial by parasitizing destructive insects. This was rather higher than the group of flycatchers as a whole. As an eater of beetles, however, the least flycatcher was excelled only by the common kingbird. Flies and bugs, composing only 11 percent each, were not so popular. So it has been suggested that "gnat king" is after all not so fitting a name. Cucumber beetles, plum curculios, clover weevils and cotton-boll weevils were among the insects eaten. It is fair to assume that almost any small insect which was abundant would be taken. The rapid flight of fly species probably saves them to a considerable extent.

JULY GARDEN NOTES

By
W. E. H. Porter



W. E. H. Porter

The month of July! When garden beauty approaches its zenith so aptly expressed in these lines of the immortal Swinburne, "Lily by Lily the year becomes perfect and none of us knows what thing is fairest of all things on earth as it brightens and blows." May 3rd. Torrential rain all night: 1st rocket out, a steveniana, with leaves of *Viola Jooii* comes the bloom and what violets. Large pink-the only pink in the garden at present and the only fragrant violet that is perfectly at home in North Dakota. In my garden and surroundings may be classified as an escape, native willows in bloom make a real spring setting-golden tracery on a background of bright green slough grass. Altho *Begonia evansiana* can stand considerable frost, a North Dakota winter proves too much even with protection; bulbs are best taken up in late fall, kept dry in a cool room, where growth starts in early March and plants can be safely set out in May. My recent purchase of dwarf creeping evergreen *Cotoneaster rotundifolia* from Borsch surprises with bright pink buds opening to small white plum-like flowers, said to have red berries in the fall. *Azalea mollis* leafing out-pulled thru last summers heat by mere "skin of the teeth." May 6th. Although today was rather cheerless with dull windy rainy conditions, received a real tonic in the shape of a visit from Mr. Graves, transforming the passage of time into oblivion and judging from various neighborly visits, spring gardening fever is running high. The multi colors of violas-golden alyssums enchaned by white clusters of pency cress (*Thlaspi janke*) all make a cheerful carpet showing what abundant moisture, plus our N.D. humus can accomplish. May 10th. Sunny and warm after two nights of ice-making frost. Saw battered but active specimen of hybernated "red admiral" butterfly, the red wing bands having faded to orange. Received a much prized box of some of Claude Barr's specials, hard or impossible to obtain elsewhere; Black Hills Easter Lily *Townsendia exscapa* in full bloom, bright white, pink suffused unlifted chalice about an inch high. Beautiful indeed are the Fritillaries, guinea hen flower, with their clusters of pendant chequered bells, filling the gap between the passing of squills, Glory of snow, etc. and coming of

tulips. May 12th. This a day of surprise; some years ago I sowed a packet of seeds of *Viola pedatifida*; the resulting plants producing nothing but cleistogamous flowers and so I relegated them to a semi-wild garden corner of forgetfulness, but today this spot was a warm violet carpet; the plant is upright, bushy with palmately divided leaves, much like those of Weir's cut leaf maple and the large violets are carried on long stems well above the foliage, a treasure. May 13th. 72 in the shade, sultry, still and sunny, nature rejoices. A somewhat retiring Brown Thrasher pours melody from high branches of elm and poplar, the plaintive cooing of mourning doves, heard but not seen, are a sotta voice in perfect harmony with the quiet, dignified garden beauty. From evergreen tufts and mats arise large yellow daisies of *Actinea herbacca*, the glorious flaming orange scarlet of *Geum Waight's Brilliant*, a hybrid of *aurantiacum*, and borisi, white of Barr's dwarf *Phlox scleranthifolia* pink, violet and white mats of *sublata* and low spires of *Veronica saturoides*, color of our native violets. What a gift of the Gods is an abundance of fresh garden rhubarb. I shamelessly admit a greedy anticipation 3 times a day of this blessing for its summer duration. May 17th. Saw first barn swallow, also heard Baltimore oriole. *Hesperis steveniana* coming into bloom. May 18th. First bloom of *Phlox allyssifolia* with many to follow-large open primrose flowers sweetly fragrant as of mock orange or is it attar of roses, an unusual color, pale fuschia pink; this sweet thing of creeping moss phlox order has been described by an eminent English botanist as "no lovelier flower on earth." one of Claude Barr's many treasures. A Kingbird in the garden also first tulip out, a red dragon. *Pyrus bacata* and Dolga crab robed in fragrant white, all too transient bloom, two weeks earlier than last season. May 23rd. Unchanging is nature's law of change; with warmer days and nights permitting throwing wide open doors and windows blue scillas, nodding fritillaries and white carpets of pennycress yield to violets, white and purple of rockets, yellow beds of alyssum, large nodding daisy heads of *Actinea herbacea*, pink dead nettle whorls, carmine heads of *lychnes*, I think it must be carminea-label lost. Dog violet, pale blue of box leaved evergreen *Verronica saturoides*, large white bells of Borsch's *Camponula planiflora alba*, double lilac Leon Gambetta, common purple lilac and when viewing dark peony purple trusses of unexpanded buds of Congo lilac against background of bright green foliage we realize indeed that a "thing of beauty is a joy forever." *Aethionenia Warley Rose* has suddenly, almost visibly burst into very bright pink, almost completely hiding blue green portulaca

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BOOK REVIEWS

By
Mrs. F. Briley



Mrs. F. Briley

Pruning Trees and Shrubs by Ephraim Porter Felt, Published by Orange Judd Co. Inc. 15 E. 26th. St. New York. Price \$2.00 94 illustrations.

A world of good could be done for our trees and shrubs if this book could be placed in the hands of everyone who is trying to grow trees, in these hectic times. It is a small book of 229 pages but contains a wealth of material. The instructions on the care of trees and shrubs are simple, but important, for we are told to learn to work with nature. The book supplies information in regard to the possibilities of pruning trees in such a way as to best serve human needs. It is not intended to be exhaustive. It has accomplished its aim in presenting in concise form and plain language the more important matters in relation to pruning woody plants.

Weed and Weed Seeds: Common, Noxious and Poisonous, with commonly used crop seeds. Published by Seed World, 223 W. Jackson Blvd., Chicago, Ill. Price \$1.00.

The Works Progress Administration, has done the country a real worthwhile service by compiling this little pamphlet, which was sponsored by the University of Minnesota Dept. of Agriculture. The drawings of the weeds, and there are forty, full page, were prepared under the direction of Professors R. B. Harvey and A. H. Larson of the Section of Plant Physiology and Agricultural Botany of the Division of Plant Pathology and Botany, Univ. Farm, St. Paul, Minn. L. A. Moore and Joseph E. Barnes, Ill. Dept. of Agriculture prepared the descriptive notes of this booklet.

The drawings are extremely realistic and the descriptions are written in language that is easily understood. This makes a splendid combination for the reader who struggles to protect his crops against the persistent intruders, weeds.

Seven enormous losses to American agriculture caused directly by weeds are cited in the book. An excellent program of weed control and eradication is outlined.

Modern Fruit Production by Joseph Harvey Gourly and Freeman Smith Howlett. Published by The Macmillan Co., 60 Fifth Ave. New York, 1941. Price \$4.50.

The authors have presented the fundamentals

necessary for orcharding and small fruit culture in such a way that they become of vital concern to the serious student, and at the same time they have presented the most practical practices of American fruit growing.

No effort is made to force scientific data into this except as they form a basis for modern fruit production.

The book is very complete in covering its field. There are chapters on the fruit industry, the plant and its parts, site and soil for the fruit plantation, laying out and planting the orchard, cultural practices, fertilizers and manures for the orchard, water relations of fruit plants, pruning of fruit plants, fruit setting, fruit thinning and alternate bearing, the handling and storing of fruit, winter injury, nutrient deficiencies and physiological disorders, propagation and stocks, the origin and improvement of fruits, orchard, vineyard, and small fruit costs.

The book contains 579 pages with 87 clear-cut figures.

To plant the Prairies and the Plains, by Mrs. H. J. Taylor. Reprinted by permission from Bios, Vol. XII, No. 1-Monograph Series, Mount Vernon Iowa, 1941. Price \$1.75.

This is the story of the life and work of Dr. Niels Ebbesen Hansen, our President Emeritus of the South Dakota Horticulture Society. If there still lingers any doubt as to Hansen's right to a place among the immortals of American scientists this biography should dispel it. Here is indisputable proof that Hansen was moving forward when western horticulture was an "uncharted sea."

Among the many tributes paid to him by the author, these are favorites: "Most of us are endowed with the sense of sight, but the art of seeing is an attainment reached through cultivation and education. The artist in the plant-breeder, Hansen, has brought to the people of the prairie Northwest an appreciation of their native plants-many of them in danger of extermination."

"In the State Rose Garden at Sioux Falls, Dr. Hansen, using well-known oil roses of the Orient, has developed some hardy varieties that are rich in Attar of Roses content. He says that it would be quite possible to develop the Attar of Roses industry in South Dakota."

"When asked why he did not accept a call to go to Bolivia, his eyes twinkled as he said: 'You know the next year it blew up with a revolution.'"

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

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STRAWBERRY VARIETIES I HAVE GROWN

By

John A. Alm, Page, N. Dak.

"Doubtless God could have made a better berry, but doubtless God never did," wrote Henry Ward Beecher about the strawberry.

Who can disagree with him, especially after having known the delights of strawberry short-cake. Because of the great national appetite for strawberries, countless varieties have been bred in the hope of obtaining the ideal or perfect berry having all the good features of other varieties and none of their faults.

But here in the trying climate of North Dakota, we have to consider hardness, and also the ability to withstand drought. With that idea in view, Dr. Yeager developed the "Dryweather" everbearing, and during the fall of 1940, I had a row of them that performed very well. The berries are rather small, but of good quality. The Dryweather row bore about twice as many berries as Gem growing right beside it. Dunlap is still considered the leading June bearing variety, but I have not grown them in recent years.

Everbearing strawberries are preferable for the reason that in the average season you get a fairly good crop the same year the plants are set out.

I have grown both the Mastadon and Gem, and like them both. The latter is a round shaped berry, while Mastadon is conical. Both grow large under favorable conditions.

I have also grown Blakemore and Feugima (June bearing). The latter is supposed to be one of the biggest size berries. Have also tried a so-called black strawberry which is dark red when fully ripe. It is a shy bearer, but a good flavored berry.

This year, I had a short row of "Pink" strawberry which proved to be a heavy bearer of large pale-pink irregular shaped berries, but not as good flavored as Gem and Mastadon. Anyway, we like the nice red color in a strawberry.

The best quality everbearing I have tried out so far is the Wayzata. Plants cost about \$4.00 per hundred due to the fact that they are very shy plant producers—some plants don't send out any runners at all the year they are planted, but most of them grow a big crown, sometimes 6-8 inches across. These can be divided up into single plants for transplanting. The Wayzata would be very desirable for city gardens, or where space is limited as one could plant them 18 inches between rows and 12 inches in the row.

For farm planting, I prefer four feet between

rows for most varieties, as we still have some open space for cultivating even the second year. Plant same depth as plants have grown—too deep makes them rot, and if plants stand too high they dry out.

In conclusion, plant a strawberry patch, take good care of them, and your time and work will be well repaid.

Frequent and thoro cultivation will insure a crop even in dry seasons.

Glories of August

Scarlet sage and cockscomb fill
Every old time garden now;
Apple trees their burdens spill
Bending low in every bough,
'Neath the blazing August sun
Rows of corn stand brown and tall
And the air when day is done
Bears a trace of coming fall.

Now the vine its harvest yields;
Stately groups of sunflowers nod
From the gardens to the fields,
Overrun with goldenrod,
Skies are clear and blue and bright
And the locust chants his rhyme,
Ceaselessly from morn to night.
Farewell song of summer time.

YOUR PLANTS AND MINE

By

Mrs. C. O. Larson, Gettysburg

This time of the year we hear complaints of small flies in house plants, sometimes there are small bugs in the leaves too and one does not notice them until the leaves start to drop off. I've had both of these nuisances among my house plants and found by spraying a few shots of fly spray around in the room near the plants once in a while during the winter, has kept my plants free from all that kind of insects. One must be very careful in using fly spray so as not to put it directly on the plants or it will cause brown spots and some will shrivel up and die.

JULY GARDEN NOTES

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evergreen foliage, flower clusters remind of candy-tuft. First bloom on Dianthus Beatrice Silvermine is rather disappointing when compared with larger strap-like leaves. Last season it just showed above ground and then vanished, but not so fortunate are the English iris for second season and trial not one survived which checks out to a total failure.



BOOK REVIEW

Continued from Page 82

Turn down every biography published about a horticulturist but read this one!

McGillycuddy-Agent, a biography of Dr. Valentine T. McGillycuddy, by his second wife, Julia B. McGillycuddy. Stanford University, California. Price \$3.00.

Julia B. McGillycuddy, had listened to his stories from childhood. When, after their marriage she read aloud to him a fictionalized story of his life which she had written, he protested that if she wrote his experiences she must not deviate from the facts. She followed his instructions and as a result we have this absorbing biography rich in human values.

It gives the moving narrative of the Indians on the Sioux Reservation which was a vast territory between the Missouri River on the east and White River on the west. At that time there was probably no more autocratic position under the United States government than that of an Indian agent and McGillycuddy was one of those agents.

No writer who has lived in this period could duplicate the author's performance. The book is warm with life, and full of the zest of life yet it never loses the pain and fruitfulness of life. Here we read real stories of such characters as Custer, Calamity Jane, Red Cloud, Sitting Bull, Whispering Smith and California Joe.

The author knows and writes vividly of the stuff that went into the wild Indian wars, the great Sun Dance of the Sioux, and the progress towards the civilization of the Indians.

The author lived in the Pine Ridge Agency of Territorial days and shared in the strong loves of tradition and strong hates, in the great struggle to preserve peace with wise judgement and courage.

There are stories, too, of the influenza epidemic when Dr. McGillycuddy worked in strategic points in the mining camps of California and Utah, and in the fishing and packing stations in Alaska. McGillycuddy Agent may be read for pure pleasure and is sure to mark a milestone in the literature of our state.

Eighty dollars an ounce is the value of a new acid recently discovered in the cranberry. Chemists call it "ursolic acid"—a rare emulsifying agent which makes oil and water mix. This acid is derived from the cranberry skins, which are ordinarily discarded in making cranberry sauce. From the same skins, formerly thought useless, a cranberry seed oil can be obtained, which is a rich source of Vitamin A. To pioneer the manufacturing of these two products, plans are under way to build a \$50,000 processing plant.—Gib Swanson in Capper's Farmer.

Just recently a German police dog belonging to a Maine potato grower was accidentally locked in a car of potatoes, arriving in Detroit 6 days later, looking rather gaunt. He had eaten about a peck of potatoes during the trip. It is possible that if that dog had been locked in a car of apples, he would have eaten several bushels of apples and would have arrived sleek and rosy-cheeked. Or maybe he would have felt so good that he would have simply have pushed the car door off its hinges and gotten off the car at Pittsburgh and trotted back home!—Marylands Fruit Growers' News Letter.

The lady walked into the judge's office and inquired: "Are you the judge of reprobates?"

"I am the judge of probate."

"Well, my husband died detested and left several little infidels, and I want to be their executioner."
—The Maryland Fruit Grower.

Apples furnish needed vitamins which help ward off colds and other infections; assist in keeping bones and teeth sound; promote digestion and growth; help maintain a strong nervous system.—Appleland News.

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