

South Dakota State University
**Open PRAIRIE: Open Public Research Access Institutional
Repository and Information Exchange**

South Dakota Horticulturist

Department of Agronomy, Horticulture, and Plant
Science

7-1931

North and South Dakota Horticulturist, 3(7)

South Dakota State Horticulturist Society

Follow this and additional works at: https://openprairie.sdstate.edu/sd_horticulturist

Recommended Citation

Horticulturist Society, South Dakota State, "North and South Dakota Horticulturist, 3(7)" (1931). *South Dakota Horticulturist*. 28.
https://openprairie.sdstate.edu/sd_horticulturist/28

This Other is brought to you for free and open access by the Department of Agronomy, Horticulture, and Plant Science at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in South Dakota Horticulturist by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

NORTH and SOUTH DAKOTA HORTICULTURE

Volume III

Number VII

**THIS BOOK DOES
NOT CIRCULATE**

JULY 1931

TABLE OF CONTENTS

	Page
Home Again, A. F. Yeager, Fargo, N. D.	98
News Letter, June, 1931, North Dakota Horti- cultural Society, C. B. Waldron, Secretary, Fargo, N. D.	99
Tentative Program for South Dakota State Horti- cultural Society Meeting at Rapid City, July 29-30	100
Extracts from the Diary of a Traveling Man, W. A. Simmons, Sioux Falls	101
Flowers of Late Spring and Early Summer, O. A. Stevens, Fargo, N. D.	103
The Troubles of the Nurserymen, George W. Gurney, Yankton	105
A Garden in June, Mrs. M. W. Sheafe, Watertown ...	107
Beekeeping Notes, J. A. Munro, Entomologist, Fargo, N. D.	108
South Dakota Notes	110
Evergreens of the Black Hills, E. A. Gates, Rapid City	111

LINCOLN MEMORIAL LIBRARY
South Dakota State College, Brookings, South Dakota

Annual membership fee, \$1.00, fifty cents of which shall be for a year's subscription to the North and South Dakota Horticulture. Entered as second class matter at the Post Office of Pierre, South Dakota, under the Act of August 24, 1912.

34.05
711.63
6.3

NORTH AND SOUTH DAKOTA HORTICULTURE

Membership in the South Dakota Horticultural Society is one dollar, fifty cents of this amount is for the subscription to "North and South Dakota Horticulture". The subscription rate for affiliated organizations is twenty-five cents.

Published Monthly at Schubert Building, Pierre, S. D., by the North and South Dakota State Horticultural Societies.

SOUTH DAKOTA OFFICERS

President—Dr. N. E. Hansen	Brookings, S. D.
Vice-Pres.—John Robertson	Hot Springs, S. D.
Secretary and Editor—R. W. Vance	Pierre, S. D.
Treasurer—H. N. Dybvig	Colton, S. D.
Librarian—Chas. McCaffree	Sioux Falls, S. D.

NORTH DAKOTA OFFICERS

President—George Will	Bismarck, N. D.
Vice-Pres.—E. A. Arhart	Grand Forks, N. D.
Vice-Pres.—Mrs. Margaret Doheny	Devils Lake, N. D.
Vice-Pres.—W. B. Overson	Williston, N. D.
Secretary—C. B. Waldron	Fargo, N. D.
Treasurer—E. L. Shaw	Fargo, N. D.

HOME AGAIN

A. F. Yeager, Fargo

Secretary Waldron has asked me to write you a few notes so that you may know that I am back again in the state. My intention was to write some horticultural notes from Iowa. However, I found my time too fully occupied by studies of various kinds to allow for the collection of interesting material. Now that I am home again I hope to see a goodly number of you at the Society convention later in the summer and to hear from a lot more of you before then.

A letter from Mrs. Fraser, of Grand Forks, states that Mrs. Fannie Heath is very ill. We surely hope that her illness is not serious and that she will be able to give us more of her interesting observations and experiences in the near future.

While looking around the horticultural plots since my return I am reminded that it is now time to stop cutting asparagus for this year. The top growth that the plants make from now on will determine the amount of food they will store in their roots and this in turn will decide how much of an asparagus crop we will cut next year. If you have asparagus, give it a fair chance by seeing that it is well cultivated from now until frost so that it may have conditions for maximum growth.

Inspection of our orchard shows that the eleven-year-old Anoka apple trees have all killed out during the last year. While we are sorry to see them go we must, nevertheless, admit that they have paid their way as they have been bearing since they were two years old in the orchard. At the same time, this is a pretty good indication that Anoka is a short-lived variety and we must not plan on its staying in our orchard for a very long time.

A little trip around close to Fargo showed one man cultivating sixty acres of onions. Despite the dry weather they are looking pretty well and with reasonable growing conditions should return the usual profit.

We have noticed in a few short trips around in the woods in this region that there is apparently a big crop of Juneberries this year. If any of the Horticultural Society members notice particularly outstanding wild Juneberries we would very much appreciate having some of the fruit sent in to the North Dakota Experiment Station so that we might plant the seed for breeding work.

Currants have suffered very much more than gooseberries during the winter of the past year. In general, it seems that varieties adapted to the territory a little farther south stood up better than those from farther north. This might be expected since we have had little cold and more drouth than is usually the case.

NORTH DAKOTA STATE HORTICULTURAL SOCIETY NEWS LETTER, JUNE, 1931

C. B. Waldron, Secretary

This is the time of year when the raspberry plantation is almost sure to need attention. The suckers have attained a height of a foot or so and in many cases the weeds are not far behind. Before the suckers have made any further growth it is important that they be reduced in number so that each hill or each length of row will be carrying the proper number of bearing canes next season. The half dozen or so canes to the hill each year will give the maximum crop under most conditions. In our own plantation we made short work of removing suckers and getting rid of the weeds by using a one-horse ten-inch moldboard plow. The rows are six feet apart and the distance between the plants is the same in the rows. We found that by plowing one furrow only on each side of the row, throwing the dirt toward the plants, the surplus suckers and most of the weeds were either plowed out or covered up by the furrow. All that remained to be done was to chop out the narrow space between the adjoining hills. It seems reasonable to suppose also that the additional covering of earth close to the bushes will tend to prevent further suckering. Suckers come from the shallow roots and it is expected that the deeper covering as the result of the plowing will at least keep the suckers down to about the desired number. After plowing out the plantation in the manner described one can, of course, cultivate cross-wise instead of chopping out the space by hand. This will lessen the amount of work but one will not be able to regulate the number of new plants as well. It has been found that the yield in raspberries is almost directly proportional to the thickness of the bearing canes, which, in turn, depends upon nitrogen supply and moisture. Last season we gave the raspberries a liberal coating of rotted manure and an application of a little more than a pound of ammonium sulphate to each square rod, applied near the plants. The new shoots this season seem to be very vigorous and of good diameter. We are planning to make the same application of manure and fertilizer sometime during the month of June. It might be said in passing that this particular raspberry plantation has greater promise in the way of fruit production than anything else that has been observed in the neighborhood. This is due to the fact that tree fruits lost much of their crop through late frosts and the drouth last year was too severe for the strawberries. The raspberries are just in blossom and promise a good crop.

Those of us who did not succeed so well with our Glads last year may have been somewhat neglectful in the matter of watering. It is a more or less general impression that since the gladiolus plant has small leaf surface at this time of the year that a limited amount of watering is sufficient. It has been found, however, that large blossoms can only be obtained by supplying the plants generously with water as soon as growth begins. Likewise, if our peony blooms are somewhat smaller than usual this year it is probably due to lack of water after the blooming period last season.

As the annuals begin to show their first flowers one should not hesitate to pick them freely and with some plants like the Marguerite it is well to remove the first flower buds before they open. This results in giving the plant a much longer period of blossoming after the season advances. Pretty nearly all of the annual flowering plants are benefited by removing the first buds or at least by keeping the flowers very closely picked, especially during the early part of the season.

The Legislature has passed a bill prohibiting the sale of nursery stock grown in the State nurseries for ornamental purposes.

State nurseries were established to provide forest trees to reforest our cut over lands. The Conservation Commission is doing a good job of providing pine, spruce and other trees for this purpose.—Wisconsin Horticulture.

TENTATIVE PROGRAM FOR S. D. HORTICULTURAL MEETING AT RAPID CITY, JULY 29 and 30

July 29

Horticulturists assemble at Court House, 7:45 a. m. Wednesday morning with cars and lunches. Room can be provided in other cars for those without means of travel.

Morning will be spent in the visitation of various Garden clubs of the Northern Hills, starting at Rapid City and visiting Sturgis, Deadwood, Lead and Spearfish.

Picnic dinner will be eaten in Spearfish Canyon.

After luncheon, Mr. Krueger, Forest Supervisor at Deadwood, and Mr. Conner, Forest Supervisor at Custer, will take over the afternoon program, showing members of the Horticultural Society over some of the logging operations and plants and forest trees of the Black Hills.

7 p. m. Banquet at the Presbyterian Church, Rapid City. Tickets at 75c, with musical entertainment. Reservations should be made ahead. Speakers of the evening will include:—L. G. Troth, Secretary of Agriculture; John Robertson, Hot Springs; Dr. N. E. Hansen, Brookings; Dr. M. C. Babington, Mayor of Rapid City; with W. A. Simmons of Sioux Falls as toastmaster.

Short executive meeting after banquet to determine meeting place for next winter.

July 30, Thursday morning

Assemble at Court House at 7:15 a. m. with lunches. Leave Rapid City at 7:30. Arrive at Mt. Rushmore at 8:30. Leave Mt. Rushmore at 9:00. Crowd can take choice of traveling via State Park and visiting Wind Cave or take Hill City, Sylvan Lake and Needles road.

Crowd can eat picnic dinner or get luncheon at Wind Cave.

1:00 p. m. cars leave via Hot Springs for John Robertson's orchard where most of the afternoon will be spent studying varieties of fruit, cultural methods, management, etc.

There are plenty of Tourists Camps and Hotel facilities to accommodate everyone who cares to take in this summer session of the State Horticultural Society. If you expect to attend notify R. W. Vance, Secretary of Society, Pierre, S. D., or E. A. Gates, Rapid City, chairman program committee, so that we will know how large a crowd to handle. Everyone register and receive badge at the Alex Johnson hotel Tuesday afternoon or evening or early Wednesday morning, who expect to make trips and state whether they have cars or not and if they have any extra passenger room or not.

The above program has been outlined after writing John Robertson, Geo. Gurney, R. W. Vance, W. A. Simmons and Supt. T. Krueger. They have given many helpful suggestions, also Seth Hulbert of Caputa is working with me to make this meeting a success. We would appreciate any comments or suggestions.

E. A. GATES,
Chairman of Program Committee.

The trees are sold at cost as one or two year old seedlings, which is the size most practical for planting large areas.

To use seedling evergreens for ornamental planting is foolish, because of their slow growth.—Wisconsin Horticulture.

ANOTHER CURE FOR POISON IVY

(Wisconsin Horticulture)

In Horticulture Illustrated we get the suggestion that plain gasoline patted on the affected area of the skin with cotton cloth and allowed to dry will entirely relieve the discomfort from poisoning by poison ivy.

Since gasoline is quite plentiful these days this may be an effective cure.

EXTRACTS FROM THE DIARY OF A TRAVELING MAN**W. A. Simmons**

Minot, May 2. The graduation nurses held a banquet here at the hotel this evening, about forty strong, strong as well as beautiful, to a degree that must tend to make good health unpopular. The hotel corridors are still fragrant with the insect powder they use; the powder designed to draw the insect man.

One cannot help contemplating the terrible fate that awaits these nurses, for statistics prove that the life of a trained nurse is but about six months. That awful malady, matrimony, always gets them in that average time.

May 10. The Better Homes campaign committee in Minot have arranged an exchange project for their meeting late in May. Those having a surplus of seedlings, perennials, bulbs or plants are invited to bring them for varieties that they want. A good feature they are introducing is in not confining the better homes campaign to a single week but to make it an all season affair with contests for the greatest improvement of home grounds and the best ideas in planting. Judge John H. Lewis, a very live horticultural wire, is chairman of the local committee so the success of the program is assured. Those who attended our last meeting in Minot will remember how much the Judge did to make our meeting a success.

May 14. Uncle Sam seems thoroughly sold on the value of advertising. All along the Canadian border one sees neat signs by the roadside, calling the traveler's attention to the excellent Custom Houses our government maintains, at convenient locations, and especially inviting all tourists returning from Canada to drop in and avail themselves of their service.

The life of the custom house official is a lonely one, and it cheers him mightily to have a car fresh from Canada pay them a visit. True, these cars sometimes contain but a bottle or two, but every little bit helps, and the custom house man is just as cordial to the small as to the large importer, saves both from law violation by assuming custody of the evidence. These men, of course, have to be competent and keep fit, and in order to avoid mistakes, must frequently refresh their memory by sampling the goods taken up, as it is not possible to trust labels these days. However they perform their duties efficiently and cheerfully and it speaks volumes for the patriotism of our fellow citizens that there should be no lack of volunteers even for such undesirable positions as these.

May 12. Mrs. E. W. Gould of Minneapolis writes that during Coco Cola hour, in the evening of April 30, Richardson Wright, Editor of House and Garden, Secretary of the New York state horticultural society and Vice President of the American Rose Society spoke. He mentioned the Cabbage rose as being 1900 years old and said that it was returning to favor, being in great demand and hard to get. Hope our nurserymen will take notice and try and get this fine rose for the adornment of our Dakota gardens. Have very pleasant recollections of this rose as it bloomed in our garden in eastern Minnesota.

It was rather the fashion in those days to look down on this rose, because of its great size, but to me, it was always a very fragrant thing of much beauty, and I am glad it is coming back into popular favor. It was entirely hardy with us in Minnesota, though it might require some protection in the Dakotas, where we seldom have the snow blanket we had there. It is a very large blossom, very double, of light pink at the edges, shading to a darker hue in the center; a June bloomer with flowers rivalling the peony in size. Wonder if any of my readers have it.

May 23. The Federated Women's clubs of Great Falls, Montana, have secured and allotted to needy families fifty vacant lots to be used as vegetable gardens this summer. They have borne the expense of having these lots plowed, and dragged and even, where necessary purchased the seeds so that each family may have the best possible chance to raise a portion at least of their food this season.

This vacant lot gardening is strongly reminiscent of war days, when all possible food was raised because there was a food shortage on account of the war. Now there is a food shortage among the unemployed because of huge unsalable surpluses. Somehow it doesn't seem to make sense but that is the situation, whether or not we can satisfactorily explain it.

Ad in Norfolk Pilot: "Top windshield is cracked on left side; windshield is scratched where wiper has been; right headlight glass broken; left fender is split; right front wheel is sprung and wobbles. Stolen night of May 2nd. Reward if returned in good condition."

May 27. Morning papers tell of a five hour rain at Watertown during which 6½ inches of water were delivered. Some one with a lot of "Fluence" must have been praying for rain. For the past month Billy Sunday has been holding revival meetings at Havre, Montana, and praying for rain, so far with no success. Either he is out of touch with the authorities controlling the distribution of moisture, or he failed to give sufficiently explicit directions as to where he desired it delivered. In the latter case it is quite natural it should have been sent to Watertown.

May 28. Mrs. E. W. Gould of Minneapolis writes, "This is a good poison for ants. Mix sugar and tartar emetic in equal parts and spread where they are found. It kills and drives them away." Also in regard to a rose bush she is sending me, "If it is wilted, let it stand in a mud pie over night before planting. They call that 'puddling' and it revives nursery stock quickly."

Was too early this year to see the wild flowers in Glacier Park at their best, but even those that were in bloom, like the camassias, seemed small and stunted by the drought. But being early enabled me to see, for the first time the beautiful little forget-me-nots of a vivid lobelia like shade of blue. They seemed to root with an almost moss like shallowness and would be found in round clumps a foot or two in diameter. They are very lovely and I hope they will submit to being tamed.

Among the Bear Paw mountains I saw several low moist meadows that were turned a bright pink in color by the masses of shooting stars blooming therein.

In driving to the little Indian town, Heart Butte, I came to a place where an Indian had foolishly fenced up his own land, which included the old road, so one had to drive around on a new trail, barely visible over the prairie. This prairie was fairly carpeted with trailing junipers so one was compelled to drive over and cause the death of some of these beautiful vinelike plants.

We hope you are all planning to attend our summer meeting at Rapid City, July 29 and 30. To those that have not seen the Hills we can promise a rare treat, while those that have visited them before, have long been awaiting a good excuse to revisit them. Have yet to meet the person who was disappointed in the Black Hills and there is something about them that seems to draw one back to them.

Am sure my friend Wallner, if he finds time to read this, will chuckle and say "It is John Robertson's cider."

FRUIT BREEDING FARM REMEMBERED BY THE LEGISLATURE

Several of our affiliated organizations were very active during the recent session of the Legislature in urging appropriations for enlarging the Fruit Breeding Farm and providing for a laboratory building.

In the appropriation bill \$9,000 was provided for additional land and \$13,500 for a laboratory building. In the laboratory building there will be special rooms for the several research members of the staff, a fire-proof vault for storing records, a suitable room for photographic work, and space for other purposes.—The Minnesota Horticulturist.

If screen wire is placed around the small trees when they are planted, you will not have to worry about the rabbits girdling the trees next winter.

FLOWERS OF LATE SPRING AND EARLY SUMMER

O. A. Stevens, Fargo, N. D.

A remarkable change takes place in North Dakota's weather about May 20. After having experienced successive relapses from fine spring days to cold windy periods, we suddenly are carried into summer. The response to this by plants is shown clearly in the number which begin blossoming at this period. I find from my list of flowering dates of 350 species of wild plants, that nearly three-fourths of them come in the two months of May and June and that almost one-half are between May 20 and June 20.

The last of May seems less productive of prairie flowers than either the preceding or the following period. The outstanding species is the Blue-eyed Grass, the blue or white flowers of which occur in great profusion. This is related to our garden iris, but its grass-like leaves and prairie habits keep it associated in our minds with grasses. A related plant is the Star Grass. The bright yellow flowers of this appear close to the ground in wet meadows the first of June. The Prairie Violet with finger-like leaves and quite large blue flowers is a popular prairie plant in late May.

The Columbine is the queen of the woods at this season. It is not abundant in North Dakota but is fairly common in the eastern part of the state. It begins to blossom about May 25. A little earlier appear the Star-flowered Solomon's Seal, a low plant with a cluster of small white flowers which are always welcome at this season when new kinds are few. It is interesting that this species is not limited to the woods but is found in the coulees in the western part of the state.

A few days after the Columbine comes the Waterleaf. It grows in profusion along the Red River and the delicate lavender flowers are attractive but do not last long and are almost useless for cut flowers. The Wild Vetch clammers over the low bushes at the edges of woods and thickets or upon the grasses and other plants in the open. The Spiderwort grows in the open but is rather partial to banks or other slightly protected places. A second variety grows in the sandy soils. The three large petals of the Spiderwort vary in color from pink to blue. They last but a few hours, softening into an inky-like mass.

Early June brings a flood of new kinds beginning with the Canada Anemone, which is found all over the state in slight depressions of the grasslands. The many species of Milk Vetch cover the prairie at this season and present a variety of form and color. My favorite is the two-grooved (referring to the pod) which is more common southwestward and seems rather to prefer barren clay soils. Single plants may be two feet high and two or three feet in diameter, the purple flowers forming dense clusters six to ten inches long. Another species with large creamy white flowers is common in the west. One year in Williams County I noted this as the most showy plant on the prairie the first week in June.

Three plants of ill repute but with very showy flowers are found on the prairies especially in the west. The Loco is very like some species of the Milk Vetch. Its spike-like clusters of purple blossoms quite cover the hills in places. A sort of Larkspur with beautiful blue flowers occurs sparingly in the extreme western part of North Dakota. The False Lupine with clover-like leaves and large golden yellow blossoms is somewhat earlier. These three species are among those which are poisonous to livestock.

A native mustard, the Western Wallflower, is one of our most characteristic prairie blossoms of early June. Its flowers are much like those of our common weedy species and are followed by a thick cluster of very long slender pods. The Northern Bedstraw bears dense clusters of very small white fragrant flowers. The plant is compact, about a foot high and like the anemone it grows in slightly favored places rather than on the open prairie.

The False Mallow is a familiar plant in the western half of the

state and is one which has proven popular in cultivation. It seems especially at home on clay soils such as that laid bare by the road grader. Through the short grass its orange-red blossoms gleam like a flash of fire.

Stony hills are the home of the Milkwort, a little plant with many stems bearing finger-like clusters of tiny white flowers. On the buttes at the last of June appears a small plant with clusters of small but very bright yellow flowers. The leaves are thick and felty. It is one of the most conspicuous plants on the buttes but I find no common name for it. It is one of many western species of the buckwheat family.

Lupines are found only in the southwestern part of North Dakota. One small annual species has rather pretty blue flowers suggesting possibilities for use as a border plant. The second species is perennial and develops into quite a large plant with many pale blue flowers. Lupines are easily recognized by the seven or nine narrow leaflets radiating from their stem.

The Evening Primroses are mostly plants of summer time but one blooms in June among the grasses and its yellow flowers open in the daytime instead of following the general rule of the family. It is a slender plant from one to two feet in height. Another member of the family grows low and spreading, with slender stems, narrow leaves and white flowers which turn pink with age. This has no established common name. It is well known and frequently called "honeysuckle," which the flowers do suggest. Gaillardia, a member of the aster family bearing flower heads with purple and yellow rays, appears on the prairie in June. This is another of our plants which is found in the seed catalogs. The Purple Coneflower of the same family is found all over the prairie but especially westward. The spiny brown centers of the flower heads are peculiar and with the long drooping, pink rays, make a pleasing combination.

The several species of Beardtongue have a prominent place among our wild flowers and are far more richly represented in the Rocky Mountain region. The flowers are from one to two inches long, somewhat like Foxglove or Snapdragon. The earliest is the White, a stocky plant of the hillsides. A brilliant blue flowered species appears in the extreme western part of the state. The Slender, with lilac colored blossoms, is the most common of all, growing in good grassland. The large flowered is our handsomest one and is being cultivated. Its stems are stout and tall, the leaves rounded, thick and glossy; the flowers are pure pink fully two inches long. The plant grows especially in sandy soils and in North Dakota is found chiefly in the Lower Missouri Valley and that of the Cannon Ball. The Crested Beardtongue with quite large pink flowers grows in the Bad Lands.

The ground in the eastern woodlands in June is becoming overgrown with coarse herbs and there is no longer a place for the more delicate species. The Smooth Wild Rose rises to a height of four or five feet. Its flowers are pink and begin to appear about June 10, a few days in advance of the Prairie Wild Rose, whose flowers vary from dark red to nearly white. The stems of the Solomon's Seal rise in wide arching curves, the greenish yellow flowers hanging beneath. The Tall Meadow Rue displays no petals but a great mass of yellow stamens and a wealth of attractive foliage. The Spreading Dogbane grows just outside the woods or in open spaces. Its many small flowers are bell shaped and very attractive. The Bushy Vetch I have so named from its robust habits. It is much coarser in all respects than the wild vetch but more handsome in appearance.

One of the most popular flowers of late June on the prairies is the Wild Lily. The rich red flowers which are dark spotted within are borne in two's or three's at the top of the knee high stems. The lilies grow in the low meadows where the soil is quite moist. The Blue Bell comes at the same season. It is less particular and thrives on the northern slopes of the hills. In certain localities with well watered sandy soils I have seen wonderful displays of patriotic colors, the red lilies mingling with the blue bells and white camas, a fitting climax for the season.

THE TROUBLES OF THE NURSERYMAN

(Paper Read at the 1931 Horticultural Society Meeting)

George W. Gurney, Yankton

I have never been able to quite understand why people speak of a fast snap or an easy job or a nice condition in life as a "Bed of Roses." I would just about as soon sleep in a bed of cactus as I would a bed of roses and although the roses would look better, still I think it would hardly be one bit more comfortable than the bed of cactuses. Therefore, I don't have a bit of hesitation in starting out this talk on "The Troubles of the Nurseryman" by calling the nursery business a bed of roses and by following that statement up that my experience in the nursery business which has consumed practically all of my life—so far—has proved it to be just that. In other words, it is a beautiful business the handling of flowers, shrubs and trees but in that good old bed are plenty of thorns.

As I look back to my boyhood as the son of a nurseryman and being raised on a nursery, the first trouble that I can remember getting into was this: It was the time of year when boys became interested in bows and arrows. You know there is a time for everything—marbles, baseball, football and bows and arrows. Well, this was that time. I had been whittling on it a considerable time cutting it off and had made one end rather pointed. (And by the way, I had selected a two-year old Whitney Crab for the job). My youngest brother was watching me and I told him to pay close attention. As always with younger brothers, he neglected to follow my instructions and I started to apply corporal punishment. He took to his heels and me after him. In order to stop his flight and hasty departure, I threw the piece of apple tree at him with unerring aim and it did considerable more damage than I intended it should have done.

Just at this psychological point father came out of the packing house door and grasping the situation with his usual quickness in such matters, calmly walked over to the annual "brush pile" of discarded nursery stock, selected a bundle of one hundred 18 to 24 inch cottonwoods—and, you will note that I have remembered the exact size and type—and applied them where they would do the most good and from my point of view, the most damage.

Well, for some time I was just one jump ahead of those cottonwoods making several circles around father. From then on my troubles along that line were numerous. For example, I tested forbidden fruit. Of course, this is the heritage of Adam and I must be a direct descendant because test forbidden fruit I did and reaped the usual harvest of sinful boys. Father had planted for testing purposes for a number of years and usually the fruit that I tested was on a tree that was bearing only one or two specimens. Of course, my brothers joined with me in these testing experiments and the result was that father didn't find out a great deal about the fruit that he had under observation.

Well, I just tell you folks these stories to give you some idea of the troubles of a young nurseryman and to emphasize the fact that although we grow out of the forbidden fruit and the 18 to 24 inch cottonwood troubles, we grow into some that we fear and usually are even greater to the matured nurseryman. In fact, a good many of them are nightmares. Some times we have a wonderful year for growing stock and everything comes along fine through the growing season and then financial conditions may be such that quite a percentage of this nursery stock finds its way to the brush pile. If folks can't buy the nursery stock that we dig, it goes up in smoke and a good many years showed the profit of a year's business making a red glow on the skyline.

On the other hand, a nurseryman may work up a mighty fine stock taking several years to do this and then out of a clear sky comes a flock of bullets in the form of hailstones that will knock the farmer out for his profits and at the same time damage several years of growth to the nurseryman.

And, of course, man's natural enemy the insect is ever present with his ally—the plant disease. We have got to keep fighting them or we

can't get a clean bill of sale from the state inspector. It costs money to fight diseases and insects but it costs a whole lot more not to fight them and so, of course, we fight. Out with the old spray guns and down goes Mr. Bug. I tell you, folks, if a nurseryman naps on the job, he is going to suffer heavy losses from insects and diseases. You have got to keep everlastingly at them.

Another bugaboo of the nurseryman is the quarantine laws; some of them, necessary and essential but others, really oppressive and unnecessary. An insect pest or a disease bursts out in Connecticut and immediately there are many quarantines wide sweeping in their effect that affects us clear out here in South Dakota in the Middle West. It means that the nurseryman must have an ever watchful eye out for quarantines and regulations of every state in the Union where he is likely to ship nursery stock because ignorance is no excuse and if he happens to ship into a state where there is a quarantine, the federal judge jumps on his neck and tacks on a heavy fine.

Then, there is the planter who plants his grapevines upside down and his lilies right side up and then complains because they do not grow in spite of the nurseryman's instructions in regard to it. The nurseryman has to continually adjust complaints from folks who have not done their share in regard to successful planting. The purchaser forgets that the thing that he is handling is alive, that it requires nursing and care in order to overcome the reaction of transplanting and shipping. He sticks it in the ground, puts some dirt over the roots and forgets about it and then complains because it doesn't grow. And, Mr. Nurseryman must smile and be very happy to give him a new plant or a whole new orchard whatever it happens to be. Of course, the nurseryman always doesn't do anything of the kind but that is what he is expected to.

Another duty of the nurseryman evidently—at least in my experience—is that of adjusting damage to trees where a careless automobilist tries to climb one or a tree has to be removed from necessity and believe me that's a sweet job. To place a valuation on a tree is almost an impossibility for the tree that wouldn't be worth a dime to you would probably be worth a thousand dollars to someone else. There is too much sentiment in the value of a tree and so the nurseryman just has to use his own judgment and figure out how long it would take to grow one and lay out his estimate on that basis. You know the nurseryman always must sponsor the cause of a tree and if he is a true nurseryman he will for he loves trees and realizes their actual commercial and sentimental value. One of the most common problems along this line that the nurseryman has to face is that of the removal of trees on highways where the engineer in charge orders a whole row of beautiful trees to come down in order to get them out of the way for his road whereas, many times, a little curve or a change in the layout would save the tree. Down they come and the nurseryman is called in to estimate damages.

Now, we nurserymen, do not claim to be perfect. In fact, if we take other folks estimate of us, we will have to admit a great deal of imperfection but we are actually human—although some of us do not look it—and we do admit that we make an occasional mistake just as anybody else.

To sort of soften what I have just said about the purchaser of nursery stock who plants his grapevines upside down, etc., I do want to say this that 99 per cent of the customers of the nurserymen are not cranks but are mighty fine folks, reasonable and fair. We consider the farmer and townfolk of the Middle West to be the best people on earth and we can prove it. Where one makes the complaint that is not fair, there are thousand who send in words of praise and at least ninety-nine who are open to reason.

Make preparations for gathering and storing vegetable and flower seeds for next year.

Keep a close watch for raspberry plants infected with mosaic when cutting canes. Remove the diseased plants and prevent spreading the disease.

A GARDEN IN JUNE

Mrs. M. W. Sheafe, Watertown

A few short weeks ago the ground was brown and bare, the trees and shrubs apparently lifeless, when suddenly nature awakened from the long winter sleep and began setting the stage for the glorious show soon to be on exhibition for the admiration and enjoyment of all who choose to look.

A beautiful green carpet covers the bare earth, trees are draped in varied shades and textures, while the shrubs put forth their coloring (even before leaves) to brighten and beautify the landscape. The weather we say (and we have many kinds) is unfavorable to the growing of flowers, wind, frosts and hail all enter into the scheme and we sigh, "most discouraging." Almost before we have recovered from our despondency though gardens in June burst forth in all their glory.

As I write, my own garden is before me, it is very simple, informal and to many would seem without scheme of coloring or arrangement. Not at all in accordance with the rules of "Landscape Architecture" but, like "Topsy" it just grew and is a joy and solace at all times.

A few of the flowers in evidence at this time are the Columbines, irises, peonies, oriental poppies, violas, early phlox, double buttercups, rocket, several kinds of ferns, day lilies, fragrant white Peruvian daffodils, rue, cranesbill, meadow sweet, Persian daisies from white to deep rose, pink gas plant and the sky blue flax, that is a real joy at all times. Articles about these flowers have appeared from time to time in our magazine, there is little left to tell and repetition is tiresome. I would, however, like to urge upon all flower lovers who have not already done so, to grow columbines. They are one of the most graceful, dainty and artistic of flowers, the colorings marvelous, ranging from pure white through all the shades of pink into deep rose, blues, from very light into the darker shades and lavender into the dark purple, beautiful all yellow and the many combinations of colors, with the dainty clean foliage, complete a most entrancing border setting. One cannot have too many.

The irises "Rainbow flower" one could write pages and not half do them justice. If I had only room for two early summer bloomers, the above mentioned would be my choice. Much valuable information has already appeared about the irises so will only urge all to try a few. Now is the time to plant for next year's bloom.

The iris seems to be vieing with the peony for first place. In a recent catalog many new ones are listed priced from five to twenty dollars a root. Do not let that dishearten, as there are numberless fine varieties to be had at ten cents each. "Ambassadeur," a marvel of beauty and one of the highest rated, is quoted at three for fifty cents when four years ago it was five dollars a root. As irises increase rapidly the price for the choicest varieties soon drops. A few of the so called fool proof, inexpensive but desirable kinds are Rheine Nixe, Lohengrin, Her Majesty, Monsignor, Wyomissing, Ma-Mie, Fairy, Perfection, Eldorado, Sherwin-Wright, Juniata and Mrs. H. Darwin. This group gives one all the colors and combinations usually seen and are admirable in every way.

The Oriental Poppy is for many rather difficult to grow and yet is the easiest when understood. Plants like the human family have many peculiarities and requirements, if these are given, no trouble will follow.

Plant seed now in a well prepared, well moistened bed, sprinkle seed thinly over the soil, sift a very little additional soil over lightly, press down well and cover with an old gunny sack single thickness, water through it when needed. Keep covered until seeds sprout then remove. Do not at any time let soil become dry. When spring arrives transplant unless they are not crowded in seed bed.

The long carrot like root requires a deep hole, so to keep root straight press soil closely about them, water well but do not keep soaked. There are several shades and colors that are hybrids, so one is only sure of the brilliant scarlet from the seedlings and you may get a very choice new

(Continued on page 109)

BEEKEEPING NOTES

J. A. Munro, State Entomologist, Fargo

Every beekeeper should attend the summer meeting of the North Dakota Beekeepers' Association to be held at Aneta, Nelson County, July 15. The program will begin at 10 o'clock in the forenoon and it is planned to continue until about 4:30 in the afternoon. The program will include practical talks on various phases of apiary management and should be of interest to every beekeeper. The Commercial Club of Aneta and local beekeepers of that city are making plans for the entertainment of all beekeepers who attend. Good graveled highways lead to Aneta and it is expected that there will be a fine large attendance from the surrounding territory. Come and bring your problems with you. Remember the date—July 15, at Aneta—and join in this annual beekeepers' meeting.

The first blooms of yellow sweet clover were reported June 5 at Fargo. On June 13 a few blossoms of white sweet clover were noticed. It will probably not be until July 1 that the bloom from either of these sources will make any appreciable addition to the nectar flow.

Beekeepers can prevent swarming to a large extent by providing the queen with adequate space for brood rearing and adding supers for storage as necessary.

Bee inspectors are now on the job and work is going along very nicely for the season. The deputy inspectors include J. D. Beals, Dwight; Gordon Bell, Grand Forks; J. W. Beatty, Fargo; W. F. Boylan, Carrington; L. A. Carruth, Brookings, South Dakota; Charles Hausmann, Hillsboro, and Marvin Huckle, Lidgerwood.

Members of the North Dakota Beekeepers' Association are reminded that a select, untested queen is being sent as a premium to each paidup member during the coming season. Memberships also include subscription to North and South Dakota Horticulture and a special rate of 50 cents annual subscription for each of the leading bee journals. Send in your \$1.00 and receive these splendid benefits of membership. If you wish any of the bee journals add the required amount and state the name of the journal for which you wish to subscribe.

"When should colonies be requeened and how often?" is a question frequently asked. If the queens are to be given to divisions for the making of nuclei increase, then the latter part of May seems to be a most satisfactory time. Nuclei made then will have time to build up fairly well for the July-August nectar flow. Old or failing queens should be replaced with as little delay as possible. General requeening may be done during any of the summer months.

The beekeeping library is steadily growing. During the past year a number of books published in England were secured through the School of Agriculture for this project. We now have a complete file of Gleanings in Bee Culture bound, and incomplete files of other journals. We are glad to hear from any beekeeper who has old books or files of bee journals to contribute. At the 1930 meeting the association endorsed the establishing of an apicultural library. Don't throw away any old bee books or journals—send them to your secretary's office at the Agricultural College, Fargo. You will receive proper credit.

The attention of members is called to that fine letter regarding the American Honey Institute, written by J. D. Beals of Dwight, North Dakota, on page 57 April issue of this magazine. At the past annual meeting Mr. Beals was appointed to approach members for support to the American Honey Institute.

Dr. M. C. Tanquary, head of beekeeping, University of Minnesota, was a visitor to this office recently. In the course of conversation he reviewed some interesting results he has had with "Balsam Wool" as packing for outdoor wintered colonies.

Members, why not get your neighbor beekeeper to become a member of the North Dakota Beekeepers' Association and subscribe to any of the bee journals at the special rates offered? Through this office you can secure any of the leading bee journals for 50c per year. By so doing

you will render both your neighbor and this association a favor. The annual membership fee is \$1.00 and entitles you to North and South Dakota Horticulture.

Proof Positive

Curiosity prompted a kid
To lift from a beehive the lid;
"I wanted to see
What was in it," said he;
And his face testifies that he did.—Cousineau.

A GARDEN IN JUNE

(Continued from page 107)

color. Division of the roots is the only sure way to increase the same colored plant.

Many inquiries come in about replanting tulips. In my opinion these bulbs should be dug now, as the foliage has turned yellow and limp, which indicates the bulb has matured. Dig them, assort, for size and replant soon as possible in new well prepared soil. Groups of several planted at intervals through the border is effective and to me satisfactory. Better results follow replanting at once, than if bulbs are kept out of the soil until autumn.

ENTOMOLOGY NOTES

This has been an unusual season for injurious insects. Cutworms began their depredations much earlier for the season than has been reported for the past number of years. The unusual earliness was apparently brought about by the mild winter and early spring. This has also influenced the season of injury. Cutworm injury has not extended as late this season as in past years. Apparently all cutworm injury is over for the season at this time of writing—June 17. Much of the damage to corn, small grains and vegetables could have been prevented by the timely application of poison bran bait. For garden quantities the recommended bait is bran 1 quart, molasses 1 tablespoonful, Paris green 1 teaspoonful and sufficient water to moisten. This should be mixed to the consistency of a crumbly mass and scattered over the infested ground in late afternoon at the first sign of injury.

Numerous reports are coming in, at this time of writing, on the striped cucumber beetle. A recent examination showed these pests to be very abundant and feeding upon the young plants. Control measures should be applied as soon as the beetles are first noticed. Dust the infested plants with a mixture consisting of calcium arsenate one part and land plaster 20 parts. In case calcium arsenate is not available, you may use Paris green or powdered arsenate of lead mixed with land plaster or flour.

Blister beetles are causing considerable injury to caragana hedges and other plants. The common gray species has been the only one reported to date this season. On a recent field trip in the vicinity of Fargo I noticed several caragana hedges almost completely stripped of their foliage. Spraying the leaves with a good arsenical spray, using one pound of Paris green to about twenty-five gallons of water, will aid in controlling the pest. Better results are obtained if the Paris green is used along with Bordeaux mixture.

Cankerworms have again appeared in large numbers along the Red River Valley and have completely defoliated large tracts of trees. Basswoods suffered the most injury. This is the third season in succession this pest has injured trees along this territory and it is apparent that something should be done to check its appearance in future years. Banding of the tree trunks with tree tanglefoot during the latter part of winter prevents the wingless females getting to the trees during April and May and is the best control remedy to be recommended. Infested areas should be marked now for banding at the proper time next year. Spraying of the trees with arsenicals is a satisfactory control where only a few trees are to be considered, but where the pest is active over a large tract of trees, the spraying is too expensive as compared with banding. Besides this, the banding of the trees with tanglefoot is much more efficient in preventing injury.

SOUTH DAKOTA NOTES

We hear much talk about the damage from forest fires and most of us have come to realize the extent of this damage, but some people are still careless about fires near their windbreaks and orchards. Onida has a fine lot of Scotch Pine on the north and west side of their Court House grounds. The trash which had collected along the curb was burned last spring and one side of the trees was fairly cooked.

I passed through Redfield a few days ago and I noticed that a fire had burned through the dry grass in the park near the depot. A few of the trees had a branch or two in the top that bore green leaves, the leaves on the other trees were entirely killed.

Fire will destroy in a few minutes the beautiful trees that it has taken years to produce and these losses usually occur more or less through carelessness.

The intense heat during the latter part of June caused the grasshoppers to hunt shady places. The north side of buildings, telephone poles and fence posts were fairly covered with hoppers. They would crawl into badger holes by the hundreds. The ground became so hot that they lined wires of the fences until the wires resembled ropes in appearance. Wire is a good conductor of heat and would usually be considered an undesirable resting place on a hot day but a thermometer placed near the ground would register 135 degrees Fahrenheit, at least one that was being used for a test registered that temperature and upon the next examination it had broken. Many of the thermometers that had been in the same place on buildings for years were broken by the high temperatures.

The heavy freeze late last spring caused many trees to produce some second blossoms. In many cases these blossoms were mal-formed. In the vicinity of Wagner some apple trees bore a number of blossoms on June 8, about a month later than the usual blossoming date, but an Anoka tree in Ipswich seems to have all honors. It had some blossoms July 1. We usually do not have apple blossoms the fourth of July.

We received a letter from Mrs. Pearl Frazer dated June 18. Part of the letter is as follows: "My mother, Mrs. Fannie M. Heath, has been very dangerously ill for some time. She is getting better slowly but it will be weeks or months before she can attend to her affairs." We hope that Mrs. Heath will be well in a short time and that she will experience little of the agony that sometimes accompanies ill health. We usually give little thought to such matters until they are upon us.

The location of the International Peace Garden is to be settled in the near future. The Garden will commemorate the more than a century of Peace under the treaty of Ghent of 1812 and the Rush-Bagot Convention of 1814. This treaty and convention provided that the boundary between the United States and Canada should not be fortified. The Turtle Mountains in North Dakota and Manitoba is one of the finest places along the border for the constitution of this Garden. Mr. J. W. Parmley, President of the C to C Highway is doing a great amount of work to secure the location of this Garden in the Turtle Mountains.

Iris may be divided and transplanted the latter part of July. Water well when planting if the weather is dry and an occasional watering later will well repay the planter.

EVERGREENS OF THE BLACK HILLS

(Paper Given at the 1931 Horticultural Society Meeting)

E. A. Gates, Rapid City, S. D.

In this article I am not going to discuss the evergreens from the botanical standpoint but will describe briefly their location within the Hills, local importance and general characteristics. There are quite a number of varieties of evergreens found in the Black Hills Region but only about three are of very much economic importance.

First in importance comes the Bull Pine (*Pinus Ponderosa*) or Western Yellow Pine as it is sometimes called. The tree is found growing over practically all the Black Hills with the exception of a few spots, the Bald Hills, flats and valleys. The former at some time, no doubt, having been burned off and not reseeded as yet and the valleys as a rule are too wet for these deep rooted trees. The pine give the color to the Hills, whence the term "Black Hills." As seen from a distance they appear to be black or a deep purple. The Bull Pine is used chiefly for lumber. The Warren-Lamb Lumber Company of Rapid City has the largest sawmill in this territory, but there are numerous other small mills all through this region. The bulk of fuel used in our section is pine wood. Much of the dead timber found for fuel is "pitch" wood and makes a quick hot fire. People go into the Hills from miles around and haul wood out in trucks, wagons, trailers and even in the back of their cars. The pine that is found in the Black Hills is one of the best for windbreaks and planting stock, because of its hardiness and vigorous growth, consequently the seed is in high demand from nurseries that grow evergreen seedlings. Many natives make it a business in the fall of collecting pine and spruce cones for the purpose of extracting and selling the seed.

Second in importance comes the Black Hills Spruce *Picea canadensis* (*albertiana*). Large areas of the spruce are found in the upper Hills, in the valleys and on the north slopes. They grow very tall in some places and are very beautiful because of their fine dense growth and green to bluish color. They have spreading shallow roots, consequently do not grow on the south slopes or in the more exposed locations. Because of its hardiness and dense habit of growth, the Black Hills Spruce is in great demand for planting stock for windbreaks and specimen plantings. There are quite a number of men who make it a business of collecting small spruce in the spring and sending them out to nurseries for lining out stock or to farmers for windbreaks. Where these spruce are properly handled they are transplanted quite successfully. It is necessary before gathering spruce that the stock be inspected by the State Nursery Inspector and that the collector has a permit from the Forest Ranger if he gathers the trees from the Forest Preserve. These collected trees are not very dense and are poorly rooted as they come from the Hills, therefore it is best that you obtain nursery grown stock for lawn and specimen plantings. Thousands of spruce are cut each year for Christmas trees and these also must be taken under the supervision of the Forest Ranger with certain restrictions as to spacing, location in the forest area and distance from public highways.

Third comes the Silver Cedar (*Juniperus Scopulorum*) or Colorado Juniper. These trees are located in scattered areas in the foothills. They vary in color from a silvery blue to a dull red. During the winter months they assume a duller, darker color in the dormant stage and there is not so much variation as there is during the summer. They are perfectly hardy and drought resistant and therefore are very valuable for windbreaks. They should not be used, however, near an orchard because of the danger from Cedar Rust on the apples. The trees will stand clipping and are fine for ornamental and foundation plantings. Large areas of cedar are found in the Bad Land region where they are used quite extensively for fence posts and for fuel.

Fourth. Prostrate Juniper (*Juniperus communis depressa*) grows scattered all through the Hills. It grows in among the pines, in shaded

or partially shaded areas. They are low growing, spreading ten to fifteen feet across. The leaves are purplish green, silvery underneath. They are rather difficult to transplant direct from the Hills and you should obtain your stock from some nursery. They can be used for foundation planting.

Fifth. Is the broad leaf type of evergreen, the Oregon Grape or *Mahonia aquifolium*. It has a holly leaf, which turns purplish in the fall and hangs on most of the winter or all the winter where the plants are covered with snow. The plants only grow a few inches high where growing wild and come up from underground root systems. They grow only in damp ground where there is plenty of shade. They make a good ornamental shrub.

Sixth. I would name the Creeping Juniper which I term *Juniperus procumbens*. This is a low trailing juniper, creeping flat upon the ground or rocks. It is found in isolated areas, growing generally out in the open on rocky exposed spots. The plant could be used in rock gardens to good advantage.

Seventh. Lodge Pole Pine (*Pinus Contorta*) is found in two localities in the Hills. On the north side of Crook Tower and on the east side of upper Rapid Creek. It is of no economic importance in the Hills.

Eighth. Lumber or White Pine (*Pinus Filexilis*) is found in one locality and that is on the old trail from Sylvan Lake to Harney Peak. No economic importance in the Hills.

Ninth. The Forest Service has planted several varieties of evergreens at Roubaix for experimental purposes and these are at present quite large trees. The plantings consist of the Douglas Fir, Australian Pine and Scotch Pine.

SOUTH DAKOTA NURSERYMEN

Invite you to send for their representatives or for their catalogues to compare prices and quality of nursery stock offered.

TREES, SHRUBS and FLOWERS

Grown in the North means hardier stock and a more successful planting.

Your money stays at home and is kept in circulation when you buy from the South Dakota Nurserymen.

WRITE A LETTER

To any of the South Dakota Nurserymen for information as to what varieties do best in your locality, how and when to plant and expert advice as to the best and most artistic arrangement.

SOUTH DAKOTA NURSERYMEN

Will Co-operate With You and Want Your Good Will.

WANTED—Reliable Salesmen
DYBVG NURSERIES, INC.
 COLTON, S. DAK.