

NORTH AND SOUTH DAKOTA HORTICULTURE

SEPTEMBER 1934



ELMWOOD PARK, SIOUX FALLS, S. D.

THE GOLDFINCH

O. A. Stevens

A graceful flight in long wave-like sweeps and a cheerful "per-chic-o-ree" announces the presence of the goldfinch. The black cap, wings and tail of the male make a striking contrast with his otherwise brilliant yellow coat. The female is more modestly attired, the yellow of her feathers being softened with gray and olive, and especially, the black cap is lacking. In the fall the males assume duller colors and look much like their mates.

Our goldfinch was first described by Mark Catesby from Carolina, and the name was evidently borrowed from the European goldfinch, a related bird of equally brilliant coloring but with far less "gold" in it. The name "wild canary" is often applied to these birds but before pronouncing upon the identity I always cross-examine the inquirer to make certain that he has not the yellow warbler in mind instead. The male of the warbler is readily recognized by the absence of black and by the presence of orange streaks on the breast. The behavior of the two species is quite different, but both are chiefly yellow and the shrill songs are enough alike to be confusing.

In the hand, the goldfinch is found to have distinct characteristics. The legs are very short, those of a bird which does not walk but which clings securely in uncertain positions. The bill is short and thick; the forehead is low, the eyes seemingly bulging outward from a head too small to hold them.

Goldfinches are found all over the United States and as far north as southern Manitoba and central Quebec. Their migrations are rather limited. Some remain as far north as southern Minnesota in winter, and some nest as far south as Arkansas and Georgia. The Gulf Coast marks the limit of their southern travels. Several slightly different varieties of the bird occur west of the Rocky Mountains.

These birds might well be described as "happy-go-lucky". They associate in flocks the greater part of the year. Many members of the sparrow family arrive early, for they subsist mainly upon seeds which are easily obtainable at that season. The goldfinches do not arrive in our region until about May 15th notwithstanding the fact that they winter well northward. One year I was much puzzled by some which came the last of April, still wearing their winter dress. It seems that this is not uncommon and was a winter wandering rather than a spring migration.

Their late arrival evidently is associated with their late nesting. June nests are rare and September ones more common. Even in Arkansas, nesting is said to be delayed until July. The nests are usually in forks of bushes or small trees and are built of grasses and fibers, com-

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monly lined with thistle down or similar material. The eggs are pale bluish-white without markings. In early September the birds are gathering again into flocks and departing southward.

"Thistle birds" is another name for the goldfinches. They are fond of the thistle seeds and a bird perched upon a thistle head has been a popular pose for the illustrators. Like other sparrows, they feed largely upon seeds, but also upon insects to a considerable extent. Grasshoppers and plant lice have been found to comprise a large part of their diet when these insects are abundant. Dr. Thomas S. Roberts has observed the young birds being fed upon seeds which had first been thoroughly softened in the gullet of the parent. They are especially fond of oily seeds such as sunflower, ragweed and flax. The flowers have scarcely withered on the large sunflower heads before we find the birds perching on them and prying out the green seeds. I once advanced cautiously upon such a busily engaged bird and captured him in my hands.

A few years ago Mrs. J. M. Leen of Ray, North Dakota, wrote me that she had observed them feeding upon the seeds of goatsbeard. The method was the same that I have noted in the case of dandelions. The birds do not take the ripe, expanded heads, but those a little younger. First they pull off some of the green bracts which form the outer covering, and then pick out the seeds.



NORTH DAKOTA STATE HORTICULTURAL SOCIETY NEWS LETTER



A. F. Yeager,
Secretary,
Fargo, N. D.

While cultivated varieties of fruits will not come true from seed, for instance, one cannot raise Wealthy apples by planting Wealthy seeds nor Opata plums by planting Opata seeds, nevertheless, the raising of fruit plants from seed in the case of wild fruits is worth giving serious consideration. Probably the pits from the best wild plum tree you know of will not produce trees bearing fruit as good as the one the seed is taken from, but it is quite likely the seedlings will all produce usable fruit and among them perhaps, there may be some very good ones. It is very easy to raise trees of plum, chokecherry or sandcherry. All that is necessary to do is to mix the fresh seed from the ripe fruit with moist dirt or sand and bury it in the ground a foot deep until spring. Along about the middle of April, dig it up and plant it. It is surprising how rapidly such seedlings develop and reach fruiting size. If given good cultivation it is quite likely some of these will bear the third year and the largest percentage of them should be bearing the fifth year. If planted as a part of the shelter for the garden and orchard, they will serve as a double purpose in giving fruit as well as protection.

While *Caragana arborescens* is the common variety of this genus generally known as Siberian Pea Tree, there are, nevertheless, other species of *Caragana* which are hardy in the state and should be used. One of these is *Caragana frutescens*. While it is smaller in size, it produces much more showy blossoms. *Caragana pygmaea* is one of the few hardy small shrubs which can be used here safely.

It is possible to transplant asparagus in the fall but it is better to wait until spring. Also, while it is possible to start a new bed by dividing old plants, experiment stations have shown that strong one-year plants from seed are superior.

I wonder how much truth there is in some of the theories people have about the effect of water on plants. One of the oft-repeated statements is that water should not be applied to plants, at least the top of the plants, during the heat of the day. Nevertheless, I have yet to see any plant injured by sprinkling the tops in this manner and I saw one good sized field of glads which was sprinkled every day with an overhead irrigation system in the afternoon this year with the idea of preventing damage from high temperatures. Certainly those glads gave

every appearance of responding to the treatment. If any of our members have positive reports to give with respect to either damage or lack of damage from applying water in the heat of day, I would be glad to have them. Certainly there is one pest which would be greatly reduced by such a treatment and that is the red spider. Dozens of samples of shrubs and tree leaves have been received which were dying this summer apparently from the effects of this little pest.

A friend from Hankinson sent in by mail what had the appearance of being a large purple groundcherry. When the purple husk was pulled back a round fruit-like object was found. However, it proved to be a kind of puff ball as shown by cutting through what looked like the berry.

I do not know how many times this summer letters have arrived asking why tomatoes were not setting fruit. Some thought crickets were eating them off; others thought some kind of disease was attacking the plant. It was, however, merely the effect of extremely high temperatures just before blooming. It is evident from variety and breeding plots here at the College that different plants and varieties differ greatly in their ability to set fruit in hot weather. Some set heavily and some not at all, although the amount of bloom is much the same in both cases.

All growing processes are, of course, hastened by high temperatures. Flowers such as roses which ordinarily remain on the plants several days still keeping good color, this summer often lasted only one day before signs of deterioration appeared.

While the hop plant is a native of this region the commercial growing of the crop is confined to other parts of the country. Great hop vineyards are much in evidence in Oregon, where trellises are built to carry the hop vines ten feet or more above the ground. Nevertheless, the hop plant is an interesting herbaceous perennial vine and worth planting here for that purpose.

A recent letter asks about seed of the potato onion. These onions are reproduced by divisions of bulbs in the same way as the garlic bulb is subdivided. Each division planted out will produce a large bulb likewise being capable of being split up.

I do not know whether there is any quantity of tree seed developing in the state this year. If any of you should happen to know of some of our hardy trees such as ash which have a good seed crop it might be worth while to look into the possibility of marketing it. Since the United

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THE OBJECTIVE OF HOME AND SCHOOL GROUND ARCHITECTURE

N. O. Monserud, Sioux Falls, S. D.

There is no worthy undertaking but what it has some objective; there must be some good reason and purpose for every worthy act; there is something we are seeking to accomplish, we are trying to make some gain in the line of progress.

The three institutions that are instrumental in influencing a child's life are The Home, The Church and The School; and of these three, the first and last named are where the child spends most of his time; the Church is, or should be, the stabilizer of the other two; and because the Home and the School are the two institutions that surround and influence the child mostly, we will have these two in mind in considering this subject.

We want our children to become interested in the beautiful and worth while things in life; we want to help the child to discover the worth while and beautiful things that nature has to offer; in other words, to learn to appreciate and understand the many beautiful and useful things that nature has for our use and enjoyment; the things that will make the pathway of life a little smoother, a little more pleasant, and a little more attractive; the things that will help lift our minds and thoughts above the sordid things and mere material things, and learn to appreciate some of the vast beauties and cheerful things that our Creator in His wisdom has provided for us.

Some one might suggest: "What a hazy and visionary subject to discuss and elaborate upon in a time of depression and hardships such as now surround us, especially here in South Dakota." Well, there would be some merit to such an objection: I will agree that there are many economic subjects that we could consider and discuss at this time: We might talk of Mortgage Foreclosures, Bank Failures, Bankruptcies, Receiverships, Loss of Fortunes, Grasshoppers, Droughts, Hot Winds, Sand Storms, or Crop Failures, but most of us are quite well fed up on these topics. I think it is both timely and proper that we take just a little time in considering what we, as a Horticultural Society, can do to help this State to be a better place in which to live. We are not living unto ourselves alone, and we must have those in mind who are to follow us as well as those whom we expect to keep in our state as neighbors and fellow citizens, and those whom we expect to attract to our state in the future; therefore during this time of depression, when we find disappointment and grief on every hand, let us do all we can to

tidy up our respective places of abode, as well as try to cheer up the surroundings and grounds of our rural and city schools, and seek to make our respective homes and our various institutions of learning just as inviting and cheerful as possible so that our children and young people will be impressed with the fact that God still lives, that the sun still shines, and nature still bestows her smiles and showers her bounties upon us.

About two years ago, I read an article in one of our magazines that painted a picture of an average American family who were feeling the pangs and hardships of the depression; they were farmer folks as I remember it, and both the wife and husband worked extremely hard, and it all seemed in vain. The wife worked so hard that she neglected herself and her household trying to do her part as she saw it, but she noticed how depressed and discouraged her husband seemed to be, and how little progress they made in spite of their hard work and personal sacrifice; being an educated and cultured lady, she did some serious thinking and tried to get a perspective view of the whole situation and decided that she was going at things from the wrong angle; and so she began to tidy up their home, and made it just as cheerful and attractive as possible. She paid more attention to her own personal appearance, and saw to it that when her husband came in for his meals, there was not only plenty of good wholesome food on the table, but it was well served and placed on an attractive table. The house commenced to show a cheerful appearance. She invited in friends and neighbors at intervals, and did all she could to make their home just as cheerful and cozy as possible without increasing the expense account, and to her amazement things commenced to go better; her husband took new courage, and went at things with renewed energy and strength, and the family and home found themselves once more.

In these times the question of cost looms up: what will the cost be, and how can it be paid? These are vital questions that must be considered, but our homes and schools are such important factors in our civilization that both should have a proper setting from the esthetic as well as the economic view point. We must have food to eat, clothing for our bodies, and houses to live in, and these things must be paid for. In building our homes and schools, there is no one feature that will give more returns for its cost than what little one spends for beautifying the surrounding grounds. We are not building just for today, but the foundations laid by us today will be developed and enjoyed by those who are to follow us.



There is no family so hard up, but what they can tidy up their place a little. If it is a rural home, it can at least be cleaned up, by putting things in their proper places, and hauling away the litter and rubbish that will accumulate over winter; a few shade and fruit trees can be planted, as well as a few flowers. The same is true with the town or city dweller: No place looks so discouraging as a home, or possibly I should say a "house", in a city, where there is nothing but rubbish, ashes and garbage littered all about the house and not a sight of a tree or bush. Any city dweller can take a few minutes morning and evening to help clean the place up, no matter how poor they are. A little grass can be sowed and kept for a lawn, and a few flowers and shrubs can be had for almost nothing.

But we find a number of neglected homes owned or occupied by people who can well afford to make them more attractive. We can hardly expect children who come from homes where everything in and about the house is confusion, dirt and chaos, can become the best of citizens, or desirable home makers. Likewise our schools: I pity the child who attends a school that has nothing more to offer than a "school house". Not that classes cannot be conducted and well taught even in an unpainted and poorly kept school house, but if the school grounds are attractive, with a suitable place provided for play and recreation as well as cheered up with a few well selected and well placed trees and flowers, what a different impression it will make upon the child's mind. What a child sees and observes in going to and from the school is something that impresses and follows him all through life. Trees and flowers attract the song-birds, and how cheerful are the songs and twitters of birds in the spring time, and what a cheerful greeting each blooming flower has for our little folks. "Behold the lilies of the fields, they sow not and spin not, but even Solomon in all his glory, was not arrayed as one of them."

One of our poets aptly says:

"Life's hopes shall blossom into flowers,
Your way shall lead through rosy bowers;
The golden hours shall turn to song,
And days will never be too long."

Some one might doubt the wisdom of launching upon the artistic program in our present day condition. Of all times when we should give some attention to the artistic side of life, I think it is now, when we all have felt and seen the sweeping devastation that has crumbled all hopes built upon intrinsic and material values. What we as American people need is a better balance. We need to know that material things alone are not sufficient or capable of bringing real happi-

ness. There have been too many of our American people who have lived for material gain alone, and our notion of success or failure has been measured almost entirely by the dollar yardstick. True, we must all try and have what we need, but I pity the man or woman whose only interest is in material things. We should learn to do as the Europeans do: That is, live a little every day as we go along.

Here in South Dakota, we have a wonderful opportunity too in this line. There are thousands of homes that can be made better, more cheerful and homelike and will help make life more worth while living, with some little attention to the yards and grounds. There are thousands of farmsteads that can be made more attractive and much more convenient by a little re-arranging of yards, fields, pastures, etc. The time and work saved by a properly designed farmstead will pay for the cost of landscaping many times over in actual time saved in every day routine. There are hundreds of neglected and uninteresting school grounds that can be made beautiful and attractive, with a nominal outlay for a fitting design and well selected planting material. Our state can really be made very beautiful.

About twenty years ago, South Dakota had almost no good roads or highways. I had the pleasure of helping in a small way to give South Dakota one of the finest highway systems anywhere, now used and enjoyed by thousands every day by our own people, and attracting thousands of tourists and visitors to our state each year. The value of our present highway system cannot be measured in dollars and cents. It has become one of South Dakota's greatest assets. With the right cooperation by our State Horticultural Society, our nurseries, and growers, our State College and Landscape Architects and Engineers, and possibly some encouragement from our State Legislature, we can do a lot towards attracting people to our state, as well as bring cheer and happiness to many of those who already live here, and help create a state loyalty and a pride in our state by its citizens. The garden clubs and the home ground contests have done much, but the interest should be extended to our school grounds and farmsteads. We have a number of nurseries and growers that can supply good trees and bushes, that will when properly placed and cared for, entirely recondition most any farmstead. To the city dwellers, there is almost no limit to possibilities.

In South Dakota, we have a large variety of plantings that are suited to our climate, grown by our own nurseries, and if properly planted and cared for will add millions to the wealth

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NORTH DAKOTA NEWS LETTER

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States Government is to put in one hundred shelter belts each a thousand miles long, it would seem to me the problem of securing the seedlings would be a major one, especially when it came to finding adapted stock.

This year for the first time we tried out a new onion variety called Early Grano which was developed by the New Mexico Experiment Station. This onion proved to be the earliest of all our onion varieties and was of very good quality. You who grow onions from seed might do well to test it out another season.

While we are mentioning onions, I am reminded that one grower near here estimates his crop this year as 20,000 bushels or more.

Blackie egg plant is another new variety showing up well this season.

Small fruits such as raspberries and gooseberries may be divided and transplanted in the fall. The tops should be cut back to only about six inches in length and unless there is enough rainfall before winter sets in it will be well to mulch the plants a bit with old hay or rubbish.

We do not believe it is a good policy to set out trees in the fall unless they are small ones.

One of our drought-discouraged friends who intends moving out of the state wants to take his trees and shrubs with him and asks whether this can be done. The moving is perfectly possible after the plants are dormant, but it is necessary to get the stock inspected by the State Nursery Inspector, J. A. Munro here at the College, before the other state will permit their entry.

We are asked whether cutting off the ends of squash and muskmelon vines is a good method of hastening maturity. We offer as a substitute that late set fruits be picked off. In that way, the plant will get the benefit of all its leaves and the food produced by them will be utilized in maturing the early crop.

Now and then the Agricultural College gets some advertising it doesn't wish. For example, our work being done with apricots was written up in the Country Gentleman in such a way that we have received many letters asking for propagating wood. The fact is that it will be some years before we are prepared to introduce any varieties, though the 1400 young trees we had seemed to offer a good prospect for eventual success.

The feeding roots of trees are largely in the upper four feet of ground. Hence, a good watering of the surface should benefit the plant. Nevertheless, one must bear in mind that the roots of the tree in many cases extends as far out to the side as the top extends upward. A

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EXTRACTS FROM THE DIARY OF A
TRAVELING MAN

W. A. Simmons

July 22nd: While we have two wren houses each in an apple tree and about fifty feet apart, for several years we have been unable to rent but one of them. As soon as another wren appears willing to lease the other house, our tenant bawls him out and orders him off the premises. He insists on controlling both houses, raises one family in one house, then moves into the other house and raises another brood.

This year he came off with four lively youngsters, stayed around the place for a few days until the children had adequate use of their wings, then the whole family left us for about a week, when the old folks returned minus the children and have settled down in occupancy of the other house. I would like to know where they ditched the children and whether he visited Reno on the trip or whether he is still singing to encourage the same wife.

Aug. 12th: Recently Haskin's column contained the following: "Q. How can cannas be kept so that they will bloom again next year? A. Cannas should be lifted from their summer quarters just as soon as the foliage is blackened by the first frosts. Cut off the flowering stems about six inches from the ground. They should be closely packed together in boxes using dry sand and stored away where frost will not affect the rhizomes."

Be sure to water your peonies well and give the new roots a chance to develop normally, without which no worthwhile blossoms can be produced next year. If you are getting any additional peonies or moving any clumps you already have, September is the ideal month to do it. When an old clump is dug up, it cannot be replanted as it is, if of any considerable size, but must be divided, the preferred size of these divisions being about three eyes. Set them so but about two inches of soil covers the eyes, for if much deeper, sulkiness will develop, manifested by failure to furnish blooms.

The Boyce Thompson Institute for Plant Research says that dahlia roots keep best in a temperature of from 35 to 50 degrees Fahrenheit. Imported peat moss proved entirely satisfactory for packing the roots. "Used as it comes from the bale, the peat was found dry enough to take care of the excess moisture from the roots and yet it did not cause excessive drying." They recommend digging the tubers after the first frost, then allowing them to dry out for several days before putting them into storage.

Gладиолус too should be allowed to cure or gradually dry out after harvesting before being

put away in shallow boxes for the winter, and never be stored in a receptacle where they would be piled over two or three bulbs in depth. Where but a few dozen bulbs are being stored, so there is no great amount of moisture, this matter will largely take care of itself.

Mr. F. F. Rockwell in his book "The Gladiolus" says, "In four to eight weeks after harvesting the bulbs and bulblets will be ready to be cleaned. For the bulblets this consists principally of taking the old tops off and of sifting out through a screen of suitable size the loose sand and dirt. If the bulbs are to be offered for sale, small hard lumps of dirt and pebbles must also be removed. For home use their presence does no particular harm. The bulblets may be cleaned by merely shaking them in an ordinary sieve. In cleaning the larger bulbs the remainder of the old withered bulb at the base and the stubs of the tops should be taken off. The bulblets which will now be quite hard and ready to fall from the bulbs should be carefully saved if wanted for further propagation.

"A temperature of 40 to 45 degrees F. is quite ideal for storing gladiolus bulbs. An occasional drop below 40, so long as they are not actually touched by frost, or a rise to 50 or so, will do no injury.

"Large bulbs may be kept in trays or in paper bags, preferably in a cellar where the air will be fairly moist but not 'dank' so that they will not dry out excessively and shrivel. Bulblets, on the other hand, are usually allowed to dry out entirely too much. They will keep in better condition to germinate in the spring if packed in fairly moist sand. This should be examined from time to time and if found getting dry should be moistened and thoroughly stirred up so that it will not pack down hard, for air is necessary as well as moisture."

Aug. 15th: With each succeeding season I am more and more favorably impressed by the Lobo apple. This is a seedling of the McIntosh originated at the Ottawa station some years ago, and although awarded the Wilder medal, has not in my opinion received the attention it deserves. It is hardy and a very early bearer. Mine are top-worked on Virginia crab, and I received my first apples the year after the cions were placed. One branch about a foot long set a terminal bud that bore four large apples.

It is not only earlier but much larger than McIntosh and also stays on the trees better. While not as early as Duchess, it is much larger at all stages of growth. Mine are not quite ripe yet but are well colored and three and a quarter inches in diameter and have the fine odor and much of the flavor of McIntosh.

They are not long keepers, and I am sure it would be impossible to keep them long on a

roadside stand. They would sell as fast as exposed to view. I am hoping our nurserymen will take up and push this fine apple, as I am sure it will make them many friends among their patrons.

Aug. 6th: Here are a few things to do in September to keep our members out of mischief:

Freesias should be potted up now for winter blooming. Use six or seven bulbs in each six-inch pot and set them about an inch below the surface. Then plunge the pot up to the rim in the garden and leave there as long as the weather is fine, then bring indoors. If your section is favored by good fall rains, it would be well to plant grass seed on the spots the drought has left bare, which in many cases is the entire lawn.

Day lilies may be divided or set now.

This is the time to add a few of the new oriental poppies, rose, salmon, white or pink.

Small seedling plants of marigolds, petunias, flowering tobacco, etc., can be potted now for indoor winter blooming. Take cuttings of geraniums and other tender plants that are to be kept over winter indoors.

Many of the lilies are ready for planting now and fall planting is much better than waiting for spring, as the bulbs will have the advantage of a good root system when growth starts in the fall and be much more apt to live long and prosper. Also this is the time to plant narcissi and most of the lesser spring flowering bulbs such as crocus, etc.

Begin to gather grass, weeds, leaves and garden refuse to add to the compost heap or to be reduced to manure with advo.

Hyacinths and tulips, particularly the Duc van Tholl varieties of the latter, can be potted now, then buried in the garden with about six inches of soil over the tops of the pots, till severe weather arrives, when they should be brought into the cellar and kept there until the growth indicates they are ready to be brought up to light and heat. Success with these depends on giving them plenty of time to form roots and trying to hurry them will result in an inferior blossom.

Trees and shrubs can be pruned at this time but spring flowering shrubs must not be pruned now if flowers are wanted next year.

Keep the strawberry bed free from weeds; in fact allow no weeds to go to seed. Do not be alarmed about having none next year; your neighbor will attend to that little matter.

Squashes will keep best if they are mature when harvested. Let them dry in the sun for a few days before storing indoors if this can be done without allowing them to freeze.

Customer: Why do you have an apple as your trademark? You're a tailor.



Tailor: Well, if it hadn't been for an apple, where would the clothing business be?—Excavating Engineer.

This reminds me of a former employer who, on hiring me, said he always liked to have a man on his crew that was not much good, as without such he might not appreciate his good men.

One didn't have to be told which rows were Yeager's tomatoes, as the load of fruit they carried spoke more eloquently than any Farmer-Laborer candidate. Mr. Wallner has but few Earlinana tomatoes this year and says he will have none next year, as he considers we no longer need this sort.

NOTES FROM A NORTH DAKOTA GARDEN

A. L. Truax

Sept. 22nd: We returned today from our trip east and found Autumn Asters and annual Chrysanthemums in bloom in our home yard in spite of the ravages of the grasshoppers. The annual Chrysanthemum will stand quite heavy frost, and makes a showy substitute for the perennial Chrysanthemum in this climate where the latter is not hardy out of doors.

Sept. 23rd: Began taking up and replanting Tulip bulbs. This I do about every three years, as the old bulbs split up into smaller ones after blooming, and so get too thick. I have long had the idea that the commercial propagation of Tulip bulbs might be successfully undertaken in the dryer parts of the Dakotas. Though I have no figures on them, I know that mine increase rapidly, and our hot, dry summers ripen them perfectly so that bulbs of blooming size are sure to bloom the next spring after planting in the fall, and in favorable seasons I have produced bulbs as large as those received from Holland where special feeding and nurture are given them.

Sept. 26: Crocus Speciosus in bloom. This Autumn Crocus bears large flowers of bright blue, beautifully netted and veined. This is the third season that it has flowered for me out of doors. My other Autumn Crocus of the variety zonatus is not blooming this year but upon digging down into the ground I find that the mother bulbs have split up into small ones, and these I am replanting, feeling quite sure that they will blossom another year. This Autumn Crocus has rosy lilac flowers with a yellow throat, very freely produced. Like the spring flowering varieties, these Autumn Crocuses need a warm, sheltered location, like along the south wall of a house foundation. Care should be taken to order varieties that bloom early enough in the fall for our climate. I tried

Crocus Sativus but it was so late that it never bloomed out of doors for me. There are many expensive varieties of Autumn Crocus, but the two that I have named above are moderate in price.

Note.—On account of the misprinting of "dreary" for "ivory", the effect of Rosamund Marriott Watson's lovely verse on Tulpis in the May number was lost. In justice to her, and to the Tulip, about which there is certainly nothing dreary, the verse is given correctly here:

"Along the lawns the tulip-lamps are lit,
Amber and amaranth, and ivory,
Porphyry, silver and chalcedony...

Filled with the sunlight and the joy of it."

Also, in the July number Aconitum napellus bicolor was described as "blue beautifully edged with blue." It should read "white, beautifully edged with blue." And in the same number I made the mistake of giving the name Crocus speciosus to the Cloth of Silver Crocus. The correct name is Crocus Versicolor.

DELL RAPIDS NOTES

Edna Shreve

In spite of constant disappointments caused by adverse weather conditions this season, the Dell Rapids Garden Club retains its enthusiastic interest in gardening activities.

Attendance at the regular meetings has been exceptionally good this summer, and any special meetings call forth a full membership.

The group drove to Sioux Falls recently for a tour of the parks and gardens. A trip through Mrs. D. B. Getty's bird sanctuary and an hour spent at McKennan Park where the caretaker gave of his time and information were greatly enjoyed.

August 7th an early breakfast was held in the natural outdoor living room of Mrs. C. A. Williams of Dell Rapids. The efficient committee served a delicious breakfast cooked on the open fireplace made by Mrs. Williams. The twenty-two ladies present greatly enjoyed this event.

Our genial vice-president of the Horticulture Society, Mr. Wallner, has invited the Club to a corn-roast, to be held at Pasque Knoll in the near future to which we are looking forward with great eagerness.

Many colonies of bees are dead from starvation and doubtless many more will perish this winter. The general opinion is that the bees can be replaced next year more cheaply than they can be fed and this is probably true. We hope they do not place N. R. A. working hours on the bees because it would cause considerable extra work checking each bee's actual working hours.



THE IMPORTANCE OF LANDSCAPE ARCHITECTURE ON PUBLIC GROUNDS

H. N. Dybvig, Colton, S. D.

This subject reminds me of a story of the youthful agricultural college graduate who said to the old farmer, "Your methods of cultivation are hopelessly out of date, why I'd be astonished if you got even ten pounds of apples from that tree." "So would I," replied the farmer, "It's a pear tree." The more I have studied this subject the more I am convinced that I do not know any more about my subject than the youthful graduate.

However I have often been surprised at the way landscaping has been handled on many of our public grounds. Many times the ones in charge have gotten a bright idea that they should plant a row of trees or shrubs some place on the grounds, and perhaps the next year someone else is in charge and he plants something in some other part of the grounds and perhaps this continues on down for a number of years until the grounds get so jumbled up that it is very difficult to do anything without taking out most everything and starting all over again.

I will say if the first one would have spent the money he did for planting with some good landscape artist even though he did not make any showing in actual plantings he would have laid a foundation on which his successors could have gone forward by and eventually a harmonious planting would result.

A landscape artist can assist you a lot in selecting the proper kind of specimens for your planting so that it will harmonize and fit into your place often times saving enough for his client to more than pay for his services.

In planning your home grounds of course it is also important to have some expert advice but here you have a better chance to practice some of your pet or rather individual hobbies than you have on public grounds.

By landscape artists I do not mean these self-styled artists that by chance have gotten a job selling nursery stock for some nursery, but I mean any one who has studied this and has not only finished a course in college but also should have some experience as in this way they will be a lot better qualified to lay out public grounds. I am sorry that we do not have more real landscape men, but no doubt we will have a lot more in these parts soon as there is going to be a lot more work for them in the very near future with our state park program ready to go, as well as many highway beautification projects.

THE OBJECTIVE OF HOME AND SCHOOL GROUND ARCHITECTURE

(Continued from page 101)

of our state in years to come. If the early pioneers of South Dakota had planted more durable trees in the early days, we would now have had thousands of living groves and windbreaks. The old idea of "tree claims" was good—if only the right varieties of trees had been selected and properly planted. Now that we have discovered the proper varieties of planting for our state, we can give sound advice and counsel to those who are interested. I am in hopes that the state can soon be in position to give some aid or inducement to encourage farm and home owners along this line so that every farm will at least have its windbreak and shelterbelt, and at least a few shade and fruit trees for their use and comfort.

While I was walking through one of the largest parks in the city of Berlin, planted in the days of Frederick the Great, I was impressed with the fact that out of this park, millions of feet of valuable lumber could be taken today and still have a wonderful park. I was also interested to learn of the forethought and foresight of the German government in the conservation of their forests. No land owner in Germany can cut trees even on his own land without permission from the proper official, and then he simultaneously plants back an equal number of trees and takes care of them. The varieties have been well selected so that in addition to providing shade and fuel, these trees as they mature become valuable for building purposes and otherwise. Many of our American forests are over stocked with young evergreens of different varieties, millions are cut out each year for Christmas trees, and they certainly add greatly to the Christmas spirit; but I am wondering if thousands of young evergreens are not needlessly slaughtered that could be transplanted to the thousands of farms in South Dakota which have no trees whatsoever, and certainly an evergreen or two on each school ground would add greatly to the appearance. Many of our bare hillsides in South Dakota, especially adjoining our towns and cities, could be beautifully dressed up with the surplus evergreens from the Black Hills; when it comes to a permanent windbreak, there is no tree that is as valuable and durable for that purpose as Black Hills' pine or spruce, and in time become valuable for lumber and building material.

While many of our South Dakota homes, both rural and city can be converted into veritable parks, owing to their advantageous locations. This is not so much to be desired as a general uniform beautifying of the state with well



planted home grounds, having an assortment of both shade, fruit and ornamental trees that will be "useful as well as ornamental". Boys and girls that come from such homes will learn to appreciate the artistic and fine things, which will reflect in their school work and in their future lives as valuable citizens.

Many of our city school grounds over the state are sufficiently large so that some part can be utilized as a beauty spot. In many places school grounds and city parks can be combined to the advantage of both. I have seen many beautiful grounds and parks in many parts of our country, and I have also visited and marveled at the beauty of many formal and informal grounds and parks in foreign countries, where there are many trees and plantings not suited to our state; but we have here in South Dakota a multitude of hardy and native trees and plants that makes it possible for every home to be well supplied with shade, fruit and flowers; and for every school ground to have its artistic beauty spot where there is a soft lawn, tall graceful shade trees and well arranged shrubs and flowers; with these will come our many song-bird friends and add their bit to give us cheer and encouragement.

The objective of Home and School ground Architecture should therefore be to help make every home ground as cozy, convenient and beautiful as possible, and every school ground so attractive and beautiful that it may serve our boys and girls as a guiding star to that which is beautiful and noble, and encourage them to seek the lofty, worth while, and finer things in life.

NOTES BY F. X. WALLNER

In company with Mr. Max Tischner of Huron, we made a thorough inspection of the Hollandale garden district. Potatoes being replanted on early onion and cabbage ground. We saw one acre of early cabbage and it was replanted. Five acres of early onions escaped the winds between the lake and a grove. The hedges have been killed by the fine soil drifting two to four feet between. Ninety-seven per cent of the first seeding went out; about the same of the second seeding. The third seeding was up just fit for its first wheelhoeing. The other two seedings coming up between and all over. The celery growers did not suffer so much as it was just going out into the field. Carrots will be late, also cabbage. Potatoes looking good here also all along the route. They talk of 10c potatoes and \$10.00 onions next fall. Trees on the 200 mile course are suffering from the drought. Even out in the swamp on an island the pines are turning yellow; only the spruce seem to hold on. Ash, elm, and box elder are the old reliable.

CULINARY QUALITY IN MINNESOTA VARIETIES OF APPLES*

By Alice M Child, Division of Home Economics, and W. G. Brierley, Division of Horticulture, Minnesota Agricultural Experiment Station, St. Paul.

Old and new varieties of apples, suitable for Minnesota conditions, are being studied by the Horticulture Division at the University of Minnesota Fruit Breeding Farm. Questions come from fruit breeders, growers, and consumers as to the qualities of these apples. It seemed desirable to determine the baking, coddling, and sauce-making values of the available varieties of apples in 1933.

Experimentation

Forty-two varieties of apples, which had been stored at a temperature of 34° F. (1.1° C.) were cooked by each of the following methods: (1) Baked (with no sugar); (2) Coddled (cooked in a sugar syrup); and (3) Sauce (with a small quantity of sugar).

After preliminary work on cooking apples experimentally, the following procedure was followed:

Baked Apples. The washed apple was cored with a five-eighths metal corer, placed in a six-inch pottery casserole and one-fourth cup of water added. A seven-inch thermometer was placed through the apple into the center of the fleshy part. The apple was baked at a temperature of 232° C. until the thermometer within the apple registered 85° C.

Coddled Apples. Syrup for coddling the apple was made in quantity by placing three parts of water to one part of sugar in a saucepan and brought to the boiling point. The specific gravity of the syrup was 1.15 B.

Apples were prepared for coddling by slicing one-fourth inch across the apple. One hundred grams of slices were placed in two cups of boiling syrup in a saucepan, covered and allowed to cook for fifteen minutes. The coddled slices were then placed on a plate, without syrup, and judged.

Apple Sauce. One pound of washed apples were sliced one-fourth inch thick and dropped into water until ready to use. One-fourth cup of water was placed in a covered saucepan and heated to boiling. The drained slices were added and were cooked for ten minutes. The cooked apples were forced through a potato ricer, one tablespoonful of sugar added for each cup of pulp and the sauce heated for about three minutes or until the sugar was dissolved.

Judging

The cooked products were rated by the same judges, according to definite standards.

Standard for Bake Apple

Shape: original shape fairly well retained.
Color: outside and inside color, attractive.
Flavor: a distinctive apple flavor.
Texture: tender, fine grain.
Juiciness: juicy, not too juicy.
Skin: tender with desirable flavor.

Standard for Apple Sauce (1).....

Consistency: slightly rounded mass when placed in a dish.
Color: typical, uniform bright color throughout.
Finish: fine grained and smooth, granular but not lumpy, pulp evenly divided.
Absence of defects: practically free from defects.
Flavor: characteristic apple flavor prominent and distinct.

Judges' Scores

Table I gives the average total scores of three samples of the varieties of apples tested. For a perfect product for apple sauce the score is 100; for baked apple, 48; and for coddled apple, 44 as indicated on grading sheets.

Table I—Average Total Scores of Apples Used as Sauce, Baked or Coddled of Three samples

*Published with the approval of the Director as Paper No. 305 of the Journal Series of the Minnesota Agricultural Experiment Station.

Note.—Enameled sauce pans were used for cooking and a mechanical slicer for slicing.

	Sauce	Baked	Coddled
1. Anisim	77.1	26.6	27.1
2. Ben Davis	83.8	27.6	29.3
3. Black Ben	88.8	29.6	31.8
4. Boiken	78.8	35.3	34.1
5. Colorado Orange	90.2	28.7	35.2
6. Cortland	84.4	31.3	30.9
7. Fameuse	72.2	24.0	29.9
8. Folwell	83.7	36.0	32.1
9. Golden Russet	52.8	16.6	21.6
10. Haralson	92.0	31.8	35.5
11. Hawkeye	90.1	38.8	31.1
12. Jewel Winter	89.8	36.3	34.2
13. Jonathan	90.9	29.3	35.0
14. Judson	86.4	28.6	36.1
15. King David	85.1	34.1	39.3
16. Malinda	35.3	18.5	19.3
17. Maud	64.4	24.3	33.0
18. McIntosh	77.3	25.8	26.7
19. Milwaukee	90.7	36.5	30.7
20. Minnehaha	73.1	27.0	29.2
21. Minn. No. 488.....	92.4	37.9	27.7
22. Minn. No. 643.....	88.4	34.9	34.0
23. Minn. No. 658.....	88.5	34.0	33.8

24. Minn. No. 790.....	82.3	23.9	29.0
25. Minn. No. 876.....	91.7	35.6	36.5
26. Minn. No. 995.....	97.2	37.3	34.5
27. Minn. No. 1007.....	91.9	32.2	30.9
28. Northwestern	89.9	30.5	33.1
29. Onondaga	88.2	31.1	34.9
30. Paragon	88.3	29.2	30.2
31. Patten	85.4	33.2	31.8
32. Perkins	85.3	23.2	30.1
33. Red Wing	87.2	32.6
34. Salome	84.7	26.3	33.2
35. Stewart Seedling	62.7	27.2	24.9
36. Sugar Loaf	76.1	22.0	24.5
37. University	88.5	33.2	37.0
38. Wealthy	97.4	30.8	31.3
39. Wedge	83.3	29.9	32.9
40. Windsor Chief	79.3	22.2	27.2
41. Winesap	85.1	24.8	24.3
42. Wolf River	92.0	29.5	29.0

(1) Tentative standards for grades of canned apple sauce, United States Department of Agricultural Economics, December 15, 1932. Mimeographed.

Score Card for Apple Sauce²

	Standard	Sample No.—
Consistency	20
Color	20
Finish	20
Absence of Defects	20
Flavor	20
Total Score	100	

Coddled Apple Grading Chart. A similar grading sheet for coddled apples was used.

Summary

According to total scores, apples were rated as follows:

For Apple Sauce

Excellent: Wealthy, Minn. No. 995.
Very Good: Colorado Orange, Haralson, Hawkeye, Jewel, Winter, Jonathan, Milwaukee, Minn. No. 488, Minn. No. 876, Minn. No. 1007, Northwestern, Wolf River.
Good: Black Ben, Judson, Minn. No. 643, Minn. No. 658, Onondaga, Paragon, Red Wing, University.
Fair: Ben Davis, Cortland, Folwell, King David, Minn. No. 790, Patten, Perkins, Salome, Wedge, Winesap.
Poor: Anisim, Boiken, Fameuse, Maud, McIntosh, Minnehaha, Stewart Seedling, Sugar Loaf, Windsor Chief.
Very Poor: Golden Russet, Malinda.

For Baking

Very Good: Boiken, Folwell, Hawkeye, Jewel Winter, Milwaukee, Minn. No. 488, Minn. No. 643, Minn. No. 876, Minn. No. 995.
Good: Black Ben, Colorado Orange, Cortland, Haralson, Jonathan, Judson, King David,



Minn. No. 658, Minn. No. 1007, Northwestern Greening, Onondaga, Paragon, Patten, University, Wealthy, Wedge, Wolf River.

Fair: Anisim, Ben Davis, McIntosh, Minnehaha, Salome, Stewart Seedling.

Poor: Fameuse, Maud, Minn. No. 790, Perkins, Sugar Loaf, Windsor Chief Winesap.

Very Poor: Golden Russet, Malinda.

For Coddling or Cooking in Sugar Syrup

Very Good: Colorado Orange, Haralson, Jonathan, Judson, King David, Minn. No. 876, University.

Good: Ben Davis, Black Ben, Boiken, Cortland, Fameuse, Folwell, Hawkeye, Jewel Winter, Maud, Milwaukee, Minnehaha, Minn. No. 643, Minn. No. 658, Minn. No. 790, Minn. No. 995, Minn. No. 1007, Northwestern Greening, Onondaga, Paragon, Patten, Perkins, Red Wing, Salome, Wealthy, Wedge, Wolf River.

Fair: Anisim, McIntosh, Minn. No. 488, Windsor Chief.

Poor: Golden Russet, Malinda, Stewart Seedling, Sugar Loaf, Winesap.

Dessert Rating

Rating usually given to apples for dessert or eating quality.

Excellent: McIntosh.

Very Good: Cortland, Fameuse, Jonathan, Minnehaha, Minn. No. 1007, Wealthy.

Good: Anisim, Boiken, Folwell, Golden Russet, Haralson, King David, Malinda, Maud, Minn. No. 448, Minn. No. 643, Minn. No. 790, Minn. No. 876, Northwestern Greening, Paragon, Perkins, Salome, Stewart Seedling, Sugar Loaf, Wedge, Winesap.

Fair: Ben Davis, Black Ben, Colorado Orange, Hawkeye, Jewel Winter, Minn. No. 658, Patten, University, Windsor Chief.

Poor: Hiberna, Judson, Milwaukee, Minn. No. 955, Onondaga, Red Wing, Wolf River.

From these ratings it is shown that all apples are not equally good for all methods of cooking and that the culinary qualities of apples are not always the same as the usual dessert rating. In other words, the edible quality of an apple is not a reliable criterion for its cooking quality.

The summer of 1933 was unfavorable for the proper development of quality in many of the varieties of apples studied. It is hoped that further studies in subsequent seasons may change the rating of some of these varieties.

The authors are greatly indebted to J. D. Winter, E. Angelo, Mabel Rogers and Elizabeth Sutherland for judging and to Lucy Laughlin, Carol Kessler, Muriel White, Helen Bjerke and

Evelyn Sell for the experimental work carried on.—Minnesota Horticulturist.

(2) Ibid.

NORTH DAKOTA NEWS LETTER

(Continued from page 102)

tree thirty feet high, in order to have all its roots watered would have to have an area watered which would be 60 feet in diameter. Therefore, one must not expect too much from a few gallons of water placed around the base of the trunk.

Sweet peas have done so poorly this year that quite a number of letters ask the reason. Sweet peas are cool weather loving plants and the absence of that kind of weather is militated against good blossoms. Quite likely some of those which produced nothing before the middle of August will give a good account of themselves from then until frost.

Mr. Moore of Carrington recently sent in a bunch of leaves and a cherry pit as evidence that there is a real cherry tree alive and bearing near there. I hope to be able to see this tree in fruit another season.

Professor O. A. Stevens of the Agricultural College who is something of a seed expert has the following to say about killing out of dandelions: "There does not seem to be any entirely satisfactory method of removing dandelions. If they are cut about two inches below the surface that should suffice to kill them. Various other methods have been tried. We know of one party who was well satisfied with the method of dropping a few drops of gasoline from an oil can in the center of the top of the plant. Gasoline flows very easily, however, and too much will kill the grass around it. Another person used concentrated sulphuric acid, simply dipping an ice pick into the acid and then inserting it into the top of the plant. The acid, however, is rather dangerous material to use as it burns clothing or any other material with which it comes in contact."

According to the Minnesota Horticulture, the Haralson apples on almost all farms made more money for the growers than any other variety in the state.

SNAP BUY FOR SOMEONE

1200 Black Hills Spruce, 6 to 30 inches, about 60% blue; 25 select Blue Cedars, 2½ to 4 feet; 25 Golden Tipped Junipers. All stock transplanted two years ago. Also have Pine, Spruce and Juniper seed.

J. V. VALLENTINE
Custer, S. D.