

dry weather. It does not penetrate to the roots, but merely forms a hard surface. It also causes the roots to come upwards, where they become scorched, and the plant is injured instead of helped. Frequent stirring of the surface soil is far and away ahead of watering to help the plants to withstand drought. This may be accomplished by cultivating, hoeing, raking, or, in case of potatoes, harrowing. Potatoes should be harrowed till they are six inches high. Care should be taken to hill the potatoes up well, so that none will be sun-burned or frosted.

Sask.

BRENDA E. NEVILLE.

Gardens and Gardening

In the columns following some interesting and instructive letters are published in answer to our request for descriptions of farm gardens and methods of growing the ordinary garden vegetables, fruit and flowers. There are a good many good gardens on the farms of Western Canada when one comes to find them out. The writers of the articles that follow have had experiences ranging from one to twenty-five years in gardening on the prairies and many suggestions are offered that should be of value to those who have made up their minds to have a garden, but have little knowledge of gardening, as well as to those who have tried to raise such fruits, vegetables and flowers as may be grown in our climate, but have been only partially successful. The contribution of Brenda E. Neville, Sask., has been taken as the best received, and that of R. B. McNeil, Sask., for second.

The question asked in this week's issue is one of general interest being on the subject of hail insurance. The opinion of readers is invited. The question appears as usual at the head of the farm department.

Description of Our Farm Garden

EDITOR FARMER'S ADVOCATE:

Our farm garden lies to the east of the farm house and buildings. It has a southeastern slope, and at the top of the hill the soil is very dry and barren. Almost all the garden is sandy. The soil grows richer as the bottom of the slope is approached. At the northeast corner is a spot of rather heavy clay land. Along the north, west and east sides are planted shelters of hardy trees, such as native maples, white ash, native, Russian, and golden willows, cottonwoods, and Russian poplars. The maples and ash were grown from seed. The others from small cuttings.

We found that the top of the hill, which is almost worthless for vegetables, will produce trees. Willows and poplars both thrive there. The trees hold the soil, and also catch snow, which in spring moistens the rest of the garden. They also help to shelter the more tender garden stuff from severe western winds and hail storms.

The garden is laid out in strips running north and south. That is, rows of trees and fruit bushes are planted at even distances, leaving strips that may be plowed and used for vegetables. On the east, next to a hedge of willows and maples, are two rows of Johnston's St. Martin rhubarb. The plants are set three feet apart each way, and four feet from the hedge. It would have been better had they been out six feet, as the trees are nearly twenty feet high now, and take the moisture from the ground. Next to the rhubarb is a row of red raspberries. These grow rapidly, and fruit will almost every year, and are never laid down and covered. They are well protected by snow in winter, and the soil was heavily manured before the plants were first set out. The next row of bushes is one of red currants. Between the raspberries and red currants the ground is filled with strawberries. They fruit fairly well, and need little protection if heavily covered with snow. Another hedge of maples west of the currants practically divides the garden into two parts. The part already described has been too much crowded with trees at the ends, so that though it could be plowed when the trees and bushes were small, now it is very hard to take even a scuffer in.

From here to the west side the space is evenly divided by three rows of fruit bushes; one of Houghton gooseberries, one of red currants, and one of black currants. Here and there in the rows a few trees are planted. Apple trees are being established, and we are trying black raspberries and cherries, also the curious strawberry-raspberry. In the spaces between the rows of bushes sufficient vegetables of all sorts are grown to supply a family of six, and after the family is supplied we have several bags of beets, carrots, turnips, cabbages, etc., for sale. We always have far more currants than we can use ourselves, also gooseberries. Radishes, lettuce, cress, spinach, etc., if not sold or eaten when tender, are pulled and fed to the hens.

The garden is one hundred yards long and about fifty yards wide. Asparagus and rhubarb plants grow between the fruit bushes, in the same rows, so that they can be cared for at the same time. One

strip of ground is reserved for a nursery, in which to propagate trees and shrubs for use in a wood plot, also in plots of shrubbery that we are starting to plant on the large lawn. This lawn has never been plowed, as it was a pet idea to preserve a little of the natural prairie, wild flowers and all.

Near the house are flowers in abundance. Almost every hardy annual listed in ordinary catalogues has been tried. Most do well, but some are favorites, poppies, nasturtium, mignonette, marigolds, eschscholtzias, sweet sultans, cornflowers, chrysanthemums, bertonias, gillia, whitlavia, godetia, snapdragons, and a host of others find a place. Sweet peas are not forgotten.

Flowering shrubs, namely, lilacs, caraganas, bush honeysuckles, and spireas show up well. The wild choke cherry is a thing of beauty and fragrance at flowering time. Perennial flowers fill all odd corners. We have larkspurs, large and small, in all shades of blues, from white to very dark. In vivid contrast the scarlet lychnis shines out like fire. Columbines in indescribable variety of shades and colors abound. Pinks and Sweet Williams are there and pansies and violets too. Iceland poppies do extra well. Several kinds of Iris give us our earliest and loveliest bouquets for the table; and last, but not least, is a bed of hardy roses. Not last either. We must not forget the grand peonies. Native shrubs are mixed with others on the grounds, and wild flowers are encouraged. Space forbids further detail, but enough has been said to prove the possibility and feasibility of laying out and maintaining a health-giving, pleasure-giving, and altogether profitable farm garden.

Sask.

BRENDA E. NEVILLE.



THE GARDEN REFERRED TO BY MRS COOPER IN HER LETTER IN THIS ISSUE.

Laying Out a Garden

EDITOR FARMER'S ADVOCATE:

As I have no photo of our garden I will try to describe it as it is to be this summer. Our house faces south on a lawn about thirty feet wide, and south of the lawn is a row of lilacs which separates it from the vegetable garden. The area of the latter is about quarter of an acre. From the north boundary of the lawn to the south boundary of the garden on the west side is a hedge of three rows of maples which serve as a good shelter and windbreak for the small fruits and vegetables. On the inside of this windbreak is a row of black currant bushes, next is a row of gooseberries, then a row of tomatoes, the plants of which have been raised in the house or hotbed till warm enough to transplant, then comes a couple of rows of squaw corn which serves as a shelter for the row of tomatoes, as the wind often plays havoc with large tomato plants. Then one after another I put in rows of the following, always trying to have the seed to fill out the row right to the bottom for appearance sake, if nothing else: red carrots, beets, onions, lettuce and radish, sage, peas, turnips and cabbage. The cabbage I put in a straight row except that I put three or four seeds to a place, then thin out to one plant. I think cabbage do better this way than if they are transplanted.

I also put in a few rows of early potatoes which bring me over pretty well to the east side of my field, down which is two rows of red and white currants, then a row or two of raspberries, then four rows of strawberries and if you ever happen to be up our way this summer I hope you can be treated to strawberries and cream. I must not forget to say that for flowers we have several rose bushes and lilacs between the lawn and garden and three flower beds on the lawn, or will have when finished. Would advise all who are beginners to leave the rows of vegetables in the garden far enough apart for a horse and scuffer to clear the rows. It is so much better than hoeing.

Sask.

R. B. MCNEIL.

Some Suggestions on the Garden and Gardening

EDITOR FARMER'S ADVOCATE:

Ever since I began living on a farm I have taken an interest in gardening and found it a great pleasure to be able to grow fruits, flowers and vegetables. The first thing required in this country when one starts gardening is a good shelter belt, but the trees should not be planted too close to the garden or they will take too much moisture from the soil in the dry weather we so often have in summer.

The land for fruit trees and vegetables should be well manured with rotted hen manure, if possible, made very fine and free from lumps. It is best to spread the manure over the land before it is ploughed. Then by plowing it well under it will not be at the surface when the seed is being put in.

I always use a graden seeder, a Planet Jr., to sow the vegetable seeds. A seeder does the work better than can be done by hand, one is sure of getting the seeds down into the moist soil, with care they sow the seeds evenly, and you can put in a large garden in a short time, without so much backaching work. For the drill to work well the soil should be worked up very fine, and if a little light, so much the better. I do not like a heavy clay soil. The light land is more convenient to work in and I find the vegetables do better, and it is not so hard to keep the weeds down.

All fruits, trees and vegetables should be planted in as long rows as possible, a sufficient distance apart to allow you to work between the rows, so that you

wood is cut out, unless, of course, wood should be damaged by disease or some other cause, in which case better removed.

These directions as to pruning theory that plants are growing. Sometimes currants are grown on a small tree. This plan is entirely wrong. Our heavy winds may stem and the plant is gone. When the snow is retained about better during winter, which gives roots, and also assists in retaining and summer.

DAIRY

A New Production Record

The Chief of the Dairy Husbandry in the University of Illinois reports a better record for Jerseys made by this cow produced in one year nearly nine tons of milk, and 1,100 and has broken all Jersey records in the world has a higher record taking her average production stands absolutely without an equal.

The 15,253 pounds of milk produced during the year contained 14.6 pounds of total milk solids. The perfectly enormous amount of an efficient dairy cow in one year the work done by the average cow is at the age of two years, weigh close to 100 pounds. The of growth he has actually produced carcass, only one-fifth, or 200 edible dry matter. This means produced as much edible solids, twenty-five steers, thus certain good margin, the world's record breed.

Cottage Cheese from

A very acceptable quality of cottage cheese can be made from buttermilk. The curd can be separated by heating up to about 120 degrees for an hour through a cloth fine enough to bag full of curd is then hung up that most of the whey may drain morning the fine buttermilk, skimmilk or whole milk until consistency similar to that of the cream. The product makes a cottage cheese that can be sold as buttermilk cottage cheese at five to ten cents per pound.

The yield should be from per one hundred pounds of greater yield per hundred pounds be obtained by mixing about one milk with three-fourths buttermilk to stand over night at a temperature of 60 degrees; in the morning heat to ring for one hour, then stir the heat it again to 120 degrees. This mixture is then dipped into a bag of muslin to drain anywhere from twelve to twenty-four hours, or until it gets the desired consistency. The curd is then mixed with the desired consistency mixture and the yield will be about 100 pounds of buttermilk cottage cheese per 100 pounds of milk.

Considerable care must be taken of these products to prevent the curd so that it is tough and directions for getting the right curd cannot be given. A person from his own trials the proper amount of cooking needed to be acceptable to the trade.—Prof. Hoard's Dairyman.

The Cause of Fishy Flavor

The U. S. Bureau of Animal Industry studying the cause of fishy flavor recently reported its findings.

Of the undesirable flavors in milk, fishy flavors may be classed as the most troublesome. They range from a slight taint to a strong flavor of oil to a strong flavor of oil. The latter case the inferior quality of the milk is evident even to the indifferent flavor, which is one of the most common, gives to butter a peculiar mackerel or salmon. Butter is as fishy which is merely oily, but the typical flavor of fishy butter is for any other.

While many things connected with the dairy industry have been ascribed to the cause of fishy flavor, investigators are of the opinion that it is not produced by the action of bacteria, but so far as can be ascertained is a particular substance produced by one of the combinations of the

will have room to do the hoeing and keep the land cultivated. Never waste time making raised beds to grow vegetables in this country, as they are best grown on the level. Get the earliest varieties in all garden seeds and plants, as our growing season is so short the late varieties do not get time to mature.

The first seeds I sow in the early spring are: radish lettuce, onions, beets, parsnip and carrots. Later on when the chance of spring frost is over I put in beans, squash, cucumbers, citrons, cabbage, cauliflower and tomatoes last of all.

We have half an acre of land for our fruits, flowers and vegetables, and find it the best paying land on the farm, even when wheat is over \$1.00 per bushel. In our fruit garden we grow all kinds of small fruits, such as red and white raspberries, currants, red, white and black, gooseberries and plums. We also have a good many apple trees, that are doing well. We picked about five pails of apples last year.

Man.

MRS. A. COOPER.

Pruning Currant Bushes

EDITOR FARMER'S ADVOCATE:

Kindly explain the pruning of currant bushes. I have a small plantation, which I believe is suffering from lack of proper pruning.

Man.

MRS. G. H. M.

In D. W. Buchanan's book, "Horticulture in the North," the following comments are made on the pruning of currant bushes: "Toward the close of the growing season or early in the spring is the best time to prune. Many varieties of currants send up a number of new shoots each year. The pruning should consist of removing all but three or four of the strongest of these new shoots each year. At the same time some of the oldest branches should be cut out close to the ground. By following this plan the bush will be entirely renewed every few years, always remembering that three and four-year-old wood usually will produce the most fruit. The plants, therefore, should be a few years old before the old