

# How to Plan A Home Garden

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**Raising a Few Vegetables One of the Best Antidotes For the Present High Cost of Living**  
**Almost Half of the Family Living During the Summer and Autumn Months May Thus Be Secured**

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A GOOD vegetable garden is one of the best antidotes for the high cost of living. At the Illinois experiment station it was found that the net profits per year from a half acre vegetable garden were nearly \$75. At the present high prices and without counting the work done in the garden by the members of the family the profits will be considerably greater than this. A properly arranged garden can be counted on to furnish nearly half the family's



AN EMERGENCY HOTBED.

ing during the summer months. It will also add a variety to the menu that is so small item. Vegetables purchased at the store are never as fresh and never taste as good as those gathered from the garden. There are difficulties in the way of a successful vegetable garden, of course. On the farm the men folks are often too busy to "monkey" with the garden. In town space for a garden cannot always be obtained, and it is sometimes difficult to get the garden plowed and cultivated. A little planning will overcome all obstacles, however, and the results fully justify any trouble that may be incurred.

## Planning the Garden.

Success in home gardening depends to a considerable extent on having everything planned out beforehand. It is a good plan to make a rough map of the garden. Make lines where the rows are to be and write on each row the name of the vegetable to be grown. If horse cultivation is to be used the rows will need to be about three feet apart. Where the garden is to be cultivated by hand most garden crops can be planted as close as four inches to eighteen inches apart. The garden should be planned for horse cultivation wherever possible, as the extra space used will be more than counterbalanced by the saving in labor. In the case of town gardens it is often possible for several neighbors to make arrangements for a man with a horse and cultivator one afternoon out of each week. In this way the cost for horse work will be insignificant, and the garden will be kept in shape with a minimum of hand work. The same plan should be followed in getting the gardens planned and measured.

In planning the garden early crops should often be followed by late ones, thus getting double use of the land. The plan shows a specimen plan for a garden 75 by 125 feet. The same general principles will apply for a garden of any size:

	Hotbed.	Cold frame.	Rhubarb.
SPINACH, CARROTS, BEANS, PEAS, CABBAGE, ETC.			
PEAR, BEANS AND CABBAGE.			
Lettsuce and radishes can be followed by late peas.			
EARLY POTATOES AND CORN.			
Rows three and a half feet apart.			
Can be followed by late cabbage or turnips.			
MELONS, CUCUMBERS, SQUASHES, TOMATOES, ETC.			
Rows four feet apart.			

do not patronize a cheap seedsmen. A few cents saved in the price of seed will be more than counteracted by the loss of value of the crop. The highly advertised novelties are usually more as curios than for anything else. If you can't resist the temptation to try one or two of these, put them in some obscure corner of the garden where their failure will be noticeable. The old reliable varieties are always the best in the long run. It is well to plant a number of different varieties in order to give variety and succession. This plan will give a comparison of varieties, which will form a basis for seed selection next year.

## Preparing the Ground.

An earlier and thriftier garden can be secured if the land was plowed in the fall. It is also better to have it

well rotted manure can be added to the plowing in the spring and a well. Where the ground was plowed in the fall the manure should be applied before plowing in the spring. There is no fertilizer so good for the garden as well rotted stable manure. The average lively stable manure should be avoided, however, as it is usually coarse and strawy and full of weed seeds. Liberal quantities should be used, as it is almost impossible to make the garden too rich.

Where manure cannot be obtained a commercial fertilizer with a guaranteed analysis of 10 per cent potash, 8 per cent phosphoric acid and 3 per cent nitrogen may be used instead. One thousand pounds of this mixture to the acre will be about right. It can be scattered over the garden after plowing and harrowed in, or the plan of hill fertilization may be followed. In this plan the fertilizer is mixed with the dirt in the bottom of each hill or furrow. Where this is done it would be well to add a little nitrate of soda for such plants as asparagus, rhubarb and lettuce, as nitrogen promotes leaf growth.

The garden should not be worked in the spring until the ground is thoroughly dry, as otherwise it will be cloddy all summer. The plowing, disking and harrowing should be thoroughly done, so that by planting time the garden is in as fine a condition as it can be made. This thorough preparation will help warm the soil, and a warm soil means an early garden. If the soil of the garden is heavy and not naturally well drained it should be thoroughly tilled.

## The Hotbed and Cold Frame.

With many vegetables it is a great advantage to start the seed in a hotbed early in spring. Hotbeds are of many kinds. The simplest is a wooden frame of any convenient size with the back side about eight inches higher than the front. This can be covered with a storm window or even with a frame covered muslin. The heat is usually furnished by fermenting horse manure. This should contain enough straw so that it will be rather springy, but not enough so that it will be too loose. The manure should be moistened with warm water and piled up in a conical pile after being mixed thoroughly. After it has started to ferment it should be mixed again. After fermentation starts the second time the manure can be spread out on the south side of some building in a pile about two feet thick and two or three feet larger each way than the hotbed frame. The frame should then be set on the manure and about six inches of dirt placed in it.

A necessary adjunct to the hotbed is the cold frame. This is made the same as the hotbed, with the exception that no manure is used and no heat provided. Plants grown in the hotbed are very tender and are likely to perish if removed immediately to the garden; consequently the plan of "hardening off" is followed. After the plants get a good start they are accustomed to outside conditions by leaving the cover up a longer time each day. After a few days of this treatment they are transplanted to the cold frame. This protects them to some extent, especially at night, while they are gradually hardened by leaving the cover off as much as possible.

## Planting.

As soon as the garden is in shape for planting seeds of the hardier vegetables should be put in. In this class will come lettuce, radishes and early potatoes. A little later the early cabbage plants can be set out and the onion seeds planted. Then come the early peas and beans, carrots, parsnips, beets and other like crops. Crops that are sensitive to frost, such as melons, cucumbers, squashes, tomatoes and eggplants, should not be planted until all danger of frost is past. Late potatoes and sweet corn should be planted about the same time. In order to extend the season of crops like peas and sweet corn fresh plantings should be made at intervals of about a week and a half up to the latter part of June. To secure early vegetables early varieties must be used for the first plantings, but the bulk of the planting had better be done with late varieties, as they are better yielders and are usually of better quality.

In planting the garden a string and a couple of stakes should be used to insure straight rows. The aim should be to put the seeds in just deep enough to get them in contact with moist soil. Small seeds, especially should not be planted deeply. Potatoes, which are not really seeds, should be planted deeply enough to make hillling unnecessary. After the seeds are planted the soil above the rows should be compacted. A light garden roller is handy for this purpose. A loose mulch should be provided to prevent evaporation by going over the rows with a rake or by giving the garden a light harrow.

## TROUBLESOME GARDEN PESTS

**How to Rid the Home Garden of These Unwelcome Visitors.**

One of the most troublesome garden insects is the striped cucumber beetle, which so often plays havoc with cucumbers, melons and squashes. Probably the most effective way of getting rid of beetles in the home garden is by the use of frames covered with netting. Light box number is all right for these frames. They should be made about eight inches square and four inches high. The top should be covered with screen or mosquito netting.

These frames should be placed over the plants as soon as they begin to appear through the ground and left until the plants have outgrown them. Then they can be put away and kept for the next year.

A simpler and cheaper remedy, but one that is more work, is to go over the vines in the morning while the dew is on and tap each one gently to knock the beetles off on the ground. Then with a common oil can filled with kerosene apply a drop of oil to each beetle. Be very careful not to let any of the oil touch the plants. By going over the patch two or three times most of the beetles can be killed.

Cabbage worms are very troublesome at times. The paris green-bordeaux mixture is the standard remedy for these as well as all other biting insects. To make it dissolve one pound of copper sulphate in a wooden pail. Slake one and one-half pounds of fresh lime, preferably with hot water. Add enough water to the copper sulphate solution to make five gallons and do the same to the lime. Now pour the two solutions together and stir well. Stir one ounce of paris green to a thick paste with a little cold water, add it to the bordeaux solution and stir well. This mixture is the standard remedy for both insects and fungous diseases. It should be applied with a hand spray pump.

There is sometimes difficulty in getting a liquid spray to stick to the smooth leaves of the cabbage. In that

## STORING VEGETABLES.

**How to Keep Them Fresh For Winter and Early Spring Use.**

The greatest share of garden vegetables are eaten fresh as they come in season, but some of them can be stored and kept for winter use. Green cucumbers can be packed in brine and kept indefinitely. Tomatoes, rhubarb and ground cherries can be canned.

For most vegetables a dry cellar, one that can be ventilated when necessary, is the ideal storage place. Cabbages can be hung from the ceiling by the roots or laid away in single layers on shelves. Another way to keep cabbages through the winter is to pack them in trenches with the heads up and cover with a layer of straw and two or three inches of dirt. Freezing will not hurt cabbages if



PUMPKIN WORTH STORING.

they are not subjected to alternate freezing and thawing. The disadvantage of this method is that none of the cabbages can be obtained for use until the ground thaws in the spring.

The best way to store root crops, such as carrots, parsnips, beets, salsify or rutabagas, is to pack them in sand. This keeps them fresh throughout the winter. Parsnips have a better flavor if they are frozen before being put in the cellar.

Potatoes may be piled in bins. They should be kept in a dark place to keep them from turning green or sprouting. They should be thoroughly dry before being put into the cellar. Potatoes can be stored in a pit out of doors, but they must be covered deeply with straw and dirt so they will not freeze.

Onions should be thoroughly dried as soon as they are pulled. Then they can be sacked up and stored in any dry place where there is no danger of freezing.

Squashes and pumpkins do not keep very well in storage. They should be laid on racks in a dry cellar. If they are put into the cellar without bruising they may be kept until the middle of the winter. The cellar should be ventilated occasionally by opening the windows for a few hours. This will also keep it from getting too warm.

## Early Potatoes.

A few extra early potatoes may be obtained by selecting some sound seed potatoes of a reliable variety, such as Early Ohio, laying them out on a shelf or bench where there is plenty of light and covering them with a thin layer of moist sand. This should be done ten days or two weeks before the soil will be fit for planting. By the time the soil in the garden is in shape the potatoes will have developed thirty sprouts four or five inches long. A shallow furrow should then be opened and the potatoes transferred to it, care



EXTRA EARLY POTATOES.

being taken not to injure the sprouts. Cover the potatoes just deep enough so that the sprouts will reach the surface of the ground. They will begin growing at once, and you will have the satisfaction of having new potatoes a week earlier than your neighbors.

## Celery Growing.

Celery should be started in the cold frame some time during the spring. It can follow some early crop, such as lettuce, radishes or early peas. The plants are usually set in trenches, although this is not absolutely necessary. They are set about six inches apart in rows three feet apart. Celery needs a rich soil and plenty of shallow cultivation. After the plants are well grown the stems should be drawn up tightly together and banked up with dirt in order to bleach the stalks and make them tender. This banking up should be done gradually, adding a little more dirt each time.

## EGGPLANTS.

**How to Prepare These Delicious Vegetables For Table.**

The eggplant is one of the most delicious vegetables that can be grown in the home garden. The plants should be started in the hotbed or in the house the same as tomato plants. The subsequent transplanting to the cold frame and finally to the garden outside should be the same as for tomatoes. They should not be set out in the garden until settled warm weather, as the plants are very tender. About three feet each way is the best distance for planting. The soil should be kept well stirred and free from weeds. The potato bug sometimes attacks the eggplants, often with fatal results to the young plants. The best remedy is the paris green-bordeaux mixture.

The domestic economy department of the Iowa State college gives the following recipes for cooking eggplants:

**Stuffed Eggplant.**—Cook eggplant fifteen minutes in boiling salted water. Cut a slice from the top with a spoon. Remove pulp, taking care not to work too close to the skin. Chop pulp and add one cup of soft, stale bread crumbs. Melt two tablespoonfuls of butter, add one tablespoonful of finely chopped onion and cook five minutes. Add this to the chopped pulp and bread, season with salt and pepper and if necessary moisten with a little water. Cook five minutes, cool slightly and add one beaten egg. Refill eggplant, cover with buttered bread crumbs and bake twenty-five minutes in a hot oven.

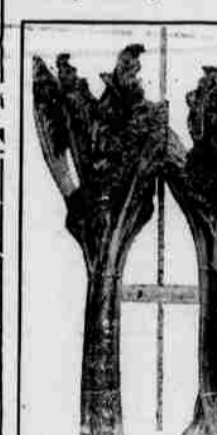
**Eggplant Fried in Butter.**—Cut the eggplant into slices one-quarter of an inch thick after the skin has been removed. Sprinkle the slices with salt, pile them one upon another upon the back of the dish. Place on them a plate holding a weight and let stand one hour to express the juice. Then dredge with flour or dip in egg and bread crumbs. Put a pan over the fire with enough butter to cover the bottom to the depth of half an inch when melted. When the butter is smoking hot put in the eggplant, fry it brown on both sides and serve hot.

**Fried Eggplant.**—Pare an eggplant, cut in one-fourth inch slices and soak overnight in salted water. Drain, let stand in cold water one-half hour; drain again and dry between towels. Sprinkle with salt and pepper, dip in batter or in flour, egg and crumbs and fry in deep fat.

**Eggplant Fried in Batter.**—Peel, slice and salt the eggplant as directed in the recipe for eggplant fried in butter. Have ready the frying kettle half full of hot fat. When ready to fry, dry slices of eggplant between towels, dip in batter and fry in the hot fat until brown. Drain them on brown paper and serve hot.

## Winter Rhubarb.

A good supply of winter rhubarb can be raised in the cellar. Dig up half a dozen or more good sized roots in the fall and leave them exposed where they will freeze until the middle of December. Then pack the roots in the cellar right side up. The roots should



RHUBARB GROWN IN CELLAR DURING WINTER.

be packed in moist sand or fine dirt. The darker the cellar the better. A fine crop of delicious rhubarb will be secured after the roots have become well thawed out, usually along in February.

## Cultivating the Garden.

On the farm horse cultivation can be used in the garden to a considerable extent if the rows are long enough. A one horse adjustable cultivator is the best implement for garden cultivation. For working up close to the rows and in gardens where horse cultivation is not practical the wheel hoe can be used. The garden should be cultivated often and well. The weeds should be kept down, as no garden vegetable can successfully compete with weeds. Appearance counts for a great deal too. A clean, well kept garden adds 100 per cent to the looks of a place, while one full of weeds detracts about as much.

Where a wheel hoe or horse cultivator is used the amount of hand labor will be reduced to a minimum. All that is necessary is to hoe out or pull the weeds in the rows. The root crops, such as beets and parsnips, should be sown rather thickly and thinned to four to eight inches apart in the row. This can be done with a narrow bladed hoe or by hand. Cultivation should be kept up until well along toward fall, taking care not to disturb the roots of such vegetables as are in bearing. After all the vegetables have been gathered in the fall all weeds and trash should be raked up and burned. This will destroy many weed seeds and insects.

## CANNING VEGETABLES.

**How to Treat Them So They Will Keep Their Freshness.**

The glass jars that are to be used for canning should be set in a boiler of cold water, placed on the stove and boiled for ten to fifteen minutes. This completely sterilizes them, destroying the bacteria that cause fermentation. The jars should be left in the boiling water until the moment they are to be used. The rings and covers should be sterilized in the same way.

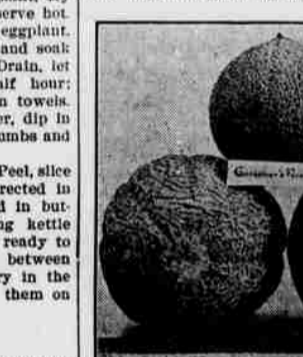
Rhubarb can be easily canned and kept for winter use, when it makes an acceptable substitute for expensive canned fruit. Rhubarb for canning should be cut when it is young and tender, washed well and cut into pieces about two inches long. Pack these pieces tightly into the jars and fill with cold water. After about ten minutes pour off the water and fill again, to overflowing this time. Seal the cans tightly and the rhubarb will keep until you are ready to use it.

When the tomatoes do well there is usually an abundance of fruit—much more than can be used while it is fresh. It takes care to can tomatoes so that they will keep, but with a little practice it can be done. The tomato should first be washed thoroughly and then boiled for about six minutes. After this preliminary treatment they should be peeled and sliced. Then put them in a kettle and heat slowly, stirring frequently. Boil for half an hour and then put into the jars and seal tightly.

These are about the only vegetables that are available for canning which are ground cherries, which make delicious preserves. If the family likes horseradish an extra amount of it can be prepared in the spring, when it is plentiful, and kept for use later in the season.

## Raising Early Melons.

Melons bought in the market never have the flavor of those grown in the home garden. Commercial growers select varieties because of their shipping qualities rather than for their flavor. Melons are not the easiest vege-



FINE HOME GROWN MUSKMELON.

table raised, but a little time and effort spent in getting a successful crop will be well repaid.

The best way to get early melons is to plant the seed in berry boxes in a hotbed or in the house about six weeks before the usual date for planting them outdoors. The soil should be rich and fine. About ten seeds should be planted in each box. After the plants are well up all but three of the strongest can be destroyed.

When the weather becomes warmer the boxes can be transferred to the cold frame and the plants gradually hardened. When all danger of frost is past and the soil outside has become warm the melon plants can be set out in the garden. Six feet apart each way is the best distance for muskmelons and eight or ten feet for watermelons. A fire shovelful of poultry manure mixed with the soil of each hill will greatly hasten the growth of the melons. In transplanting make a hole about the size of the berry box. Strip off the sides of the box carefully so as not to disturb the roots, place the cube of dirt in the hole and pack fresh dirt around it.

The future care will consist mainly of thorough cultivation and protection from striped beetles.

## Tomato Growing.

Tomatoes must be started in the hotbed or in the house early in March, especially in the northern states, if satisfactory results are expected. They should be transplanted to the cold frame about two weeks before they are set out in the garden in order to harden them. Frequent transplanting also makes the plants more stocky and develops the root system. As soon as danger of frost is past the plants may be set out in the garden. If early tomatoes are wanted the best plan is to pinch off all side shoots, leaving only the main stem. This should be tied to a strong stake four or five feet high to hold it erect. When trained in this way the plants can be set out in rows three and a half feet apart and about two feet apart in the row.

Another plan is to make a four sided rack about a foot square at the bottom by a foot and a half at the top. It should be about four feet high, with two or three slats on each side. One of these is placed over every hill and the vines trained up over it. They ripen much better when handled in this way than where they are allowed to spread out on the ground, and there is not nearly so much loss from rotting. Where this method is used the plants will have to be set out about three and a half feet apart each way.

In case there is danger of a frost just as the fruit is beginning to ripen a little straw may be put over the vines nights and removed during the day.