

Gardening on a Small Scale

W. H. Robertson, assistant horticulturist of the Department of Agriculture for the province of British Columbia, has just completed an article treating of gardening on a city lot. As the climate in British Columbia is quite similar to that of many sections in Washington and Oregon, the findings should prove of interest to our readers. The first installment of this article follows.

THE expenditure for vegetables for a family of five where all vegetables are purchased has been estimated at 35 cents per day, or \$126.75 per year. This sum represents from one-fifth to about one-eighth of the income of the average man. The greater part of these vegetables could be produced on spare land surrounding the home at an expense of but a few dollars for seed, tools, and fertilizer; and, besides, the vegetables grown would be fresher and more would be used than when purchased.

Because of the mild climate of the Coast and Island districts a good supply of fresh vegetables may be had at all times of the year, as is shown by the following table:

Month.	Vegetables.
January.....	Kale, parsnips, leeks, lettuce, parsley.
February.....	Kale, parsnips, leeks, lettuce, parsley.
March.....	Spinach, broccoli.
April.....	Radish, onions, rhubarb, broccoli.
May.....	Asparagus, peas.
June.....	Early cabbage, carrots, beets.
July.....	Early potatoes, parsnips, beans.
August.....	Tomatoes, cauliflower, onions, cucumbers, summer squash.
September.....	Cabbage, salsify, herbs.
October.....	Celery, Brussels sprouts, leeks, Winter squash.
November.....	Fall lettuce, early spinach.
December.....	Same as for January and February.

Besides the fresh vegetables which may be had through the Winter months, the gardener can have a large variety stored, including potatoes, beets, carrots, onions, celery, squash and turnips.

Preparation of the Ground.

Too much stress cannot be placed on the importance of preparing a good seed-bed. In the Fall, land intended for gardening purposes should be cleared of all rubbish and ploughed or spaded to a depth of not less than seven inches. This operation will leave the land rough, and, besides opening the soil to the effects of the weather and permitting it to absorb a maximum of rainfall, will aid in freeing it from injurious insects or other pests. No other operations are necessary until Spring, unless some fertilizer is to be applied; the kind, time, and amount to apply is taken up under "Fertilizers."

Even though the soil was well spaded in the Fall, the Winter rains will have packed it, so that another spading will be advisable in the Spring. Previous to this operation, all manures other than nitrate of soda should be applied, so that they will work well into the soil. Following this, the surface of the soil should be raked over with a hand-rake several times to rid the soil of any clods and to ensure a firm seed-bed. As the planting is not all done at once, the unplanted area should be hoed and hand-raked before planting, in order to kill all weeds which may have started and to hold the moisture which is necessary to start the seed growing when it is planted.

Fertilizers.

Undoubtedly, well-rotted stable manure is the best fertilizer for the garden. Besides the plant-food it contains, it has a great value in improving the physical condition of the soil. It lightens heavy soils and makes them earlier, while it has a binding action on light soils, which increases their capacity for retaining moisture and accelerates the liberation of plant-food. Where Win-

ter rains are common, it is best to apply manure in the early Spring and work it into soil immediately.

Commercial fertilizers are also valuable, especially where manure is not available, and also when used in conjunction with barnyard manure. Their main value lies in the amount of nitrogen, phosphoric acid, and potash they contain. These three elements may be purchased ready mixed as a complete fertilizer, or the elements may be purchased separately and applied. Potash and phosphatic manures should be applied during the Winter months; nitrate of soda, in which we find nitrogen in the most available form, should be applied to the growing crop, as it is easily washed out of the soil.

As a rule, crops grown for the leaf production, as spinach, cabbage, and lettuce, require a higher percentage of nitrogen than those grown for the root or tuber production, such as beets, carrots, potatoes, etc., which require a greater amount of potash and phosphoric acid. Since the vegetable garden is usually mixed as regards the fertilizer requirements, it is best to give a general dressing of fertilizer in the following proportions: Nitrate of soda, 10 lbs.; potash, 15 lbs.; phosphoric acid, 30 lbs. This applied to a garden 40x40 feet gives about 1 lb. to each 30 square feet, which should prove ample. The three need not be applied at once, as the best results come from applying them as mentioned previously.

The application of lime is also very beneficial to the soil, and when used should be applied during the Winter; 75 to 100 lbs. would be ample for a plot 40x40 feet.

In case the reader desires more information on the use of commercial fertilizers, he should secure Circular No. 28 from the Department of Agriculture.

Planting and Cultivation.

When planting, a garden-line is necessary in order to ensure straight rows. All the tools that will be necessary are a strong spade or shovel, hoe, and garden-rake. A trowel for transplanting work will also be found to be useful. Depth of planting seed will be found in the tables on this page. Transplanting should be done during the latter part of the day, and the plants are always set deeper than they stood in the seed-bed. When transplanting, be sure that the earth is well packed around the roots in order that root-action may start at once.

After the seedlings begin to show and after any transplanting is done, cultivation should be the rule. By keeping the ground thoroughly hoed, not only is moisture held in the soil, but the plant food in the soil is made available through the action of the air. On large garden-plots a wheel-hoe with planter attachment will be found to save time in planting and to decrease the cost of hoeing.

Raspberries	
Gooseberries	Currants
Rhubarb	Asparagus
Strawberries (old bed)	
Early Potatoes	
Radish	Lettuce Herbs
Peas	
Spinach	
Onions	
Carrots	
Beets	
Parsnips	
Turnips	
Beans	Sweet Corn
Cabbage	
Cauliflower	
Late Potatoes	
" "	
" "	
Strawberries (new bed)	

Plan for a Small Garden.

Garden-Plan.

The following plan is only a suggestion of the systematic way in which a piece of ground 40x40 feet

may be planted. In some cases the area that can be devoted to vegetable gardens may be larger or even smaller. Rotation should be practiced, so that by the time the early radish, spinach, peas, etc., are finished, their place would be taken by cucumbers, squash, tomatoes, etc., which have been started in a hot-bed, window-box, or secured from a greenhouse.

Points to be remembered in drawing up a plan are:

- (1) Make a measurement of your lot.
- (2) The planting table shown will give some idea of distances for planting.
- (3) Plant in straight lines to conserve space.
- (4) Keep the perennials (such as small fruits) together.
- (5) Plant early season vegetables together, so that when they are removed the same piece of ground may be planted to a late crop.

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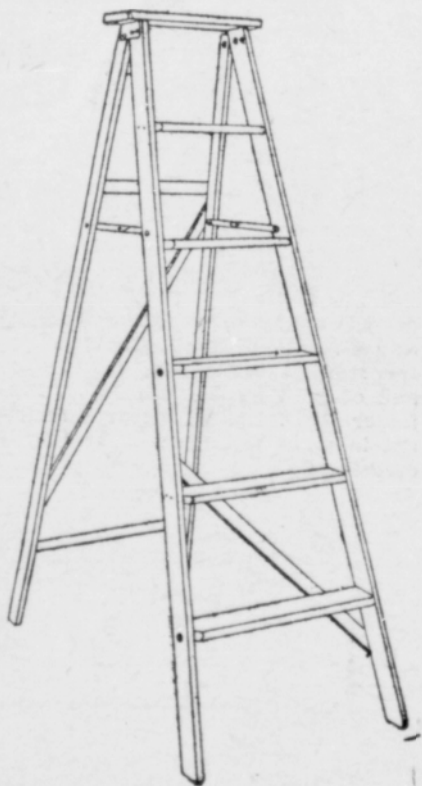
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