

*Chamber of Commerce*

**DULUTH GARDEN  
PRIMER**

Issued In Interest of Home Gardening  
by the  
Homecrofting Committee of  
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# Duluth Garden Primer

## DRAINAGE

The land must be so drained either by open ditches or by underdraining that no water will stand on or near its surface. The amount of water in the soil should be only that which is held there by capillary attraction, all that will drain away should be allowed to do so. It does not need to be drained so that the water will dry out immediately but so that what water comes on the land will be moving, however slowly. Absolutely stagnant water on or in the land is bad for ordinary garden crops.

## FERTILIZATION

Land must be fertilized to get the best results. The best fertilizer is well rotted cow or horse manure. If possible it should be procured in the Spring, turned over once or twice until it is done heating, the pile covered with two or three inches of earth, and allowed to stand until Fall. Covering with earth prevents its becoming a breeding place for flies.

The value of cow and horse manure lies not only in its fertilizing qualities, but also in its effect in loosening and mellowing the soil. Three or four inches of well rotted manure put on the garden each year is not too much. If such manure cannot be had various forms of commercial fertilizers are to be had.

## PREPARATION AND CULTIVATION OF THE SOIL

Where gardens contain clay soil such as is common in Duluth it should, if possible, be plowed or dug with a digging fork in the Fall, leaving it in large rough furrows or clods. After plowing or digging, three or four inches, if possible, of well rotted manure should be spread over it. The frost will break up the clods more or less and the manure sift in among them. In the Spring the surface should be raked smooth and fine. This will ensure a good seed bed and a surface that can be easily cultivated during the summer. If it is re-dug in the Spring, it will bring clay again to the surface, be hard to work and tend to crack in dry weather. Leaf mould, sand or sandy loam, or sifted coal ashes, worked into clay soil will make it mellower and this should be done where possible. These should be applied near the surface as it is important to have the top two or three inches loose and workable to preserve the dust blanket and to make it easy to cultivate. By plowing

## PREFACE

This is intended for a primer to help those who are starting to garden in Duluth or its vicinity. It aims only to give the fundamental principles, not the fine points, necessary in raising successfully the common garden vegetables, flowers and shrubs. It has more especial reference to the clay soil so common in this city. Seeds and plants can be planted slightly earlier and deeper in a lighter, more sandy soil, and drainage is in such soils seldom necessary.



it under in the Fall and making another loose surface the following Spring the ground to a considerable depth will be gradually improved.

### PLANTING AND CULTIVATION

It should always be borne in mind that the surface inch or two should be kept loose and dust like. This is spoken of as a dust blanket. A dust blanket prevents evaporation, the particles of earth being so loose that water will not rise through them by capillary attraction. Cultivation with a hand or wheel hoe or rake regularly about once a week especially as soon after a rain as it is possible to go on the land without packing or puddling the clay will keep down the weeds and preserve the dust blanket.

Such cultivation is far preferable to pulling up the weeds, as by going over the ground regularly in this way all weed seeds near enough to the surface to germinate will get started and turned up to the sun and killed while young and tender.

Clay soil should never be worked when so wet as to pack.

The earth, however, should always be firmly packed about the seeds or roots, to prevent their drying out by exposure to the air and to enable moisture to pass to them from other parts of the soil.

In planting seeds of the size of peas, beans, corn and the like, it is a good plan, after covering them up, to walk up and down the row two or three times and then rake the surface slightly, not getting down to the seed however; and after sowing smaller seeds, like beets, turnip, carrots and the like, it is well to pat the surface with the hand or a piece of board.

In planting trees or shrubs all broken parts of the roots should be cut off clean, the hole made somewhat larger than the spread of roots and in clay drained with loose rock or tile, the earth packed tight between the roots by the hand and when all the roots are covered so they will not be injured thereby the dirt above them should be stamped down well and the top inch or two raked and kept loose. If they have come from a distance and have not been cut back before shipping a little of the top should be cut back. If moved from place to place in the garden in Spring shrubs, unless very large, will not need cutting back.

Cultivation between plants and rows should cease about August 1st in this climate, as things will then mature quicker, and the weed seeds near enough the surface to germinate should by this time be all started and killed.

People differ as to the times of planting.

The following are thought to be safe dates for the beginner. The depths given in gardening books and seed catalogues are nearly always too deep for this soil and climate. The kinds given are good kinds for this locality though not, of course, all the good kinds.

The following may be planted any time after May 1st and

and about a quarter of an inch deep, and thin to four inches apart.

Beets—

Egyptian, Crimson Globe.

Carrots—

Denvers, Chantenay.

Kohl Rabi—

Early White Vienna, Early Purple Vienna.

Lettuce—

Boston, Iceberg, Mignonette.

To grow head lettuce it should be transplanted when one or two inches high eight inches apart, in rows or beds.

Onions—

Globe.

Parsnips—

Hollow Crown.

Spinach—

Radishes—

Onion Sets—

An inch deep after May 1st.

Peas—

Should be planted about two inches deep and twelve or fifteen seeds to running foot.

The hard round pea like Alaska, any time after May first.

The wrinkled kinds from the middle to the end of May.

Dwarf kinds, American Wonder, Nott's Excelsior, Blue Bantam, Little Marvel.

High and later kinds that need brush or wire: Telephone, Alderman.

Heroine Thomas Laxton and Champion of England.

Rows two feet apart for dwarfs. Three to four for high kinds.

The following should not be planted before about the first of

June:

Corn—

An inch or inch and a half deep, and about two inches apart, in rows three feet apart, thinning to plants about eight inches apart; or in hills three feet apart, each way, leaving four plants in a hill.

Best kind: Golden Bantam.

Cucumbers and Squash—

One inch deep in hills four or five feet apart. Plant a dozen seeds in a hill and thin to four in hill when plants are well grown.

Beans—

Plant two inches deep and two inches apart in rows two feet apart.

Kinds: Wax Beans, Valentine.



Tomatoes—

Transplant to open ground, about two and a half feet apart.

Train up stake, cutting off side shoots from time to time.

Kind: Earliana.

Cabbage and Cauliflower—

Buy plants and transplant to open ground any time in May about 18 inches apart.

Potatoes—

Cut to two or three eyes. Plant about middle of May in rows three feet apart, two inches deep and fourteen inches apart in row.

Kinds: Carmen No. 3, McKinley, Early Ohio, Early Rose.

## SHRUBS AND FLOWERS

### ARRANGEMENT

The following are some of the principal rules for the arrangement of trees, shrubs and flowers on a small lot:

Have a background of trees, if possible.

Lawn should be open in front of house, with shrubs massed at the sides and in corners.

Main setting of picture—green grass, trees and shrubs, with flowers in front of shrubs to light them up.

Arrange trees and shrubbery to leave good views and screen bad ones.

Break straight lines, either actually or in effect, by variety of planting.

Break ground line of house with shrubs or flowers.

**Some Hardy Shrubs that grow well in this climate:**

Lilacs—Common Purple, Common White, Persian White.

Bush Honeysuckle—(Lonicera Tartarica.)

Hardy Hydrangea.

Spirea Van Houtteii, also known as bridal wreath.

Barberry—Common, Purple leaved and Thunbergii.

Rosa Rugosa—Red and White.

Wild Rose—Dogwood, Sumach.

Vines—Virginia Creeper.

Annual Climbers—Climbing Nasturtiums.

Plant half an inch to an inch deep any time after the first of May.

Scarlet Runner Beans—An inch or so deep about first of June.

**Perennial flowers that die down each Fall:**

Tulips—Mixed.

Narcissus—Poeticus ornatus.

Daffodils—Emperor and Empress. Should be planted three inches deep in well drained soil in October under trees and shrubs, the tops allowed to die in Summer before cultivating, and they will increase from year to year.

Peonies—Roots should be planted in good rich earth in September. Last a great many years without resetting. Get good ones.

### White:

Early—Festiva Maxima.

Mid-season—Golden Harvest.

Late—Marie Lemoine.

### Pink:

Early—Delicatissima.

Mid-season—Bernard de Pallisy.

Late—Livingstone and Richardson's Grandiflora.

Perennial Phlox—Should be planted in September.

Golden Glow—Plant in Spring.

Bleeding Heart—Plant in Spring.

Iris—Plant in September. Kind: German Iris.

Perennial Larkspurs or Delphinium—Plant in Spring.

Annuals—To be planted after first of May.

Nasturtiums—Dwarf. Half an inch deep.

Sweet Peas—Two inches deep from 1st to middle of May.

Gladiolus—Bulbs—Can be planted an inch deep after the first of May. Should be taken up after frost, tops and all, and kept in dry place for two or three weeks, then top cut off and bulbs placed in dark cool place in cellar protected from mice but well ventilated

Calendulas—

Bachelors' Button or Corn Flower.

Poppies—The seed sowed any time after May first.

### LAWN

Don't cut the lawn too close; set the mower to cut from an inch and a half to two inches high.

A lawn looks well because it is even, not because it is short. The sun gets at the roots if the grass is cut too short, and no plant grows well without some part of it above the ground.

Cut often and leave clippings on lawn.

Sow clover seed and lawn grass each year. Clover roots open up the soil.

Do not water often but soak deeply each time.