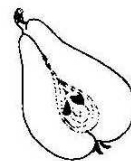




# DWARF FRUIT TREES



## Tips for the Home Gardener

Create a mini-orchard in your backyard with dwarf fruit trees. Famous for their small stature and abundant, regular-sized fruit, they are easy to prune and easy to harvest from the ground. They allow for planting more trees in less space, with opportunities for enjoying a variety of different cultivars. Generally, fruit trees will bear fruit sooner than their larger counterparts.

### About Dwarf Fruit Trees

Most dwarf fruit trees are produced by grafting one cultivar to the roots (rootstock) of another variety. The rootstock causes a dwarfing influence on the tree size but does not affect fruit size. Some dwarf varieties require the grafting of an interstem (a stem of a separate cultivar) between the crown and roots to improve graft compatibility, disease resistance, and cold-hardiness. Rootstock designated as “ultra dwarf” result in tree sizes from 3 to 6 feet. Rootstocks that are “semi dwarf” produce trees ranging from 6 to 15 feet. (See also Longwood’s list of [Recommended Dwarf Rootstocks for Apples and Pears](#).)

Genetic dwarf fruit trees, on the other hand, are selectively bred cultivars that grow to no more than 6 feet high at maturity. Their small size make them excellent choices for container gardening. Although genetic dwarf fruit trees can be grown on their own roots, they are usually grafted to increase pest and disease resistance. At this time, peach, nectarine, and apple trees are the only fruits available as genetic dwarfs.

### Cultural Requirements

All fruit trees should be planted in full sunlight. Other cultural requirements vary enough to warrant careful research. In making your plant selections, you should take into consideration bloom dates to avoid the possibility of late frost damage.

### Pruning

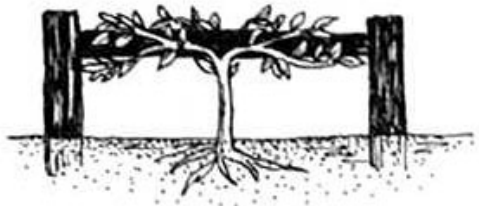
Pruning is the selective removal of stems and branches to develop the tree’s structure. Experts differ on pruning techniques and times, but all agree that pruning provides several key benefits:

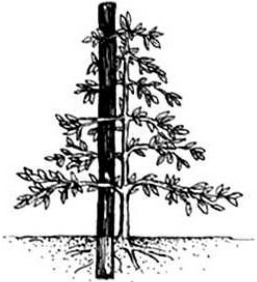
- ✂ Improves air circulation, which is important for controlling disease
- ✂ Allows for better pesticide spray coverage of the stems, leaves and fruit
- ✂ Reduces the number of fruit, so energy can go into developing fewer but larger fruit
- ✂ Allows sunlight to reach ripening fruit
- ✂ Shapes the tree and limits unwanted growth

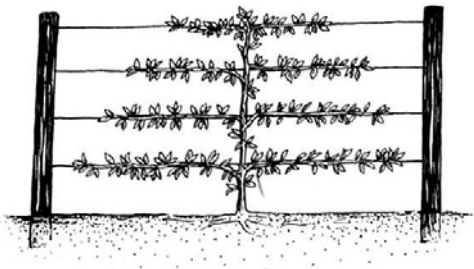
Pruning in early spring opens the interior of the tree for better air circulation and more light. A summer pruning will discourage shoot growth, help contain the tree size, encourage fruiting spurs to grow close to the main trunk, and reduce sucker development. For training young trees and rejuvenating old ones, prune in winter to encourage new shoot growth in the spring.

## Training Methods

Training methods may vary, but most involve two steps: pruning the branches, then bending and tying them down as they would naturally be when laden with fruit. The branch bending results in the tree's energy being directed to fruit production rather than vegetative growth. Below, you will find descriptions of three training methods: low cordon, spindle, and trellis.

Low Cordon Training System	
<ul style="list-style-type: none"><li>☞ Trees are trained to branches parallel to the ground.</li><li>☞ The branches are supported by a post and rail frame.</li><li>☞ Fruit cordons can be used as attractive “living fences” around vegetable or flower gardens.</li></ul>	

Spindle Training	
<ul style="list-style-type: none"><li>☞ Trees are trained into cone shapes to improve light and air circulation.</li><li>☞ Branches are anchored horizontally with strings and stakes until they can hold that position on their own.</li><li>☞ Some tree varieties on dwarfing root stock will require staking due to brittle root systems.</li></ul>	

Trellis Training System	
<ul style="list-style-type: none"><li>☞ The trees are trained into a narrow hedgerow shape and supported by posts and wires. Although variable, 18 inches between wires offers appropriate support.</li><li>☞ Trellis end posts are anchored in concrete. As plants mature and become heavier, the end posts may need to be cabled to the ground.</li><li>☞ This method works well for home gardens and commercial orchards.</li></ul>	

## Pollination

Before planting a fruit tree, you need to know whether the variety is self-pollinating or cross-pollinating. A self-pollinating tree will bear fruit on its own; cross-pollinators require a tree of a different cultivar planted nearby. When planning your small orchard or fruit tree plantings, be sure to consult a good reference source to be assured of meeting pollination requirements. The cultivars selected for cross-pollination must have overlapping bloom periods.

If you have only one tree and it is not self-pollinating, you can cut fresh blossoms from an appropriate cross-pollinator and place them in a bucket of water under the original tree. Bees will then carry pollen from the cuttings to the tree.

Self-Pollinating Trees		
peaches	nectarines	apricots

Cross-Pollinating Trees			
apples	pears	plums	cherries

## Tips for Controlling Pests and Disease

- ☞ Choose cultivars that have been bred for disease and pest resistance.
- ☞ Keep turf under the trees mowed, and pick up and dispose of fallen fruit damaged by insects or disease. In the fall, rake and destroy fallen leaves and fruit.
- ☞ Employ Integrated Pest Management (IPM), a method of disease and pest control that combines cultural practices, biological control agents, and reduced-risk chemicals to preserve environmental quality. For information about implementing IPM in your home garden, consult Longwood's [Tips for the Home Gardener: Integrated Pest Management](#).

### Longwood's Dwarf Fruit Tree Display

Visit Longwood Garden's mini-orchard in the Idea Garden for a living catalog of dwarf fruit tree varieties. Cultivars selected for the display have exhibited increased resistance to pest and disease damage. You can also observe the various training and pruning methods used to keep trees healthy, attractive, and productive.