

Growing A Successful Backyard Orchard

If you like the idea of a wide variety of tree-ripened fruit grown in a small space consider the benefits of summer pruning to keep trees at a manageable size. **Three steps** will ensure a successful backyard orchard if trees are properly planted and maintained:

- Choose several varieties with different ripening times
- Plant trees close together
- Control the size of your trees

Understanding The Reasons For Pruning

Small trees yield crops of manageable size and are much easier to spray, thin, prune, net, and harvest than large trees. If trees are kept small, it is possible to plant a greater number of trees, affording the opportunity for more kinds of fruit and a longer harvesting season.

Summer Pruning is the only way to keep fruit trees under twelve feet tall.

Most deciduous fruit trees require pruning to stimulate new fruiting wood, to remove broken and diseased wood, to space the fruiting wood, and to allow good air circulation and sunlight penetration in the canopy. Pruning is most important in the first three years, because this is when the shape and size of a fruit tree is established.

It's much easier to keep a tree small than it is to make a large tree small.

Summer Pruning

Pruning at the same time as thinning the crop is strongly recommended. By pruning when there is fruit on the tree, the kind of wood on which the tree sets fruit (one year-old wood, two year-old wood, spurs, etc.) is apparent and will help you to make better pruning decisions.

There are several reasons why summer pruning is the easiest way to keep fruit trees small. Reducing the canopy by pruning in summer reduces photosynthesis (food manufacture), thereby reducing the capacity for new growth. Summer pruning also reduces the total amount of energy stored in the root system thereby controlling growth the following spring. Pruning is also easier (and more likely to get done) in nice weather than in winter.

Step 1: Successive Ripening

- Plant several varieties with different ripening times to maximize the length of the harvesting season. Four trees instead of one means ten to twelve weeks of fruit instead of only two or three.
- Planting more varieties can mean better cross-pollination of pears, apples, plums and cherries for more consistent fruit production.

Step 2: High Density Planting

If you have limited space for fruit trees, consider these techniques for close planting and training of fruit trees to make the most of the available space.

- Plant two, three or four trees in one hole. Choose trees with rootstocks of similar vigor (for example, all on Citation), and plant 18-24 inches apart, with groupings 12-15 feet apart.
- Plant trees with multiple varieties grafted onto the same tree.
- Espaliers are trees trained to grow flat against a wall or fence.
- Hedgerows are a row of trees planted approximately 36 inches apart.

Step 3: Size Control

Choose an ultimate size and don't let the tree get any bigger.

First year

- At planting time, **bareroot trees** may be topped as low as 15 inches to force low branching, or higher (up to four feet) if well-spaced side limbs already exist. After the spring flush cut the new growth back by half (late April/early May in Central Calif.). In late summer (late August to mid-September) cut the subsequent growth back by half. Size control and development of low-fruiting wood begins now.
- When selecting **containerized trees** for planting in late spring/early summer, select trees with well-placed low branches. These are usually trees that were cut back at planting time to force low growth. Cut new growth back by half now, and again in late summer.
- **Two, Three or Four trees in one hole:** At planting time cut back all trees to the same height. Cut new growth back by half in spring and late summer as above. In the first two years especially, cut back vigorous varieties as often as necessary. Do not allow any variety to dominate and shade out the others.

Second year

- Pruning is the same as the first year: cut new growth back by half in spring and late summer. Pruning three times (spring, early and late summer) may be the easiest way to manage some vigorous varieties. Thin to open center beginning in the second season. Prune single-tree plantings to vase shape.
- **Multi-plantings** (2, 3 or 4 trees in one hole): Thin out the center to allow plenty of sunlight into the interior of the group of trees. Remove broken limbs. Remove diseased limbs well below signs of disease.

Third year

- Choose a height and don't let the tree get any taller. Tree height is the decision of the pruner. When there are vigorous shoots above the chosen height, cut them back or remove them altogether. Again, in late spring/early summer, cut back all new growth by at least half.
- The smaller one, two, and three-year-old branches that bear the fruit should have *at least six inches* of free space all around. This means that where two branches begin close together and grow in the same direction, one should be removed. When limbs cross one another, one should be removed.
- When removing large limbs, first saw part way through the limb on the under side ahead of your intended cut so it won't tear the trunk as it comes off. Also, don't make the final cut flush with the trunk or parent limb and be sure to leave a collar (a short stub).
- Apricots require more pruning in the summer to control height. Prune as needed (2 to 3 times in the summer) to keep the tree from getting too much growth. Be careful not to cut too much at one time, this can cause excess sun exposure and sunburn of unprotected interior limbs.
- To develop an espalier, fan, or other two-dimensional form, simply remove everything that doesn't grow flat. Selectively thin and train what's left to space the fruiting wood.

You learn to prune by pruning! Don't let pruning decisions scare you.

There are many acceptable ways to prune - no two people will prune a tree in the same way.

Thinning

Quite frequently, stone fruit, apples and pears set more fruit than can mature to a desirable size. Removing some of the immature fruit improves the quality and size of the remaining fruit, and reduces limb breakage. Thin when the fruit is about marble-size and space the fruit about 6 inches apart with no more than 2 fruit per cluster.

Winter Care

Dormant sprays should be applied in the dormant season, additional pruning can also be done in winter.

This information is courtesy of Dave Wilson Nursery.

For photographs and more information, go to www.davewilson.com, and click on the Home Gardeners link.