Backyard Orchard Culture

What is Backyard Orchard Culture?
The objective of Backyard Orchard Culture is a prolonged harvest of tree-ripe fruit from a small space in the yard. This is accomplished by planting an assortment of fruit trees close together and keeping them small by summer pruning.

Backyard Orchard Culture Is Not Commercial Orchard Culture
For years, most of the information about growing fruit came from commercial orchard culture: methods that promoted maximum size for maximum yield but required 12-foot ladders for pruning, thinning and picking, and 400 to 600 square feet of land per tree. Tree spacing had to allow for tractors.

Most people today do not need nor expect commercial results from their backyard fruit trees. A commercial grower would never consider using his methods on a 90 ft. x 100 ft. parcel, so why should a homeowner?

Backyard Orchard Culture Is High Density Planting And Successive Ripening
The length of the fruit season is maximized by planting several (or many) fruit varieties with different ripening times.

Because of the limited space available to most homeowners, this means using one or more of the techniques for close-planting and training fruit trees; two, three or four trees in one hole, espalier, and hedgerow are the most common of these techniques.

Four trees instead of one means ten to twelve weeks of fruit instead of only two or three.

Close-planting offers the additional advantage of restricting a tree's vigor. A tree won't grow as large when there are competing trees close by. Close-planting works best when rootstocks of similar vigor are planted together.

As a four-in-one-hole planting, for example, four trees on Citation rootstock would be easier to maintain than a combination of one tree on Lovell, one on Mazzard, one on Citation, and one on M-27.

In many climates, planting more varieties can also mean better cross-pollination of pears, apples, plums and cherries, which means more consistent production.

Backyard Orchard Culture Means Accepting The Responsibility For Tree Size
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 in a given space, affording the opportunity for more kinds of fruit and a longer fruit season.

Most semi-dwarfing rootstocks do not control fruit tree size as much as most people expect.

Rootstocks can help to improve fruit tree soil and climate adaptation, pest and disease resistance, precocity (heavier bearing in early years), longevity, and ease of propagation in the nursery.
To date, no rootstocks have been developed which do all these things plus fully dwarf the scion.

**Pruning is the only way to keep most fruit trees under twelve feet tall.**
The most practical method of pruning for size control is **summer pruning**.
Tree size is the grower's responsibility.
Choose a size and don't let the tree get any bigger. A good height is the height you can reach for thinning and picking while standing on the ground or on a low stool.

Two other important influences on tree size are irrigation and fertilization practices. Fruit trees should not be grown with lots of nitrogen and lots of water. Some people grow their fruit trees the way they grow their lawn, then wonder why the trees are so big and don't have any fruit!

**Backyard Orchard Culture Means Understanding The Reasons For Pruning**
It's much easier to keep a small tree small than it is to make a large tree small. Most kinds of deciduous fruit trees require pruning to stimulate new fruiting wood, remove broken and diseased wood, space the fruiting wood and 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.

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, which helps you to make better pruning decisions.

**Backyard Orchard Culture Means Summer Pruning For Size Control.**
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 food materials and energy available to be stored in the root system in late summer and fall. This controls vigor the following spring, since spring growth is supported primarily by stored foods and energy. And, for many people, pruning is more enjoyable in nice weather than in winter, hence more likely to get done.

**Backyard Orchard Culture Means Not Being Intimidated By Planting Or Pruning**
Fruit tree planting and pruning needn't be complicated or confusing. When planting, be aware of air circulation. This is important for minimizing disease problems. Check drainage. If poor-draining soil is suspected, consider a raised bed to protect the trees from starving for oxygen when the soil is water-logged. Up to four trees can be planted in a 4x4 foot bed raised at least 12 inches above the surrounding soil. For more trees, shape a larger bed to fit the available space.

Pruning in Backyard Orchard Culture is simple. When planting a bareroot tree, cut side limbs back by at least two-thirds to promote vigorous new growth. Next, two or three times per year, **cut back or remove limbs and branches to accomplish the following:**
FIRST YEAR

At planting time, most bare root trees may be topped as low as 15 inches above the ground to force very low scaffold limbs or, alternatively, trees may be topped higher than 15 inches (up to four feet) depending on the presence of well-spaced side limbs or desired tree form. After the spring flush of growth 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 begin in the first year.

The main exceptions to the low-cut recommendation above are large caliper bare root peach and nectarine trees (3/4" up), which sometimes do not push new limbs from low on the trunk. Especially when these trees are not fully dormant, they should be topped higher initially, just above any existing lower limbs or at about 28 inches if no lower limbs are present. Once new growth has begun, height may be reduced further.

When selecting containerized trees for planting in late spring/early summer, select trees with well-placed low scaffold limbs. These are usually trees that were cut back when potted to force low growth. Cut back new growth by half now, and again in late summer.

Two, Three or Four trees in one hole
At planting time, plant each tree 18 to 24 inches apart. Cut back all trees to the same height.

Cut back new growth by half in spring and late summer as above. In the first two years especially, cut back vigorous varieties as often as necessary (very important!).

Do not allow any variety to dominate and shade out the others.

Plant each grouping of 3 or 4 trees in one hole at least 18 inches apart (between closest trees) to allow for adequate light penetration and good air circulation.

Hedgerow plantings: easiest to maintain when spaced at least three feet apart. Make sure the placement of the hedgerow does not block air circulation and light for other plantings.

To conserve water and stabilize soil moisture: apply at least a 4-inch layer of mulch up to 4 feet from a single tree or from the center of a two-, three-, or four-trees-in-one-hole planting.

SECOND YEAR

Cut back new growth by half in spring and late summer, same as the first year.

Pruning three times may be the easiest way to manage some vigorous varieties: spring, early summer and late summer.

Single-tree plantings: prune to vase shape (open center, no central leader). Multi-plantings: thin out the center to allow plenty of sunlight into the interior of the group of trees.

All: remove broken limbs. Remove diseased limbs well below signs of disease.

THIRD YEAR
Choose a height and don't let the tree grow any taller.

Tree height is the decision of the pruner. Whenever there are vigorous shoots above the chosen height, cut back or remove them. Each year, 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 or both should be cut back or removed.

When removing large limbs, first saw part way through the limb on the under side ahead of your intended cut. Do this 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; be sure to leave a collar (a short stub).

Apricots will require more pruning in the summer to control height. Prune as needed (2 to 3 times in the summer) to remove excessive growth. Be careful not to cut too much at one time, as this might cause excess sun exposure and sunburn to the 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.

Don't let pruning decisions inhibit you or slow you down. There are always multiple acceptable decisions - no two people will prune a tree in the same way. You learn to prune by pruning!

For further advice consult your nursery professional.

Backyard Orchard Culture Begins With Summer Pruning!
Smaller trees are easier to spray, prune, thin, net and harvest! With small trees, it's possible to have more varieties that ripen at different times. The easiest way to keep trees small is by summer pruning. There are lots of styles, methods and techniques of summer pruning; most of them are valid. The important thing is to prune!

Backyard Orchard Culture Means Knowing Your Nursery Professional
The concepts and techniques of Backyard Orchard Culture are learned and implemented year by year. An integral part of Backyard Orchard Culture is knowing your nursery professionals and consulting them when you have questions.

Backyard Orchard Culture Is The Pride Of Accomplishment
A definite sense of accomplishment and satisfaction derives from growing your own fruit. There is a special pleasure in growing new varieties, in producing fruit that is unusually sweet and tasty, in providing an assortment of fruit over a months-long season, and in sharing tree-ripe fruit with others. These are the rewards of learning and experimenting with new cultural practices and techniques as you become an accomplished backyard fruit grower.

There's no excuse for neglected trees, maintenance undone or lack of know-how. Backyard Orchard Culture is an attitude: Just Do It! (Curtesy of www.davewilson.com)