



J&L Garden Center

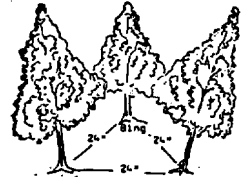
*The All Season Gift
and Garden Center*

620 North 500 West Bountiful, Utah 292-0421

www.JLGardenCenter.com

Plant Several Trees In One Hole

Families today have less space for fruit trees, less time to take care of them, and less time to process or preserve large harvests than in the past. Accordingly, today's family orchards should be planned and managed differently. The main objective of planting several trees in one hole is to prolong the harvest of tree-ripe fruit in a small space. This means planting several varieties of fruit close together, which ripen at different times.



For years, most of the information about growing fruit came from commercial orchard culture: methods that promoted maximum size for maximum yield. This type of culture required 12-foot ladders for pruning, thinning and picking, and 400 to 600 square feet of land per tree. Tree spacings had to allow for tractors. Most people today do not need or expect commercial results from their backyard fruit trees.



High Density Planting

To maximize the length of the fruit season you must plant several varieties of fruit that ripen at different times. Because of the limited space available to most homeowners, this means using one or more of the techniques for close-planting trees. Planting two, three or four trees in one hole is one technique. Another technique is to espalier trees. A third technique is to plant trees in a hedgerow.



Having four trees instead of one means you can harvest fruit for ten to twelve weeks instead of only harvesting two or three weeks.

Close-planting offers the additional advantage of restricting a tree's vigor - trees won't grow as large when they are competing with trees close by. Close planting works best when rootstocks of similar vigor are planted together. For example, four trees having semi-dwarf root stock would be easier to maintain than having one tree on a dwarf root stock, two trees on

semi-dwarf rootstock and one tree on a standard rootstock.

In many climates, planting more varieties can also mean better cross-pollination. Pears, apples, plums and cherries, all produce better when a pollinizer is near by. Better pollination means a more consistent harvest.

Small Trees

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



Most semi-dwarfing rootstocks do not control the fruit tree size as much as people expect. Different rootstocks help trees adapt to soil conditions and climates. They help trees adapt to pest and disease conditions. They help increase the tree's longevity, and they make propagation much easier. To date, no rootstocks have been developed which do all these things, plus fully dwarf the tree.

Pruning

The only way to keep most semi-dwarf fruit trees under twelve feet tall is by **PRUNING**, and the most practical method of pruning is **SUMMER PRUNING**. When you plant several



trees in one hole the ultimate tree size is determined by the grower. Choose the height and width you want and don't let the tree get any bigger. A 'good height' is subjective but you might consider a 'good height' to be the height you can reach for thinning and picking while standing on the ground, or while standing on a low stool. A 'good width' should be determined by the size of your yard and the type of tree you plant.

Two very important influences on tree size are your irrigation and fertilization practices. Do not give fruit trees too much fertilizer or extra amounts of water if you are trying to keep them small. The rate of growth is directly related to the amount of fertilizer and water they receive. Some people grow their fruit trees the same way they grow their lawn; lots of fertilizer and lots of water. Then they wonder why the trees are so big and don't have any fruit!



Reasons For Pruning

Most kinds of 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 to penetrate the canopy.



Pruning is most important during 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 small tree small than it is to make a large tree small again.

Pruning at the same time as you are 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.

Summer Pruning

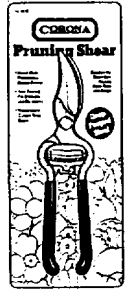
There are several reasons why summer pruning is the easiest way to keep fruit trees small. Reducing the canopy by pruning in the summer reduces photosynthesis (food manufacture), thereby reducing the capacity for new growth. Summer pruning also reduces the total amount of food materials and energy available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

Steps Of Pruning

Fruit tree pruning doesn't need to be complicated or confusing; pruning is simple. When planting a tree, cut the side limbs back about two-thirds to promote vigorous new growth. Then, two or three times per year, cut back or remove limbs and branches to accomplish the following:



1. First year

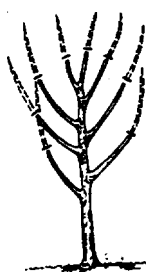
a) At planting time, young trees may be topped at 18 to 24 inches to force very low scaffold limbs, or they may be topped up to four feet, depending on existing side limbs and desired tree form. After the spring flush of growth, cut the new growth back by half (late-May/early-June). In late summer (mid to late-September) cut the subsequent growth back by half.

b) When selecting containerized trees for planting, select trees with well-placed low scaffold limbs. These are usually trees that were cut back at planting time to force low growth. Cut back new growth by half when you plant them, and again in late summer.

c) When you plant two, three, or four trees in one hole. At planting time, cut back all trees to the same height. Cut back new growth by half in spring and late summer as above. Cut back vigorous new growth in each tree as often as necessary, especially in the first two years. Do not allow any one variety to dominate and shade the others.

2. **Second year** pruning is the same as the first year; cut back new growth by half in spring and late summer. For some vigorous varieties, pruning three times may be the easiest way to manage the tree: spring, early summer and late summer.

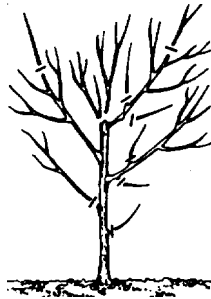
Third year: choose a height and don't let the tree get any taller. Tree height is the decision of the pruner. When there are vigorous shoots above the chosen height, cut back or remove them in late spring or early summer, pinch back all new growth that follows. Size control and the development of low fruiting wood begins now. Repeat the inspection and pruning process in late summer or early fall.



3. Remove broken limbs. Remove diseased limbs

well below the signs of disease.

4. The smaller one, two, and three-year old branches that bear the fruit should have at least six inches of free space all around them. 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.



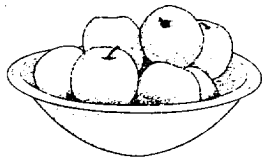
5. If you start pruning while the tree is young you shouldn't have to do major pruning later. However, if you have to remove a large limb, saw part way through the limb on the under side so it won't tear as it comes off. Don't make the cut flush with the trunk or parent limb - be sure to leave a collar (a short stub).

6. 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.

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

Tree Ripe Fruit

There is a special anticipation and excitement in growing and tasting different varieties of tree-ripe fruit, in learning when to pick each variety for peak quality, in learning whether they are best right off the tree or a few days after picking, and in comparing this year's flavor and sugar to the memories of previous crops. The enjoyment can last a life-

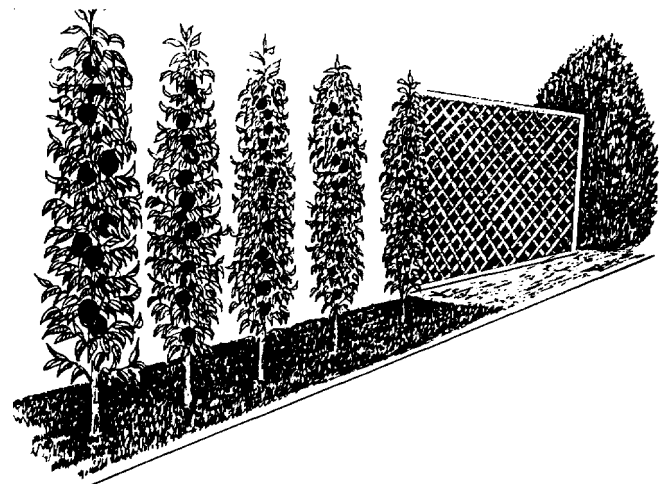
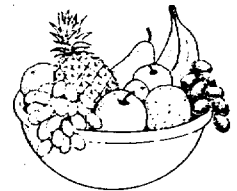


time because of the never ending stream of new fruit tasting experiences. It can be an older variety home-grown and tasted tree-ripe for the first time ("this is the best Red Haven peach I've ever tasted"), or a completely new variety, the most recent product of modern breeding.

Even years of fruit-tasting can't dilute the excitement of the flavor and superb acid/sugar balance of tree-ripe Satsuma Plum, the intense flavor of tree-ripe Redgold nectarine, or the uniquely flavored, high sugar, mysterious plum-apricot hybrids, the Pluots and Apriums.

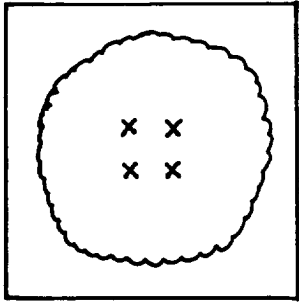
Rewards

There is a definite sense of accomplishment and satisfaction, a special pleasure in growing your own fruit, in growing new varieties of fruit, in producing fruit that is unusually sweet and tasty, in having fruit over a long season, and in sharing tree-ripe fruit with others. These are the rewards of learning and experimenting with new cultural practices and techniques, the rewards of becoming an accomplished backyard fruit grower.

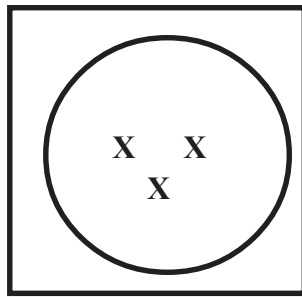


Information Sources:

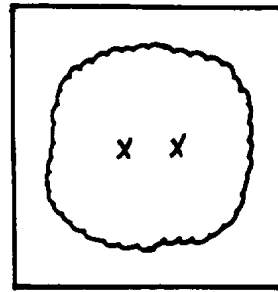
"What Is Backyard Orchard Culture?" Dave Wilson Nursery



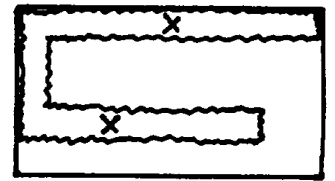
10' x 10' area. Four Trees in one hole. Plant 18" to 24" Apart



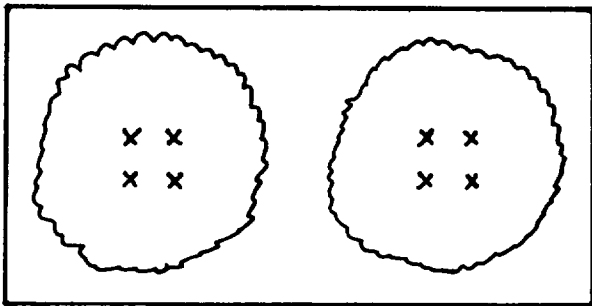
10' x 10' area. Three Trees in one hole. Plant 18" to 24" Apart



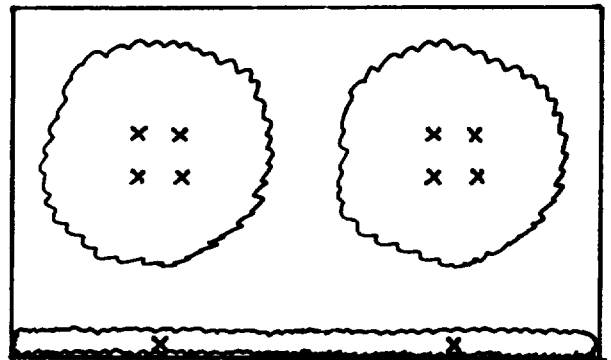
8' x 9' area. Two Trees in one hole. Plant 18" to 24" Apart



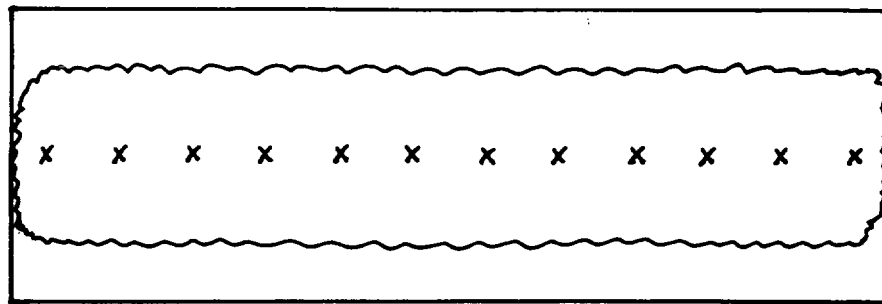
5' x 10' area. Two Trees espaliered. Plant 4' to 6' Apart



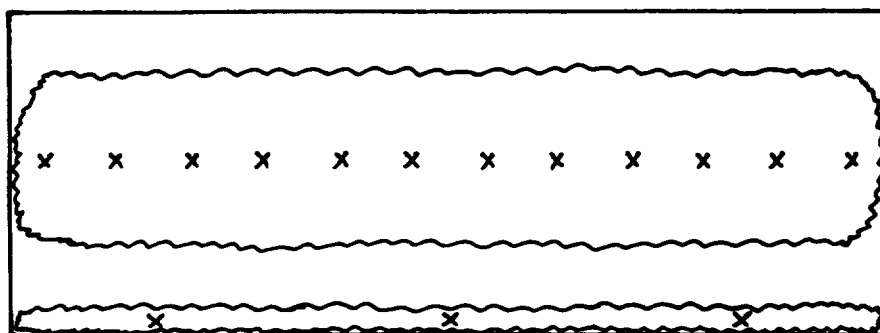
10' x 20' area. Four Trees in one hole. Plant 18" to 24" Apart in hole. Plant clumps 10' to 15' apart.



10' x 20' area. Two sets of Four Trees in one hole, plus 2 espaliered trees. Plant 18" to 24" Apart in hole. Plant clumps 10' to 15' apart. Plant espaliered trees 4' to 6' apart.



10' x 30' area. Plant 10 to 12 trees 3' to 4' apart as a hedge row. Or. plant 3 groups of Four Trees in one hole.



12' x 30' area. Plant 10 to 12 trees 3' to 4' apart as a hedge row plus three espaliered trees.