



Redwood Barn Nursery

1607 Fifth Street Davis, California

Getting started with fruit trees

"My son planted a peach tree from a seed! Can we plant it? Will it be a peach tree? Will it make peaches?"

Yes, you can plant it. It will be a peach tree and will make peaches. The fruit might be good, or might be mediocre, but it will be edible. It won't be the same peach that he got the fruit from because peach trees don't "come true" from seed. Peach trees, like most fruit trees that you buy, are clonally propagated by grafting or budding.

Every year, fruit tree growers plant tens of thousands of seedlings or rooted cuttings of rootstock out in fields. Then they graft or bud any of hundreds of varieties of fruit species onto the carefully chosen rootstocks. Budding is a process where a growth bud of the desired variety is carefully excised from the branch of budwood, a slit is made in the bark of the rootstock and the bud is slipped in between the bark and the cambium and sealed with tape or wax or both. This takes considerable skill and good eye-hand coordination.

Once the cambium of the bud heals with the cambium of the rootstock and starts to grow, any of the rootstock above that point is cut off. A year or so later as the trees go dormant in late fall, the grower digs them up, washes the soil off the roots, trims and bundles them, and then ships out thousands of trees to hundreds of nurseries and hardware stores all over the country.

The logistics of this are daunting. Just finding enough truck drivers has been a big problem for several years. But once accomplished, home gardeners will find the greatest selection of deciduous fruit trees in January and February. Some retailers pot the trees immediately, while others "heel them in" to shavings or sand. When they arrive, the roots are bare. So, we call this the bareroot season, and it is underway in California right now.

Which variety to choose?

There are hundreds of fruit varieties. Dave Wilson Nursery, the largest grower of fruit trees for the home garden market, lists 101 varieties of peaches and 38 varieties of nectarines!

Flavor profile (sweet or tart?), when they ripen, disease resistance, vigor and yield, seasonal color from flowers or fall leaves, are all considerations.

"Chilling hours" are noted on the label. This refers to the number of hours between 34 and 50 degrees that a particular variety needs to enter and emerge from dormancy to flower and fruit properly. This can be an issue for gardeners in Southern and coastal California. With a few exceptions, this is not a concern for us.

Quick list of deciduous fruit varieties for our area.

- Apricots: Blenheim is the best-flavored apricot. It ripens early, which is important in our area because summer heat damages the fruit of later-ripening varieties. Royal is another name under which Blenheim has been marketed.



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- Peaches: Loring (ripens in July), O'Henry and Rio Oso Gem (both ripen in August) have the best flavor and firm texture. Red Baron has spectacular flowers and very sweet, soft fruit that ripens in July. There are many other great peaches: white peaches, cling peaches, donut peaches, and more.
- Nectarines: Flavortop (ripens mid-July) has outstanding flavor. JuneGlo, Fantasia, Goldmine are also very good varieties. Double Delight has showy flowers as well as great fruit.
- Plums: probably the easiest stone fruits to grow. Santa Rosa and Burgundy are good all-purpose plums, though they tend to ripen all at once. Emerald Beaut and Nubiana hang on the tree longer. There are many other outstanding plum varieties. Just check the label as many require a second type for cross-pollination. Two plum trees would be a lot of plums for the average family.
- Pluots and apriums are interspecific hybrids between plums and apricots. Flavor Supreme and Dapple Dandy are two of the best. All pluots require another variety for cross-pollination, and these two work together. Santa Rosa plum will also pollinize pluots.
- Apples: Fuji, Gala, and Braeburn are three of the best for this area. Gravenstein, a Northern California heirloom variety first brought here by the Russians in the early 19th century, grows well here, but it does need another apple (such as Fuji) nearby for pollination. Fireblight and codling moth can be pest issues with apples.
- Pears: fireblight resistance is the most important consideration as it is a bacterial disease that affects pears and is very common here. Warren has given me great results. Moonglow and Fan-Stil are also fireblight resistant. Kieffer pear is resistant to fireblight and is said to be heat tolerant, but the fruit has grit cells that many find unappealing.
 - What about cherries?

I no longer recommend growing sweet or pie cherries due to the spotted wing drosophila¹, a fruit fly which infests the fruit. I don't consider it a manageable pest for home gardeners.

We can also grow mulberries, pomegranates, persimmons, jujubes, and quince trees here.

How to plant your new tree

The soil should not be so wet that it sticks to the shovel or slicks the side of the hole as you dig. You can dig a few days to a week after the last rainfall.

The hole you dig needs to be wide enough and deep enough to accommodate the roots without bending them. That means **the hole is typically 3 feet wide and about 18 inches deep.**

One person can hold the tree upright while the other backfills the soil around the roots.

Make sure the bud or graft union will be at least a couple of inches above the final soil grade.

You can often see a color change on the bark where the tree was growing in the production field. That is where your tree should be when you're done.

Use only the native soil for backfill.

¹ https://redwoodbarn.com/DE_Drosophila.html



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We do not recommend mixing it with compost or using any other additives. Fertilizer is not needed. "Vitamin B1" doesn't do anything.

Tamp the soil firmly around the tree, and then **make a basin for watering** by pulling up loose soil into a raised ring a few feet out around the tree.

Water thoroughly: using a hose, fill up the basin and water for several minutes. You want to **make sure all air pockets fill with soil and settle.**

Protect the trunk from sunburn and borers.

Sunburn happens quickly on a sunny winter day, and sunburned bark attracts borers. This is a leading cause of failure of young bare root trees! Trunk guards are very effective. Or you can paint the trunk up to the first branch with interior white latex or whitewash.

Check the watering regularly.

A major cause of failure of bare root trees is incorrect watering during the first few weeks. I have used two systems with good results, depending on what kind of rainfall year we're having.

1. water the tree **once a week, providing a few gallons of water each time**, unless we have regular rainfall. If you have a drip irrigation system, the tree should have two emitters and the system should run for an hour or two. With a hose it will only take a few minutes at a high rate of flow, but make sure it isn't running off. This is probably fine this year.

OR:

2. water the tree **one gallon of water every day** until the tree buds out and begins to grow. This was particularly effective during drought years, to make sure the soil didn't dry out. A drip system running 30 – 60 minutes each day, or simply filling up a watering can and watering the tree, sufficed. Keep this up until the tree has broken dormancy and put on a few inches of growth, then gradually adjust it to your regular watering schedule.

As the tree begins to grow, expand the watering zone outward past the drip line. Tree roots grow out more than they grow down.

Training your young tree

You will typically see **two training techniques** described for fruit trees:

- Vase
- Modified Central Leader

I recommend that you not cut back the tree at the time of planting, and instead make your choice between these two techniques either the first summer or the first winter after planting.



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Vase or Open-center training is done by pruning out the center of the tree. The tree is cut to as low as three feet above the ground. Three or four low branches, usually rather close together on the trunk, are allowed to remain. Everything below them is removed.

This makes it a lot easier to get at the fruit, spray the tree, and do subsequent pruning. It does require pretty severe pruning and fruit thinning in following years, as the branches are at greater risk of splitting from the weight of the fruit.

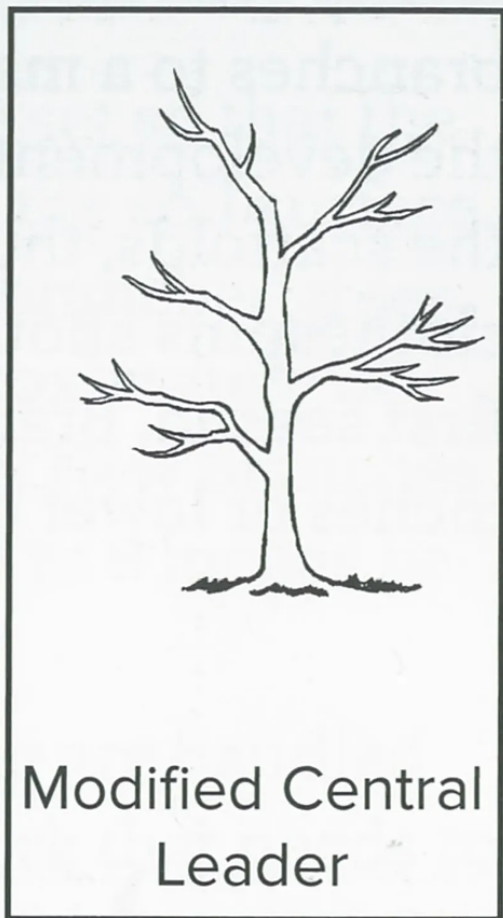
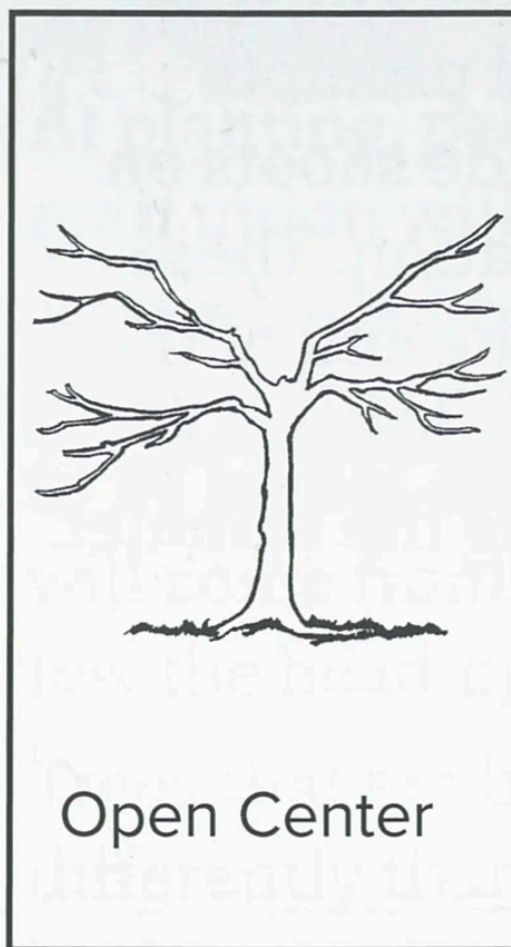
Modified Central Leader training is chosen for better placement of the permanent branches along the trunk. In late summer, or in the first winter after planting, the center of the tree is taken out by cutting back the central leader, but to a higher point than with Vase

training and by cutting to an existing lateral branch. Usually, the leader is cut to a point 4 to 6 feet above the ground.

Three to four permanent branches are chosen, spaced a foot or so apart up the trunk and “distributed radially” around it (i.e., not right above each other). All other small branches are removed.

In my opinion, this is the best choice for home gardeners as it leads to a tree with better structural stability but whose height has been reduced.

As the tree grows you will prune it to improve the branch structure, manage the fruit load, and reduce diseases. And with careful training and pruning, you will enjoy fresh fruit every summer for a couple of decades!





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Flavortop nectarine in July. Nectarines are a fuzzless variant of peach, a recessive gene that was found and propagated centuries ago. Some folks find them less astringent than peaches. Nectarine flavor is generally more sweet-tart than peaches.



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O'Henry peach doesn't ripen until August, but it's worth the wait. Very sweet with intense flavor and a firm texture, so it's good for baking and freezing as well as fresh eating.



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Santa Rosa plum is one of Luther Burbank's best-known introductions, one of the most reliable backyard fruit trees. Fruit ripens in June. The peel is tart but the flesh is sweet and juicy. Santa Rosa also serves to pollinize other plums and pluots.