

Apple Trees in Containers

by Athena McElrath

If you've ever thought about growing your own apple trees but got discouraged because you either live in an apartment and have no backyard, or you have a backyard but it's tiny, here's an idea: try growing apple trees in large containers. The [Home Orchard Society](http://www.homeorchardsociety.org) in Portland, Oregon (www.homeorchardsociety.org) is a wonderful group that can help you succeed with fruit trees. The HOS Arboretum, located on the campus of Clackamas Community College, offers workshops in grafting and pruning fruit trees.

If you want to grow apple trees in pots, you need to know a little bit about how a tree is built. There are two basic parts when building your own fruit tree: the rootstock and the scion. The scion, a cutting from a particular variety of tree, is grafted onto the rootstock. A graft is where new scion wood attaches to, and grows out from, the rootstock. The fruit is produced from the scion and not the rootstock. Both rootstock and scion determine the mature tree size. Knowing how to graft allows you to build your own trees that will top out at a dwarf height (four to six feet tall), thereby not outgrowing the space you have available for them when they mature. You can also maximize space by grafting several apple varieties onto one rootstock. Another benefit is that you can graft heirloom variety apples or grow different varieties that mature early, mid and late season to extend your harvest. You can also experiment with varieties that are delicious but unavailable for sale locally. Finally, knowing how to graft enables you to build your own trees inexpensively. As a member of HOS, you can buy rootstock at the Fruit and Berry Cutting (Scion) Exchange for five dollars each, and get the scions for free. At the Cutting Exchange they will build a tree for you with whatever scion wood you select for a small fee, but they also sell supplies like Doc Farwell's Grafting Seal (for sealing moisture out of the newly forming graft), and grafting bands (which resemble strips of rubber band and are used to connect the newly grafted scion to the rootstock until the graft takes), so you can do your own grafting. However, if you prefer, dwarf apple trees are available for purchase locally, as well as online from [One Green World](http://www.onegreenworld.com) in Molalla, Oregon, and [Raintree Nursery](http://www.raintreenursery.com) in Morton, Washington. Prices start around twenty-two dollars per tree. Once you learn how to graft, you will discover a new obsession and after you run out of room at your house, you will find yourself grafting for your neighbors and friends as well.

Karen Tillou, manager of the Arboretum, recommends M27, M9 or P22 rootstocks as best for container-grown apple trees. Karen says that these are the most dwarfing kinds of rootstocks, but they absolutely require staking/support even in a pot. (Wood or thick bamboo stakes can be attached directly to the pot with the tree's branches loosely tied to it.) They are dwarfing because they have small, relatively weak root systems and consequently need support and very consistent water throughout the dry summers.

As far as particular varieties of apples that work well as container plants, Karen suggests choosing varieties that are not vigorous. Varieties have a measurable "vigor" the same way rootstocks do. If you match a vigorous variety to a dwarf rootstock, you will still get a tree that wants to get big. It's best to choose moderately vigorous varieties, and a very complete list can be found at the [HOS](http://www.hos.org) website. Picking a "good" apple variety is a little like picking out a "good" outfit: it all depends on your particular taste. However, a delectable one is 'Spitzenburg,' a medium to large orangish-fruited dessert apple reputed to be Thomas Jefferson's favorite, introduced in 1790. Another

favorite is 'Stayman Winesap.' A red-skinned apple, it tastes sweet, crisp, juicy, and is everything a fresh eating apple should be—delightful offered on a tray with cheese and accompanied by wine as you watch autumn leaves fall.

Vern Nelson, garden writer for *The Oregonian*, gardens on a quarter of an acre, has an extensive edible landscape and grows forty-one varieties of apples in his orchard. Vern considers 'Orleans Reinette,' a dessert apple flushed with rosy color and strong aroma, ripening in mid-October, a worthy addition to a home orchard.

If you like hard apple cider, growing appropriate varieties in containers is more difficult because most of the single varieties are a bit large for pots. One single variety that might lend itself to container growing is 'Sweet Coppin,' which is moderately vigorous and produces a sweet, pure cider. Most often hard cider is made by blending the juices of sweet dessert and cider apple varieties, but you can make hard cider out of certain single varieties as well. For more information, do an online search for "Apples for Hard Cider Production" and "Growing Cider Apples."

Karen advises adding annual compost to potted apple trees in March. During the first two to three years Karen maintains using more nitrogen/animal manure will encourage vegetative growth, and then switching to a bloom and bud fertilizer with more phosphorus will promote fruiting when the tree is older. Among others available for purchase, Dr. Earth offers organic fertilizers that are suitable for this purpose.

Vern mentions that it can be hard to keep a pot-grown tree vigorous for a long time, so he suggests root pruning every two years. To accomplish this, you should remove the tree from the container and literally cut the outer ends of the roots off. Afterwards, put it back into the container with new potting soil. This will help reinvigorate the tree's root system and keep it more productive. Vern also emphasizes using containers no smaller than a half-whiskey barrel size, to allow for adequate root space. Both Karen and Vern stress not allowing dwarfing rootstocks to bear fruit too soon. Many will try to bear fruit in their second or third year after grafting. If they fruit too soon, they will stunt themselves. Thus, they will never make more apples than that initial branch structure allows. To prevent this stunting takes determination: you must harden your heart and pinch off the flowers the first two to three years that they show up. This helps the tree put more energy into growing substantial root and branch systems, making for a healthier, longer-lived tree.

In terms of pruning the tree's branches, Karen points out a container gardener should aim for balanced, open structure that allows for air and light circulation. Once you have a framework of branches, you can winter prune new shoots back to two to three buds each, to create fruiting spurs along the branches. You could also consider training your tree into an espalier shape. Espalier training allows you to grow your tree in a small, two-dimensional space, and trees so grown are decorative placed against a wall or situated around a patio area. Vern offers an excellent class on espalier training (contact him at anewleaf1@aol.com). The HOS can also give you advice and training.

On the subject of winterizing container-grown apple trees in Clark County, Karen explains that the top of the tree would come through unscathed. As the roots in a pot freeze a lot sooner than roots under the soil, however, it is advisable to place the pot on the ground, not on a deck if possible, and then mound it up with leaves, straw, sawdust, or burlap sacks. The organic matter helps trap air around the pot, and prevents it from freezing. You could also place your pot up against the wall of a building and then mound organic matter around it because buildings hold more heat than air.

Even if you don't have a lot of extra space, try some apple trees in containers. It's a long-term project with even longer (and delicious) results.