

How to Grow Apples

The first thing you need to grow apples is a long-term commitment. Growing apples takes considerable time and quite a bit of work. Still, if one of your fondest childhood memories is the apple tree in your backyard, producing your own apples is a satisfying part of gardening.

Site Selection

Before you begin growing apples, make sure you have room for at least two trees. Typically, two apple trees bear enough fruit to keep a family of four in good supply. Apple trees need to grow in full sun, which means they need at least six hours of sunlight each day. Even dwarf varieties need to be spaced at least 8-feet apart. It is also essential to provide your trees with good drainage. Although apple trees tolerate a variety of soil types, they prefer sandy loam to sandy clay loam with a pH of about 6.5.

Choosing cultivars

You probably wonder why you need two trees to grow apples. Apple trees are self-incompatible. Simply put, this means that even the most industrious bee (bees are the chief pollinators of apple trees) can't persuade two trees of the same variety to bear fruit. So, to grow apples you usually need two trees of different varieties. Some nurseries offer apple trees that have two or more compatible cultivars grafted on the same tree; but to be on the safe side (and to get enough apples for a family of four) you still need two trees. A flowering crab will also pollinate your fruit-bearing apple tree and is useful in pest deterrence, as you'll see later in this article.

Although apples trees grow from seed, it takes several years and a significant amount of nurturing to produce an apple harvest from seed. The easiest way to begin growing apples is to purchase either bare root or container grown trees from your favorite garden nursery. In addition to fruit size, taste, and color, your nursery professional can recommend trees that are cold hardy for your area, bloom at approximately the same time, are pollination compatible, and are disease resistant. You'll find that purchasing disease resistant cultivars makes a generous cut in your apple tree maintenance time!

When selecting trees from a catalog or Internet site, you need to make these comparisons between cultivars. Look for catalogs and sites that list compatible cultivars for you.

How high your tree grows also depends on the type of tree you plant. Dwarf varieties reach 8 to 10-feet in height, semi-dwarf trees grow 10 to 15-feet tall, and standard trees may reach heights of 20-feet or more. Although their yield is less, dwarf and semi-dwarf rootstock typically bears the same size fruit as standard size trees and is overall easier to manage.

Planting Apple Trees

Although fall is the best time to plant apple trees, bare root trees are difficult to find during autumn. If you plan to plant bare root trees, early spring when the soil is workable but temperatures are still cool is the best time. Container grown trees can be planted any time during the growing season if you provide them with sufficient water.

When planting bare root trees, hydrate the roots by soaking them in a pail of water for about an hour before planting. Using a sharp pruning shears, trim any broken or crossed roots and shorten all roots to about 18-inches long.

Dig a deep hole, two to three times the size of the root ball. Mix some of the soil with well-decomposed compost and add it to the hole. Gently spread the roots in the hole. Hold the tree in place, keeping the graft union 2 to 3-inches above ground. Otherwise, your dwarf or semi-dwarf will grow to standard size!

Starting with the top soil, refill the hole with the soil you have extracted, removing air pockets as you fill by tamping the soil with your feet.

Bury a container-grown tree at the same level it occupied in the pot.

Hydrate your planting with one to gallons of water. Add additional soil to maintain the soil at the same level as that surrounding the hole. To help control weeds and conserve moisture, extend the diameter of your planting with a two to three inch layer of mulch applied about a foot from the tree trunk.

Trees generally need to be spaced as far apart as they will reach in height at maturity. In other words, dwarf trees need to be 8 to 10-feet apart and semi-dwarf trees need to be spaced 10 to 15 feet.

Stake new trees during the first year to prevent strong winds from dislocating them and causing them to grow at an angle. Dwarf apple trees have a weaker root system and may need staking for the life of the tree. Secure stakes to your trees with heavy 9-gauge wire, enclosing it with a piece of garden hose or other wrap to keep the wire from damaging the trunk.

Young trees are a favorite food of many small animals like rabbits and field mice. Protect your newly planted apple trees with a 15 to 18-inch piece of hardware cloth placed around the trunk. Push the hardware cloth about four inches down into the soil. As the tree matures, remember to remove it so that it doesn't girdle the tree.

Pruning and Training Apple Trees

Many gardeners prefer the **central leader** system for pruning trees. In this system, the trunk or *central leader* supports three to five *scaffold branches* (fruiting branches connected to the trunk). Your goal is to develop and maintain the scaffold branches at a minimum of 60° from the trunk, so that the tree is somewhat cone-shaped. This type of pruning allows light and air to reach every part of the tree, aiding in disease prevention and helping fruit to ripen.

Begin pruning at planting time. Remove any suckers from the base of your tree, any branches that are lower than 30 inches from the ground and any branches that compete with the leader. Next, select four to five of the remaining branches as your scaffold branches. Choose those that angle closest to 60° from the trunk. Scaffold branches should be spaced at least a vertical half-foot apart. Prune out the rest of the branches. Trim scaffold branches so that the topmost branches are the shortest and the lowest branches have the widest spread.



After the initial pruning, your tree needs annual touchups to:

- 1) maintain the conical shape
- 2) remove any dead, broken, or diseased branches
- 3) remove any vertical "water spouts" (these branches are vigorous vertical branches, which compete with the central leader).
- 4) remove any suckers from the roots or the lower trunk of the tree
- 5) remove any downward growing branches
- 6) new growth in the middle or upper part of the tree

Undertake annual pruning in late winter before the tree begins to bud.

If your trees have a tendency towards strong vertical growth, you need to **train** them to grow in a more horizontal mode. Training branches to grow at 60° from the trunk slows down production of new leaves,

new branch growth, and encourages fruiting. In addition, branches grown at wide angles are stronger and therefore better able to support the weight of the fruit.

To train branches, use a spreader, wedged between the branch and trunk, forcing the branch to grow at a wider angle. Spreaders are readily available at garden centers, but if you only need one or two, a strong, notched stick also works well. Remember to remove spreaders at the end of each growing season.

Diseases & Pests

Although many “How to Grow Apple” manuals cite dozens of diseases and pests, most are either rare or regional. There are actually only about a half-dozen problems and pests that you need to actively combat!

Pests: The “worm” in your wormy apple is most probably one of three types of insect larva.

Curculio Beetle

Found in the Eastern US, this little bugger is tough to get rid of with either sprays or traps. Your best bet is to scare it to death! Curculios like to roll over and play dead when they are startled. An effective method of ridding your orchard of them is to lay sheets on the ground in the mornings during blossom time. Shake your tree. The curculios will fall into your sheets. Empty the sheets into waste bags and be rid of them!

An alternative method to combat curculios is with a repellent spray that contains two tablespoons of garlic extract, two tablespoons liquid seaweed, one-tablespoon neem oil, and one-tablespoon fish oil per gallon of water. Use of this spray is where having a flowering crab at hand comes in handy! Since this is a *repellent spray* and not a *pesticide*, the beetles will migrate from your fruiting trees to your flowering crab.

Codling Moth

The codling moth is probably one of the most prevalent pests known to apples. After petal fall, moth larvae enter young fruits through the blossom end. moths lay eggs on leaves and twigs about the time petal fall begins. Within days, larvae find their way to fruits and tunnel inside them, often beginning with the tiny openings left by the flower, feasting on the fruits of your labors.

Codling moth traps lure male adult moths with female pheromones and trap them. If your moth problem is small, you can effectively protect your orchard with these. However, for larger codling moth problems you need to spray your trees with Bt (*Bacillus thuringiensis*). Fish oil added to the spray mix both helps stick the bacterium to leaves and slows its breakdown. Beginning 15 days after petal fall, you'll need to spray three times at five-day intervals.

Apple Maggot

Also known as the railroad worm because of the tracks it leaves in your apples, the Apple Maggot causes pitting and dimpling in your fruit. Trap adult flies on red sticky balls by hanging them in your tree after petal fall. Another way to reduce apple maggots is to promptly remove any fallen fruit.

Fungus Problems Need Not Prevail!

Scab

Named because it looks like a healed-over scab, it is the most widespread and damaging of apple diseases. Control scab by spraying your trees with sulphur near the time when your buds begin to turn pink.

Powdery Mildew

Powdery Mildew is a fungus that attacks many flowers, fruits, and foliage plants. Characterized by white to gray, talcum-powdery growth, it thrives in warm, dry climates but needs high humidity to germinate its spores. The best way to control powdery mildew is by pruning to let air circulate freely through your tree. Sulphur spray also controls outbreaks of powdery mildew.

Cedar-apple Rust

This fungus looks like quarter-inch rust colored blisters. It also can be controlled with sulphur spray.

Make [Gardening-Guides](#) your first stop for current information on how to grow [Apples](#) and all your favorite flowers, fruits, and vegetables!

© 2005 [Gardening-Guides.com](#) All Rights Reserved