# Apples

Ever since Johnny Appleseed set out to dot America with apple trees, the apple has been as much a part of our history as the bald eagle. Of course, commercial production and urban growth have limited the number of trees grown and the number of varieties available. But with interest in home gardening burgeoning, nurseries are offering more and more types each year.

Home owners usually have to be careful about what goes where to get the most from their gardens. Trees take up a good deal of room, especially standard-size apple trees; a single tree can gobble up as much as 1,600 square feet. For this reason, it's often best to opt for the dwarf Varieties Bushel for bushel, dwarfs will offer excellent produce and, at the same time, are easier to plant, prune, and maintain. Because of the smaller size--about nine feet high for a dwarf and between 13 and 14 for a semi-dwarf--picking fruit is much easier, spraying against bugs and disease is simplified, and pruning is a cinch because nearly all the branches are within easy reach.

## Varieties

You'll find one or another of the apple varieties for just about all 50 states. Among the most popular of the early-fruiting or summerharvesting apples are Anoka, Lodi, and Stark's Earliest. Fall varieties include the ever-popular Cortland, Delicious, Gravenstein, McIntosh, Northern Spy, Winesaps, and Wealthy. Apples require cross-pollination to set good fruit, so plant two or more varieties to ensure proper pollination.

Most apple trees need an extended period of cold during dormancy to leaf out and eventually set blooms; Tropical Beauty is one exception and is suited to southern states. But some varieties are better at withstanding the temperature variations than others. Check with nursery staff or the county extension office to find out the best varieties for your area. Catalogues, too, should list recommended zones along with variety descriptions.

A dwarf is a union of two or three trees. One type, often a crab apple, is for the rootstock, with a standard tree grafted or budded on top. The place where they join is called a graft union and looks like a bulge or kink in the lower part of the trunk. Some apple trees are created from three trees: a full-size tree for the rootstock, the dwarfing tree as the mid-piece, and a standard tree for fruit.

All three sizes of mature trees--dwarf, semi-dwarf, and standard--may be grafted onto hardy rootstocks. Red and Yellow Delicious, Winesap, Wealthy, and Jonathan come in all three sizes. Fruit trees have been budded or grafted for desirable features, so trees you start from seeds may not be as sturdy or productive as purchased ones.

## Planting

Plant apple trees in early spring in the North and late autumn in the South. The roots are the most vulnerable part of the fruit tree, so get the spadework started before trees arrive in the mail or before you select them from the nursery.

Dig a large enough hole, making sure it's at least twice the estimated size of the tree's rootball. Plant the tree as deeply as you can, while leaving the graft union or mid-piece above soil level. This may put it somewhat deeper than the tree was planted at the nursery. But be sure the graft union or mid-piece is above ground. If it is covered with soil, it could sprout and you could end up with a large tree because the dwarfing segment was bypassed. Allow 25 feet between semi-dwarfs and ten feet between dwarfs.

Provide support for the young tree. Drive a pipe, iron stake, or  $2 \ge 4$  into the ground, and anchor the trunk to the stake with soft twine.

Depending on variety, dwarfs will bear in three to four years, and semidwarfs bear in four to five years. Standards take somewhat longer. Remove blossoms for the first couple of years after planting so the tree can direct vigor into establishing root and trunk.

# Care and feeding

You'll find reasonably priced nursery stock as year-old whips (without branches). Trim top. As branches develop, train to the central leader for dwarf trees and modified leader for semi-dwarfs. Prune while dormant. Remove dead, broken branches, crossed limbs, and water sprouts

The process for feeding the apple tree is often more a matter of resisting temptation. The young tree, especially, should not be given huge doses of fertilizer, because over-application may lead to excessive leaf and branch growth, leaving the tree susceptible to disease and breaking.

As soon as the apple tree is planted and staked, cover the surrounding soil with a four- to six-inch layer of mulching material, such as hay, dried grass clippings, wood chips, sphagnum peat moss, or partially decomposed compost. Add more throughout the season to maintain a two- to three-inch layer. As vegetative matter breaks down, nutrients will be gradually released into the soil. At the same time, decayed matter will improve the structure of the soil, which means its ability to retain water and nutrients will be greatly enhanced. Mulch keeps weeds down, too.

Mulches do, however, provide a handy cover for mice, so leave a fourto six-inch space around the base of the tree. A wire screen placed around the trunk will also discourage chewing animals from damaging the bark.

### **Insects and diseases**

Next to bone-chilling cold, the more serious obstacles to growing tasty fruit are bugs and diseases. Spraying is practically unavoidable. As a

rule, seven to 12 applications are necessary, and all should be timed according to the growth stages of the tree: dormant (before buds begin to swell), pre-pink (blossom buds show pink), pink (just before full bloom), petal-fall (blossom petals drop off), and then every ten to 14 days thereafter for up to six more applications. To protect the bee population, avoid spraying when trees are in full flower.

Keeping apple trees clean and avoiding overfertilization will help keep fire blight disease under control. (Symptoms include a burnt appearance of young leaves, twigs, and blossoms.) Cut out and burn (or bag for garbage pickup) diseased limbs, fruit, and leaves. Avoid heavy pruning or overapplication of nitrogen fertilizer, which stimulates rapid growth.

### Harvesting

Summer apples will ripen in late July or early August, fall apples in September, and winter ones in late fall. Try to be patient so fruit can reach peak flavor while on the tree. Check the seeds: fruit is immature while seeds are white, ripe when they're brown. Fruit should also part easily from stem. If you plan to squirrel away a bushel or two for midwinter use, be sure you select only those apples free of dents, cuts, or bruises.