

# Care Sheet for Apples

## Care Upon Arrival

Potted plants can be planted in the soil at any time of the year, as long as the ground is not frozen. If it is hot summer, the plants will need to be watered twice weekly if it is dry. If you are not ready to plant yet, the plant should be fine kept near a front door where it can get light and you can keep an eye on it. Keep the potted plant watered, making sure the soil stays moist, but not sodden or overly soaked (don't leave it in standing water in a bucket or pond for more than a few hours or its roots will begin to die). If any part of the plant is broken from shipping, it is best to prune that piece off where the break occurred. Make sure to NOT cut a fruit tree off below its graft union (marked with a splotch of paint)—below this is only rootstock which will not produce quality fruit. If the plant is broken below the graft union, immediately splint and wrap it so it is rejoined, using scraps of plastic bag and rubber bands, or any type of tape should work. Using a piece of a stick and taping that well below and above the break should hold things in place until the wound heals over.

## General Information

Apples are a very beautiful but sometimes tricky fruit tree to grow. They like full sun, and prefer rich, well drained soils. In the humid Midwest, many insects and diseases put the pressure on apples and their fruits. Fortunately, we offer many varieties which have been bred to be resistant to the diseases, but the insects can still be a problem. Apples require a separate variety for proper pollination; however in most urban and even suburban areas, many of the ornamental crabapples people have planted can often pollinate your single apple tree. If you want to be certain, plant two varieties. Blooms occur in the spring, covering the tree in beautiful pink and white! Fruit follows the blooms, with a wide range in size, firmness and flavor. Ripening time is anywhere from mid- summer through late fall, depending on the variety. Apples can take a little bit of time, sometimes a year or two to get their roots established in the soil, so don't give up on them if they don't seem to grow very fast their first two years. After this time, they usually get going and make as much as 18" of growth each year thereafter.

## Planting

We offer two sizes of apple trees—the rootstock Bud-9 is a full dwarf, reaching only 6-8' high; and M-111 which can reach 18' tall if unpruned (it can be kept to 14' by pruning). Plan for this mature size when you pick your planting spot (it's very easy to forget your tiny tree will get to be this big). Dwarf apples should have 6-8' of space between them at their planting spots; M-111 apples should have 14-18' of space. Dwarf apples will need to have a study stake driven in at least 2', right next to the plant at planting time. Tie the tree to the stake in two or three places, leaving a little room for the tree to move and grow (be able to fit your hand through the loop). This stake will stay there for the life of the plant. M-111 needs no staking. If your soil is very compacted from construction or lots of walking traffic, take some time to loosen the soil (with a spade or garden fork) to 24" deep by 3' diameter before

planting your tree. When you do plant it, carefully dig a hole that is the same size as the pot. Slide the tree out carefully from its pot and set it into the hole you dug, slightly below the level it was in the pot. Now lightly firm the soil around the tree with your hands or foot so the plant can't rock back and forth easily. Always apply mulch of some sort (see below). Now with a hose or watering can, water the tree generously. Make sure the tree gets a good watering twice a week for its first year in the ground, either from a rain, or from you watering if it does not rain. Do not water if the weather is already wet! This can drown out the roots from too much water. In wetter parts of the country, it is good to have the tree planted on a slight mound so its roots can be above standing water during torrential rains. Conversely, plant fruit trees in basins if you live in a dry part of the country.

## **Pruning**

Apples will bear fruit if not pruned, but they will look gangly and the fruit will be much smaller and damaged than you are used to seeing in the grocery store. They might also resort to a biennial bearing cycle (fruit only every other year). Pruning apples is best done in late winter when the buds are just beginning to swell (February thru early March here in southern Indiana). In the first and second years, prune very little off (mostly dead wood and anything below the graft line) but select one more vigorous and upright shoot to become the "central leader". This will be the future "trunk" of your tree, with branches radiating off to the sides. Keeping this central leader in mind, prune side branches starting the third year, aiming to keep clusters of three to five branches evenly spaced around the tree, with approximately 2-3' of space vertically between clusters of branches (more like 1' between clusters for dwarf apples). Generally, I remove all water sprouts (long, straight up growth) and dead wood first, and this forces the growth out to the side more. Take only enough off of side branches to loosen up the tangle of growth. Always keep fruiting "spurs" (short thick stubs with buds on them) on the trunk and branches—these are where most fruit is borne upon. Keeping apples well pruned will help immensely with disease and insect problems. Aim to be able to see light through any portion of the tree—you want some sun and wind to be able to penetrate even deep within the branches. An old pruning adage is to be able to take a cat by the tail and fling it through the tree without it hitting any big branches! Shoot for this amount of openness.

## **Fertilizing and Mulching**

Never put fertilizer into the hole when you are planting the tree! It is best to wait until the second year to begin fertilizing fruit trees. Mulching right away with material like wood chips, bark mulch, grass clippings, spoiled hay, straw, even shredded paper will do wonders for your tree (synthetic mulches like rubber or plastic will only keep the soil moist). Mulch keeps the soil moist during dry spells, wicks the water away during wet weather, and breaks down into wonderful black rich humus that enriches the soil. No rototilling needed! Just keep adding more mulch material each year, starting with a 3' diameter circle at planting, and expanding the circle so it falls at the edges (drip line) of the branches as they grow outward. Keep a clear area of about 3" around the trunk, so rots and rodents do not nibble the wood. Starting the second year, it is good to add some sort of fertilizer on top of the ground (or old mulch) before you add new mulch. Keep the fertilizer in a circle near the drip line of the tree—this is where its feeder roots are. Manure is best, as it has a fairly balanced nutrient

load, and it encourages soil life. Only apply a layer 1" thick, in a 1' wide band, and put mulch on top of this. The soil will do the rest of the work incorporating it into the ground and making it available to plants. If using synthetic fertilizer, always go with the instructions on the package. For a tree treat, find some kelp meal at a local garden center or from an organic farmer, and sprinkle some of this around the drip line every 3-5 years. Note: if you are using hay with a good clover or alfalfa in it, there is no need to add manure! Watch your tree to see if you are using too much or too little fertilizer. It will send out water sprouts over 24" long if you are using too much (and it won't fruit very much) and it will stay very small, growing little or not at all if you are using too little. Over-fertilizing apple trees can bring on insect and disease problems, so its best to go with less if you are in question about the amount. If you are not getting any fruit after 6 years, try adding a little bone meal, rock phosphate, or other phosphorous source. If you have very acidic soils, adding a little lime will help problems as well.

## **Fruiting**

Apples need more attention from you to produce quality fruit. With a little extra care, the fruit will be bigger, have less insect and rotten spots in it, and you will get more of it every year. To get larger fruit, thin the fruits that set after the flowers drop in the spring—when they are marble-sized, go and pick all but 1-2 fruit-lets from each cluster (aiming to leave a hand's breadth between each fruit-let or cluster) and compost or discard the rest of the fruits you pick off. You will see insect damage at this time, and always leave the best looking fruits. To avoid insect damage, I recommend using a natural product called Surround™, a wettable clay that you spray on the tree every two weeks, starting just after the flowers fall off the tree. Most apples will ripen well on the tree, but should be picked while still a little hard and ripened indoors in paper bags until soft (you can keep the hard fruits in a refrigerator or cool basement and pull a few out each week into your heated space to ripen for you). A good method to tell when the apples are ready to pick is this: First, pick one off the tree, cut it open with a knife and look at the seeds. If they are dark colored, the fruit is probably ready, if they are still white or mostly white, wait a little longer. Also, try eating a slice of this fruit—if it is somewhat tasty and has some sweetness, they are ready—if they are flavorless are just sour, they're not. Know that not all apples have a red color when ripe—some are striped, some green, some yellow. If your apples are always full of insect and disease damage, I recommend reading a good book on apple growing to find out some more details on how to deal with pests. I recommend Michael Phillips *The Apple Grower* very highly—one of my favorite books! Also Stella Otto, *The Backyard Orchardist* is good for many different fruit trees including apples.