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Planting and Mulching Trees and Shrubs

Selecting a healthy plant
Choose plants with healthy root systems. Healthy root tips are light in color; older roots are dark. If the plant is container-grown, remove the pot and take a look at the roots for yourself. A good rootball will stay intact. Avoid pot-bound plants and those with many roots circling the outside.

It's harder to check balled-and-burlapped (B&B) plants, but you can. Probe into the rootball about three inches out from the trunk, checking for roots. If you don't find any in the upper few inches of soil, avoid that plant.

Now step back to examine the plant's overall structure. Shrubs should have several stems coming from the base of the plant. Trees, on the other hand, should have only one upright trunk and branches should be evenly spaced along the trunk. Avoid plants with dead branches, trunk cracks or wounds, or leaves that show signs of insect damage, disease, or drought.

Transporting and storing your plant
When moving your plant, handle it by the rootball or container and not by the trunk or branches. Cover it during the ride to avoid windburn. Load and unload it gently; don't drop or bounce it on the ground.

If you can't plant it right away, keep it cool in the shade and give the plant plenty of water. Plants will need water daily in the summer. The best thing for your plant is to plant it as soon as possible.

Digging the hole *(refer to diagram on last page of fact sheet)*
First find the trunk flare on your tree or shrub. This is the base of the trunk which widens out at the interface with the uppermost roots. If there is soil or potting medium on top of the roots, carefully remove it to expose the trunk flare. Measure the depth and diameter of the rootball now.

The most common mistake people make when planting a new tree or shrub is making the planting hole too deep and narrow. Instead, focus on digging down only as deep as the root ball is. The soil underneath needs to stay firm so the plant doesn't settle later on. Make the hole two to three times as wide as the diameter of the rootball. This ensures that the soil is aerated and will encourage rapid root growth.
At this point, you should have a healthy plant ready to be planted into the proper-sized hole. Carefully place it in the hole to check the depth. If you've made the hole too deep, remove the plant and place some soil back into the hole, firming it with your foot.

Planting
Now you're ready to plant. If your plant is in a pot, remove it by sliding it out sideways on the ground. If the roots are dense, slice downwards with a sharp knife in three or four places around the outside of the rootball, about an inch deep. Cut any visible circling roots; this will cause them to branch out into the new soil, instead of continuing to grow in a circle after planting. Place the plant in the center of the hole and check again that it is at the proper depth.

If your plant is balled and burlapped, remove as much wire, burlap, rope, straps and other ties as possible, but avoid breaking up the rootball while doing so. It may be easiest to set the plant in the hole and then cut and remove these materials from the top half of the rootball. It's okay to leave wire and burlap on the bottom half of the ball, because most roots grow out from the top half anyway.

Next, fill in the hole around the root ball with the soil you saved from digging. In most cases, there is no need to amend the soil with organic matter. However, it is a good idea to have a soil test done ahead of time so that you can add the proper amounts of lime and essential nutrients at planting. If the soil is very heavy (clay soil) or very sandy, adding 10 percent to 20 percent compost or peat moss to the backfill may be worthwhile. Otherwise, it is not recommended.

Firm the soil as you backfill, but don't stomp on it and compact the soil. You can add water when the hole is half full to settle the soil, then again when you've finished planting. Make a donut-shaped dam of soil around the outer edge of the planting hole to form a "saucer" to retain water around the plant.

Watering
Water is the most essential resource that you can give your new plant. Immediately after planting, water thoroughly to saturate the entire root ball and backfill area. This improves root to soil contact, eliminates air pockets, and ensures that your plant has enough water to survive.

Water frequently for the first few weeks. Water daily for a few days, then every other day for two weeks. After that, give your plant an inch of water twice a week, gradually backing off to once a week, until late fall. One-half inch of rain or more will reduce the amount of water you need to apply.

A drip irrigation system can be very helpful in very hot weather, in very windy areas, or areas of sandy, fast-draining soils. Applying water slowly so that it soaks in is much better than applying it rapidly with a hose. You can also do this by filling a five-gallon bucket with holes drilled in the bottom so the water drips out slowly over the root zone. Water must be applied to all sides of the plant, not just one, so move the bucket each time you water.

Mulching
Mulching gives your plant a competitive advantage over turfgrass and weeds, so that it establishes itself quicker and grows faster than unmulched plants. It also helps keep the soil moist between waterings, and keeps the soil temperature constant.

You have several mulch options. Composted pine bark, nuggets, or hardwood chips are good choices. Don't use straight compost as a mulch, as it may encourage weed growth.
Spread the mulch out in a uniform layer, two to three inches deep over the entire rootball and outwards at least to the drip line of the plant. You can renew mulch each year by adding a little to the surface; there is no need to remove old mulch, but don't allow it to become deeper than four inches.
Don't pile the mulch up around the trunk of your tree. This common mulching practice is not only harmful, but will lead to the decline and eventual death of your plant. Pull the mulch back about four inches from the trunk or stem.

Staking trees

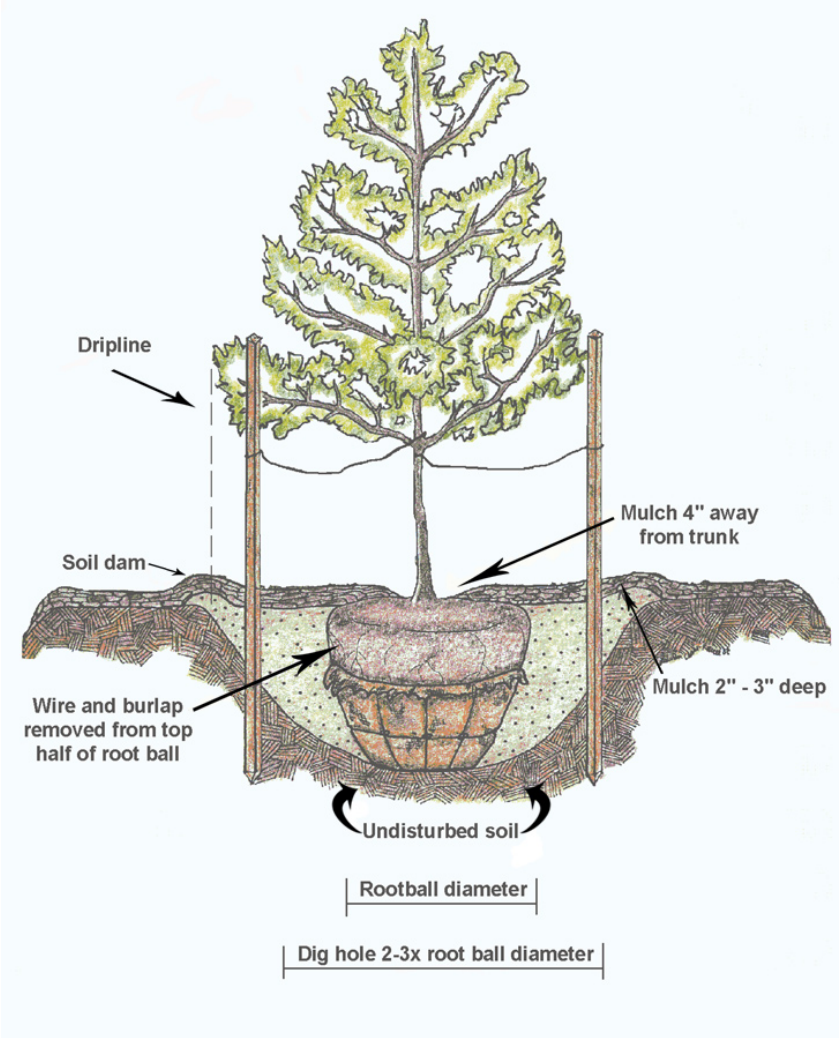
Large trees may need staking to stabilize the root ball while the roots grow out into the surrounding soil. Smaller trees and shrubs do not need to be staked unless it is a very windy site. Use two sturdy stakes, pounded firmly into the soil just outside the root ball at the time of planting. Attach the tree loosely with a flexible material (such as wide fabric straps that won't cut into the bark) around the trunk at the lowest level of branching. Remove the straps and stakes after one year. When they are left on, they often end up girdling and injuring the trunk.

Follow-up care

Your plant doesn't need fertilizer the first year. After that, apply a slow-release fertilizer over the root zone in the spring or summer. Your soil test will give you specific recommendations.

Water when needed for a year or more. Shrubs will be established after a year, but trees will take more than one year. In our climate, it takes about one year for each inch of truck diameter, measured four inches above the root flare. A 2-inch diameter tree will take two years, a 3-inch diameter tree three years, and so on, before a tree can be expected to survive on its own. Meanwhile don't expect to see much shoot growth, as the tree must grow a root system first.

Don't do any major pruning before or after planting; only remove any dead or injured branches or stems. Beginning the second year you may prune lightly as needed to establish good form and structure.



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