

Getting off to a good start is essential to growing a healthy, long-lived tree. A stunted tree seldom develops into a desirable one. Weak growth and poor foliage let the sun burn the trunk and branches, making the tree more susceptible to attacks by insects and diseases. Good cultural practices lead to improved success in establishing trees.

**Preplanting care.** Keep the tree in a cool place and the roots moist until planted. Bare roots may be soaked in a bucket of water for a few hours or overnight, but no longer.

**Urban tree planting.** When planting trees in urban areas or other areas disturbed by construction, care must be given to reducing soil compaction caused by heavy equipment used in construction. Soil has often been compacted in these areas to the extent that neither water nor oxygen can adequately penetrate the soil. Site preparation for tree planting in compacted areas should consist of digging or tilling at least 8 to 12 in. deep and in a large enough area to accommodate future root extension. This helps restore the pore space in the soil, permitting penetration of water and oxygen and facilitating the spread of roots throughout the soil. This can result in more rapid tree establishment and a root system that better provides water and nutrients and supports the tree against New Mexico winds. Organic matter (moist peat or compost) may be worked into the soil in the prepared area to encourage root extension and to help keep the soil loose.

**Digging a hole.** Make the circumference and depth large enough to accommodate most of the roots.

**Pruning.** Remove broken roots of deciduous trees and shorten all others so that they do not touch the sides of the hole. The roots of containerized trees should be pruned by cutting vertically up the sides of the root ball to sever circling roots.

**Plant the tree no deeper than it grew in the nursery.** Fill around the roots with well pulverized soil. Water to settle the soil, then add more soil and more water. In sandy soils peat or compost is often added. Make sure it is moist and mixed well with the soil before filling the hole.

**Add no manure or fertilizer in the planting hole.** The development of new roots is dependent primarily upon moisture, and contact with high fertilizer concentrations may cause injury, resulting in burning around the edges of leaves (salt burn).

**Water.** If the tree is planted in late winter or early spring, water often enough to keep the soil moist. After growth starts, more frequent irrigations will be needed, usually every 7–14 days during the first growing season. Container trees that are growing when planted may need more frequent irrigations until the roots have grown out of the soil ball. The second season, after the tree becomes established, irrigations may be less frequent. However, more water is needed as the tree grows. The small basin originally left for watering will no longer be sufficient. Enlarge the basin and water thoroughly, well past the drip line of the tree. Water deeply because frequent light applications of water promote shallow root systems.

**Fertilizers.** No fertilizer should be needed the first season. In sandy soil a very small amount may be beneficial if applied once or twice during the season and followed with plenty of water. Never apply fertilizer to a dry soil. Irrigate and wait until the next regular irrigation before applying. As the tree grows older, apply more fertilizer. Usually nitrogen is the main element needed. A general rule is to annually apply 3/4 pound of ammonium sulfate or the equivalent amount of other nitrogenous fertilizers for each year of age or inch of trunk diameter. Apply uniformly on the soil starting 18 inches from the trunk and going well past the drip line. Split applications are less likely to damage the roots, especially in heavy soils, and less nitrogen is lost through leaching in sandy soils. Divide the total annual amount by two or three and apply at monthly intervals. Apply no fertilizer after July 30.

*Original authors: Darrell T. Sullivan, former professor, and Esteban Herrera, former Extension horticulturist.*

**Young trees in lawns.** Trees planted in established lawns require special attention. Young trees do not compete well with grass for water and mineral nutrients. Also, lawns are usually irrigated frequently but lightly so that water does not reach the bulk of the tree's root system. Keep grass from around a tree out to the drip line by cultivating or by applying a 2- to 4- in. layer of organic mulch. If grass is not removed, extra water and fertilizer will be needed. After the tree is older, it competes much better.

**Winter sun scald.** Summer sun may burn the bark of weak trees; however, winter sun is equally as injurious, even to healthy ones. During warm winter days the sun warms the exposed bark of the trunk and main branches on the southwest side. At night, temperatures may rapidly fall below freezing. This alternate cooling and warming injures the bark tissues. The tree weakens and becomes vulnerable to insects and diseases.

Paint trunks of young trees with exterior white latex paint (not oil base) to reflect the winter sun. Maintain temporary branches on the lower part of the trunk to shade the southwest side. Remove temporary branches when higher main branches extend far enough to shade the trunk in winter.