

POST-TRANSPLANT CARE OF TREES

Barbara J. Bromley, Horticulturist 2012 (rev)
Rutgers Cooperative Extension of Mercer County

Thoughtful planning and attention to the tree's needs during planting are the first two steps toward ensuring its long-term survival. When properly selected for a site and planted, the following will help it thrive.

MULCHING (if not done at transplant)

Spread a 2-3 inch layer of organic mulch such as shredded hardwood, wood chips, coarse compost, or licorice root in the area under the tree – the wider the better. Because of the possibility of disease or rodent damage, *no mulch should touch the trunk or the root flare*. Mulching helps conserve water, prevent weed growth, moderate soil temperatures, and act as a barrier to lawn mower and string trimmer damage. The wider the area mulched, the less competition there is from surrounding turfgrass. (Young, newly forming tree roots are less able to effectively compete with established grass roots.)

WATERING

Water thoroughly. A tree is considered a transplant for at least 2 years and for as long as 10 years, depending on species and speed of recovery, no matter how old it is when planted. (One rule-of-thumb is that transplant recovery takes the diameter-of-the-tree-plus-one in years. For example, a three-inch caliper tree should take 4 years to recover from transplanting.) Even a tree that is drought tolerant or wet site tolerant when established will not have that tolerance for the first two to four years that it takes to redevelop a strong root system.

Trees should be watered deeply once a week in warm weather, more frequently in hot, windy weather. Generally it is not necessary to water trees daily after the first week. This discourages development of a healthy root system. Trees planted in quick-draining loamy sand or sandy loam soils will need water more often than those in heavier silt loam or clay soils or in soils high in organic matter. Continue watering until the leaves drop in autumn.

Irrigation bags and rings can be very useful on both residential and commercial sites. Water is poured into the bag or ring and allowed to seep gradually into the soil around the base of the tree. This can reduce the amount of time necessary to water thoroughly and also the possibility of overwatering. Also it isn't necessary to constantly drag hoses from one place to another.

It is difficult to give much guidance other than general information when suggesting how much to water newly planted materials. Variables include the size of the plant and planting pit, the texture of the native soil, the amount of organic matter, the amount of natural rainfall, the type of soil or potting mix in the root ball or container, average daily temperatures, winds, exposure (west and south are more drying than north or east), and size of leaf canopy.

The goals are to keep the soil moist, but not soggy, and never to let the soil dry completely while the plants are becoming established. (A watering rule-of-thumb is a five-gallon bucket of water per each inch of trunk diameter twice a week if there is no rain.) Be sure that the original soil ball and the backfill soil are both moistened completely. Allowing the hose to dribble water slowly into the planting pit to saturate the planting area is acceptable, but the hose must be moved to ensure that water gets to all of the roots. Care must be taken not to drown the tree.

The best time of day to water is morning. On occasion a plant may wilt slightly in the heat of a scorching summer afternoon. If the plant recovers after sunset, its roots probably could not fill the high water demand created by high temperatures, but there was enough water in the soil for it to become turgid again in the evening. Watering in late afternoon may supply more water than the plant can use.

During extended droughts, even old, well-established trees should be watered.

WINTER PROTECTION

Except for mulching, hardy trees don't need extra winter protection.

PEST CONTROL

Trees stressed by digging and transplanting need all of their leaves in order to manufacture food for growth. Insects further weaken newly transplanted trees, making them more susceptible to other problems. Check stem/trunk and leaves of shrubs and trees regularly for presence of insects and diseases. Consult experts for control methods. Remove weeds that compete with plants for water and nutrients.

FERTILIZING

Fertilizer is usually not needed until the year after transplanting. After the first year, the tree will need a source of nutrients. To determine which nutrients are needed, have a soil test run. Using those results, fertilize using slow-release, non-burning organics, a high-nitrogen fertilizer containing slow release nitrogen (such as 10-6-4 50% organic), or water-soluble plant food to supply those nutrients. Apply just beyond the drip line of the tree following the label directions for rate. Do not over-fertilize.

Note: Because of the possibility of overwatering and overfertilizing, do not plant annual flowers at the base of a newly planted tree. Also, be sure lawn irrigation systems do not water the tree or shrubs along with the lawn.