

## HOW TO WATER NEW TREES

Watering newly planted or transplanted trees need not be mysterious. There are a few rules of thumb to follow but first consider these factors to help you determine how often to water: the season, temperature, wind, rainfall, moisture retention of the soil and drainage.

Trees experience 'transplant shock' whether they are one inch caliper saplings or four inch caliper trees because they lose 80% of their root structure when dug up and put into a root ball. Their survival depends upon re-establishing their root structure to support their crown or leafy canopy. With good watering, it takes one year for a one inch sapling to re-establish its root and five years for a four inch tree.

## WATERING WHEN PLANTING

Rather than putting water into the empty plant hole, back fill the hole and then water. Apply fifteen gallons of water in a slow trickle around the perimeter of the root ball, not on its trunk. Allow the water to penetrate the soil to the depth of the root ball, usually about 18-24 inches. (Soaking reduces the oxygen content of the soil and this can kill the tree.) Thereafter, apply one inch of water per week along with good monitoring of the soil. This means using a narrow trowel to make a small trench at the edge of the root ball and sampling the soil moisture by touch. Water if dry, delay watering and monitor again in a day or two.

Young trees need more water in their first year until their roots extend out of the root ball into the native soil. Continue this pattern of monitoring and watering as needed through the season until the leaves fall and the tree goes into dormancy. Note that tree roots grow through November and need water to do so. Only stop watering when the soil is frozen. The water then becomes an insulator.

## WATERING TREES DURING THE NEXT 2-5 YEARS

As young trees grow to re-establish their roots and achieve a balance between root and canopy, continue the monitoring and watering schedule as described above. Sample the moisture content of the soil adjacent to the edge of the root ball and water when the soil is dry. One inch of water, applied slowly, per week is a good rule of thumb but monitoring the soil gives the best results considering rainfall, temperature and other variables.

## WATERING OLDER TREES

Established trees that have a good root structure and supported leafy canopy are usually self-sufficient. However in periods of drought it is prudent to monitor soil moisture by digging a trough out under the canopy, not at the trunk, as the roots extend

that far. If the soil is dry 8-10 inches below the surface, water slowly with a sprinkler around the whole perimeter of the tree, applying one inch of water.

#### MULCH IS IMPORTANT FOR WATER RETENTION

Mulch is a tree's best friend. It insulates the soil, retains moisture, checks weed growth, prevents soil compaction, reduces lawn mower damage and adds a 'finished look' to the landscape.

Establish a grass-free area at least three feet in diameter around all trees, young and old. The area can be square or round. Use wood chips or hard wood bark pieces loosely applied to a depth of 2-4 inches but not touching the trunk. Do not "volcano" mulch tree nor place the edging around tree area, back onto the tree.

For more information see [Tree Care Tips and Techniques](#).