



Watering

Your Newly Planted, Transplanted, and Established Trees

One of the most important factors affecting the survival rate of newly planted, transplanted, and established trees is proper watering. Drought conditions weaken and stress trees. Stunted shoot growth, sparse foliage, and susceptibility to insects and diseases occur when a tree is stressed. Proper watering is needed for the tree to become established and to adapt to its new environment. A watering schedule should be followed to assure your trees are receiving the accurate amount of moisture. Too much water can stress a tree to the same extent as having too little moisture. Ideally, trees need about an inch of water a week. Water should be delivered in a manner that neither over-saturates the soil nor allows it to dry out. Be sure to allow for rainfall when you calculate the amount of water to which your tree is exposed. Rainfalls of 1/2" to 1" on average per week would provide an ideal amount of water. Trees on hills may have to be watered for double the time but at half the recommended water flow rate in order to eliminate runoff.

Newly Planted Trees (less than 2 years since planting)

Transplanted trees rely heavily on moisture in the root ball throughout the first growing season. Only part of the water that was available to the tree before transplanting is available to the tree after transplanting due to the fact that there are fewer roots to do the absorbing... over 80% less! The transpirational demands of the tree may exceed the roots' ability to supply water. The soaker hose method of watering is usually the preferred method of watering for newly planted trees. This is because the water can be directed at the root ball as opposed to a larger area surrounding the newly dug hole. There are no roots in the larger area outside of the root ball to absorb excess water. As a result, the area surrounding the hole can become quite saturated, causing unwanted bacterial and fungal pathogens.

Established Trees

An established tree can be defined as a tree with 100% of its root system intact. Smaller established trees can be watered using either the soaker hose or sprinkler method, while larger trees might be easier to water using the sprinkler method. 1/2" to 1" of water per week would be ideal.

Soaker Hose Method

Coil the soaker hose around the trunk of the tree, starting about two feet away from the trunk. Wrap the hose outward and around the tree, about 18" from the previous wrap. For established trees, wrap the hose outward until you reach the dripline (i.e. the spot on the ground that corresponds to the outermost edge of the canopy above), then continue an additional distance that is equal to one half the distance between the trunk and the dripline. For newly planted trees, wrap until just inside the edge of the root ball. Check your hose specifications for the amount of water being delivered over the specified time.

Sprinkler Method

For established trees, set the sprinkler to span the area equal to the entire root zone (i.e. area from trunk to dripline) plus one half this distance. For newly planted trees, set the sprinkler to span just to the edge of the root ball. A container placed within the sprinkling area can help you monitor the amount of water (in inches) being applied. If you have mulched the tree (and hopefully you have), consider the amount of water the mulch absorbs when determining the inches of water applied to the soil.