

Water It Right!!

A Quick Guide to Proper Irrigation Techniques for New Trees and Shrubs

The most important survival factor for newly planted trees is soil moisture during the first few years after planting. Watering during the first growing season is crucial. After planting, the roots of trees will eventually spread into surrounding soil. Until that happens, however, trees continue to draw water mostly from their root ball. The rule of thumb for time required for tree establishment is one year for each one-inch of tree caliper. Smaller trees and shrubs establish more quickly than larger trees. It is critical to the tree's health that the root ball of the tree not dry out during the establishment period. A tree with a dry root ball cannot absorb water.

Most new tree and shrub transplants that are properly planted in well-drained soil (See *Plant it Right!*) require about one inch of water per week. New trees and shrubs may need to be watered twice a week for the first month and once a week for the remaining portion of the first growing season, depending on rainfall amounts. Whether container-grown or balled and burlapped (B&B), most of the functional roots of trees and shrubs will remain inside the root ball until the plant is established. This relatively small soil reservoir dries out more rapidly than the soil around it. It is therefore important to monitor the water status of the root ball and to concentrate the addition of water in this area.

After a tree or shrub has been planted, construct a ring of soil 2 to 3 inches high at the outside edge of the planting hole to form a water basin. This directs water into the root zone to aid in retaining water rather than having water running off the surface. The water basin does not need to be a permanent fixture and can be removed after the plants become established. Apply a two to three-inch layer of mulch over the planting hole. The mulch will help maintain moisture and reduce fluctuations in soil temperature. The mulched area should be expanded as the plant grows.



<http://home.howstuffworks.com/how-to-plant-trees-shrubs-and-vines.htm>

When irrigating, enough water should be added to penetrate the entire root zone at one deep soaking. For transplants, this means to wet the planting hole. Use a garden hose to slowly soak the soil by filling the water basin to the top to allow deep water penetration and encourage widespread root development.



A treegator

Or use a drip irrigation system such as a 5-gallon plastic bucket with 1/8-inch-diameter holes drilled in the sides near the bottom. Place the bucket next to the tree and fill with water. This allows water to slowly trickle into the root ball. More attractive water reservoir devices like the tree gators (www.treegator.com) are also available. Commercial drip irrigation systems or leaky pipe (soaker hose) systems are also effective and efficient methods of irrigation.

Continue to irrigate trees during the growing season over the entire establishment period. The frequency can be reduced to once or twice a month after the first growing season. During dry winters, irrigate monthly. Evergreen trees and shrubs may require additional irrigation during dry fall and winter months. Most established landscape shrubs need infrequent watering. Check the soil moisture level at a depth of 4 to 6 inches. Without rain, even established trees benefit from a thorough watering once a month during the growing period.

While established trees and shrubs typically require less water than turf, new trees and shrubs require more water than turf. Always plan to irrigate different plant groups separately. Irrigate in the early morning or evening to minimize evaporation.

For more information, visit the VGIC website:

<http://www.viriniagreen.org>