

# Tips on Tree Watering in Dry Climates

## Watering Newly Planted Trees

Irrigate newly planted trees at the base, making sure to wet the entire root ball area. Water as needed, perhaps as often as twice a week during the first growing season. Young trees (up to two years after planting) should continue to be watered at the base, but the diameter of the zone of wetted soil should expand outward as the tree grows. Check the soil periodically to see if it is dry; allow the soil to dry moderately between waterings.

## Watering Established Trees

Established trees should not be watered at the trunk. Instead, irrigate from the dripline (the edge of the tree's leaves) outward. The distance will depend upon the size of the tree and the nature of the tree's root system. As a basic rule of thumb, apply water in a circular band that's at least half as wide as the distance from the trunk to the dripline.

How the water is applied is just as important as *where* the water is applied. Trees prefer to be watered slowly and deeply. Spray irrigation (sprinklers) is great for lawns but not for watering trees. Instead, use a bubbler, multiple drip emitters, or a hand-held hose to deliver water to the tree's root zone. Moisten the soil two to three feet deep each time you water, and let the surface dry between waterings. Use a soil probe to determine the depth of the moistened soil. If the soil is only moist to a depth of one foot, keep watering. Remember, deep watering encourages deep rooting—and deep roots are the best way for a tree to survive a drought. Irrigate established trees once every two weeks during the growing season and once a month during the dormant season.

## Anatomy of a Mature Tree

### Canopy

### Irrigating Trees in Drought

During times of drought, a lack of moisture can cause trees to suffer from drought stress. One early sign of drought stress is wilted leaves. Another sign is leaf scorching, when the edges of leaves or the space between a leaf's veins turn brown. When a tree begins to exhibit signs of drought stress, irrigation must begin immediately to avoid long-term damage to the tree.

### Tree Basics

Trees are slower to establish than most other landscape plants, so they need special consideration when it comes to irrigation. Newly planted trees will typically require more frequent watering than established trees. Although they don't need to be watered as often, large established trees need a larger volume of water (in gallons) than younger trees to stay healthy enough to avoid disease and resist insect pests.

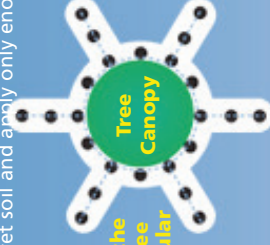
In times of drought and water restrictions, trees should be given priority over other landscape plants, including lawns. Why? It takes 20 years of growth for a newly planted tree to reach the size of an existing 20-year-old tree. A turfgrass lawn left unwatered will naturally go dormant for the season and turn brown, but it may turn green again when rain falls or irrigation is reintroduced. Even if reseeding or resodding is necessary, a lawn can often be re-established in a single season—a large tree cannot.

Remember: during a drought, the goal of irrigation should be *sustaining the tree*, not watering for maximum growth. To conserve precious water, stop all irrigation *during* precipitation! Then, before resuming a scheduled irrigation, check the depth of the wet soil and apply only enough water to moisten two or three feet deep.

### Trunk

Depending upon the type of tree, its age, its root structure, and the type of soil it is growing in, a tree's roots can extend more than three times wider than the height of the tree and grow three feet or more in depth. When watering trees, water slowly and deeply. It's important to get the water deep into the soil where the tree roots can absorb it.

Place emitters the width of the tree canopy in a circular star pattern.



Moisten the soil two to three feet deep. Most of a tree's water-absorbing roots are in the top 12 to 24 inches of the soil.

3 feet

### Roots

Root zone

Tree Tip: Save water! Trees that are adapted to dry climates need less irrigation once established.

