Quench Your Tree's Thirst: Water Deeply and Regularly.

Since we live in a unique Mediterranean climate with little to no rainfall during the hottest months of the year, it's important to make sure your trees are getting adequate amounts of water at regular intervals. A tree will decline if it isn't provided its minimum requirement of water, becoming susceptible to pests and disease.

Advanced signs of water stress include:

- wilting, curling, yellowing of leaves and browning of leaf edges
- dieback of twigs and branches
- lack of new growth and shoot lengthening in spring.

Because we often grow trees that aren't native to our area, it's important to learn about the differing water needs of landscape trees. Even some of our native trees have higher water requirements, such as those types that would normally grow along a waterway. Find out how trees are rated for water requirements at a website for "Water Use Classification of Landscape Species" (WUCOLS), such as www.wateright.org/site2/reference/wucols_region.asp

Most trees will benefit from summer watering, although a few natives might suffer if watered too frequently. Even drought tolerant trees are more resistant to disease and pests when irrigated a few times during summer. It may be necessary to continue watering into the winter until dormancy or rain arrives. It's also important to increase watering during periods of drought, because trees get less water from rainfall.

"Deeply" refers to getting moisture to the root zone: 2–3 feet down, not just in the top 6–12 inches, as you would for a lawn. (Lawn irrigation is designed to wet only a few inches of soil.) Apply enough water to moisten the soil from the surface down through the root area, which will depend on the tree size.

If you can't tell that the tree has been watered, use a soil probe or dig deep to feel for moisture, but do so away from a young tree's root-ball.

Photo by Aaron Escobar.

What is regular watering? For mature trees, water every 2–3 weeks during the dry season, which varies each year, but approximately May-November. Water-loving trees require more frequent irrigation, as do young trees: water the root-ball area deeply 1–3 times per week to encourage rapid root growth.

If you don't have a separate irrigation line for your trees, try one of these simple methods to water the root zone:

- Let a hose drip for a few hours, moving it around below the tree canopy.
- Coil soaker hose under the tree inside and just outside of the drip line (the outer edge of the canopy of leaves).
- For young trees, build a circular earth berm just outside the drip line and fill the basin with water a few times. Fill with 1–2 inches of water per foot of root zone.

The amount of water needed to replenish the root zone will vary with soil texture. Sandy soils drain quickly, retain less water, and require more frequent irrigations. Soils high in clay hold more than 2 inches of water per foot of soil depth. Many of our local soils are loam, a mixture of sand, silt and clay. For loam, each foot of soil depth holds 11/2–2 inches of water.

Keep spray off tree trunks. For mature trees, focus sprinklers about half way between the trunk and the drip line and spray out to 10–15 feet beyond the drip line.

Mulch slows evaporation and prevents weed growth. Place a layer of wood chips, leaves or partially decomposed compost 2–5 inches deep on the soil surface, under the canopy, but **not** touching the trunk. The tree's own leaf litter can also serve as mulch. Organic mulches hold moisture and create a favorable environment for soil life, including helpful bacteria and earthworms.

Create a Buffer Zone

Remove lawn, groundcovers and weeds at the base of a tree's trunk so the tree won't have to compete for water and nutrients. By eliminating the need to trim grass, you will avoid serious injury to the tree's bark from string trimmers and mowers. Cuts in bark interrupt the transport of nutrients and water and expose the tree to disease and pests.