



## *Trees Need Summer Care*

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Water is the biggest summer need for Alamosa trees. We've been getting a bit of rain in the San Luis Valley this month, but it probably has not been enough to keep your trees healthy.

If you can, poke into the soil and see how wet the top foot is -- remember most of a tree's active roots are within the top 12 inches of soil. Sometimes it isn't easy to check the soil directly and you need to check for secondary symptoms. According to the Davey.com website you should look for: "wilted foliage, a sparse canopy of off-color and undersized leaves, leaf yellowing, leaf drop, premature fall coloration, and leaf scorch."

Unfortunately, lack of water isn't the only cause for some of these symptoms. For example, leaf scorch (the browning of leaf margins and tips), is caused by "a tree or shrub's inability to take up sufficient water to meet its needs," according to the Colorado State University Extension website. While this can be caused by under watering, it can also be caused by excess moisture, fertilizer, or heat stress.

"When a plant is over watered," reports the CSUE website, "it cannot grow new, water-absorbing roots without oxygen. Soggy soils therefore prohibit root development and scorch will result." And the over-application of fertilizer can cause leaf scorch by 'burning' roots.

Plants suffering from heat stress shut down basic growth functions and cannot pull sufficient water up into their leaves. According to the CSUE website, "Plants on the south or west sides of buildings or fences may show the effects of reflected, concentrated heat, as may plants surrounded by rock mulch. Black plastic mulch can cause the soil to heat up to levels beyond a plant's tolerance, shutting down growth processes and severely damaging roots resulting in leaf scorch."

Let's say you can rule out over watering, over fertilizing, and heat stress. What's the best way to water your trees? Most websites suggest watering deeply and infrequently.

The Davey website suggests putting a sprinkler beneath a tree with a can close by and running the sprinkler slowly until two inches of water have collected in the can. It's important to water the entire root zone -- this means at least out to the edge of the canopy. In Alamosa, the best time to water is during the cool of the day -- typically early in the morning or in the late afternoon if cloud cover or rain has caused the temperature to drop.

You may need to water more if the tree is in a turf area -- the grass will absorb a lot of water. If you have a young tree, consider keeping turf outside the canopy area so any water goes to the tree. Mulching around the tree can reduce evaporation.

I wonder about mulching the two 1 ½-inch caliper maple trees I planted this summer. They are watered by a low pressure watering system. Will the bark mulch absorb water I want to go to the tree roots? Or will the mulch be more of a benefit – reducing evaporation and keeping the soil cooler? I'll mulch and add additional with a hose placed under the mulch layer.

You also need to consider your soil type when watering trees. Even in my yard, the soil ranges from extremely sandy to clay. If you water clay soil too rapidly, the water may just pool or run off. If you have sandy soil, it's hard to keep it wet as the moisture just seeps through. I've spent many years trying to improve my soil so it is loose and holds water. It's a continual struggle!

Ideas on frequency of watering vary widely. Many people have trees in their lawn and typically water enough to keep the lawn healthy. The Denver Water website says, "When watering restrictions prohibit turf watering, or when trees are not in turf areas, water small trees four times per month, medium trees three times per month and large trees two times per month."

My trees get regular water from low-pressure drip or sprinkling emitters. During the summer, I tend to deep water trees in drier areas of the yard once a month.

The more attention you pay to your yard, the more in tune you'll be with what your trees need. And, of course, different trees species require different amounts of water. But that's for another article!

*"It is no coincidence that the cities rated 'most livable' always have an abundance of trees."* Gary Moll & Stanley Young in 'Growing Greener Cities'