

Watering Trees in the Winter

With the drought of 2018 and the wet spring and summer of 2019 many landscape plants have struggled. This year, established trees with dead branches, browning leaves and too early fall color all came into our office. Most of these symptoms were attributed to environmental stress relating to water.

Trees that have been in the landscape for more than 5 years are generally considered well-established. Often the perception of these trees is that other than pruning, these trees need little to no care from homeowners.

When deciding how much care to give your established trees, you must consider their value in your landscape. A tree in your front yard that is part of a welcoming landscape would likely be highly valued. If this tree was brown or dying you would see it every day as would your neighbors or passerby's and it would likely ruin the landscape. A tree in your backyard that shades your home would likely be of moderate value. It may not need to look as perfect as a front yard tree but you definitely wouldn't want it to die or drop large branches as these may hit your home. A tree on the edge of your property serving as a screen may be of the lowest value. This tree isn't needed esthetically but it does still serve a purpose and you want it to survive. Even these trees shouldn't be allowed to suffer irreversible drought stress if they have landscape value.

The most important factor to consider when you're considering if you should water an established tree is the weather. A wet spring or fall may lead homeowners to think they don't need to water established trees even when hot, dry weather moves in. Any sudden change from wet to hot and dry will stress plants. Use a metal rod or dowel to push into the soil near your tree. If the dowel easily penetrates into the soil you can wait to water. If the dowel doesn't penetrate the soil, or only goes an inch or two, the soil is dry and needs to be watered.

To water established trees, soak the soil to a minimum depth of 12 inches, out to and beyond the drip line, every three to four weeks if it doesn't rain significantly in the meantime. A rain gauge to measure natural precipitation is essential for determining proper tree irrigation frequency. Remember, the feeder roots on an established tree will extend well beyond the drip line.

When applying water around established trees, use any method that thoroughly moistens the soil to a depth of 12 inches or more out to and beyond the drip line. Methods that apply the water directly to the soil surface will be most efficient. A porous soaker hose works well, or just let a pencil thin stream of water from a garden hose soak the ground before moving it to another location. Don't expect to adequately water an established tree with a handheld hose. It's unlikely you will be willing to stand there long enough to do much good.

Because water moves more readily into moist soil, it might be wise to apply additional water immediately following rainfall of 1/4 to 1/2 inch to move water deeper into the root zone and to maximize the benefit of light precipitation.

Be sure to thoroughly soak the soil around established trees and shrubs before the ground freezes in the fall. Evergreen trees are more prone to drought damage during winter months than deciduous plants that have entered dormancy. To make things more difficult, evergreens don't show drought stress as quickly and often show stress past the point of salvation. Often we get a week of 40 degrees or an

occasional day of 50 degrees in the middle of winter. Take advantage of these days and give your trees, especially evergreens a drink.

Often we receive questions about planting flowers underneath tree. The best advice I've heard on this subject is "plant under a tree you like—not a tree you love." Digging and planting directly under a tree disturbs roots and gives the tree competition for water and nutrients. This activity won't likely kill the tree, but if it's a tree you love don't stress it.

Mulch is a critical factor in water conservation in the landscape. Mulched trees retain more water and suppress weeds that would otherwise compete for moisture. Never apply mulch up against a tree trunk. Often we see these mulch "volcanos" in new construction and I have been guilty of trying to excavate these trees in parking lots and the homes of my friends. Mulching up against a tree in a giant mound leaves your tree susceptible for insect and disease (entering through rotted bark) and suffocates the tree's flair roots which require oxygen.

Proper mulching around a tree should look like a doughnut—a ring around the tree 2-3 inches deep. This ring can be extended out several feet up to or past the drip line of the tree. The mulch will serve a purpose and look better than patchy grass that struggles for water and sunlight underneath the tree.

While many homeowners struggle with the concept of caring for large, established trees I find that watering and mulching are much better than the alternative—removing a large, established tree. To quote the late Bob Ross; "There is nothing wrong with having a tree as a friend."