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Summer Gardening

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Most Trees Are Planted Too Deep in the Ground

Trees too deep in the ground, an all too common problem, have two basic problems. When the trunk flare is under ground, it stays moist and doesn't breathe properly as bark is supposed to do. Soil too high on the trunk also often hides circling and girdling roots which choke the tree and drastically slow down growth. Many trees are snapping off at the ground surface because of this problem. Trees grown in containers are highly subject to this damaging condition. To make matters worse, mulch is often piled up on trunks.

Improperly Exposed Root Flares

Root Flares - Properly Exposed

Solution? Get the mulch and soil off the trunk and off the flare. If you do the soil removal yourself, use hand tools and gloved hands being extremely careful not to damage the wet bark tissue. Water can be used but only with a soft flowing stream. Strong water blasts can severely damage the soft bark on the base of the trees. The best route is to hire an arborist that uses the Air Spade. It is a fancy sandblasting type tool that blows air (no sand) at a high velocity and removes the soil without damaging even the smallest roots. Arborists that don't use this tool or the Air Knife should be passed on when hiring a tree care company.

Once exposed, the root flare area should be left exposed to the air. The tree trunk and root flare eventually will grow and expand to fill the depression around the base of the tree. Putting anything into the depression will cause the area to become a problem again. That includes stones, bark, compost or anything else. All I would put in the depression is a very thin layer of shredded mulch and that can be skipped. Deep holes that may create a dangerous situation need to be covered with a grate.

Tree Care

Trees can suffer sudden dieback after weed-and-feed fertilizers were applied around them. The weedkiller Atrazine is especially damaging. If it applied as much as twice a year for several years it can kill trees and shrubs.

Watering Trees

In order to ensure healthy and sustained growth, newly planted trees should be watered consistently for the first two to three growing seasons. Depending on soil conditions and rainfall, newly planted and young trees should be watered once a week. Weekly watering should continue throughout the summer and fall months, or until the tree is well established in the landscape.

So, what are some of the watering guidelines? Keep the soil moist but not soaked. Too much water, especially in heavy clay soil, can severely damage the tree by eliminating air from the soil and suffocating the roots. The soil should not stay saturated, but should have time to dry out between watering. A good indicator is the mulch around the tree. If the soil is dry below the surface of the mulch, it is time to water. If the mulch is still moist, do not water. This time of year, the standard rule is to water at least once a week at the rate of ten gallons for every diameter inch of the tree. For example, a two-inch diameter (caliper) tree will need twenty gallons per watering.

Often people water leaves and tree trunks. There are two problems with this. The first problem is that the tree gets most of its water through the roots, not the leaves and bark! The second problem is that water on the leaves may result in sun damage to the leaves and diseases due to insects. Water the ground within the drip line (the outer edges of the tree's branches) to disperse water down to the roots.

A soaker hose is ideal as it can water a greater area at one time and does not need to be moved as often. Also, a soaker hose allows for gentle watering. Blasting water under the drip line may remove nutrients, washing away useful soil. Other good thing is using watering wand to water trees. If you have an irrigation system, create separate zones for trees and grass as watering frequency and volume is different among trees, the beloved St. Augustine, and other summer color, deer-candy plants. During long dry periods, trees must be given top watering priority over your lawn because your brown grass might green up and come back but your brown leafed trees will not survive.

The five-gallon bucket method (or watering bags) provides another easy and effective way to water your trees. Simply drill one-quarter inch holes in the side at the bottom of five-gallon buckets of water and place them beneath the drip line of the tree. The gradual release of water will effectively soak the critical root zone of the tree and provides an inexpensive alternative to sprinklers or other watering methods.

In Central Texas you should continue watering weekly during the winter if there is no rain. Newly planted trees should be watered regularly, particularly April to September, for 2-3 years so that they may have the best chance of surviving and becoming well established.

You do not generally need to water established trees. However, observe your older trees to see if they need additional water. The need for watering will most likely occur during periods of extended drought. If you do water an older tree, you can either water the entire area under the crown or foliage, or concentrate water on 1/3 of the area.

The best time to water in this blistering heat is between 10 pm and 8 am. Trees relieve water deficits overnight. There is also less evaporation during the late night hours, providing more water in the soil. Finally, pest problems are minimized when watering during the night. To conserve water you could drain your kid's pool and pour water under a tree or redirect your rain gutters toward your trees. If you really want to save, reuse the water you save waiting for the shower to warm up (or would that be being too radical!). Plant drought tolerant species so they have better chance for survival and need less watering. Forget your desire to plant water loving trees (such as magnolia, bald cypress, pecan and some other trees) on rocky shallow soil because they will not do well. Rather plant oaks and elms unless you have rich deep soil.

Nourishment during the hot summer months is crucial to the survival and growth of a young Texas trees. Always remember to mulch, water, and care for your trees so that you may enjoy the beauty, and the shade, of your trees for many summers to come.

By Emsud Horozovic, Forestry Manager for City of Round Rock