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Alamosa Trees
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To Water or Not to Water

Trees need winter moisture, even if they're dormant.

Alamosa doesn't tend to get much winter moisture and our weather can be very cold. Some Januarys I've found the ground frozen at a depth of 6 inches which makes it nearly impossible to safely water trees. However, this winter we had a relatively warm December, and January hasn't been too cold.

Winter watering is a challenge in Alamosa. First off, how many of us have a hose handy in January? Or have access to outdoor water? All but one of our faucets has been shut off for the winter to prevent freezing. And what time of day is best for watering? You want to water when the temperature is above freezing and the roots have a chance to absorb water before nighttime freezing. Often this is early afternoon when many people aren't at home.

It's also hard to know how much to water. Many trees in town are automatically watered in summer months if they're in a lawn or on a drip system, so people aren't aware how much water they're getting. And trees need more water in the summer anyway.

Denver's general survival rule suggests applying 10 gallons of water per inch of tree diameter (measured at chest height), one to two times a month in winter. So a 6-inch diameter tree needs 60 gallons of water each time. The Colorado University Extension service says only water when the air and soil temperatures are above 40 deg. F. I admit I've never watered this much in the winter and I realize we don't have Denver's climate. It doesn't make sense to water when there's snow cover or when the ground is frozen near the surface.

A solid layer of ice persisting more than a few weeks can cause root suffocation. This was very apparent in England this past summer. Longtime gardeners I met in May and June bemoaned the loss of more plants and shrubs during the 2009-2010 winter than they'd ever lost before. It was a particularly wet, cold and long winter with ice coating gardens for months. Sadly, it doesn't look like this year will be any better for them.

When watering, remember most of a tree's roots are in the top 12 inches of ground and that they typically extend at least to the dripline (the ground that lies directly below the outermost reaches of a tree's branches) if not 2 or 3 times further. So water deeply and slowly within the dripline to reach the most critical root area.

Tree setting is an important element when considering water needs. Trees in windy, sunny, or reflected heat locations will lose moisture more quickly. A 4-inch layer of loose mulch helps the soil retain moisture.

Newly planted trees are the most susceptible to winter drought injury. Woody trees generally take one year to establish for each inch of trunk diameter, according to the Colorado Extension. For example, a two inch diameter tree (at ground level) takes a minimum of two years to establish under normal conditions.

A general perception is that trees just "tune out" over the winter and can be easily ignored. This isn't the case. Deciduous tree roots need winter moisture to remain alive and many evergreen roots actually grow during the winter.

Damage from lack of winter watering often doesn't show up until the following spring and could include branch dieback, or even tree mortality, according to the Rocky Mountain Chapter of the International Society for Arboriculture.

While our climate is harsh, and trees can be difficult to grow, we do have them. Imagine an entire continent without a single tree – Antarctica! And Tierra del Fuego, at the very southern tip of Argentina, essentially has only three types of trees – all beech species. This makes Alamosa's tree diversity seem impressive!

"I willingly confess to so great a partiality for trees as tempts me to respect a man in exact proportion to his respect for them." James Russell Lowell