

## Year Round Gardening

# Winter Tree and Shrub Care

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In the Pikes Peak region late autumn and winter can be dry, windy and, cold. Trees and shrubs are subject to desiccation injury under those conditions. Evergreens, both conifer and broadleaf are particularly susceptible to this injury. Because the leaves (or needles) remain on the tree through winter the tree can lose moisture through transpiration, the process of water movement through a plant and its evaporation from aerial parts, such as leaves, stems and flowers, faster than their roots can replace it from the frozen ground.

Deciduous trees and shrubs lose their leaves before really cold conditions arrive. Evergreen tree leaves remain active until they run out of water in winter. While photosynthesis slows because of diminishing light in winter, it does not stop. While all trees will benefit from winter application of moisture, it is more likely to be critical to the survival of evergreen trees.

Winter watering should be done whenever the ground is snow free and dry. Water during daylight, preferably on days when the temperature is above 40°F. Apply water slowly, a soaker hose is a good option. If you don't want to drag hoses purchase several buckets and drill a small hole in each. Place them around the dripline of the tree and fill them up. Then they will slowly apply water to the ground. Avoid spraying foliage.

Winter watering is your first line of defense against winter desiccation injury there are a few other things you can do to help trees and shrubs get through our dry winters. Late autumn is a good time to look at how well your trees and shrubs are mulched. If the mulch you applied in the spring has blown away, think about replacing it before winter. If you don't have the time to purchase mulch, put a layer of shredded leaves and grass clippings around the tree or shrub to help retain moisture under the drip line. I would call this 'emergency mulch', not perfect but it will help. Broad leaf evergreens, like hollies (both *Ilex* and *Majonia* sp.) can be susceptible drought injury.

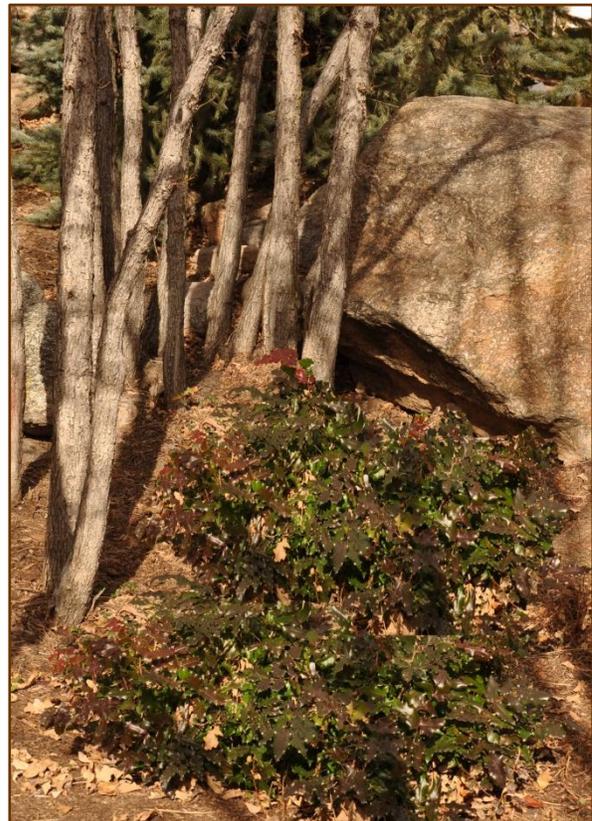


Photo courtesy of Freddie Bogardus

On warm days the leaves lose water through transpiration. There are anti-transpirant products that can be applied to those shrubs to decrease the amount of water loss. Just spray the product on leaves, it will leave a waxy coating, translucent enough to allow photosynthesis and waxy enough to minimize moisture loss. Anti-transpirants are available at garden centers.

Newly planted shrubs may need a bit of extra protection. Because the root system may not be fully established, the plant may not get enough water even with winter watering. Consider using some burlap or frost cloth as a wind barrier. You will have to rig some kind of support to keep the cloth around, but off the plant. This can be accomplished with wood stakes, or concrete wire mesh. This kind of wind protection can minimize dieback in the first winter.

Sun scald or south west injury can be a problem for young, thin bark trees. In the Pikes Peak region, we often have warm winter afternoons, followed by plunging nighttime temperatures. The layers of the trunk just under the bark will become active (transporting water and nutrients to the canopy branches) during warm afternoons. That activity leaves them vulnerable to the rapid chilling that occurs at night. In a mature thick barked tree, the bark will protect those tissues, in a young tree the sudden cold may actually force that thin bark open, leaving the trunk permanently damaged. Paper or plastic tree wraps can mitigate those temperature swings and prevent the damage. The wrap should go on by late November, and come off in spring (Thanksgiving to Easter is an easy way to remember). Do not leave the wraps on all year.

Your trees and shrubs are an investment, it is worth the effort to help them get through our fickle winter weather.

*When you have questions, Colorado State University Extension has research-based answers. Get answers to your horticulture questions by visiting [ask.extension.org](http://ask.extension.org) any time day or night. Follow the El Paso County Master Gardeners on [www.facebook.com/ColoradoMasterGardeners.EPC/](https://www.facebook.com/ColoradoMasterGardeners.EPC/).*