



Life as a tree is tough – here's how to help

BY BRIAN SEBADE

Frequent high winds, soils that are shallow and low in organic matter, low annual precipitation and a short growing season all challenge trees in Wyoming.

Like other plants, trees require food, water and adequate space to grow and reproduce. Trees in landscapes must weather a wide range of harsh climatic conditions. The challenge

for many homeowners is making sure trees receive what they need to maintain adequate growth and health.

Water and Soil Management

Depending on the tree species growing on your property or landscape, they might be somewhat adapted to the climate or not at all. Some conifers species, for example, are planted in landscapes around the state that do not mimic their natural environment.

Spruces and firs are naturally found in habitats with damp or saturated soils throughout most of the year and generally have a layer of duff, or undecomposed forest litter, surrounding their base that keeps soils from drying out. Trees planted in landscapes that do not mimic their natural environments require extra resources and attention.

Making sure there is adequate water and nutrients for trees is crucial. Deciduous (the ones that lose their leaves) and coniferous (evergreen) trees both require adequate soil moisture during the spring, summer and fall.

While some trees are more drought tolerant than others, drought-tolerant trees still need adequate water for proper growth and maintenance. Trees that enjoy wet conditions, such as spruce and fir and deciduous trees such as fruit and nut trees, require consistent moisture throughout the growing season.

This means a good soaking every week to two with moderate watering in between. Turning the sprinkler on for five minutes a day is not enough to sustain adequate soil moisture. A general rule of thumb

is ten gallons of water for every inch of trunk diameter. A sharp object, such as a screwdriver, can help you gauge soil moisture levels by the ease with which it can be worked into the soil.

Adding two to three inches of mulch or wood chips around the base as far as the outside edge of tree branches (drip line) can help decrease soil water loss. To avoid the risk of rot, make sure the mulch doesn't touch the trunk. For soils that are low in organic matter and essential nutrients such as nitrogen and phosphorous, fertilization or incorporating compost and organic matter might be necessary. Refer to UW Bulletin-1172, "Fertilizing Trees and Shrubs" by Karen Panter, for more information. Find it at bit.ly/fertilizingtrees.

Winter and Environmental Management

Again, water is important. While above-ground growth shuts down in winter, roots are still active during portions of dormancy. Some root growth continues, and sap flows in the early spring prior to budding and leafing out.

It is a good idea to water evergreens in the middle of winter when there is little snow cover, soil temperatures are above 40 degrees and soil moisture is scarce. Trees such as spruces and firs have many shallow roots that can be easily damaged during warm winter periods.

Tree wraps, trunk covers and fencing can ensure trees are not harmed by human or wildlife activity. If you plan to prune, winter is a good time because trees have not budded or leafed out.

For more on getting trees ready for winter, pruning and watering, visit the tree and shrub care section of the Barnyards & Backyards website at bit.ly/barnbackyard.

Insects and Disease

Entire books are dedicated to insect and disease issues, but if you do not have the time to master insect and disease management, proper tree care is a great strategy for helping trees in your landscape fight off insect and disease damage.

Again, the most important strategy for defending against winter damage, environmental stress and disease and insect issues is making sure trees receive adequate water, nutrients and protection.

If you have further questions related to tree care in your area, contact your local UW Extension Office.

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