

The Right Tree

One of the most exciting things about the arrival of spring is the planting of flowers, vegetables, shrubs and trees. We love our trees! Did you know that the average lifespan of a tree in the landscape is only about eight years? This is generally due to poor design, layout and planting methods. Quite often landscape designers and homeowners place trees in situations that does not give them much of a chance to establish successfully and thrive. Careful consideration should be given to proper tree and shrub selection. First and foremost, is the plant within the recommended hardiness zone? Much of the Big Horn Basin lies within hardiness zone 4b as designated by the USDA. That means that plants should be able to tolerate temperatures -20 to -25 degrees Fahrenheit below zero in order to survive.

Placement of the tree or shrub in the design of landscape is important. Are you planting a single specimen tree, a group planting, or a mass planting? A specimen tree is one where the tree is a landscape feature. It is set off by unique form, leaf color, bark texture, or other significance. Group plantings are 2 or more trees that are a unit (multiple component) landscape feature. These plantings may include shrubs and other plants to help emphasize the unique plants. In mass plantings the individual trees or shrubs lose their identity but the beauty is within the appearance of the entire planting as a whole. A group planting may grow into a mass planting as trees and shrubs mature.

Trees can be planted to frame a view such as a house, a yard, or other landscaped areas. They can also be planted to help maximize winter solar heating and summer cooling. In the winter homes with south-facing windows have a great potential to capture winter solar heat.

Broadleaf tree branches can intercept 20-55% of the sun's radiation thus keeping that heat from reaching your house. On the other hand, in the summer the leaves of trees block 70-90% of the sun's radiation on a clear day and can reduce home cooling costs by 10-30%. Group plantings for shade can reduce summertime temperatures by as much as 20 degrees.

No matter where you choose to plant a tree careful consideration must be given to the proximity to overhead utility lines such as electrical, cable TV, and telephone. Underground utility lines such as water, sewer, electrical and irrigation must also be considered. Quite often blame is given to tree roots for a disruption of water and sewer service. When in fact the roots

of trees and shrubs are moisture-seeking, particularly in dry soils and drought conditions. Any water leaking or seeping from broken or damaged sewer or water lines, poorly jointed utility connections, or irrigations systems that leak underground, will attract tree roots. And they may cause a disruption to your service.

The planting location is important. If you are planting a single tree or shrub a good general rule of thumb is to allow at least 20 feet of space from the nearest sidewalk, curb, structure, or fences. Over time the tree grows and spreads its branches and roots. In general, the roots of a tree can grow more than 30% beyond the drip line (furthest branch growth with leaves). So consideration should be given to the rate of tree growth and the maximum height and width that a mature tree may reach.

If you are purchasing and planting a tree on your own there are several important things to remember. Containerized trees can be limited by the spread of roots while kept in the container. If your trees is ball and burlap or bare root keep the soil around the roots moist to the touch. Store in a shady spot. Bare root trees can be packed with wet newspaper, sawdust or mulch around the roots and then wrapped in a plastic bag. Plant the trees as soon as possible, within 2 days. Ball and burlap or containerized trees should be planted within 24 hours. Before you leave the nursery or garden center write down the following information; where the tree was purchased, date of purchase, warranty period, type of tree (species) and the mature height and width. Soil amendments should be considered where you have alkaline or heavy clay components. These are added along with the tree at the time it is planted.

Trees and shrubs provide a myriad of benefits when planted correctly in the landscape. Noise abatement, energy saving from heating and cooling, carbon dioxide reduction, UV reduction, air pollution abatement, storm water runoff mitigation, property value increase, windbreak, and wildlife habitat to name just a few. The USDA, Forest Service has valued the benefits of community trees. For each dollar that a city invests in a community tree program, large trees return \$1.92 in environmental benefits. Medium-sized trees return \$1.36, while small trees return \$1.00. And then there are the intangible returns that trees provide. A place of rest and relaxation. Leaves rustling in the wind. The green color of summer and the red, orange, yellow and brown colors of fall foliage. Some things you can't put a price on.

There is a lot of information out there on plant health care, planting, and maintenance. The ones that I would lean on most for current information are listed here; The Arbor Day Foundation <https://www.arborday.org>, The International Society of Arboriculture <http://www.isa-arbor.com>, The Wyoming Division of Forestry <http://wsfd.wyo.gov>, Dr. Ed Gilman's tree planting information <http://hort.ifas.ufl.edu/woody/planting.shtml>, and Colorado State University Extension, Garden Notes from the Colorado Master Gardener Program www.cmg.colostate.edu and Park County Master Gardener <http://www.parkcounty.us/extension/MGprogram.html>. As your City of Powell, arborist I would be happy to answer any questions you might have. I can be reached during regular business hours at (307) 754-6971. Happy planting!