

2010 01 27 Alamosa Trees
by Marilyn Loser
Pruning: Why and When?

I've often heard that winter is the proper time to prune trees. For many trees, this is the case. But why prune a tree at all? Producing strong structure should be the emphasis when pruning young trees, according to the United States Forest Service.

Safety, health, and aesthetics are the primary reasons for pruning mature ornamental and shade trees. Pruning for safety involves removing branches that could fall and cause injury to people or property. It also includes trimming branches that restrict lines of sight at the street or in the driveway. Please, if branches are growing into utility lines, call public service or a tree service and don't attempt to trim them yourself.

“Pruning for health involves removing diseased or insect-infested wood, thinning the crown to increase airflow and reduce some pest problems, and removing crossing and rubbing branches. Pruning can best be used to encourage trees to develop a strong structure and reduce the likelihood of damage during severe weather,” according to the United States Department of Agriculture.

All woody plants shed branches in response to shading and competition. Branches that do not produce enough carbohydrates from photosynthesis to sustain themselves die and are eventually shed; the tree seals resulting wounds. It may take a tree a long time to shed a dead branch. The most striking example I've seen is in the outback of Australia. Ghost eucalyptus trees typically have very white bark. In severe droughts, a frequent occurrence in the outback, these trees cut off nutrients to a particular branch, which dies and turns black. Large, old eucalyptus trees often have many such black branches. The harsh conditions of the outback, where rain may not fall for 3 or 4 years, require trees to take extreme measures to survive. As a side note, there are no cacti in the outback. I think of cactus growing in desert climates and would have expected to see some there, but succulent cacti need more frequent rain than the outback provides.

Back to the San Luis Valley. Branches that are poorly attached may be broken off by wind and the accumulation of snow and ice. “Branches removed by such natural forces often result in large, ragged wounds that rarely seal,” according to the USFS. “Pruning as a cultural practice can be used to supplement or replace these natural processes and increase the strength and longevity of plants.”

In Colorado, most storm damage in trees is due to co-dominant trunks (trunks of similar size), according to Colorado State University Extension. “Structural problems of this type should have been corrected while the tree was in the early growth stage.” The best way to avoid this problem is to plant trees with a dominant trunk.

Pruning for aesthetics can enhance the form of a tree and stimulate flower production. It is important to consider the natural shape of a tree when pruning to retain its structural integrity. For example, trees with pyramidal crowns, such as most conifers, have a strong central stem and lateral branches that are more or less horizontal and do not compete with the central stem for

dominance. Trees with spherical crowns, such as elms and cottonwoods, have many lateral branches that may compete for dominance.

Why prune in the winter? One obvious reason is that it's easier to see the structure of deciduous trees when there is no foliage. Another is that during winter dormancy there is little, if any, sap bleeding from a fresh cut. Many tree wounds emit odors that attract disease-spreading insects; there is less odor and fewer insects during the winter.

I'm not aware of fire blight (a bacterial disease that can be spread by pruning) in the San Luis Valley, but many sources encourage pruning susceptible tree species during winter dormancy. Susceptible species include many varieties of crabapple, hawthorn, and pear.

Trees that flower in the summer or fall are best pruned in the winter. Flower buds will form on new twigs during the next growing season and bloom normally, according to the USFS. Exceptions to winter pruning include trees and shrubs that bloom early in the spring such as lilacs, chokecherry, and flowering plums. It's best to prune these immediately after their blooms fade.

The July 8, 2009 column discussed "Pruning Myths" and can be found online, along with all of the 2009 Alamosa Trees columns, at http://www.alamosatrees.net/at_pages/news-columns-2009.htm.

"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