



Denver / Castle Rock / Boulder
303.337.6200

Monument
719.302.5117

Ft. Collins / Loveland / Greeley
970.221.1287

Longmont
720.204.1846

www.myswingle.com

Winds and Tree Damage

One of the fun things to do in Colorado is to boast about our weather. It is not unheard of to have 70 degree high temperatures in February. The warm winter temperatures are often the result of Chinook winds which warm at the rate of five degrees for every 1,000 foot drop in elevation. These winds compress as they come down the Rockies and may reach 75 to 100 miles per hour – the equivalent to a Category I hurricane.

During these wind events there are news accounts of broken branches and entire tree failures. The likelihood of storm damage is predicated on the strength of the wood, tree species, branch structure, and root health.

Wood strength is a function of the tree species, tree age and diseases. As a rule, the faster the tree grows, the weaker the wood. Trees such as cottonwood and silver maples are more prone to branch breakage than a honeylocust or oak. Fast growing trees are also subject to wood decaying fungi which undermine the wood structure leading to failures.

Branch structure is the product of the tree species and periodic pruning throughout the tree's life. All other factors being equal, a tree with a single upright trunk is stronger than trees grown as a multi-stem clump or those with multiple forked branches. Trees with less than ideal structure may be corrected when young. The older the tree gets, the harder it is to correct the weaker branches.

What's going on above ground is also occurring below the soil surface. Trees need adequate space to grow. Trees in tight spaces may be more prone to fail. Excavations including the installation of a new irrigation system, concrete work, and foundations can severely disturb tree roots and tree stability.

Broken branches, missing bark, and hollows in the tree are an indication of trouble. You should have these trees inspected by an arborist. Have your trees pruned. All trees will benefit from being placed on a regular pruning schedule every three to five years. Consult an arborist before excavating or digging trenches around trees.

Living in and around nature has certain inherent risks. Tree and branch failures can be capricious happening with or without signs of external defect.