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## WHEN IS A TREE A HAZARD?

BY DONNA HOFFMAN

To be a hazard tree or be removed, that is the question.

Many aging trees in our urban forests and windbreaks surrounding homesteads and pasture lands are dead or dying. Sometimes pruning will improve their condition. Knowing when to remove a tree that is declining or dead is harder.

Trees aren't designated a hazard unless they could fall on something or someone – a target. Of course, property is a concern, but having humans as targets increases the hazard level and risk of liability associated with not removing a tree. For example, a tree branch overhanging a neighbor's fence is of less concern than a branch overhanging a swing set or play area. A tree growing over a garage is a lower risk than one overhanging a bedroom.

## **Look for Hazard Tree Indicators**

The trunk of any tree is its main support, and decay in the trunk can lead to failure, especially during high winds. Cracks in the bark or wood can invite disease organisms to infect exposed tissues. Fungal conks (mushrooms) are not as common in our drier environment, but they do occur and are a good indicator of deeper decay. When new wood grows around a cavity caused by decay, the tree can sometimes remain substantial enough to stay standing, but beware. Any of these indicators can cause a high-risk rating if there is a target below.

The canopy of a tree often receives the most inspection and is an important

indicator of the tree's overall health. If plenty of leaves are supported by strong branches, photosynthesis might be enough to fight off disease organisms through the process of compartmentalization. If the leaf area of the crown is insufficient to sustain the crown, trunk and roots, the tree will decay, decline and eventually die. If sections of the tree have dead branches, pruning and investigation into the overall health of the tree are necessary.

Roots are somewhat harder to investigate but are another important indicator of the tree's overall health. Without a healthy root system, the crown and trunk have little chance of staying upright in Wyoming winds. Roots are often damaged by construction activities. They are also affected by soil compaction, soil mounding and drought, which can cause root dieback.

Once woody tissue in the ground dies, decay organisms go to work to return that organic matter back to the soil. In the meantime, dead roots are a detriment to the tree. Once bacteria or fungus begin to decay root tissue, less water and fewer nutrients are absorbed. Photosynthesis and growth decline, limiting the tree's ability to fight decay above ground.

## **Practice Good Tree Care**

To keep trees in good health, provide plenty of water and nutrients in the surrounding soil, from the dripline and beyond.

Another component of good tree care is regularly scheduled pruning. Routinely pruned trees are less likely to develop defects and weaknesses that lead to decay and failure. Plus, early pruning leaves smaller wounds that are easier for the tree to close.

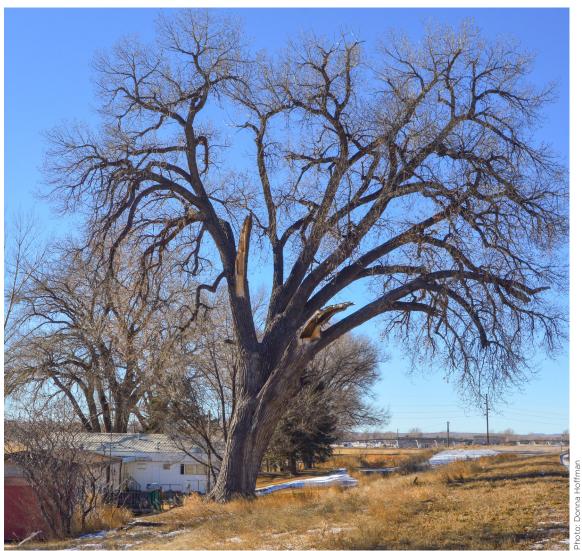
Winter months, or those when trees are without leaves, are a great time to hire an arborist certified by the International Society of Arboriculture (ISA) to prune, survey tree health and assess hazard potential.

If a target lies beneath or near a tree, consider hiring an insured certified arborist to remove limbs or the entire tree. Remember, there comes a time when whether to remove a hazard tree is no longer a question.

## **Resources**

- Fertilizing trees and shrubs: bit.ly/fertilizingtrees
- Winter watering: bit.ly/Winterwater
- Tree owner's manual from the Wyoming State Forestry Community Forestry Program: bit.ly/WYtreeowner

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Indicators suggest this Wyoming cottonwood might be a hazard tree.