

Prevent personal injury and property damage

In Your Backyard Woods

Trees make the outdoors a wonderful place to be. They burst with color in the spring and fall, and provide habitat for nature’s smaller creatures. Trees shade lawns and houses and harbor tree forts. Trees are splendid things indeed.



Sometimes, though, structural defects in trees can cause problems. Weakened limbs, for example, can fail and cause injury or damage. Yet many structural defects can be detected and corrected if trees are inspected, or prevented through proper tree planting and pruning practices.

Inspecting Your Trees

Trees in high-use areas and within striking distance of a target should be inspected every year and after severe storms. A target can be a vehicle, building, or a place where people gather such as a bench, picnic table, trail, or fire pit. You should examine all parts of a tree, including the roots, lower main stem where

it joins the roots, upper main stem, branches, and branch unions. Use binoculars to see high branches.

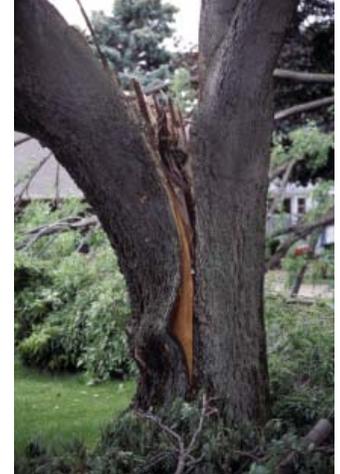
Major Tree Defects

Major types of tree defects include dead wood, cracks, weak branch unions, decay, cankers, root problems, and poor tree form.

Dead wood is often dry and brittle and cannot bend in the wind. All dead wood is unpredictable. Dead branches and treetops that are already partially broken off are especially dangerous.



Dead or broken branches are high-risk defects and should be removed immediately in high-use areas.



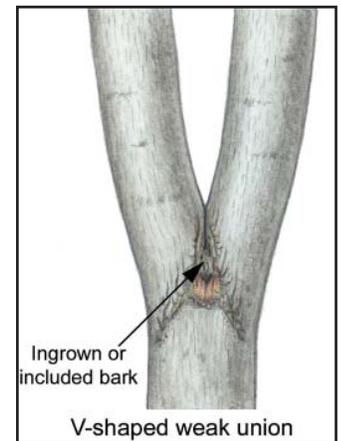
Cracks are extremely dangerous because they indicate that the tree is already failing.

Cracks are deep slits through the bark, extending into the wood of the tree. They weaken the tree, making it unstable.

Places where branches are not strongly attached to the tree are called weak branch unions. Trees with a tendency to form upright branches, such as elm and maple, often produce weak branch unions.

Decay, in its early stages, does not mean a tree is hazardous. Advanced decay, however, (wood that is soft or crumbly, or a cavity where the wood is missing) can create a serious hazard.

A canker is a sunken area on the stem or branch caused by wounding or disease. A canker increases the chance that a stem or branch will break at that point.



Did You Know . . . ?

The baldcypress, found in swamps all over the South, naturally resists decay.

Symptoms of root problems include soil mounding, twig dieback, dead wood in the crown, and off-color or smaller-than-normal leaves.



Harrison Soil & Water Conservation District, Mississippi

Trees with root problems may blow over in windstorms or fall without warning.

Poor tree form can result from years of storm damage, unusual growth patterns, improper pruning, and other types of damage that create weakness or structural



In this case, a serious crack, wood decay, and conks (produced by decay fungi) are all present on the main stem. This tree is located within striking distance of a target, poses a safety risk, and should be removed.

imbalance within the tree. Such trees may be interesting to look at but can be structurally defective.

Carefully examine trees for the presence of multiple defects that are touching or are close to one another. If more than one defect occurs on the stem or branches, assume the tree or branch is at high risk for failing.

Corrective Actions

There are four recommended action steps to correct safety risks:

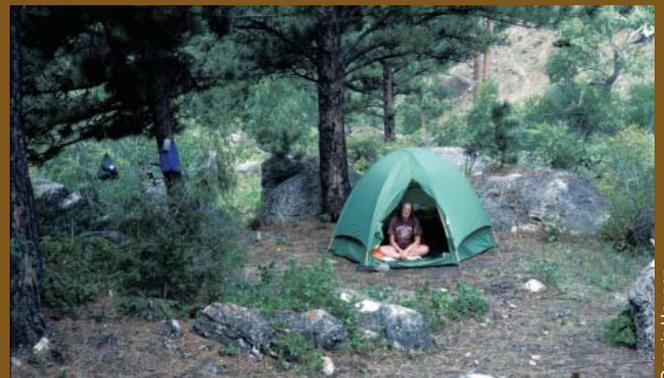
- Move the target.
- Prune the tree.
- Convert the tree to a wildlife tree.
- Remove the tree.

If you are not sure about a tree's condition, talk with an arborist or consulting forester.



Steve Katovich

To create wildlife habitat, dead trees may be left standing if they will not hit a target.



Dennis Haugen

A campsite in the San Juan National Forest in Colorado.

In the Forest

The USDA Forest Service and the U.S. Department of Interior's National Park Service manage developed recreational sites within national forests and parks to help ensure public safety. Both agencies have established hazard tree management policies and standards, requiring periodic, thorough, and documented tree inspections in developed recreation sites. Many State forests and parks have similar tree risk management plans in place. Just as the management practices in these recreation areas help keep visitors safe, your backyard woods should be properly managed to provide a safe environment for family and friends.

Family Activity: There's a Fungus in Your Woods

Wood decay fungi produce fruiting structures that produce spores (the “seeds” of fungi). These fruiting structures can be soft, fleshy, and temporary (we call these mushrooms) or hard, woody, and persistent (we call these conks). Fungi are important because they decay wood, recycling nutrients to help other trees and plants grow.

Look for mushrooms and conks around dead or dying trees (use the ideas in the Mushroom and Conk Scavenger Hunt, below). Mushrooms and conks might be growing from decaying roots or on the bark itself.

Mushroom and Conk Scavenger Hunt

Form mushroom teams and show each other the mushrooms you find, including these:

- * A white mushroom
- * An orange mushroom
- * A conk that looks like a turkey tail
- * A mushroom with a long stem
- * A mushroom that glows in the dark
- * A spotted mushroom
- * A conk bigger than your fist
- * A mushroom that looks like an umbrella
- * A mushroom that looks like a sponge

WARNING:

Do not eat any wild mushroom without first obtaining an identification from an expert. Toxins are found in many different kinds of mushrooms. Most poisonous mushrooms are not fatal to humans, but they may produce nausea, diarrhea, or hallucinations when eaten. Only six species of North American mushrooms, out of several thousand species, are considered deadly poisonous.

