

## Tree Topping: A Practice to Avoid

## WASHINGTON STATE UNIVERSITY EXTENSION FACT SHEET • FS061E

Tree topping is the practice of cutting off the entire top of a tree. It is done to improve views, avoid power lines, keep a large growing tree contained within a small space, and other reasons. However, this practice is harmful to trees, often makes problems worse, and is usually not the best approach to dealing with tree conflicts.

Topping harms trees several ways. First of all, it removes a key portion of the tree's crown, which limits its ability to photosynthesize. Topping also causes significant deformity and abnormal growth patterns. In broadleaved trees, numerous sprouts may form where the stem or stems are cut. These sprouts are unsightly, may be weakly supported, and can quickly grow and create a larger problem with views or power lines than there was to begin with (Figures 1 and 2). These weakly supported sprouts also become a safety hazard as they grow larger and heavier.

In conifers, the loss of the leader can result in the uppermost remaining lateral branches turning up and attempting to form a new top. This can result in a crooked or multi-stemmed top with a significant weak spot where the new top or tops join the stem (Figure 3).



Figure 1: Hardwood trees like this bigleaf maple respond to topping by sending up numerous new, weak shoots.

Topping trees also creates opportunities for decay organisms. The fresh cut across the top of the stem is exposed to the elements and fungal spores, collects rainwater, and otherwise fosters ideal conditions to introduce decay fungi and bacteria directly into the heart of the tree stem (Figure 3). At the same time, the stress of being topped can diminish the tree's natural disease resistance, compounding the problem.



Figure 2. After this bigleaf maple was topped, numerous tall, thin, and weak vertical branches quickly grew back up into the power lines. In addition to the negative aesthetic and health impacts on the tree, the power line conflict remains and may even be exacerbated now.



Figure 3. This Douglas-fir tree was topped several times because of its proximity to adjacent power lines. Between loss of live crown and introduction of decay into the stem, the tree died. Note the extensive fungal conks on the upper portions of the stem and how the tree had formed multiple new tops after previous toppings.

Tree topping may be appropriate if the goal is to promote heart rot for cavity nesters or a dead or malformed tree to provide habitat features. In fact, topping is so effective at killing trees that it is a common method for artificially creating snags and wildlife trees. Nature tops trees via storm damage or winter injury. If you have a storm-topped tree in your forest or yard, you can observe the impacts on its appearance, growth, and vitality.

There are bound to occasionally be conflicts between trees and views, power lines, or other land uses. However, topping is not a good answer for such situations. A professional arborist can help you determine a more appropriate pruning strategy. If an arborist or tree care service proposes topping as a solution, it may be a good idea to hire a different company. The International Society of Arboriculture (ISA) maintains a list of certified arborists on their website at http://www.treesaregood.com/.

If the conflict with the top of the tree is unavoidable, then it might simply be the wrong tree for that location. Consider removing the tree altogether rather than keeping it in a ruined, compromised form by topping. You can replace the tree with a smaller variety that will not cause problems, or you can leave that particular area tree-free. Your local WSU Extension office or conservation district can help you select an appropriate tree for the problem location. WSU Extension Bulletin EB2036, Small Trees for the Home Landscape (http://cru.cahe.wsu.edu/CEPublications/EB2036/eb2036. pdf), is also available to provide ideas and options.



By Kevin W. Zobrist, WSU Extension Forestry Educator. Banner photo by Joseph O'Brien, USDA Forest Service.

Copyright 2011 Washington State University

WSU Extension bulletins contain material written and produced for public distribution. Alternate formats of our educational materials are available upon request for persons with disabilities. Please contact Washington State University Extension for more information.

You may order copies of this and other publications from WSU Extension at 1-800-723-1763 or http://pubs.wsu.edu.

Issued by Washington State University Extension and the U.S. Department of Agriculture in furtherance of the Acts of May 8 and June 30, 1914. Extension programs and policies are consistent with federal and state laws and regulations on nondiscrimination regarding race, sex, religion, age, color, creed, and national or ethnic origin; physical, mental, or sensory disability; marital status or sexual orientation; and status as a Vietnam-era or disabled veteran. Evidence of noncompliance may be reported through your local WSU Extension office. Trade names have been used to simplify information; no endorsement is intended. Published November 2011.