

January 11, 2025

Topping Trees Makes Them Hazardous
By Annette Meyer Heisdorffer, Ph.D.
Extension Agent for Horticulture Education – Daviess County

Trees are important for our environment. The drastic removal or cutting back of large branches in mature trees is considered topping. The tree is pruned as a hedge is sheared and the main branches are cut to stubs. However, topping trees makes them look terrible and they become hazardous.

Misconceptions have led to the continual topping of trees. In most hardwood-type trees, topping to reduce tree height or spread will have the opposite effect. New sprouts grow so rapidly that the tree returns to its original height quickly. Topping is a more serious danger to trees in the landscape than disease or insect threats. A topped tree has a dramatically shorter life span and creates potential hazards in high-traffic areas. These trees are more susceptible to breaking under the weight of ice.

A less damaging alternative for reducing the tree's height and spread is completed through a technique called "thinning-out." The crown is thinned out by selectively removing a few branches back to another major branch or truck.

Another inaccuracy about topping is that the new growth associated with it is beneficial. While the tree appears rejuvenated, upright branches are more likely to break and cause property damage. These new branches are not as structurally sound as the naturally occurring branches. If wood rotting is present at the cut end of the limb, which it often is, the weight of the new sprouts will compound a bad situation.

Topping also leads to more disease and insect problems. Large wounds created by improper pruning cuts made during topping rarely seal over. If they do, it takes many years.

Meanwhile, the remaining stubs are vulnerable to invasion by insects and always begin to decay.

Another problem with topping is the interference with the tree's ability to manufacture food because many leaves or potential leaves for the next growing season are removed at one time. Leaves produce food for the tree through a process called photosynthesis. The small number of leaves left on the tree may not be able to support the tree's remaining branches, trunk, and roots.

Topping also removes part of a tree's food storage area. When limbs are removed, the storage area for sugar, the tree's energy source, is also removed. This is an open invitation for the tree's slow starvation.

Scalding damage to the branches by the sun occurs when trees are topped. Because large limbs shield much of the tree from direct sunlight, suddenly removing this protection exposes the remaining branches to scalding. Topping may also harm adjacent trees and shrubs planted in the larger tree's shade.

What are the alternatives to topping? In some situations, removing large limbs may be

necessary. The crown of a tree can be reduced by thinning out selected branches back to lower lateral branches on the tree. This reduces the tree's height and spread while retaining its natural shape. Only selected portions of the tree's canopy are removed, reducing the possibility of sun scald damage.

When thinning out selected branches, the pruning cut is made close to the trunk, but the branch collar remains. The branch collar is the raised area at the base of a limb where it is connected to the tree. The collar is formed by a clumping of the water and food conducting tissues. This area designates the edge of the tree's natural barrier to decay where it will form callus tissue and woundwood over the cut area. This pruning cut is less conspicuous than those left from topping, and it walls itself off more rapidly and completely. If a stub is left, it begins to decay back into the tree and the wound left from the branch removal will not wall itself off. Thinning out selected branches requires greater skill and time than topping, but in most situations, is well worth it.

It may be better to remove a tree you consider too large and replace it with a smaller one.

After severe pruning, the normal appearance of the tree is extremely altered, and it would be aesthetically better to remove the tree.

If the limbs of your trees are near power lines, call the power company for help. It is better to be safe than sorry.

For more information about the hazards of topping a tree contact the Daviess County Cooperative Extension Service at 270-685-8480. A free publication on this topic is available. Upcoming Meeting:

"Where Do I Start? Vegetable Seed Selection and Producing Transplants." Thursday, January 23, 2025 at 1:00 p.m. and repeated at 6:00 p.m. at the Daviess County Cooperative Extension Service Office.

## Annette's Tip:

A Certified Arborist is recommended for working with trees. A frequently asked question is what is a Certified Arborist and how can I find one? In most cases, removing branches from large trees for safety's sake, involves hiring a professional. A Certified Arborist is a trained professional who has passed an exam in tree care and health, proper tree and branch removal, and climbing trees and removing branches safely. A list of them can be found at the International Society of Arboriculture <a href="http://treesaregood.org">http://treesaregood.org</a>. Make sure the company carries insurance against property damage and has workers' compensation for employees.

If you know of landscape professionals who would like to become certified, more information is available at the International Society of Arboriculture website <a href="http://www.treesaregood.org">http://www.treesaregood.org</a> and through the Daviess County Cooperative Extension Service at 270-685-8480.

The Martin-Gatton College of Agriculture, Food and Environment is an Equal Opportunity Organization with respect to education and employment and authorization to provide research, education information and other services only to individuals and institutions that function without regard to economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation for prior civil rights activity.