

Extension

Forestry and Natural Resources

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Frequently Asked Question Series What's Wrong with Topping?

What is topping?

This pruning practice is the reduction of tree size by heading back many or most large, live branches without regard for tree health or structural integrity. Topping manages height and spread but leaves behind woody stubs that cause decay, weak branch attachments, and increased likelihood of failure.

Why are trees topped?

Many tree owners have their trees topped when the trees reach heights they consider unsafe or in conflict with



a structure or other trees. Sometimes tree owners fear a strong wind might blow over trees with larger branches or the branches will break. However, research shows that trees left to develop naturally or that are properly pruned for good structure are stronger than trees that are topped. The extensive root system of a healthy tree, left undisturbed, provides adequate support.

What does the tree think about topping?

Topping creates a health and safety crisis for the tree. Pruning away live, green tissue reduces the tree's ability to photosynthesize and manufacture food products. This action also creates wounds that require energy to close. Topping slows the growth of the tree, which reduces its ability to maintain food sources, and ruins tree architecture.

"Rounding over" or "rounding the crown" is the same as topping. Indiscriminate pruning to an improper lateral or internodal cutting

Author: Lindsey Purcell, Urban Forestry Specialist Department of Forestry & Natural Resources permanently damages the tree as the branch stubs die and the tree decays. The interior wood of topped branches, which is typically older, can decay rapidly, making new sprouts more susceptible to failure as they grow in length and weight.



Topping depletes stored energy. If topping doesn't kill the tree, topped trees regain their original height quickly, often within a year or two, depending on growing conditions. **Topping requires** continuous live branch removal to keep up with excessive growth and weakly attached branches. This constant pruning has adverse effects on tree health and can result in death of the tree.



Table 1. Topping problems for trees

Decay and cracks in the cut stubs	Possible damage to trunk and branches from sudden, intense sun exposure
Depletion of energy reserves due to excessive live tissue removal	Reduced root growth
Reduced energy storage capacity	Increased insect and disease infestations
Poor branch structure subject to storm damage	Increased likelihood of death of the tree
Tree mortality	Increased costs to maintain in contrast to proper structural pruning

Topped or headed trees can be hazardous to people and property.

Topped trees require constant, if not annual, pruning to keep up with excessive and unhealthy growth spurts. Ultimately, topping is more expensive for the tree owner.

Alternatives to topping:

 A tree that needs regular pruning to keep it smaller is likely the wrong species for the site. Replacing the tree with a more suitable species could be more cost-effective.



- 2. If height and spread are issues, use best practices to reduce tree size. Make reduction cuts by removing stems and branches back to live, lateral branches that are at least one-third the diameter of the removed stem.
- 3. Monitor tree growth and intervene before branches get too large and infrastructure conflicts become severe. Prune as needed to reduce size and redirect growth with appropriate cuts.
- 4. When selecting a tree keep its mature height in mind. Plant shorter-growing trees under utility wires.
- 5. Hire an **ISA Certified Arborist**. Tree care is a profession of dedicated individuals trained in the latest scientific advances who can help with tree maintenance.

For more information on planting and pruning trees, click on the links below:

- Choosing a tree video
- Tree selection list
- How to plant a tree video
- Tree planting process
- Tree pruning
- Tree pruning video



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