## The Difference Between Topping and Crown Reduction Pruning

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**Topping** is the "**T**" word in the tree industry. It is the unacceptable pruning practice of reducing the height or spread of a tree using <u>heading cuts</u>. <u>Heading cuts</u> reduce the trunk or branches of a tree to stubs or to lateral branches too small to assume the terminal role of the branch being cut. In spite of providing short-term control of tree size, topping causes serious future problems. When a tree or shrub is topped, several things happen:

- 1. The branch at the point of the heading cut produces a flush of new growth, usually numerous, vigorous and disorganized sprouts. This "witch's broom" of new growth destroys the tree's natural growth habit and beauty. Sprouts are often long and upright with little variation in shape and structure.
- 2. In producing such profuse growth to replace the lost foliage, the plant is soon as tall as it was before topping. But now the crown is denser, requiring extra time and effort to prune.
- 3. The sprouts also create a foliage shell, shading the plant's interior, often causing inside branches to die back.
- 4. Finally, the new sprouts are weakly attached, crowded and prone to breakage. Although topping is sometimes done to make trees safer, trees can become more hazardous after topping.

## The alternative to topping is Crown Reduction.

**Crown Reduction** is the selective removal of live branches to decrease the height or spread of a tree's crown. Use of <u>drop-crotch pruning cuts</u> is required. A <u>drop-crotch pruning cut</u> removes the end of a branch by cutting back to a crotch created by a lateral branch. This side branch needs to be at least 1/3 the diameter of the branch being cut. If the branch is 1/3 the diameter of the parent branch or larger, water and nutrients will be redirected into the lateral branch and it will assume the terminal growth responsibility of the removed branch. The tree will produce less sprouts at the point of the pruning cut and the tree's natural growth habit will be preserved.



A drop-crotch pruning cut is illustrated above

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