



KNOWING IS ½ THE BATTLE: IMPROPER PRUNING TECHNIQUES

Tree pruning is a science as much as it's an art. There are reasons based upon plant physiology for the ways we prune trees. The following are pruning practices good arborists will avoid.

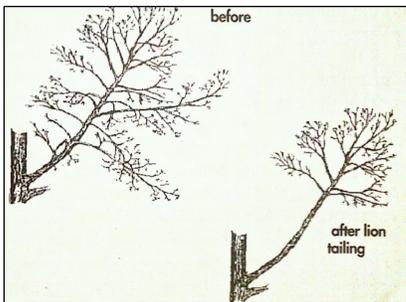
Topping

Topping is the reduction of a tree's size using heading cuts that shorten limbs or branches back to a predetermined crown limit. Removing more than 30% of a tree's crown can cause stress. Topping routinely removes more than 50% of a tree's crown if not 100%. It is difficult for the tree to heal large wounds left by topping, which leads to interior decay. The tree is forced to use stored energy reserves to push new growth. This new growth often called 'water sprouts' are poorly attached. As they grow they pose a high potential for limb failure.



Lion's Tailing

Lion's tailing is the removal of an excessive number of inner, lateral branches from parent branches. This is detrimental to tree health and structure. Interior branches are important in the hot summer months for continued photosynthesis production. The inner crown of a tree is cooler than the outer crown. During prolonged periods of heat the outer leaves will cease photosynthesis, while the shaded interior leaves will continue to make food for the tree.

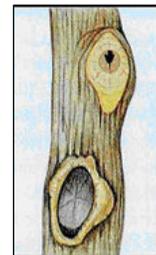
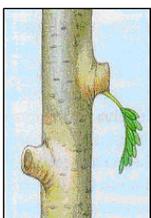


The lateral branches growing on parent branches are very important for creating good branch taper.

Branches should be larger in diameter at their point of trunk attachment and gradually get thinner towards the branch tip. Removing interior lateral branches prevents the tree from producing good branch taper. Uniform diameter along the length of a branch creates a narrow level arm with dynamic load on one end. This situation is predisposes trees to branch failure.

Flush Cuts & Stub Cuts

Flush cuts are pruning wounds made parallel to the trunk inside the branch collar. The natural process of tree limb shedding occurs at the branch collar. The branch collar contains parent stem tissue that forms callus tissue over the wound. Flush cuts heal slower and will likely lead to internal tree decay.



Conversely, stub cuts are pruning cuts made outside of the branch collar leaving a stub. Stub cuts slow wound closure, and leave a path for decay to enter the tree.