KANSAS FOREST SERVICE
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Lion Tailing and its Impact on Tree Health

Foresters have long discouraged the topping of trees, and those efforts made progress in discouraging the practice. Unfortunately, another practice is nearly as prevalent as topping was. Referred to as lion tailing, this practice harms the long-term health of the tree and creates structural problems that cause the branches to fail when they normally would not.

Lion tailing is becoming increasingly common among tree trimmers. The practice is largely driven by public demand. Informal surveys indicate that homeowners feel the more branch material removed from the tree, the more value for their pruning expense they received. Ironically, a good pruning job by a certified arborist is often unnoticeable.

Lion-tailing has rendered this tree structurally compromised by removing all interior branches.

Lion tailing is:

- The excessive thinning or removal of the interior branches, leaving most of the foliage and canopy on the branch ends, creating an appearance similar to a lion's tail.
- An improper pruning practice that ruins the structure, dynamics, dampening effects, and overall health of a tree.
- A practice that removes too much leaf area: reducing photosynthesis and carbohydrate production, causing plant and water stress, and it may force the tree to use stored carbohydrate reserves.
- A practice that predisposes trees to structural damage from wind, ice, and other loading events because most of the weight distribution in leaf material is concentrated at the ends of the branches.
- The overthinning of the interior portion of a tree by removal of the interior branches next to the trunk or pruning all the interior branches as high as a bucket truck can reach.
- A tree trimming practice performed by an uninformed tree trimmer.

Why this practice harms trees:

- Reduced photosynthesis and carbohydrate production may cause the tree to use its carbohydrate reserves.
- Pruning can be stressful; this improper pruning practice is even more stressful.
- The tree responds with a surge of new growth, which can increase water stress.
- It may cause sunscald on the tops of the branches or the trunk of a tree. Sunscald creates avenues for decay, and insect and disease damage.

- Trees respond to the excessive wounding, increased sunlight, and loss of leaf material by sprouting new branches in the canopy interior. These sprouts are typically poorly attached and inefficient and will increase the long-term costs of pruning.
- While the exterior leaves may become too hot to effectively photosynthesize, the interior shade leaves typically take over to maintain photosynthesis. Lion-tailing removes leaves that play an important function in photosynthesis during the heat of the day.
- Results in poor branch structure with more weight distribution on the ends of the branch instead of equally along the entire branch. With end-heavy branches, a tree will not sway and is more susceptible to wind and ice damage.

This practice, typically completed by an untrained individual, is extremely harmful to the health and structure of the tree. Two of the largest problems associated with lion tailing are: 1) the tree trimmer, who is not an arborist, thinks he or she is doing what is good for the tree, 2) the homeowner incorrectly believes it looks good, prevents storm damage, and allows light to penetrate to the turf or bed areas of the landscape.

The result is a pile of pruning brush that reinforces the idea the homeowner received their money's worth. Proper pruning practices will often be unnoticeable when completed by certified arborist.

What is Proper Pruning?

Pruning is the intentional wounding of a tree for a specific purpose to manage the structure and long-term health of a tree. It is both an art and a science that is perfected through experience and knowledge.

Proper thinning of the canopy starts at the ends of the branches by removing branches that touch, crossover, or shade other branches. Cuts should be made back to another lateral branch or the main trunk. Do not overthin the center by removing too many branches. Remove any dead, dying, or diseased branches at this time.

A properly thinned canopy will continue to sway and dampen itself during a storm. A properly thinned tree should be more resilient during storms. Typically, for most species and circumstances, a properly thinned tree should have no more than 20% of its canopy removed during any single pruning. Remember it is not the size of the bush pile that proves one's investment, rather it is in having a structurally sound and vigorous tree with only subtle changes.

Consider trees an investment that provide benefits to individuals, the community, property values, and future generations. Hire an experienced, educated professional, such as those certified with the Kansas Arborist Association or the International Society of Arboriculture. When requested, professionals should provide pruning objectives, and proof of insurance, bonding, and workers' compensation insurance. Seek multiple estimates and carefully consider accepting the lowest bid. Always ask for references and possibly view previous tree work. Some cities require arborists to have a city permit or license to work within the city limits.

This publication is made available in cooperation with the USDA Forest Service.

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MF3551 March 2021