

Prune Trees Correctly: Promote Longevity, Safety and Avoid Fines!

Doug Caldwell Ph.D., Commercial Landscape Horticulture



Figure 1 (left). Before work begins, be certain that the pruning is done by someone that will not GTO, No Gutting, No Topping (no hat-rack trees (stub cuts), No Overlifting. This jacaranda was topped (note the spindly new growth) and there was no effort to develop a central leader.

Figure 2. (right) This longitudinal section is through a stubbed branch (beneath the red line) a few years later. The tree has attempted to grow over ("callus") the wound, but it is a weak flap that will break out of the tree when the next strong wind blows.

Watch your pruning technique in Collier County! **"Hat-racked"** (see Figures 1 & 4) and **"over-lifting"** (too many bottom branches removed, see Figure 5) and **"gutting"** or **lion's-tailing** (Figure 5) pruning styles are considered arboricultural malpractice and rightfully so. The Collier County Land Development Code, Ordinance No. 91-102, is armed with teeth and with sound knowledge from arboricultural experts within the industry and university systems.

Hat-racking is stubbing a branch (Figures 1 and 3), a willy-nilly cutting of branches, far from a bud or a new leader. For a plant to "heal" or compartmentalize the pruning wound, the cut needs to be made at a point where the plant tissue can grow over or engulf the injury. This is not possible when dealing with, essentially, a broken-off branch. The plant tissue is not able to grow over the stub. It may attempt to grow over the cut stub (see Figure 2) and result in a weak flap that will break out easily. Or it may result in a domino affect, that is, the cut end will decay, which progresses to internal branch rot, which will lead to trunk rot, which will result in an unstable (hazard) or sickly tree that will be unsightly or die. Poorly placed cuts will also lead to competing laterals sprouting into an unnatural-looking witch's-broom appearance (Figure 1). There should be one dominant leader (one main trunk), depending on the species and surroundings.

ISA (International Society of Arborists) certified arborists will use reduction or subordination cuts, which will result in healthy tree growth and no stubs (Figure 4).

Figure 3. This, “black olive” tree, *Bucida buceras*, was topped (hat-racked) in Naples, Fl.



Professional arborists, as well as our code enforcement personnel, abide by the American National Standard for Tree Care Operations, ANSI A300-2017 Tree, Shrub, and Other Woody Plant Management - Standard Practices to help prepare tree care contract specifications. Also the necessary Dr. Ed Gilman’s outstanding state-of-the-art book, An Illustrated Guide to Pruning, 3rd Edition especially Ch. 5 and Ch. 11- both of these invaluable resources can be purchased here: <https://www.isa-arbor.com/store/product/124/> [you may need to cut and paste web links].

Some ANSI pruning standard practices are:

- Recall “**Not more than 1/4th of the foliage on a mature tree should be removed** within a growing season”? This has been changed and permits removal of more as needed in southwest Florida with the longer growing season. See section 5.5.3.
- “When a branch is cut back to a lateral, **not more than 1/4th of its leaf surface should be removed**. Also, the remaining lateral should be large enough to assume apical dominance.” In other words, a large lateral will suppress (a hormonal thing) excessive sprouting more than a wimpy twig.
- “Thinning should result in an even distribution of branches on individual limbs and throughout the crown.” (Figure 5)). Ignoring this concept leads to over-lifting and lion’s-tailing. Lion’s-tailing (“gutting”) puts the weight load on the ends of the branches, making branches **more prone to break-outs** in high winds.

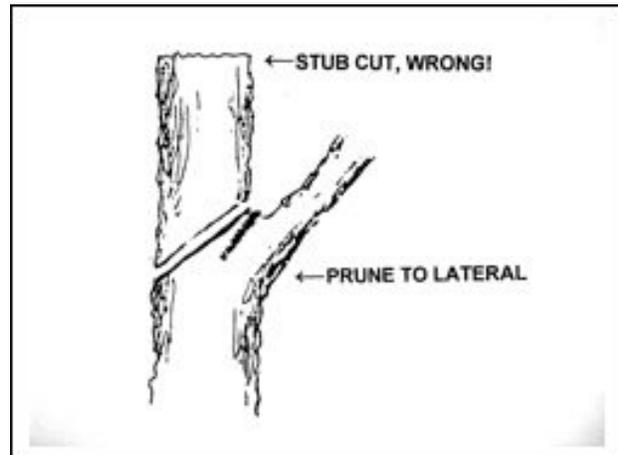


Figure 4. Make cuts close to a bud or lateral branch, a proper cut will result in complete closure and a strong branch. Modified from Circular 853 Gilman and Black.

Code enforcement will take into account the species of tree, the site limitations (parking or

building clearance) and other extenuating circumstances in deciding if an infraction has occurred. A tree that has been neglected for many years may require several years of pruning to reshape it and some drastic cuts may be required. For example, live oak and mahogany trees have multiple leaders and crossing branches and, like a teenager gone awry, just can't seem to find the straight path and may require a lot of pruning. It is better to train them up right when they are young in order to avoid the severe pruning consequences later. The spirit of the ordinance is to protect the quantity and quality of our urban and rural forests.

Good pruning is also something of an art, as with a good haircut, the end result should not jump out at you (Figure 3), but should be subtle and go unnoticed at first glance. The bottom line is communication is critical. Make sure you convey (in writing in your work order) No GTO: No Gutting; No Topping; and No Over-lifting, don't assume that the worker with the saw knows what he is doing, even if they or their boss is a Certified Arborist, misunderstandings can occur.

Certified arborists are listed at the ISA (International Society of Arboriculture) web site:
<https://www.treesaregood.org/findanarborist> .

For more information/literature contact the extension office. Also contact the Collier County Code Enforcement (403-2413) for code literature or enforcement details. An excellent web site is:
<https://hort.ifas.ufl.edu/woody/pruning.shtml>

For the municode and penalties see:
Section 4.06.05 K of the Land Development Code:
https://library.municode.com/fl/collier_county/codes/land_development_code?nodeId=CH4SIDEDEST_4.06.00LABUVERE_4.06.05GELARE

See our tree and palm pruning videos at:
<https://www.youtube.com/user/dougbughimself>

Start with, "Tree Pruning for Hurricanes."
<https://www.youtube.com/watch?v=Ht-U1f9K7zo>



Figure 5. This oak tree was gutted (lion's-tailed), that is, smaller branches were stripped from main branches and over-lifted, that is, too many bottom branches were removed. This makes the tree top-heavy and more prone to storm damage as all of the weight is shifted to the ends of the main branches.

Doug Caldwell is a Certified Arborist and the Commercial Landscape Horticulture Extension educator with the University of Florida, Collier County Extension Service. The Cooperative Extension Service is an off-campus branch of the UF|IFAS- University of Florida, IFAS (Institute of Food and Agricultural Sciences) and Department of the Public Services Division of Collier County government. e-mail: dougbug@ufl.edu; call 239-252-4800. Extension programs are open to all persons without regard to race, color, creed, sex, handicap or national origin.