



**Figure 1.** Before they start to work, be certain that your pruning is done by someone that will not hat-rack trees (stub cuts). This effort, on a mahogany, also flunked because there was no effort made to develop a main leader.

## Prune Trees Correctly: Prolong Longevity, Safety and Avoid Fines!

Doug Caldwell, Collier CO. Extension, Certified Arborist

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.



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

Hat-racking is stubbing a branch, 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 twig. The plant tissue is not able to grow over the cut 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 twig rot, which will lead to trunk rot, which will result in an unstable (hazard) or sickly tree that will be unsightly. Poorly placed cuts will also lead to competing laterals sprouting into an unnatural-looking witch’s-broom appearance. There should be one dominant leader (one main trunk), depending on the species.

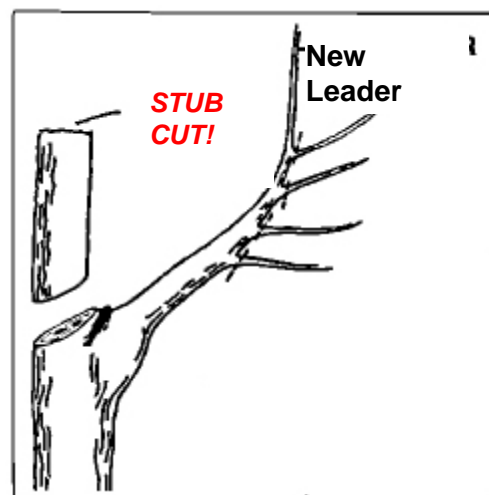
Professional arborists, as well as our code enforcement personnel, abide by the American National Standard, ANSI

A300-2001 “Standard Practices for Trees and Other Woody Plant Maintenance” guidelines (see the Florida chapter’s website to order the standards for \$20: <http://www.floridaisa.org>).

Some ANSI pruning standard practices are:

- “**Not more than 1/4<sup>th</sup> of the foliage on a mature tree should be removed** within a growing season.” Note: I suspect that this is not as critical 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 1/4<sup>th</sup> of its leaf surface should be removed**. The remaining lateral should be large enough to assume apical dominance.” In other words, a large leader will suppress (a hormonal thing) excessive sprouting.
- “Thinning should result in an even distribution of branches on individual limbs and throughout the crown.” (See the illustrations). Ignoring this concept leads to over-lifting and lion’s-tailing. Lion’s-tailing puts the weight load on the ends of the branches, making branches **more prone to break-outs** in high winds.

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 oaks 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.



**Figure 3.** 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.

**Good pruning is also something of an art, as with a good haircut, the end result should not jump out at you, but should be subtle and go unnoticed at first glance. The bottom line is communication is critical. Make sure you convey (in writing) exactly what you expect to be pruned, don’t assume that the worker with the saw knows what he is doing, even if he or his boss is a Certified Arborist, misunderstandings can occur.**

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: <http://hort.ifas.ufl.edu/woody/pruning> and for the municode and penalties see: [http://fws.municode.com/CGI-BIN/om\\_isapi.dll?infobase=12735.nfo&softpage=newtestDocumentFrame](http://fws.municode.com/CGI-BIN/om_isapi.dll?infobase=12735.nfo&softpage=newtestDocumentFrame).

Also see Pruning Landscape Trees and Shrubs, Circular 853, at: <http://edis.ifas.ufl.edu/MG087>.



**Figure 4.** *This tree has been topped although it isn't as blatant as some jobs, many of the stubbed branches are hidden, but some of them shine through. The use of drop-crotching or lateral pruning would avoid some of the future problems this tree will have.*



**Figure 5.** *This oak tree was gutted and overlifted, that is, too many bottom branches were removed. This makes the tree weaker and more prone to storm damage as all of the weight is shifted to the top of the tree.*

*Doug Caldwell is a Certified Arborist and the commercial horticulture extension agent with the University of Florida Collier County Extension Service. The Cooperative Extension Service is an off-campus branch of the University of Florida, Institute of the Food and Agricultural Sciences and a department of the Public Services Division of Collier County government. E-mail [dlcaldwell@mail.ifas.ufl.edu](mailto:dlcaldwell@mail.ifas.ufl.edu); call 353-4244. Extension programs are open to all persons without regard to race, color, creed, sex, handicap or national origin. For updates on the Southwest Florida Horticulture Learning Center visit: <http://collier.ifas.ufl.edu>*