

# *the* TROPICAL GARDEN

SUMMER 2013



Summertime at Fairchild  
A Tropical Wonder



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**NORIS LEDESMA** is the curator of tropical fruit for Fairchild's Tropical Fruit Program. She has written numerous scientific publications, two books and primary information on tropical fruit for electronic media.



**GEORGIA TASKER** was the garden writer for *The Miami Herald* for more than 30 years, and now writes and blogs for Fairchild. She has received the Garden's highest honor, the Barbour Medal, and a lifetime achievement award from Tropical Audubon Society. She is also an avid photographer, gardener and traveler. She graduated cum laude from Hanover College in Hanover, Indiana.



**KENNETH SETZER** joined Fairchild as a writer and editor with the marketing team in 2013. He contributes to print and digital media. Setzer enjoys writing about natural and human history and is an enthusiastic photographer, with a particular fascination with fungi. His educational background is in linguistics, with a BA from Queens College, City University of New York, and an MA from Florida International University.

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**ON THE COVER**

Bailey Palm Glade vista

Photo by Gaby Orihuela/FTBG

# Prune Carefully—or Not at All—for Strong, Healthy Trees

Bob Brennan and Kenneth Setzer, photos by Bob Brennan and Gaby Orihuela



Bob Brennan, Fairchild arborist, carefully pruning an apple blossom shower tree, *Cassia javanica* tree in the Garden.

**H**urricane season is already upon us, and one question that should be on our minds is what—if anything—should be done to best protect our trees from the rain and high winds accompanying tropical storms and hurricanes. How can you tell how strong the actual wood of your trees is? If you do the work yourself, or even if you hire a gardener, how do you know you are doing what's best for the life of your trees, while properly ensuring the safety of people and structures around them?

Fairchild's arborist, Bob Brennan, is a certified arborist and president of the Tropical Arborist Guild. He advises steering clear of what's often sold as "hurricane pruning."

"Proper pruning will protect your trees for a much longer time with less initial damage than what is referred to as 'hurricane pruning,'" Brennan says. "Hurricane pruning is really a misnomer; there really is no such thing as pruning specifically to prepare for hurricanes. It's unfortunately often used as a scare tactic for people with no or little arboriculture experience."

In a completely natural forested area, trees are rarely solitary; neighboring trees can literally depend on each other during high winds, with the trees towards the outer perimeters acting as a wind block. In these situations, trees along the perimeter are often the only casualties in a storm. But in landscaped areas, we often, if not usually, plant trees singly. In an open landscape, lateral tree branches may spread far wider than they would naturally in a wooded

setting because more light is available to them from all sides. This can result in an unnatural form that the tree isn't meant to sustain and may actually cause it to weaken.

Here are some signs a tree needs pruning:

**Crossed or rubbing branches.**

Weak spots may form where branches consistently touch. The smaller of the crossed branches should be removed.

**Canopy so dense it looks as though a bird of prey couldn't fly through it.** If this is the case, thinning is necessary. The principle here is if a bird can fly through the canopy, high winds will also be able to pass through without excessive resistance.

**Limbs touching a structure.** These can often be raised by removing the smaller, lateral branches along the limb—not by simply cutting the end off the offending limb.

**Two neighboring dominant branches have "grown into" one another.** This is known as included bark. This sometimes occurs where two neighboring branches have "grown into" one another, creating a "v" shape. This may result in a weak spot. Mitigate the risk of future splitting by removing one of the limbs.

**Low, aggressive limbs.** If they get in the way of people and vehicles, low limbs need to be removed or reduced.

**Broken and diseased branches.** These should be removed.

You may also prune to simply slow tree growth. Fewer leaves means the tree produces less food.



Example of pruning known as "Lion's tail."

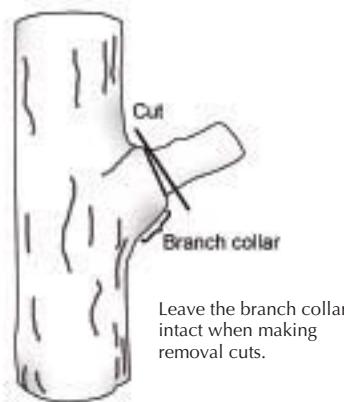
## How to prune for yourself

There are three main types of pruning cuts you should be aware of: reduction cuts, heading cuts and removal cuts.

**Reduction cuts** are made to reduce the length of a branch, cutting it back to a point where another branch begins (to a node). The branch to which you cut (the one remaining after cutting) should be at least one-third the diameter of the one you are cutting. So for example, say you need to prune a limb encroaching onto your driveway. If it's approximately three inches in diameter, you'll want to follow it back to another branch that's at least one inch in diameter, and make your cut there.

**Heading cuts** are made between areas of branching. They are known as "internodal" cuts. These are made to force budding, or to redirect growth on a very young tree. It's best to avoid these kinds of cuts on an already-established tree.

**Removal cuts** are much what they sound like. They completely remove a branch, cutting it off all the way back to the trunk, or dominant parent branch.



A satinleaf tree pruned properly.

For each of these cuts, use a sharp lopper (a special pruning scissors) for branches that measure up to about one-half inch in diameter. For larger branches, use pruning saws to avoid excessive damage.

If you are performing a removal, cut back to the trunk or a major branch. Be sure not to cut flush with the trunk, which can leave the trunk or branch open to disease or decay. Instead, look for a swelling at the base of the branch where it meets the trunk. This is called a collar, and should be left intact. Ideally, cut to leave the collar intact, while also not leaving much of a stub beyond the collar.

To thin a dense canopy, concentrate your pruning on the upper third of the tree; two-thirds of your pruning should be done to this portion. So if you're trimming a 30-foot-tall tree, two-thirds of the branches removed should come from higher than 20 feet. Keep in mind that the major branches of street trees usually need to be about 15 feet above the ground to allow clearance for large vehicles, so it's a good idea to use reduction cuts on lower branches early in a street tree's life. This way, when these "temporary" branches eventually need to be completely removed, they won't be so large as to cause trauma to the tree.

### Bad Practices

Perhaps the most common bad practice in tree pruning is "hatracking," in which nearly all of a tree's canopy above an arbitrarily drawn line is removed. The result of this horrendous practice is a very sad-looking, defoliated collection of stumps. Even worse, removing a tree's canopy essentially starves it. No leaves

equals no photosynthesis! In South Florida, a defoliated tree is also likely to burn under our scorching summer sun. And that rapid regrowth you see on hatracked trees? It's so densely packed that it is only weakly attached, and therefore more vulnerable to wind and storm damage. Hatracking is never a good idea—unless your intention is to kill a tree, making it unstable and dangerous in the process.

Another irresponsible practice: over-thinning the canopy. Removing all foliage and lateral branches from a major branch, until what remains resembles a stick with a puff of leaves at the end, is referred to as "Lion's Tailing." This can also starve a tree, and actually destabilize it. "Lateral limbs reduce the sway and whip of a branch in high winds. By stripping them all, a limb will swing and sway in the wind, and is more likely to break in a storm," Brennan explains.

If your tree branches encroach upon power lines or other structures, if your pruning requires a chainsaw, or if you are simply uncomfortable pruning, please call a certified arborist. You can find one at <http://www.isa-arbor.com>. Remember, just because someone shows up with a chainsaw does not mean he or she is an arborist. 



An example of poor pruning techniques.