



Figure 1. Severely over-pruned coconut palms, five weeks before Hurricane Wilma.

Hurricane Cuts Compromise Palm Tree Structure in High Winds!

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There are plenty of beat up palm trees following Wilma's 100 to 130 MPH winds on October 24.

On top of that, there appears to be certain streets that not only got the surprise backside winds after the eye had passed, but have twisted trees and pool cages that seem to have been hit with pin-point accuracy by tornadic cells with even fiercer winds. Just a terminology check as to why I call palms, trees. Most palm species have a single woody stem and even though most species don't have branches, they cast some shade and as many of us now know, it takes a chainsaw or a pickup truck to remove most of them. So in my book, those characteristics make the majority of palm species a tree!

Many people have adopted the 9 to 3 o'clock (canopy outline) pruning approach to palm maintenance; however, even better is the removal of only the dead or obviously-going-to-die fronds and the fruit and fruit stalks approach. See University of Florida extension recommendations: http://collier.ifas.ufl.edu/Horticulture/tree_pruning.htm



Figure 2. The overpruned coconut palms, seven days after Wilma, with nary a vigorous frond.



Figure 3. Coconut palms, 1 block away, that were not pruned, after Hurricane Wilma were hardly damaged.

I had to share these pictures that demonstrate why palms should not be hurricane cut. Coconut palms rarely require pruning. These are self-cleaning palms, the best kind to have! That means the frond drops off when it is old and has done its work. Other palms, such as queen palms and cabbage palms require mechanical removal of old fronds as they cling to the trunk and do not drop. Secondly, these were severely over-pruned. The removal of so much of the frond base (boot) compromises the strength of the entire head's multi-layer structure, which is pretty well designed, when intact, to absorb the shock of strong winds. Of course, there may have been a micro-burst of strong wind on this landscape, making the damage worse. However, the au natural, unpruned coconuts within the same block only had a few fronds kinked out of shape (Figure 3). Besides making the crown more prone to high wind damage, overpruning will cause the development of a severe narrowing of the trunk, called pencil-pointing, which could lead to trunk failure in arboriculture lingo.

Palms that were the least disturbed by Wilma's high winds were, of course, the apparently unfazed cabbage palm, Canary Island date palm, foxtail palms and short statured palms such as arecas and spindle palms. Royal palm fronds seem designed to break off, but at least the royal don't uproot as much as the over-planted queen palms. Royal palms that were pretty much frondless in Lee County last year, following Hurricane Charley, pretty much "refroned" and were back to normal within a year. How damaging two years of frondlessness will be, remains to be seen.

Another FAQ, is, "Should I dose the injured palms with copper, fungicides and insecticides to stave off bud rot?" There is no research to indicate fungicides will help the wind-damaged palms, but the fungicides probably will not hurt the palm if used according to the label. See palm experts, Drs. Elliott and Broschats' new tip sheet, 'Hurricane-Damaged Palms in the Landscape: Care after the Storm' in the recent updates section at: <http://flrec.ifas.ufl.edu/>. Since there was not a big outcry about palms that weren't treated, dying from bud rot following Hurricane Charley, my seat of the pants empirical answer is don't worry about it and let the palms recover on their own. An insecticide application is definitely unnecessary on coconut palms as they are not on the menu of the dreaded palmetto weevil which attacks primarily cabbage and Canary Island.

Doug Caldwell is also a landscape entomologist and works for the Cooperative Extension Service, which 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@ifas.ufl.edu Call 239-353-4244 x203. 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 and more landscape pest management details, visit <http://collier.ifas.ufl.edu>.