

Palm Over-Pruning

What is with the 'Mohawk' cut on palms?

There may be some give and take. And some species may tolerate this approach better than others, **but palms should not be pruned in an 11 o'clock to 1 o'clock position (hurricane cut)**. University of Florida researcher, Dr. Tim Broschat and others contend that **green fronds should not be removed** from palms (unless they are poking through your pool screen cage!).



NO! *Figure 1. This is excessive pruning on a date palm. Note the 11 to 1 o'clock canopy outline.*



NO!



NO! *Figure 2. These Sabal palms were pruned too harshly. Sabal palms should be pruned so that the canopy is kept at a more normal 9 o'clock to 3 o'clock outline.*



NO! *Figure 3. Pencil-neck symptom from overpruning this queen palm in Glen Cove. This is now a hazard risk with the narrow and weakened trunk.*

Some negative and / or potential concerns:

1. Over trimming, by removing healthy green leaves, takes away the energy manufacturing potential of the palm. This can result in "pencil pointing" a sudden reduction in trunk "thickening" at the height in the crown where diameter increase should be taking place. This weak point creates **potential hazard** issues as the canopy is susceptible to wind throw.
2. Over-pruning may contribute to **reduced winter hardiness**.
3. Continual excess pruning of cabbage palms may increase flowering, which can stress the plant.
4. Removing fronds of trees that are suffering potassium and magnesium deficiencies **removes a reservoir of nutrients** and with potassium deficiency, may quickly lead to premature palm death.
5. The removal of too many fronds and the supporting base or "boot" could decrease the built-in stabilizing or shock-absorbing capacity design of the crown and make the remaining fronds and the bud **more susceptible to wind damage**.

As a rule of thumb, only prune brown or half-brown fronds. The outline of palm canopies, **for most species, should be about a 9 o'clock to 3 o'clock position**.

Courtesy of Doug Caldwell, Ph.D. Landscape Entomologist, Certified Arborist and the Commercial Horticulture Extension Educator with the [University of Florida Collier County Extension](#).

Florida Forest Service urges homeowners to help protect Florida's state tree

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Hurricane cut palms showing the "Mohawk look."

VERO BEACH — Hurricane season is upon us and many people are turning their thoughts to hurricane preparedness. One chore which you can safely eliminate from your “to-do” list is the dreaded “hurricane cutting” of Sabal palms.

This practice involves removing the lower fronds, even healthy green ones so that the resulting outline of the tree canopy occupies the 11 o'clock to 1 o'clock position of a clock face. People mistakenly believe that reducing the number of leaves will better prepare palms against strong winds. Over-pruning of palms is a puzzling trend with no sound basis in horticulture.

Observations from the 2004 hurricane season showed that palms that were hurricane pruned were more likely to snap than palms not pruned in this way. Another reason lower fronds are removed by tree trimmers is to gain easy access to the seed stalks, which can be removed without harming the tree.

Green fronds are the palms natural food manufacturing facility. Cutting healthy green fronds removes valuable nutrients and permanently stunts growth. Excessively pruned palms are more prone to disease and are more likely to succumb to high winds and winter freezes. Sabal palms have evolved to deal with hurricanes and will rarely shed green leaves in high winds. Even brown fronds are generally too soft to become damaging missiles. If the central frond of a palm tree is damaged, the palm will die.

The surrounding fronds protect the heart of the tree from winds and frost and should never be removed. Most palms in South Florida are naturally potassium deficient and annually grow only half the number of leaves that they would otherwise. Even removing yellowing leaves can exacerbate this problem and lead to a gradual decline of the palm's health.

The only time a "hurricane cut" should be done is when a Sabal palm is being transplanted to a site with no irrigation. All of the fronds are removed prior to transplanting. This type of cutting directs the energy of the tree to re-establish the root system. Research has shown that the Sabal will establish faster if all of the fronds are removed at the time of transport. This practice should not be done, however, on any established palm.

The scientific name of the Sabal or Cabbage palm is Sabal palmetto. It is the state tree of Florida and symbolizes the natural beauty of the Sunshine State. The State Seal of Florida depicts a beautiful full-figured Sabal Palm. You won't find any hurricane cut palms in a Highwaymen painting. For a healthy, "picture-postcard" hurricane resistant Sabal palm, follow these simple points:

Remove only leaves with leaf tips hanging below the horizontal line. The outline of the resulting canopy should occupy at least the 9 o'clock to 3 o'clock position. Proactively removing lower brown fronds will help reduce cleanup operations if ever a high wind event does occur. Ask your tree care company to follow the American National Standard for pruning trees, called ANSI A300 Part 1 Pruning or simply the "A300 pruning standard."

Prune according to need, not to a schedule. Annual pruning is unnecessary.

You can prune any time of year but it is better to prune from end of August onwards. If you prune too early in the year you will miss a lot of the young flower stalks and may have to prune twice.

Never allow a tree trimmer to climb any tree with spikes.

Never pull the leaves off by hand. Leave short cleanly cut stubs or "boots."

Do not "de-boot" the leaf bases on the trunk. The lattice of boots is part of the tree's architecture and adds to stability in high winds. Older, loose boots can be pulled off by hand if necessary.

Use a proper slow release palm fertilizer three times a year, not a lawn fertilizer. It can take more than three years to correct a potassium deficiency but a correctly fertilized palm will have less brown leaves and will require less pruning. Diligence and patience pays dividends.

Palms are low maintenance trees and do not need to be overly manicured. Following these steps will not only save unnecessary expense, but will help showcase the natural beauty of Florida's State tree.



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

Hurricane Cuts Compromise Palm Tree Structure in High Winds!

Doug Caldwell, University of Florida Extension, Collier County Commercial Landscape Horticulture

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 "refronDED" 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.

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Palm pruning

Palms in the landscape by Dr. Ed Gilman

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1 - No pruning needed



No pruning is needed on this cabbage palm because all fronds are green.

2 - Palm pruning



Only the dead brown fronds in the lower part of the canopy and the dead flower stalks in the center of the canopy need to be removed from this healthy cabbage palm. Be careful not to nick the petiole bases of the fronds that remain when cutting flower stalks. If you do, they are likely to break in half in the near future.

3 - Over-pruning cabbage palms



These cabbage palms were recently over-pruned. Too many lower fronds were removed. This can stress the palm making it more susceptible to insect and disease attack.

4 - Stress symptoms on over-pruned palms



Over-pruned palms, such as this cabbage palm, might flower more in response to removing too many live fronds.

5 - Canary Island dates need no pruning



No pruning is needed on these healthy Canary Island date palms. Lower fronds are green with little to no chlorosis.

6 - Canary Island dates could use pruning



Lower fronds are dead and can be removed to improve appearance. Leave the green fronds intact. Removing green fronds from the lower portion of the canopy removes photosynthetic area and can cause stress and narrowing of the trunk.

7 - Don't prune yet



These Canary Island date palms are showing severe yellowing or chlorosis on the lower fronds. Correct this problem with appropriate nutrition or other appropriate cultural practices before pruning. Removing these yellow lower fronds now could cause yellowing to progress up to the upper fronds and could kill the palm.

8 - Correct severe chlorosis before pruning



The cause of the yellow lower fronds on this Canary Island date palm is probably a deficiency in magnesium and/or potassium. Correct this problem before pruning the palm.

9 - Severe over-pruning date palm



In addition to looking goofy, over-pruning eventually causes a narrowing of the trunk on some palms at the point where the fronds were removed. This same palm tree now has a narrowing of the trunk 6 feet from the ground 9 years after this harsh pruning.

10 - Pruning at transplanting



Many palms are pruned at transplanting to aid in transportation. Severe pruning like that shown above is efficient because it allows more palms to be placed on the flat bed trunk. There is one study on palm pruning at transplanting and it showed that for cabbage palm, removing many fronds at transplanting improved survival, but only if irrigation was applied infrequently after planting. Pruning provided no improvement if palms were irrigated regularly after planting.

11 - Over-pruning date palms



Date palms are often over-pruned in this fashion. This type of pruning stresses the palm by removing too much photosynthetic capacity from the canopy. In humid climates where these palms are now (turn of the century) being planted with regularity, this added stress could cause the palm to decline prematurely.

12 - Nice pruning job



This is not a bad pruning job on *reclinata* date palms. Lower dead fronds were removed and all green fronds remain on the palm.

13 - Over-pruning date palms



Many lower green fronds were removed on these healthy *Phoenix reclinata* (*reclinata* date palm). Unfortunately, this unnecessary practice is common in many regions where palms are grown. I think many people feel they need to do something to their palm tree. This is not it.

14 - Pruning not needed



Brahea palm makes a wonderful tree for many landscapes. The flower display is one of its outstanding features. This palm needs no pruning because there are no dead fronds.

15 - Recently pruned palm



This *Brahea* palm was recently pruned. Some live foliage was removed from the lower canopy which was not necessary for the health of the palm. Palms are pruned mostly for people reasons, not for the health of the palm. Leave as much live foliage on the palm as is practical.