



Lee County
3406 Palm Beach Blvd.
Ft Myers, FL 33916-3719
Phone: 239-461-7515
Fax: (239) 461-7501
<http://lee.ifas.ufl.edu>

July 11, 2005

FOR IMMEDIATE RELEASE

HURRICANE RECOVERY SERIES Tom Becker Lee County Extension

Yard Tip Sheet #1

DAYS LATER..... PLANT STRONG TREES

Reestablishing a WIND-RESISTANT tree canopy by pruning is a great way to begin re-landscaping after a hurricane. But, even the strongest trees recommended by horticulturist, like gumbo limbo - *Bursera simaruba*, can't hold up to Category 4 or 5 storms.

A tree's condition before a storm pre-determines how safe it is during a storm. First, determine a tree's safety from toppling over in a storm. Have dead or diseased branches pruned out before they fall in a storm. Follow recommended pruning methods by the University of Florida.

Second, have healthy trees, with or without hurricane damage, professionally pruned by a Florida-certified arborist. Even a native tree or shrub, left unpruned for several years becomes prone to damage from hurricane-force winds.

Third, when replacing a tree, select the 'right' tree species, for the 'right' place in your yard. Consider planting only tree species that stand up to a strong wind. Trees shown to withstand hurricane-force winds (after Hurricane Andrew, Opal, Charley and Frances) include: *Cordia sebestena*- geiger tree, *Quercus virginiana*- live oak, *Coccoloba uvifera*- seagrape, *Conocarpus erectus var. sericeus*-silver buttonwood and *Bursera simaruba*- gumbo limbo.

Third. consider replacing damaged tree species known for their brittle branches and structural problems: *Acacia auriculiformis* - earleaf acacia, *Eucalyptus spp.*-eucalyptus, *Persea americana*-avocado, *Tabebuia caraiba*-Caribbean trumpet tree and *Spathodea campanulata*-African tulip-tree.

Fourth, consider oaks and pines that develop deep roots for re-planting. Avoid using these tree species with shallow roots: *Albizia lebbek*- woman's tongue, *Araucaria heterophylla*- Norfolk Island pine and *Casuarina spp.*- Australian pine.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, disability or national origin. U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A. & M. University Cooperative Extension Program, and Boards of County Commissioners Cooperating.

Yard Tip Sheet #2

HOW DID TREES FALL? SURVIVING HURRICANE-FORCE WINDS

Hurricane Charley, Frances, Ivan and now Dennis uprooted or broke at the trunk trees of all shapes and sizes. Many of these trees would have survived had they been pruned properly. For trees still standing after hurricane force winds, many showed crown damage. Often, trees showed more than 50-percent of their branches broken.

To avoid damage from future wind events, establish an annual landscape maintenance schedule. Have each tree evaluated by a professional arborist. Treat or prune trees and palms as suggested.

For trees other than palms, pruning may be required every couple of years. This misperception to never prune trees creates a danger to all using your yard. Research after Hurricane Andrew and subsequent wind events has documented the need to prune trees for safety. Thin out the tree's canopy every couple of years.

Proper pruning strengthens a dense tree's canopy. Proper pruning early (soon after planting) results in a sturdier, well-spaced framework of branches that resist wind damage.

After thinning out a hazardous tree, prune to maintain a tree by keeping an open framework and leafy canopy. As a result, air moves freely through the tree's canopy.

For the strongest tree canopy possible, select trees individually for planting that exhibit a wind-resistant structure. Select and tag trees in a nursery that only have a single, up-right, central leader. Those trees selected should not appear overly dense, have branches with wide branching angles nor demonstrate a crown imbalance with in-growing or crossing branches.

After selecting a strong tree, plant at the recommended depth. Planting too deep predisposes its trunk to breaking in strong winds.

Lastly, provide extra care during the first year. Water a tree immediately after planting. And, prune it each year to correct flaws including broken, diseased or damaged branches.

Yard Tip Sheet #3

HURRICANE TREE SURVIVAL TAKES A LOT OF EFFORT.

Damage to trees from hurricane force winds may not appear for several months or several years. Shrubs and trees hit by future wind shear should be stood back upright and staked if necessary.

A small tree or shrub knocked down or leaning badly often requires immediate care. Wind and/or flooding are probable causes. Flooding damage often occurs in hurricane-damaged landscapes when plant roots remain saturated for 3 days or more.

First, if a large portion of the root ball popped out of the soil, re-planting at the proper depth may be difficult. Start by standing the tree upright. Next, evaluate the root ball. Prune exposed roots at or near the surface and position deeper, exposed roots to grow down.

Second, reset the root ball. If this still doesn't allow re-planting to its original growing position, remove soil near the base of the ball.

Third, if the tree can't be re-planted using steps 1 and 2, securely stake and re-mulch as is. If you are unable to do so immediately, place a layer of sphagnum moss over exposed roots.

Fourth, place 3 INCHES of fine, organic mulch like shredded bark, recycled bark or pine needles over an enlarged area around the tree or shrub. Remove additional sod from around a tree.

Fifth, maintain the injured tree in a similar way as a newly planted tree or shrub. Water separately or irrigate the surface area above the root ball. Keep staked for more than 6 months to a year. Depending on the tree species, establishing new roots outside the old root ball could take 3 months to one year. Wait several weeks before applying fertilizer at the minimum rate recommended by a soil test.

In areas where trees fell due to flooding, look at potential ways to improve drainage. Use only water tolerant plants in wetter areas like live oak, red mangrove, red bay or cabbage palms.

Another solution is planting trees and shrubs on raised soil beds or mounds. Shrubs planted on raised soil mounds often survive longer. In some situations, turning off the irrigation in areas of the yard prone to flooding will keep newly established trees and shrubs from being blown down.

Following a wind event, prune away ripped limbs to ensure proper healing. Wash leaves with fresh water in the canopy of plants affected by salt sprays. Also, consider fungicide applications for badly damaged palms. Lastly, expect to see sunburn on trees and under-story plants if significant leaf loss occurs after a storm. Choose these palms that showed high survivability following Hurricane Charley and Frances in Southwest Florida.

Cabbage Palm – *Sabal palmetto*

Chinese Fan Palm – *Livistonia chinensis*

Christmas Palm – *Veitchia merrillii*

Pygmy Date Palm – *Phoenix roebelenii*