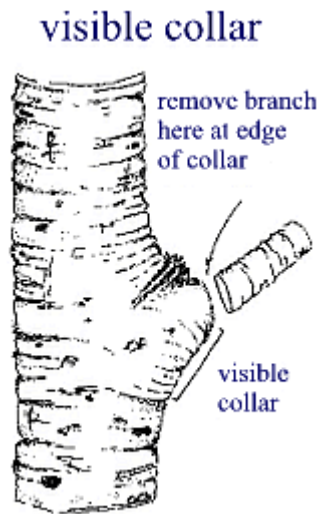


## Hurricanes and Trees

By Jane Morse, University of Florida/IFAS Manatee County Extension Agent



It's hurricane season and there is stress about what may happen to our trees. Will they come crashing through the house? Will they break apart? What will happen? While we can't answer these questions with total certainty, we can help prevent tree damage.

Proper selection of trees is the first and most important step in keeping our property safe. It is best to select trees that have good wind resistance, will fit the size of the area into which they are placed, and will be maintained and pruned correctly.

In a survey of tree damage in Florida after hurricanes Erin and Opal, the trees that were most wind resistant were live oak, sabal palm, sand live oak and southern magnolia.

The sabal palm was the only tree that was immune to the hurricane-force winds of Hugo. Less wind-resistant trees include the laurel oak, longleaf pine, pecan, red maple, silver maple, slash pine, southern red cedar, sweetgum and turkey oak. The worst wind resistance was seen in the Carolina laurelcherry and sand pine. A comforting fact from this survey is that only 1-2% of the trees studied caused property damage.

The amount of ground that is supplied for tree roots is very important in keeping a tree from blowing over. The root system will extend 2-3 times past the length of the drip line of the canopy. If the canopy goes out ten feet from the trunk, then the roots will be 20-30 feet out from the trunk. Therefore, choosing the right tree size for the space it will inhabit becomes critical to having a healthy root system.

Proper pruning promotes a healthy and strong tree. The way in which stems are attached to each other and to the trunk determines the overall structural strength of the tree. U- and L-shaped joints are the strongest. Those with V-shaped or narrow joints are the weakest and can easily split apart. Remove branches with narrow joints, those that are decayed, dead, broken, crossing over other branches, or poorly attached. Only 1/3 of the canopy should be removed in a year's time.

Plants are pruned by either heading back or thinning. Heading back (stubbing) trees in the landscape is only used when trees are too large for the area in which they are planted. Trees should never be "hat-racked" or topped. Topping creates hazardous trees because the wood inside the cut branch begins to rot. The sprouts which grow in response to topping are not well secured to the topped branch and they can easily split from the tree as they grow larger. To avoid this, prune a branch back to a living branch crotch. This technique is called drop crotching. These detrimental practices can be avoided by proper

tree selection. Thinning is the complete removal of branches back to lateral branches, or the main trunk.

When removing large tree branches, the three-cut method should be used. This will keep the limb from stripping off the bark as it falls. To do the three cut method, the first cut (not through) is made on the lower side of the branch about 15 inches from the trunk. The second cut is made downward from the top of the branch (through it) about 18 inches from the trunk. This will cause the limb to split between the two cuts without tearing the bark. The remaining stub can then be safely removed. Flush cuts should never be made since they injure the tree and allow rot to occur. A proper cut should be made at an angle, just outside the swollen area on the underside of the limb.

Regarding palms and pruning, palms having the most fronds will survive hurricanes the best since the terminal bud (growing point) is better protected. Palms should not be pruned past the horizontal position. More fronds equal more protection. The so called "hurricane cut" is the worst cut of all.

For more information on pruning, call the University of Florida/IFAS Manatee County Extension Service at 722-4524 and ask to speak to a Master Gardener (available Monday-Friday, 9 AM to 4 PM). Or see <http://hort.ifas.ufl.edu/woody/pruning/index.htm>. We have lots of FREE publications to help you.

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