Storm Preparedness – Don’t Top Your Trees!

Michael S. Orfanedes, Urban Forester

With hurricane season approaching, many Davie residents are concerned about the safety of their trees. Preparing your landscape for hurricane season is a wise move and begins with proper tree pruning and maintenance. One common misconception about tree safety is that the taller a tree is, the greater its likelihood of becoming a hazard. Subscribing to this notion, some people have their trees topped or hat-racked (see photo one). Ironically, this practice actually makes trees more, rather then less, prone to breakage and failure over time.

This is because the wounds created by large diameter (>than 2’’) stub cuts seldom heal over and the exposed wood can quickly become colonized by wood-rotting organisms, initiating internal decay. Also, the loss of the terminal portion of the branch causes a multitude of sprouts to form on the remaining stub. Over time, the sprouts on the decaying stub elongate and thicken, forming dense, weakly attached branches (see photos 2 and 3). Breakage occurs when the weight of the weakly attached branches and/or energy of the wind becomes greater than what the decayed limb can bear. Failure can be easily triggered during storms when the energy of the wind impacts the overly dense canopy.

Instead of having your trees topped, have them pruned properly so they will be less prone to storm damage. If you are going to hire the work done, you will need to hire a professional who carries a current, valid Broward County Tree Trimmers’ license. Below are some recommended guidelines that should be followed:

**Remove all dead, dying or diseased branches** - Deadwood in the canopy is a serious hazard and the most likely material to fall, break out or become a projectile.

**Thin the canopy properly** – More important than reducing the height of the canopy, have the canopy thinned properly. This will allow much of the wind’s energy to pass through the canopy, rather than being intercepted by it. Thinning involves removing smaller diameter branches back to the parent branch. Do not cut branches flush with the trunk or a scaffold limb. Be sure to allow the branch collar (swollen point of branch attachment) to remain on the tree. When properly done, most of the thinning cuts will be made in the upper and outer canopy—where the foliage is densest. Do not remove too much foliage from the lower and mid-canopy—these branches are needed to help stabilize the tree, keep its center gravity low, and build much needed trunk and scaffold branch girth and taper.

**Initiate structural pruning** - Research shows that large-growing species such as live oak, mahogany, and gumbo limbo are more tolerant to storms when trained to a single leader structure as opposed to a multiple-trunked (co-dominant) condition. Trees with closely spaced, upright co-dominant leaders often develop bark inclusions, which can lead to a hazardous condition. Structural pruning involves the development of a single desirable leader through drop-crotch pruning and removal of undesirable co-dominant leaders over a period of several years. This work usually requires the service of a trained arborist.

For more information about proper tree pruning, contact the Town of Davie and ask for the Broward County publication entitled “Proper Tree Pruning”. For on-line information, go to the University of Florida website [http://hort.ifas.ufl.edu/woody/pruning](http://hort.ifas.ufl.edu/woody/pruning).