It's heating up in the tropics, and that means we have begun yet another hurricane season. We all know we need to prepare ourselves and our homes for these powerful storms, but have you ever thought about preparing your landscape for hurricanes?

As we all know, not all of the damage to structures is due to strong hurricane winds alone. Damage also occurs from falling trees and flying landscape debris during a storm. Building codes exist to reduce damage from strong winds and high water, but there are no standards for designing and maintaining hurricane-resistant landscapes. Is it possible to create a landscape that can reduce hurricane and storm damage to structures and plantings? The answer is yes. By choosing the right plants and maintaining them correctly, we can reduce storm damage.

Storm-sustaining trees should be selected for their root development, mass, density and growth characteristics. Most of Florida’s native trees and plants are good choices. These plants have proven resistant to strong winds by surviving previous storms. It's not that exotic plants can't survive hurricanes - they can, but they need to display the same characteristics as the native plants.

A storm "survivor" tree is one that is compact, with a low center of gravity, has a strong, sturdy trunk and a large, deep root system. Our native live oak is a great example of the "survivor" tree, given the right environment and care during its life.

On the other hand, the "weakest link" of landscapes during storms is a tree that has a high center of gravity with a dense canopy, a weak trunk and shallow roots. Tall, slender pine trees are examples of the "weakest link" - especially those that once belonged to a pine forest before suburban development. These pines relied on one another for wind resistance and support during storms. Without each other, they are unprotected from storm damage.

Trees that are thought to be hurricane-resistant may still be vulnerable to strong winds. Construction damage, poor growing conditions, small root zones, and disease or insect problems make trees susceptible to toppling during storms.

Poorly designed landscapes can be a hazard during a hurricane. However, a well-designed one can be an asset. Strong, dense landscape trees can deflect wind from structures during storms. However, new plantings should be placed far enough from buildings and utilities so they can sway in the strong winds. Thick, dense hedges should be placed in front of these trees. The shrubs act as a wall to divert winds and debris from buildings.

Trees less than a year old are more susceptible to hurricane damage than older trees. They are not as strong and do not have a deep root system. These trees should be anchored with tree supports if a storm threatens.

Proper maintenance needs to be practiced during the life of any tree. The first step is to provide the tree, with good growing conditions and to keep it as healthy as you can, free of insects and diseases. Second, proper pruning needs to be maintained on the tree. A strong, deep-rooted tree may not fall during a storm, but weak limbs in the canopy may. Broken, dead and damaged limbs can be torn from trees during a storm and turned into dangerous projectiles. Even "survivors" can grow very large and unbalanced, which could make them hazards during storms.

Regular pruning during a tree's development should create a sturdy, well-spaced framework of healthy branches with an open canopy that allows air to flow freely through it. It is important for a tree to have a central leader with no narrow forks or branches that leave the trunk at an acute angle. Limb crotches should be between 45 and 90 degrees. Narrow V-shaped crotches have the tendency to split.
When a storm is on the horizon, gardeners who have kept their trees thinned and in proportion have little to do to prepare. The neglected tree that has become immensely overgrown is another matter. Just remember the "survivor" trees are hurricane-resistant, not hurricane-proof.

For more information on preparing your landscape for hurricanes and a free publication on how to properly prune a tree, please contact the Osceola master gardeners at (321) 697-3000. They are available to take your calls from Mondays to Fridays from 10 am to 2 pm.

Free landscape seminars are also available.

"Landscape Services: getting the most for your money" Join us as we look at how to select irrigation, landscaping, pest control, and tree care services for your landscape. To be held Saturday, June 11th from 9:00am-noon at the St. Cloud Civic Center, 3001 17th Street. Call 321-697-3000 to register.

"Florida Friendly Plants for Your Landscape" Learn about low-maintenance plants to beautify your yard. To be held Saturday, June 25th from 9:00am-11:00am at Extension Services, Osceola Heritage Park. Call 407-518-2267 to register.

Jennifer Welshans
Horticulture Agent
Osceola County Extension Service
1921 Kissimmee Valley Lane
Kissimmee, FL 34744
321-697-3000
jwel2@osceola.org
osceola.ifas.ufl.edu
Date: June 5, 2005