

Storms and Our Landscapes

Escambia County/University of Florida IFAS Extension

Preparing landscapes to minimize damage from storm events is an on going maintenance activity. We have hurricanes that can cause the most damage, but we also have violent thunderstorms with wind, lightning and heavy rains. Both of these events can also spawn tornadoes. Mature trees are the largest elements in our landscapes so they tend to be the most adversely effected by storm events.

Minimizing damage from storms usually begins during the planning stage of the landscape.

- ❖ Select the right plant for the right place.
- ❖ Plant trees and shrubs properly.
- ❖ Trees should always be given ample room for roots to grow. Roots absorb nutrients, but they are also the anchors for the tree.
- ❖ Trees in a group blow down less frequently than single trees.
- ❖ If large trees are planted where there is limited or restricted area for roots to grow out in all directions, there is a likelihood that the tree may fall during high winds.
- ❖ Construction activities within about 20 feet from the trunk of existing trees can cause the tree to blow over more than 10 years later.
- ❖ French drains and/or gutters on the roof may be necessary to avoid water standing in areas of the landscape. Installing these before landscaping is done will avoid having to dig up existing plantings.
- ❖ Live oak, southern magnolia and bald cypress stand up well **compared to other trees** during hurricanes. Carolina cherry laurel and sand pine did the worst.

Wind

- ❖ Trees that have had regular structural preventive pruning are less likely to fail than neglected trees. The following web site has extensive information:
<http://hort.ifas.ufl.edu/woody/maturetreecare/reducingdamage.htm>
- ❖ Branch attachment angles can affect weather a large branch will split from a tree. Wide-angle attachments are much more stable than narrow.
- ❖ Laurel Oaks are prone to failure in hurricanes.
- ❖ Queen palms are prone to falling over; cabbage and Phoenix palms are able to stand firm in hurricanes.
- ❖ Trees with decayed trunks are very dangerous in winds. Disease causing decay can come up from the roots or enter through improper pruning cuts.
- ❖ Large shrubs are more likely to blow over than small ones.
- ❖ Shrubs pruned to a more natural form withstand wind better than hedged shrubs.

Water

- ❖ Water – either standing from heavy rains or rising from lakes, rivers, or storm surge from the bay or Gulf can cause permanent damage to many plants.
- ❖ Observe your landscape for areas where water stands after a rain and correct the drainage if you can.
- ❖ If you have areas prone to flooding – consider plants that can tolerate flooded roots for several days. Many plants can only tolerate flooded roots for less than a day.
- ❖ Trees become unstable in soils saturated from heavy rains.

After the Storm

- ❖ Damaged trees may require a Certified Arborist to prune damaged areas or to determine if the tree can be saved. Large limbs are very heavy and dangerous.
- ❖ Be wary of men in trucks with chain saws driving through looking for work. An ISA certified arborist is your best bet for damaged trees that are still intact.
- ❖ Ask any “tree company” for a copy of their business license and liability insurance.
- ❖ Small trees that are partially blown over may be reset in the ground and staked to hold them until new roots grow out into the soil.
- ❖ Roots in flooded soil cannot absorb oxygen – moving water away is important for most plants. You may be able to dig a shallow trench to drain water away, however be careful not to damage roots.
- ❖ Aeration of soggy soils will help get oxygen to roots – use a pitchfork or other tool to make small holes into the root zone once standing water has drained.
- ❖ When cleaning out debris from beds, avoid the urge to take out even all the mulch with the debris. This can damage shallow roots. Take only the coarse material and leave a 2-3 inch layer of leaves and mulch. You can add a shallow layer of new mulch to spruce up the area.
- ❖ Prune to remove broken branches and other damage from shrubs. Be sure to make proper pruning cuts. Do not prune severely – this removes energy needed to recover from lost roots and leaves.
- ❖ Salt or brackish water can damage turfgrass and shrubs, but if flooding is brief, they may recover – give them a chance.
- ❖ Many plants experience root trauma from being rocked and twisted in high winds. Irrigate regularly to help fill resulting air pockets in the soil – you may need to add some additional soil to fill in depressed areas around the roots.
- ❖ After a storm is not the time to fertilize – wait several months or until the next spring. Plants need root recovery before they can utilize the fertilizer.

Keeping the landscape plants in the best health goes a long way to reducing damage. The University of Florida/IFAS Horticulture web site, “Storm Preparation and Dealing with the Aftermath” is a great place to go for additional information:

<http://hort.ifas.ufl.edu/woody/index.htm>

To find a Certified Arborist go to:

<http://www.isa-arbor.com/findArborist/findarborist.aspx>, scroll down the page and find the area to put in your zip code. This will bring up a listing of all the arborists in your area.