Tree Care Before and After a Storm

Trees provide many benefits such as shade, reduced utility costs, and improved water and air quality. To provide those benefits safely, trees require proper maintenance and good care. A healthy, well-maintained tree is better able to withstand weather events like ice storms, hurricanes, or strong winds that can cause some tree parts, or entire trees, to fail. After a storm, some homeowners are reluctant to replace downed trees, while others choose to remove trees regardless of how well the tree survived the storm. Tree damage and tree failures can cause property damage, but the possibility can be managed through proper maintenance.

Prepare your trees to withstand these events, to help to preserve the benefits you enjoy from having trees around your home. Know how to manage storm damaged trees, to help retain or even regain those many benefits we all enjoy.

BEFORE a STORM

Protect your trees with routine and periodic pruning to promote strong branches

- **Remove dead, dying, diseased, damaged, and decayed branches**
- **Encourage good branch attachment angles**
- **Remove or subordinate co-dominant stems**
- **Encourage strong branch to trunk size ratios**
- **Remove rubbing branches**

NO TOPPING!

Trees with healthy root systems, good structure, and strong branching patterns tend to fare better during storms. Following these preventative practices can help maintain the benefits that trees provide.

- Roots need room to grow and provide stability to the tree.
  - Avoid cutting roots within a distance 5 times the diameter of the trunk
  - Do not smother roots under extra soil fill or excessive mulch
  - Do not kill roots by dumping chemicals or oil on the ground under the branches of a tree
- DON'T TOP! Topping will not make a tree more able to withstand a storm. In fact the very opposite is true. Topping will result in weakly attached branches and internal decay that makes a tree more prone to breakage during a storm.
- Likewise, don't Lion's-Tail. This practice strips out the interior foliage and branches leaving all the weight of the remaining leaves and twigs at the end of branches. Lion's tailed branches are more prone to failure during a storm.
- HIRE International Society of Arboriculture (ISA) Certified Arborist if you are unable to care for your tree correctly and safely. Become established as a regular customer, as a regular customer's needs will be addressed following a storm before the needs of new clients.
- When planning for new trees, remember these guidelines:
  - Select storm-resistant trees. Whether in hurricane or ice storm prone areas, there are trees experts recommend, based on their observations of tree response to storm events. Generally, native species that have developed with local weather conditions are the best choice.
  - Plant or retain trees in groups. Trees planted in groups of 5 or more are protected from the brunt of storm winds than a single, isolated tree in the landscape.
  - Diversify. a mix of species can reduce the types of damage and overall tree loss and help retain benefits of the urban forest.

AFTER a STORM

Safety First!

- Watch for downed utility lines and treat them all as live until a utility company official has told you the line is not energized. Even cable TV lines can carry electric current if they contact a power line.
- Be safe with chainsaws. Operation of a chainsaw in normal conditions can be dangerous. In the aftermath of a storm is not the time for inexperienced users to learn.
- Work with an established, local tree service.

After a storm, hasty or emotional decisions about damaged trees can result in unnecessary removals or drastic pruning decisions. Proper and professional pruning practices can help a tree recover from the storm damage. How long that takes can depend on the amount and extent of damage, and the tree species, initial health and age. A reputable certified arborist can help advise on management, pruning and removal decisions based on your situation. Prompt, but not hasty, action will get trees on the road to recovery.

Generally, trees that are most likely to survive:

- ☐ Have sound root systems
- ☐ Have 50% or more of their crown remaining
- ☐ Are young and/or vigorous
- ☐ Did not lose more than 1 or 2 major branches with main trunk attachments

Conversely, trees that are not likely to survive storm damage

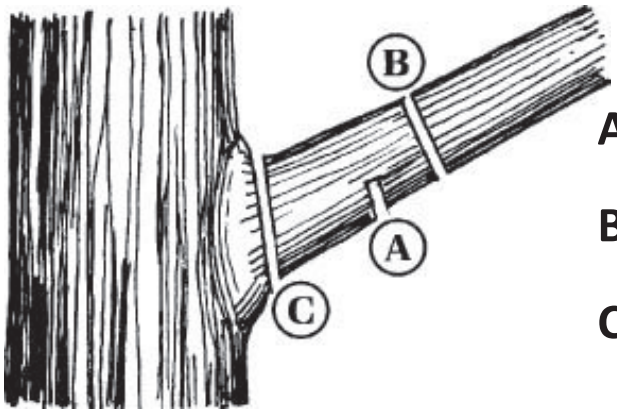
- ☐ Have a split trunk
- ☐ Are leaning much more than before the storm
- ☐ Were in poor condition prior to the storm
- ☐ Have more than 50% of their crown missing
- ☐ Have broken, severed, or cut roots
- ☐ Have twist fractures or cracks in the main stem

Follow-up care after the storm is also important. Don't be tempted to over prune: trees need as much leaf area as possible to manufacture the sugars they need to carry out their repair functions. Don't apply fertilizers to encourage new leaf growth: this can stress the tree by forcing new growth that it may not be able to support following a storm.

Dispose of debris legally: find out from your city or county officials who is responsible for collecting the debris and follow directions for placement of debris. Make sure that if burning is acceptable you secure a proper burning permit.

BEFORE and AFTER a STORM

Proper Pruning Cuts



Three Cut Method for Larger Branches

A – 1st cut partially through from underside

B – 2nd cut fully through from topside

C – final cut just outside of branch collar

Maintain your trees to enjoy their benefits now and after a storm.

Call an ISA Certified Arborist before storms damage your trees. Become established as a regular customer. Trees that have been properly pruned tend to fare better than unmaintained trees. All Certified Arborists will be busy following a storm, but regular customers will likely receive more prompt attention before new clients.

Other Helpful Publications and Web sites:

Why hire a Certified Arborist - http://ncforestservice.gov/Urban/why_hire_an_arborist.htm

Find An Arborist - http://www.treesaregood.org/findanarborist/findanarborist.aspx

Treating Storm Damaged Trees - http://hort.ifas.ufl.edu/woody/storm-damage.shtml

How To Prune (USFS) - https://www.fs.usda.gov/naspf/sites/default/files/naspf/pdf/htprune-rev-2012-screen.pdf

General Pruning Techniques - http://content.ces.ncsu.edu/general-pruning-techniques.pdf

Mature Trees: Managing Risk - http://hort.ifas.ufl.edu/woody/preventive-pruning.shtml