

GEORGIA FORESTRY
COMMISSION



GaTrees.org

Managing Storm Damaged Trees

Do's & Dont's



Contracting for Storm-Damaged Tree Removal

When confronted with storm-damaged trees on your home or property, your initial reaction might be to find someone – anyone – who can deal with the problem immediately or to attempt to tackle the job yourself.

While this is a natural reaction, it can lead to poor hiring decisions. Many companies and individuals are inexperienced and ill-prepared for this specialized job. “Do-it-yourselfers” often end up with serious injuries.

Work by inexperienced people can also lead to needless additional property damage and significant liability. Many of these problems can be avoided by following a few simple guidelines:

- ▶ **Do not do anything, outside of providing for personal safety, until you contact your insurance company.** It may have required contractors for you to use or procedures you must follow to receive full coverage.
- ▶ **Be very wary of hiring** anyone walking the neighborhood and knocking on doors. Don't be bullied into having work done through fear or intimidation. This is not a tactic used by professional tree workers. Should you feel threatened by these individuals, call your local police.
- ▶ **Have a clear mind and record in writing** what you want the job to look like when it is finished, particularly with regard to clean up. Be specific about who is responsible for:
 - Possible further damage to lawn, shrubs and landscaping, structures, adjacent and previously undamaged trees, fences, driveways, patios, and sidewalks.
 - Chip-spreading or removal and debris handling. Don't allow pine chips to remain on site - they could attract pine beetles.
- ▶ **Secure as many bids as possible** – at least three, looking for those who specialize in storm damage, and making sure the requirements of the job and responsibility for any additional damage are understood. Check at least three references. Be wary of out of state contractors.
- ▶ **Get written estimates.** Ensure that estimates include credentials, written scope of work to be performed and all costs. Compare quotes on the basis of services to be performed and costs for each service.
- ▶ **Ask for proof of workers' compensation and personal and property damage insurance.** Always contact the contractor's insurance company. Make sure a policy is valid when the contractor shows up on the job.
- ▶ **Never pay any money** until the job is completely finished.
- ▶ **Require a written contract. NO EXCEPTIONS!** Read contracts carefully before signing. Place any additional requirements in the written contract and verify that the contract details when work will be started and completed.
- ▶ **Demand that work only start once a contract is signed by both parties.**

Do's & Dont's

The Clean-up Effort

As a homeowner you may feel the overwhelming need to quickly “clean up” the storm debris left behind by thunderstorms, tornadoes or hurricanes, so that life can begin to return to normal. Unfortunately, as the clean-up begins, many homeowners are ill-prepared to cope with the sheer volume of downed trees, power lines, branches and general debris left in the storm’s wake.

However, a little planning, preparation and patience will help ease the clean-up effort, particularly if you follow these tips:

- ▶ **DO NOT TOUCH TREES IN CONTACT WITH POWERLINES - EVER.** Notify your local power provider immediately.
- ▶ **Get help** - tree trunks and large limbs can be very heavy and their movement should not be attempted by one person.
- ▶ **Do not** attempt to remove leaning trees or large branches from roofs. Improper movement could cause additional structural damage.
- ▶ **Be very careful** when moving downed trees and branches laying over one another. They are easily “sprung,” or may be supporting the weight of other downed material which could move, sometimes violently, when released.
- ▶ **Pile debris** where it won’t restrict your movements or the movements of tree crews and your neighbors as access to debris progresses. Keep trash bags and heavy cord handy.
 - Know how your local government will deal with debris cleanup. Should you place debris by the curb? If so, in what length or size bundle? How soon will they pick up and how frequently? How much will they take?
 - Determine what part of the debris may be recyclable; most woody debris is compostable and should be piled separately.
- ▶ **Have patience.** Storm debris clean-up can take weeks or even months to complete.

Chainsaw Safety

Dealing with storm-damaged trees on your property is dangerous and should not be tackled alone. Consider the following factors before operating a powered chainsaw:

- ▶ Learning how to operate a chainsaw on storm-damaged trees is dangerous and ill-advised.
- ▶ Chainsaw operation while working alone is dangerous and should never be attempted.
- ▶ Trees and limbs can weigh many tons and their weight distribution is not easily judged.
- ▶ Downed, damaged and leaning trees are usually in positions of tension. When weight is removed and they are “sprung,” they can cause unexpected collateral damage.
- ▶ Never operate a chainsaw while standing on or over downed trees or branches.
- ▶ Always be aware and in control of people, particularly children, in the area in which you are working.
- ▶ Make sure the area is clear of all persons before starting the chainsaw.

Minimum Personal Safety Equipment Required

Historically, more individuals are injured by chainsaws than the storm that caused the initial damage. Always use:

- Leather gloves
- Full face shield or safety goggles
- Hearing protection and hard hat
- Long sleeved shirt and long pants
- Over-the-ankle leather boots
- Chainsaw chaps
- First aid kit
- Knowledge of chainsaw operation
- Patience

Which Storm-Damaged Trees to Save

When confronted with storm-damaged trunks and branches, normal pruning rules may not apply. Often, the extensive pruning required will limit the likelihood of the tree's survival, and removal is the best option. It is important to be reasonable about what can be saved. In many instances, over-zealous pruning results in removal of viable branches that the tree needs for recovery. Remember that storm damage recovery can take many years, and only trees that were relatively sound before the damage make good candidates for conservation.

Different types of trees respond to storm winds differently and have varying rates of success in recovering from storm damage.*

Those least likely to survive and needing removal are:

- Lightning-struck pines and hardwoods with greater than 30% circumference impacted.
- Pines with more than 30% crown loss
- Hardwoods with 50% crown loss
- Trees whose lean has changed
- Trees with split main stems
- Trees with greater than 70% unbalanced crowns
- Trees with twist fractures or cracks in main stems
- Trees with broken roots

* see Dr. Kim Coder's 1995 publication, *Storm Damaged Trees: Prevention and Treatment* referenced at the back of this publication.

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Trees that may have a reasonable chance of survival are:

- Trees with more than 50% crown remaining
- Trees with no loss of major branches with main trunk attachments
- Trees with less than 30% circumference with mechanical damage
- Trees with sound root systems

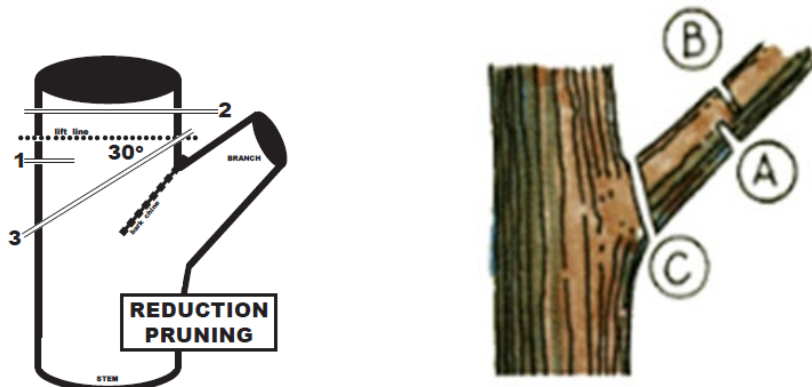
When trying to decide if a tree will recover and remain an asset in the landscape, it is important to visualize its final pruned shape. Keep in mind that prunings may be required over the next few years to bring the tree to a point where it can remain healthy for the long term. The storm recovery process can take years for older trees, and can be very costly and time intensive.

If large landscape trees are involved, it is best to consult with a knowledgeable Certified Arborist and discuss realistic solutions for your trees. Pruning by companies or individuals who don't have the knowledge or training necessary can leave you with trees that have an elevated level of risk or may cause you to have trees removed unnecessarily.

Do not top your trees. Topping trees causes major branch failures to occur over time, creating very dangerous situations in home landscapes. A knowledgeable arborist can conduct alternative pruning regimes.

Pruning and Maintenance for Damaged Trees

It is important that pruning of storm-damaged trees take place as soon as possible, remembering to ensure safety at all times. Prune all twisted and split branches back to a lateral branch that is at least three times the diameter of the damaged branch, or prune back to the main trunk. If the main stem is broken, prune back to the next major lateral branch, making sure that branch collars are intact. Should the number of damaged branches reduce the live crown to less than 50% (30% for pines) or leave an unbalanced crown, remove the tree. When pruning branches, use the three-cut method shown below. Mulch and water the tree's root system. Do not fertilize the tree with high nitrogen fertilizers and regularly monitor the tree for subsequent insect damage. (Coder 1995)



- Make partial cut from underneath
- Make a second cut from above several inches out
- Complete job with final cut just outside the branch collar

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Sources for More Information

Web Links

Georgia Forestry Commission, GaTrees.org

U.S.D.A. Forest Service <http://www.urbanforestrysouth.org/>

Arbor Day Foundation www.arborday.org/

Publications

Coder, K. 2007 *Storm Wind Loads On Trees*. Athens GA. Warnell School of Forestry and Natural Resources, The University of Georgia.

Coder, K. 2008 *Arboritecture: Foundations of Classic Design Pruning*. Athens GA. Warnell School of Forestry and Natural Resources, The University of Georgia.

Coder, K. 2005 *Storm Damaged Trees: Prevention and Treatment* Athens GA. Warnell School of Forestry and Natural Resources, The University of Georgia.

Coder, K. 2005 *Estimating Wind Forces on Tree Crowns*. Athens GA. Warnell School of Forestry and Natural Resources, The University of Georgia.

This publication was produced by the Sustainable Community Forestry Program of the Georgia Forestry Commission and was designed to provide useful information regarding actions to take following storms that damage trees. Please note there is no substitute for the assistance of a knowledgeable tree professional when making major decisions about tree care. A list of Certified Arborists can be found at GaTrees.org.