Help for Storm Damaged Trees and Shrubs

Ice and wind storms can do considerable damage to trees. Knowing what to do and how to do it could mean the difference between saving your favorite tree or chopping it up for firewood. Although some species are more prone to heaving or breakage than others, the greatest storm injury is likely to occur on weakened trees. Wind shear is often a problem with species such as poplar, maple, willow, black locust, Chinese elm, Siberian elm and sweet gum. Any tree may be damaged if it has dead or weak branches that cannot withstand the force of ice or winds.

The older and larger the tree, the more difficult it will be to save. Most large trees fail because some type of structural damage has occurred. For example, rot or disease may have entered the trunk or roots through wounds. Check the fallen tree for signs of decay, and remove it if any are present.

If a storm topples a young, healthy tree on your property, try to determine the reason for this failure. Saving a tree with defects will create a future hazard. It may be well worth calling a professional tree service that employs a certified arborist to help you decide if the tree should be rescued and, if so, to do the job.

Deciduous trees (those that lose their leaves) do not have to be righted immediately if they are dormant. Most needled evergreen trees must be straightened as soon as they are toppled, unless they are frozen. Cover exposed roots until they can be replanted.

To right a fallen tree

- Do not handle fallen trees when frozen. Wait for a thaw.
- Dig out the soil to enlarge the hole so that the roots can easily go back into position when the tree is straightened.
- It is best to use unamended soil as fill around and under the roots of the tree. If there is not enough native soil to cover the roots, add no more than one third by volume of any soil amendment, such as compost, to the native soil. **Do not** place fertilizer in this fill soil.
- Make clean cuts at the ends of torn and twisted roots.
- Be very careful that you do not loosen or rupture bark that comes into contact with ropes, cables, or wires. Use many thicknesses of canvas, burlap, or rubber to protect the bark.
- Straighten the tree by means of a block and tackle, winch, or manpower on smaller trees.
- Vertical stakes may be metal or two by two hardwood lumber. Place one stake on the windward side of the tree. Use stakes at least eight feet long for small trees; at least ten feet long for taller trees. **Or:**
  - Guy the tree with at least three wires or cables; do not allow the cables to rub against the trunk.
  - Guying stakes should be at least 30 inches long. **Be sure to remove all wires after one year.**
- Fill in around the roots, lightly firming the soil during the entire process.
- Water weekly for at least a full season if there is not adequate rain. Mulch the entire root zone with two inches of wood chips, leaves or straw. Keep mulch away from the trunk.
Branch Pruning
Remove broken branches by making cuts either at a strong side branch or at the main trunk. Do not leave stubs. Follow the sequence of cuts shown in this diagram, making certain that the branch collar (the swollen bark around the base of the branch) is not disturbed.

Trimming a wound
Broken branches leave torn and damaged wood. Be aware that frozen wood is brittle and can chip and crack. Wait for a warm period before trying to trim a wound. With a wood chisel or sharp knife, remove splintered, rough, or loose wood or bark from all parts of any wound. Leave a surface that allows water to escape completely and rapidly. Application of wound dressing is not recommended in most situations.

Adapted from Rutgers University Leaflet 172.