

Managing Storm-Damaged Urban Trees

Arkansas has more than its fair share of winter and summer storms that damage trees. Once power is restored after a storm and cleanup initiated, land and homeowners can begin to assess damage to their landscape trees. The good news is that there is no need for homeowners to pay a premium for services in the first few weeks after the storm. In the case of ornamental trees, cleanup and tree trimming doesn't have to be done immediately unless life or property are threatened. Forest landowners also should not be panicked into accepting a salvage price for timber without first evaluating whether salvage is really necessary.

Storm damage to landscape trees can range from relatively minor damage with only the smallest branches being injured to splitting of the trunk and uprooting of the tree. While minor injuries seldom result in permanent damage to the tree, severe injuries can increase a tree's susceptibility to insect and disease attack, ultimately killing the tree. Damage to landscape trees should, therefore, be properly treated and repaired to maintain the health of the tree. Some types of damage can be treated by the homeowner. Other more serious damage should be treated by a tree specialist, especially if extensive bracing, cabling or removal of large branches is required. As always, never try to remove branches or trees from utility lines. Let the professionals do it. As with all things, there is a right and a wrong way to repair storm-damaged trees.

First, let's put your mind to rest over what to do about some types of storm damage. The following categories of storm-damaged trees will survive for now and can wait to be harvested later when emergency salvage operations are over and, for forest landowners, when timber prices (and removal costs) are back to normal:

1. Trees with broken tops which still have four or more live limbs remaining.
2. Trees leaning less than 45 degrees.
3. Windblown trees with roots still in the ground.

Assuming the decision has been made to repair the tree, the next question is: "Am I capable of repairing the damage myself or should I seek

professional help?" Major repair will undoubtedly require the use of a chain saw and climbing equipment. Unless you are experienced in the use of such equipment and comfortable working off the ground, it may be best to have the work performed by a competent professional. The names of qualified firms can be obtained from local nurserymen. Also, look for listings of professionals under Tree Service in the Yellow Pages. Make absolutely sure that they carry proper liability and workmen's compensation insurance before allowing them to begin work on the job.

To protect yourself and your property it's okay to ask for references or qualifications. You might want to hold on to your money until it has been completely earned by the person you have hired to do a job. Even under critical emergency conditions, complete, good quality repairs and tree removal must be done or more damage and deterioration can appear in the future. Again, don't let just anyone who has a chain saw and a truck remove your landscape trees.

Based on common types of storm damage, here's a few recommended practices to put your yard back into order. For trees with tops broken out, remove the broken snags down to the next major interior branch. Try not to top the tree. Topping the tree will result in branches that are weak and prone to future damage. If a tree is only partially damaged, pruning damaged branches can restore the tree. First, remove broken and hanging branches to ensure safety and prevent additional property damage. Second, trees that can be saved should have broken branches properly pruned using the "natural target pruning method." Correct pruning is the best thing you can do for your tree. Improper pruning will only cause more damage to the tree, weakening it further by exposing a larger area of the tree to decay organisms.

When a tree is severely damaged, the first question that must be answered is: "Is the condition of the tree such to make keeping it worthwhile?" Take the time and effort to save a tree only if a substantial portion of the tree remains intact and if, when repairs are made, the tree will still be attractive and of value to the property owner. This is particularly true if the tree has brittle wood and a branch structure

that makes it vulnerable to additional damage from future storms. In addition to its condition, other factors to consider in determining whether or not a tree is worth saving include its age, species, growing location, the value it adds to the property, sentimental value, etc. When all of these are considered, it may often be more desirable to replace the damaged tree than perform extensive repairs. If you are not sure, see a local nurseryman, professional tree service company or consulting urban forester for assistance. If it is determined the tree is not worth saving, remove the tree as soon as possible.

Pine trees that are severely bent will have cracks in the bark and resin flow which will attract beetles. Bent hardwoods are less likely to be attacked by insects or diseases. Severely bent trees will not be suitable for veneer, poles or lumber because of internal splitting (wind shake). Small trees less than 15 feet tall usually recover and straighten. Salvage larger hardwoods and pines that are severely bent or exhibit sap flow down the bark.

Some very simple guidelines are:

- Determine whether the tree can be repaired, or if it should be removed completely. If the main trunk is completely broken or if the tree is uprooted, it should be removed.
- Remove a broken branch to the nearest branch or to the tree trunk. Never leave a ragged stub. Remove large branches with three cuts. This will prevent splintering and peeling. Make the first cut upward from the bottom of the branch about 12 inches from the next branch. Cut about halfway through the branch, or until the saw begins to pitch. Make the second cut 5 or 6 inches further out, and continue cutting until the branch falls. With a third cut remove the stub cleanly without peeling.
- Contrary to popular belief, it is not necessary to treat trunk and limb wounds with tree paint. Research shows that painted areas can actually lead to increased rot and decay due to trapped moisture. Take care during the salvage operations. Do not bang up or damage any standing live trees because wounds of this type are ideal for invasion by decay-causing fungi. And, in the case of pines, wounded trees become and remain very attractive to this summer's and next year's bark beetles. Wounded pines could be the center of a bark beetle buildup next year, so it would be prudent to avoid damaging pine stems at any time of year.

How to Reduce Future Storm Damage

Hazard tree inspections offer the best protection against future storm damage. Systematic inspections and assessments allow you to find and correct defective trees. Sound trees can withstand stronger winds than defective trees, so during storms the likelihood of tree failure is reduced.

A few tree species, including Chinese elm, silver maple, sycamore, boxelder, Bradford pear and various poplars, have brittle wood that breaks easily. These rapid-growing trees are particularly susceptible to storm damage. Homeowners should be aware of these characteristics and avoid planting such species close to buildings, utility lines, etc., where potential damage could occur. If such trees are already growing in these locations, some preventive practices, such as pruning and bracing or cabling, may help reduce the potential of storm damage. This is particularly true as the tree grows in size and the weight and surface of the leaf and branch area increases.

Waste Disposal

Materials from fallen or salvaged trees can be used in several ways. The larger branches can be cut and used for firewood. Add smaller branches and twigs to the compost pile or cut up for kindling. Branches can also be converted into chips for use as compost, mulch or other landscaping purposes if chipping equipment is available. In some areas, landfills or other waste disposal facilities are available to local residents.

Following the cleanup and repair of storm-damaged trees, you may wish to make some new plantings. A few suggestions can help reduce future maintenance problems. First, make certain the tree being considered is hardy to the area. Then, consider the potential insect and/or disease problems that may be associated with a particular species. It is also helpful to know the approximate size and shape of the tree when mature. This will help determine where to plant it to avoid interference with utility lines, branches rubbing against the house or other buildings, etc. Finally, consider characteristics of the tree other than the provision of shade, such as presence of spring flowers, attractiveness to birds, fall color and winter appearance. Through careful selection it is possible to obtain species that will contribute to the overall landscape in more than just one way.

For more information concerning salvaging landscape trees or timber, contact your local offices of the Cooperative Extension Service, Arkansas Forestry Commission and landscape professionals in your area.

References

The above article was compiled from:

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