

# Storm Damage – Timber Salvage Decisions

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*This guide is provided to help make decisions regarding timber losses associated with storm damage. If timber value loss is significant, a salvage operation may be warranted as well as claiming a tax loss.*

## Assessing Timber Value Loss Due to Storms

Storms can lead to a wide range of damage to trees and the woodlands as a whole. In some cases the damage can be light affecting only a minimal number of upper branches, while other trees will be overturned or the main stem will be broken. Some storms may degrade only a small number of trees in a stand while strong storms like tornadoes can result in damage to nearly all the trees in the affected area. The majority of the timber value resides in the lower main stem and assessment of timber loss must focus on the damage that has occurred to this section of the tree.



Determining if a salvage harvest is warranted and what the timing of that harvest should be is based on:

- **Type of Damage Sustained:** damage must be assessed on sawtimber sized trees (trees greater than 16 inches in diameter) to determine the effect on the butt log (lower 10 to 20 feet of the main stem).
- **Percentage and Overall Number of Damaged Trees:** an assessment must be made to determine if the volume of timber affected warrants a commercial harvest.
- **Species:** some species hold their wood quality longer than others after being damaged. Pines and soft wooded trees such as red maple or yellow-poplar (tulip tree) can degrade quickly within the first growing season after damage, while oaks and other hard wooded species can maintain wood integrity for several years.
- **Veneer versus Regular Sawtimber:** because veneer logs can be significantly devalued by staining and checking (regardless of species) compared to aver-

age sawtimber, salvage of damaged veneer trees must be done quickly.

- **Current Timber Markets:** as with all harvest decisions, current market conditions must be taken into account.

## Guide to Salvage Decision Making

1. Use the Decision Guide Table (see last page) to estimate the extent of timber value loss to individual trees and determine the percentage of trees sustaining significant timber damage.
2. If valuable veneer trees have sustained timber (low main stem) damage then an immediate salvage is warranted. Veneer species include black walnut, white and red oaks, ash, black cherry, hard (sugar) maple, and other commercially valuable species. Veneer trees must have a 16 inch plus diameter and contain a solid, straight, defect free (no branches or bark blemishes) log at least 10 feet in length. Few trees meet these qualifications.
3. As a general rule, if over 50 percent of the average quality sawtimber sized trees through out the woodland have damage to the lowest 10 to 20 feet of the main stem, a salvage harvest is warranted. For pine or soft wooded species, the harvest should be within 6 to 9 months and if oaks and other hard wooded species dominate, within the next two years.
4. If you find areas or patches (1 acre in size or greater) where over 50 percent of the average timber trees have main stem damage then a salvage harvest could be warranted in these areas.
5. Contact the Kentucky Division of Forestry (KDF) for assistance and guidance. Reference their publication “Salvaging Timber: Frequently Asked Questions” for information on salvage cutting. The Kentucky Division of Forestry can help you determine if your woods needs a salvage harvest or if the damage is limited enough that a salvage harvest is not needed. They may be able to mark the trees to that needed to be removed or advise what trees are in need of removal and which ones can stay. The harvest should be

focused on improving the woodlands not just removing the damage. Foresters can use the opportunity to regenerate areas that need it and remove damaged and lower value stems that need to be removed even if the stand had not been damaged.

If a salvage harvest is indicated they will also help you make decisions about how to proceed with the sale.

While the Kentucky Division of Forestry can provide sound advice on conducting a salvage sale they are not permitted to sell your timber. For assistance with this issue as well as helping with the tax implications associated with timber losses due to the storm you will need a consulting forester (see below).

6. Contact a Consulting Forester if KDF advises a salvage sale. The consulting forester can help determine the timing and administer the sale and help with tax issues if appropriate. They can advise on a capital gain loss deduction which is important particularly if you have acquired the woodlands in the last 5 to 10 years. The consulting forester will estimate the value of the timber that is to be removed (a service that the Kentucky Division of Forestry is not allowed to do) and develop a contract, undertake to find a logger capable of handling your salvage, and ensure that the logger is abiding by the contract. Consulting foresters can work by the hour or day to determine fair market value for tax purposes and a percentage of the gross of the sale if they develop a salvage sale.
7. A woodland owner may want to work directly with a logger to initiate a salvage sale. Make sure the logger is a Kentucky Master Logger and does not have a Bad Actor designation. Both of these can be found at [www.masterlogger.org](http://www.masterlogger.org). Professional loggers should be able to provide references and woodland owners are encouraged to check references. Because estimation of merchantable timber volume in storm damaged woods is difficult most loggers will prefer to harvest on the shares. In this scenario the logger takes the logs or pulpwood to a mill and the landowner gets a percentage of the sale and the logger gets a percentage. For sawtimber this is normally 50:50. However for damaged timber, or timber that is difficult to access or where markets are far away the land owner may only get 30 percent. There are several issues with selling timber on the shares including: difficulty in claiming the income as capital gains, potential liability of owning the logs being hauled do market, and the woodland owner is assuming the logger is removing all of the merchantable material and doing a good job marketing it. These

issues should be addressed with the logger prior to an agreement. However, the logger is assuming a considerable amount of risk in logging damaged timber and cutting on the shares may be the only available option.

The following provides sources of information and/or assistance:

Kentucky Storm Damage Website:  
[www.kytimberdamage.net](http://www.kytimberdamage.net)

Cooperative Extension County Offices:  
<http://www.ca.uky.edu/county/>

University of Kentucky,  
Department of Forestry Extension:  
[www.ukforestry.org](http://www.ukforestry.org)  
859-257-7597

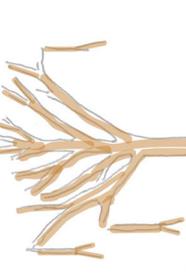
Kentucky Division of Forestry:  
<http://forestry.ky.gov>  
502-564-4496

Kentucky Association of Consulting Foresters:  
[www.kacf.org](http://www.kacf.org)

Kentucky Master Logger Program:  
[www.masterlogger.org](http://www.masterlogger.org)

Certified Master Logger Program:  
[www.certifiedmasterlogger.com](http://www.certifiedmasterlogger.com)

# Decision Guide for Storm Damaged Timber

		High Quality Veneer		Medium Quality Sawtimber	
		all veneer species (walnut, white and red oak, cherry, hard maple)	oaks, hickories, hard maple (other dense woods)	soft wooded species (poplar, soft maple, cottonwood, pines)	
 <p>Main stem broken within 10 feet of the ground.</p>	Immediate loss of butt log	Immediate loss of butt log	Immediate loss of butt log		
	Main stem log removed before growing season.	Main stem log removed before growing season.	Main stem log removed within 1 year.		
 <p>Main stem bent, greater than 60 degrees</p>	Immediate loss if bend is in bottom 10 ft of main stem.	Immediate loss, unless sections 10 to 12 feet long are solid and unbent. Should be removed within 1 year.			
	Needs to be removed before growing season.	Needs to be removed within 2 years.	Needs to be removed within 1 year	Needs to be removed within 6 months to 1 year.	
 <p>Uprooted lying on ground main stem intact</p>	Salvageable if undamaged section is at least 10 ft in length				
	Needs to be removed prior to growing season.	Needs to be removed within 1 year.	Needs to be removed within 1 year.		
 <p>Large branches torn from main stem within 20 feet of ground.</p>	Needs to be removed prior to growing season.				
	Scout these trees over the next several years, if they look to be dying, remove logs immediately.	Scout trees over the next several years. Remove logs within 2 years after dying.	Scout trees over the next several years. Remove logs within 1 year after dying.		
 <p>Crown branches broken - more than 50% gone</p>	Generally not a problem unless other stress occurs during subsequent growing seasons (drought, frost and insect defoliation).				
 <p>Crown branches broken - less than 50% gone</p>					