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Ice Damage – Timber Salvage Decisions

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I C E Timber & Woodlands

This guide is provided to help make decisions regarding timber losses associated with ice 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 Ice

Ice can lead to a wide range of damage to trees and the woodlands as a whole. In some cases the ice only damages upper branches, while other trees will be overturned or the main stem will be broken. 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.

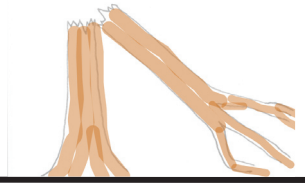
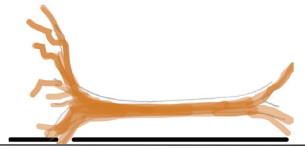
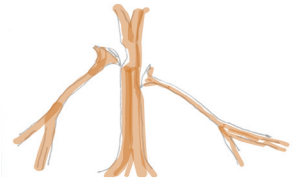
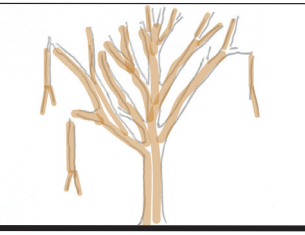
Determining if a salvage harvest is warranted and what the timing of that harvest should be is based on:

- ***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 average 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 for Ice Damaged Table (see next 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. You might decide that you can claim a deduction on your taxes and foresters can advise how to figure a casualty loss.
6. If KDF advises a salvage sale, use a consulting forester to determine the timing and administer the sale. 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.

Decision Guide for Ice 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)
	**Main stem broken** within 10 feet of the ground	Immediate loss of butt log	Immediate loss of butt log	
	10 to 20 feet off the ground	Main stem log removed before growing season.	Main stem log removed within 1 year.	
	**Main stem bent, greater than 60 degrees**	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.	
	**Uprooted lying on ground**	Needs to be removed before growing season.	Needs to be removed within 2 years.	Needs to be removed within 6 months to 1 year.
	**Large branches torn from main stem within 20 feet of ground.**	Needs to be removed prior to growing season.	Needs to be removed within 1 year.	
	**Crown branches broken - more than 50% gone**	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.
	**Crown branches broken - less than 50% gone**	Generally not a problem unless other stress occurs during subsequent growing seasons (drought, frost and insect defoliation).		

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