



# Managing Ice-Damaged Forest Stands

Tree damage from this winter's ice storms ranges from slight here to all branches in treetops here broken to heavy here trees snapped off or toppled over or lost most of their branches. Forest damage is highly variable and depends upon tree species, stand age, location and other factors. Owners are now faced with the task of assessing their forest damage and making decisions about their future. The level of damage and your personal objectives will help dictate the best follow-up measures to take to restore the health and productivity of your forests. This bulletin will help you categorize the damage that occurred in your forests and evaluate follow-up treatment needs.

**Use Professional Help:** One good piece of advice is to use professionals to provide you the best information and guidance available. Contact your local Division of Forestry district office (<http://forestry.ky.gov/divisionoffices/Pages/default.aspx>) or a list of private consulting foresters can be obtained from the Kentucky Association of Consulting Foresters' website ([www.kacf.org](http://www.kacf.org)).

**Safety:** Our first consideration should be safety. When evaluating your stands watch for loose or hanging branches in the tops of trees or leaning trees that can fall quickly and without warning. Wear your safety gear and stay out of the woods when it is windy.



**Forest Protection:** Check forest stands for pest problems and potential fire danger the next few growing seasons. Fallen trees and branches will create high fire risk when dry. Establish firelines and take extra precautions to minimize wildfire risk this spring and summer. Many forest pests are opportunistic and thrive in areas where trees are damaged or under stress. Five years of drought followed by a hard ice storm can open the door for insect problems especially bark beetles and wood borers. These pests are difficult to eliminate so be on the lookout for them and if found take appropriate action to minimize their spread.

**Salvage:** Salvage operations may be justified in commercial forest areas where there is enough merchantable timber on the ground or in standing but severely damaged trees to justify harvesting. Because of decay and pest problems salvage operations should be done within the next few months if market conditions permit. Avoid damaging the remaining trees as much as possible. Follow the forest water quality best management practices and practice safety first. Follow a salvage operation with an evaluation to determine other actions needed to restore the health of your forest.

**Timber Stand Improvement:** Removing hazardous or cull trees and thinning will help damaged stands recover more quickly. Evaluate stands again for future needs in 1 to 3 years. Use the following general guidelines below to help you determine the severity of damage and what to do next depending upon the extent of the damage and whether your forest is predominantly hardwoods or pines.

**Hardwoods:**

**Minor Damage** – in general only 5% of all ranches are affected and less than half the crown is damaged on most trees even susceptible species such as elm, hickory, apple and pecan.

**What To Do** The impact on most of these trees will be fairly small. For most trees suffering only minor damage in rural areas follow up treatment is probably not warranted.



**Moderate or Heavy Damage** – on average more than half the crown is affected large ranches were lost or entire trees were uprooted.

**What To Do** Salvaging large ranches or fallen trees for firewood or wood products may offset costs and reduce hazardous fuel load. Remove hazardous trees and consider a timber stand improvement practice in 1 to 3 years. Retain some large non-hazardous trees for wildlife cavity trees.

For more information contact the Kentucky Division of Forestry at 606-325-4000.