

STORM DAMAGE TO FORESTS: INFORMATION FOR LANDOWNERS

Natural disturbance events such as tornados, hailstorms, and flooding wreak havoc on the best of forest management plans. They can also result in major economic losses and create significant forest management problems. Some effects of heavy windfall include:

- Fuel build up resulting in future forest fire hazard
- Potential for future loss due to increased susceptibility to insects, decay, future storm damage, snowfall etc.
- Changes in aesthetic values and forest objectives
- Damaged or blocked roads, culverts, and ditches
- Safety hazards for landowner and forest workers
- Changes in fish and wildlife habitat loss of economic value

What should I do first?

1. Conduct a thorough damage assessment and consider salvage harvest:

- If physically possible, walk entire property. (Wear your hard hat and other safety gear!)
- Make a simple map showing extent and type of damage. Note trees with broken tops, broken limbs, fallen trees, severely bent trees, blocked roads & trails. Take photographs!

What is salvage?

Salvage harvest is a type of logging method used in forest areas that have been damaged by a natural disturbance.

Professional assistance is available to help you assess your situation and make informed decisions on how to proceed. For a more detailed assessment to determine value losses, how to set up and conduct a timber sale we recommend that you contract with a private forestry consultant. They will know reliable loggers, local market conditions, and regulatory requirements.

Visit DNR website for more storm information: <http://dnr.wi.gov/forestry/stormRecovery/>

2. How much time do I have before the trees deteriorate and lose economic value?

Forest Health Issues Associated following the storm damage of July 1 and 19, 2011.

From: Shane Weber, Plant Pest and Disease Specialist, Spooner DNR, 715-635-4156

Time Lines

Pine: The primary concern is the pine engraver populations. Damaged jack and red pines provide ideal breeding grounds for this bark beetle. The beetles that breed in the blowdown area will fly to attack the remaining live trees in the area of damage and to nearby (~1 mile) pine plantations or natural jack pine.

Blue stain will be a problem within 6 weeks of the storm in damaged but live (i.e. bowed down, leaning and root sprung trees). In broken off trunks blue stain should not be a problem prior to next May 1st.

Aspen (Popple) and Red Maple: Some value loss will occur in downed timber anytime after the spring of 2012. Major loss will happen in wood that is not salvaged before the fall of 2012 (especially true for aspen/popple).

Note for oak: Two line chestnut borer is a threat to all oaks in all townships. The borer will emerge from the dead oak not harvested by June 2012 and will attack and may kill remaining live oak trees. Oak wilt is a concern in certain townships. Do not harvest oak from May 15th to July 15th.

Scrub Oak: Salvage anytime before May 1 of 2012 .

Red Oak: Quality timber must be harvested by October 2011 to maintain maximum value. If high quality logs are left unsalvaged until next year, they will be reduced to swiss cheese firewood.

3. Do any of my trees have value for wildlife?

Yes, you may consider retaining a few storm-damaged trees (Large diameter reserve trees, mast and cavity trees, snags and coarse woody debris) for wildlife habitat. Species that may benefit are the Red-headed Woodpeckers, Northern Flickers and several species of bats. Reasons to not leave dead trees may include where tree retention is deemed a threat to human health and safety; and/or where leaving them would interfere with methods to control insect and disease outbreaks.

Wildlife value of open landscapes - Much of the blowdown occurred in the Northwest Sands Landscape, where young stages of forest/grasslands are important to many uncommon species of birds, reptiles, amphibians and invertebrates (especially butterfly species). If a complete salvage, combined with clear cut of residual trees is undertaken, consider allowing natural regeneration (new tree growth from natural seed, roots or stumps) to occur.

For more information, please contact DNR staff members, and the website listed
Wisconsin Bird Conservation Initiative: <http://www.wisconsinbirds.org/plan/species/priority.htm>
Ryan Magana, Northern Region Ecologist (Endangered Resources Program): 715-635-4153

4. Am I required to clean up downed trees and forest debris (slash) caused by a storm?

No, however clean up is desirable to reduce the future potential for wildfire and insect infestation. Clean up will likely be necessary to have new trees grow naturally or supplemental plant on the affected property. If the down trees create a health, safety and welfare risk, you may have civil liability for a known hazard. When slash results from human activity, including salvage logging, slash must be removed satisfactorily from adjoining properties (Wis. State Statue 26.12 (6) (7)).

Yes, if your property is entered into one of the Wisconsin Forest Tax Programs MFL/FCL. Contact local DNR Ranger Station.

Who owns the trees?

In almost all cases, except for boundary trees or cases where the timber rights are severed, the landowner on which the tree was growing (i.e., the root ball/stem) owns the tree. With boundary trees, usually both landowners are responsible and/or own the tree in question.

How to determine boundary/cutting lines in blow down?

Individual landowners should work with their neighbors to agree on boundary lines if there is a concern or question regarding who owns certain timber. Given the extreme conditions that result during blowdowns, it is often impractical or impossible to obtain formal surveys in a timely fashion, so the best advice is to work together to address the problem. Consultant foresters can help.

5. Wetland concerns?

Leave a buffer area around water features such as streams, lakes and small ponds.

Fish/aquatic considerations - Trees, logs, root wads, and branches play an important role in creating healthy, diverse lakes & streams. Research has found waters with greater habitat diversity also have more diverse populations of fish. Wood plays an important role in creating habitat diversity. As trees fall into streams, they help shape the channel and provide shade, shelter, and feeding opportunities for aquatic organisms. In lakes, fallen trees provide shelter for small fish and habitat for insect larvae and small plants. Fallen trees play such an important role in aquatic habitats that many restoration programs are working to add wood back to streams and lakes.

Wetlands- Your property may contain small ponds, or wetland pockets, which are both important features for amphibians such as frogs, toads and salamanders. Leaving downed trees in and immediately adjacent to these wetlands will enhance the habitat for these amphibians, which will use the logs for years to come, as they slowly decay.

For more information: Wisconsin Best Management Practices for Water Quality <http://dnr.wi.gov/forestry/Usesof/bmp/>

6. Where can I get advice on site preparation and reforestation?

Many tree species regenerate naturally following harvest, including aspen, oak and maple. Jack pine and red pine may not regenerate naturally. Evaluate the harvested area after two to three years for supplemental planting may be needed. For more information contact local DNR Ranger Station.

7. Where can I get trees to plant?

Either from the DNR nursery or private nurseries. DNR recommends replanting with native species. Contact WI DNR Griffith State Nursery (715) 424-3700 or <http://dnr.wi.gov/forestry/Nursery/Order/index.htm> for more information and links.