



Northern Region Forest Insect & Disease Report

*Wisconsin Department of Natural Resources
Division of Forestry*

CONTENTS

Across the Northern Region

- [Frost Damage](#)

Pests in Western NOR

- [The Big Freeze](#)
- [The Great Eastern Tent Caterpillar Camp Out](#)
- [2010 Jack Pine Budworm Early Larval Populations](#)



Pests in Eastern NOR

- [Sugar Maples Yellowing; Aphids Abundant](#)
- [Defoliation by Gypsy Moth; Some by Forest Tent Caterpillar](#)
- [Large White Pines Suddenly Losing All Old Needles](#)
- [Yellowheaded Spruce Sawflies Continue Damage in 2010](#)
- [European Snout Beetles Notching Deciduous Leaves](#)
- [Jack Pine Budworm Not Problematic in 2010 for Eastern NOR](#)
- [Introduced Basswood Thrips Damage More Intense in 2010](#)
- [Nice Chicken of the Woods Crop](#)



Odds & Ends

- [Altered Firewood Rule Started June 1!](#)
- [Yes Indeed, People Move Firewood](#)
- [Keep an Eye Out for a Sirococcus Dieback on Hemlock](#)
- [Forest Health in Other Parts of the State](#)
- [Interesting Forest Health Reads](#)
- [Valuable Forest Health Websites and Phone Numbers](#)

[Contact Us](#)

Across the Northern Region

Frost Damage

Frost damage was noted shortly after the cold weekend of May 8 and 9 on a number of species: Ash, spruce, and aspen were damaged in the eastern part of NOR. Northern pin oaks suffered in western NOR. Read more about that below in “The Big Freeze.”



Figure 1. Many spruce in the Northwoods have dead young shoots killed by cold temperatures.

Pests in Western NOR – by Shane Weber

The Big Freeze

The weekend of May 8 and 9 produced several inches of snow and low temps below 25°F across much of the Northwoods. Alas, northern pin oak throughout the region was frozen back to ground zero. Oak stands on the sand flats from Sterling Township in Polk County to Hughes Township in Bayfield County went from bright spring green to jet black. As oak stands climbed ridges the brontosaurus browse line formed at about 35 feet leaving the tree tops a dainty green with the lower crown a stark, withered black.

The good news is that the damage is ephemeral as the second flush is already starting in most areas. The other good news is that I have seen almost no damage on high quality northern red oak stands. Though spectacular in appearance the frost damage should cause only minor growth loss. On a side note, ‘Marshall’s Seedless’ ash (a cultivar of green ash)



Figure 2. Thatched areas had the 2010 severe oak freeze in western NOR on May 9.

suffered frost damage in towns all across NW Wisconsin. The observed damage is not EAB nor a harbinger of doom. These ash street trees are well along with their second crowns. I observed no damage on white ash in northern hardwood stands and black ash in swamps had not begun to flush at the time of the cold weather.

The Great Eastern Tent Caterpillar Camp Out

Tents, tents and more tents were order of the day for spring roadsides. 2010 has proved a banner year for Eastern Tent Caterpillar (ETC) all over NW Wisconsin. While this native insect is present every year, this is the highest population I have seen in 30 springs. This insect feeds almost exclusively on wild cherries (pin, choke, and black) but will slop over onto flowering crab. The trees are not seriously damaged by the feeding. The tents of ETC are dense and form at branch crotches of trees. The easiest way to control the critters is pull the tent off the



Figure 3. Eastern tent caterpillars on their nest.

tree when the caterpillars are resting inside. Just put the tents on a hard flat surface and stomp the pests into oblivion. This provides both psychological satisfaction and a little aerobic exercise. Right now most ETC are in the 4th instar (almost 1 inch long) [as of 5/24/2010]. When fully grown the stout hairy caterpillars are about 2½ inches and marked by a solid white racing striped bordered by gold down the middle of their back.

P.S. - These tents are not evidence of gypsy moth, which do not make a tent or web of any kind.

2010 Jack Pine Budworm Early Larval Populations

County	No. of Plots	% of Plots with Predicted Noticeable Defoliation	% Change from 2009-2010 of infested shoots/plot
Polk	15	0%	0%
Burnett	24	0%	↓27.0%
Washburn	21	0%	↓27.4%
Douglas	54	3.7%	↓28.9%
Bayfield	32	3.1%	↓1.1%

Pests in Eastern NOR

Sugar Maples Yellowing; Aphids Abundant

Location: The vast majority of sugar maple leaves in eastern NOR

Details: It started last year. I noticed wingless aphids on the underside of sugar maple leaves throughout eastern NOR. This year, I saw the same thing, but the aphids had wings. I sent some down to Phil Pellitteri at UW-Madison, and he identified them as *Periphyllus* species. That was in late May, and at the time, there were no symptoms associated with these aphids. However,



Figure 4. Winged Periphyllus aphids on May 21, 2010, seen on most sugar maples in eastern NOR.

since then, sugar maples have started to turn yellow between their leaf veins. Are the aphids causing the yellowing? Maybe, maybe not. I have seen red oaks and ash yellowing in some areas too, but not to the degree the sugar maples are. Bob Heyd, forest entomologist with MI DNR, has seen such abundant aphids on sugar maples a couple times in the last two decades. Historically, the population has spiked and declined quickly. It is likely that the long-term drought the Northwoods is experiencing promotes the increase in population of these sucking insects.



Figure 5. Interveinal yellowing on a sugar maple leaf, associated with aphids, just starting on June 2, 2010.

Defoliation by Gypsy Moth; Some by Forest Tent Caterpillar

Locations: eastern Langlade Co.; western Oneida Co.

Details: Gypsy moth is at it again. Some oak forests on June 7 in Langlade Co. near Langlade looked like it was early March. Most infested forests though had very thin-crowned deciduous trees. Oaks, aspens, beech trees, understory white pines, and hazelnuts were taking the brunt of the chewing. Gypsy moth caterpillars were prolific on trees, floating on silk in the air, on cars, and under your shirt collar. I saw an occasional forest tent caterpillar on hazelnut.

Control: Burlap banding can be done on ornamentals now. Everyone in these locations should make sure they aren't transporting gypsy moth caterpillars on their vehicles! It's easier than you think! Predictive surveys for 2011 gypsy moth populations should be done in early September (i.e. egg mass surveys). Details for all these can be found at <http://gypsymoth.wi.gov> (mouse over "UW-Extension Site" in the upper left; click on "Management Guide for Homeowners").

Large White Pines Suddenly Losing All Old Needles

Location: Florence Co.; Langlade Co.; Marinette Co.; Oconto Co.; Wausau-area; likely more locations.

Details: A couple foresters reported in early June the sudden browning of large white pines. I surveyed some of the areas and found that large diameter white pines near highways or in highly disturbed areas are losing all previous years' needles and retaining only their expanding candles, usually from the top first or road-side first. No pest signs are present. White pines further back away from highways are not showing symptoms. It is remarkable how quickly white pines are showing symptoms, and symptom development is in sync across a relatively large area. It seems likely that white pines stressed from salt spray, salty soil, car exhaust, and extremely dry soil conditions have reached a maximum tolerance threshold and have cast their older needles to try and cope. If you see large numbers of forest white pines showing the same symptoms, and they are free of roadway/urban stress (i.e. >100 yards from roads and not in areas where road salt drains) please report them to me or my counterpart Linda Williams immediately.



Figure 6. A white pine losing its old needles in Wausau. The same symptoms have been noted over the NE quarter of Wisconsin.



Figure 7. A close-up of symptomatic white pines showing the loss of old needles.

Yellowheaded Spruce Sawflies Continue Damage in 2010

Location: southwestern Lincoln Co.; southeastern Oneida Co.

Details: Yellowheaded spruce sawflies have drastically damaged a couple plantations where white spruce were planted at wider spacing than they should have been planted. Sawfly larvae were defoliating spruce in southwestern Lincoln Co. on June 1. The good news for these plantations is yellowheaded spruce sawflies rarely damage closed canopy forests, so eventually, they will cease to be a concern.

Control: If near a spigot, sawflies can be blasted off needles with a strong jet of water. If that method isn't realistic and spruce are dying due to defoliation, I recommend trying to kill them first with an insecticidal soap or oil. It is too late in the year now to employ those two insecticides. They should be applied about 10 days after bud caps are shed.



Figure 8. Yellowheaded spruce sawflies on June 1 in SE Lincoln Co.



Figure 9. Feeding damage by the guys in Figure 8 on June 1.

European Snout Beetles Notching Deciduous Leaves

Location: Widespread in northern hardwood forests in eastern NOR.

Details: The European snout beetle is abundant this year in northern hardwood forests. It is relatively unimportant as a forest pest. I have seen it notching the leaf margins of basswoods, yellow birches, sugar maples and elms. The damage is very similar to that done by the pale green weevil on aspen, which many of us in eastern NOR saw in 2008. This critter looks like a darkened version of the pale green weevil.



Figure 10. A European snout beetle notching basswood leaf margins.

Jack Pine Budworm Not Problematic in 2010 for Eastern NOR

Location: Vilas Co.; western Oneida Co.

Details: Early larval and late larval predictive surveys for jack pine budworm indicated the population is very low. Only a few larvae were found in the north-central part of Vilas County.

Introduced Basswood Thrips Damage More Intense in 2010

Location: Forest Co.

Details: Introduced basswood thrips caused slightly more damage in Forest Co. this year than last. Some trees were essentially 100% defoliated. The buds can be killed by these minute creatures, or the leaves can be severely stunted and malformed.



Figure 11. The chicken of the woods growing out of this oak indicates this tree has brown rot in it.

Nice Chicken of the Woods Crop

The decay conk commonly known as Chicken of the woods (a.k.a. sulphur shelf) was fruiting on living and dead oaks in late May and early June. Maybe you saw some? I thought they made a scrumptious addition to one of my dinners. Chicken of the woods is a brown rotter. Fun fact: Trees with brown rot structurally weaken much quicker than those with white rot, assuming volume of rot and species are the same. For that reason, it's good to know if a given conk causes white or brown rot.

Odds & Ends

Altered Firewood Rule Started June 1

Starting June 1, non-DATCP certified firewood can only come onto state parks or forests if it originates within 25 miles of a campground or 25 miles from the forest or park boundary if there is no campground. Also, the firewood cannot come from out of state, and it cannot come from a quarantined area that does not cover the property. The following website can help people figure out where the 25 mile boundary is from a given state property:

<http://dnr.wi.gov/invasives/firewood/firewood-maps.htm> .

Yes Indeed, People Move Firewood

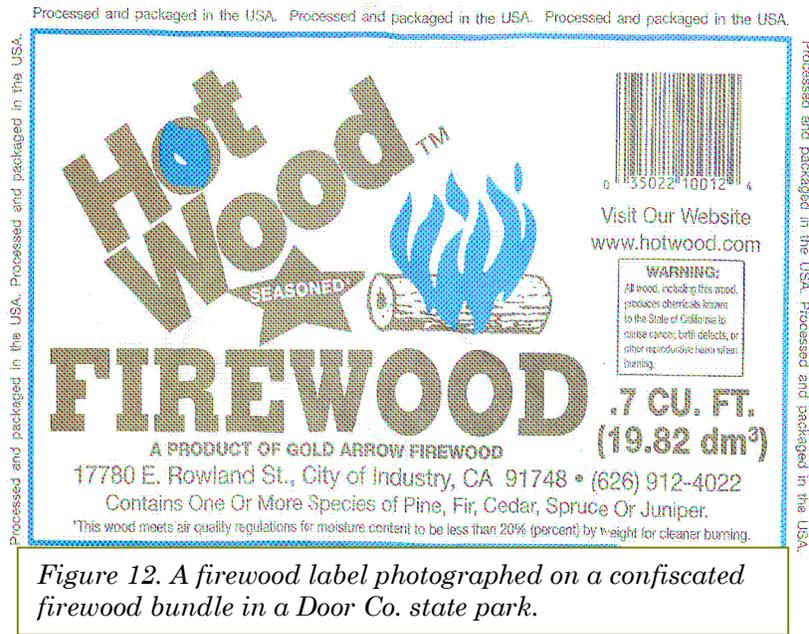


Figure 12. A firewood label photographed on a confiscated firewood bundle in a Door Co. state park.

A WDNR employee reported someone brought incense cedar (*Calocedrus decurrens*) for firewood to a Door County state park. One of our staff took a photo of the label on the confiscated firewood. I imagine Bob Uecker might say, “Juuust a bit outside! [the 25 mile ‘strike zone’ that

is]” If you were going camping in Redwood National Park, would you haul red pine firewood from the tree you just cut down in your Wisconsin back yard? Isn’t there enough to pack? At least the firewood met “air quality regulations for moisture content.” Phew! I guess if someone is going to introduce a destructive exotic forest pest into Wisconsin via firewood, the least they could do is protect the campground air quality.

Keep an Eye Out for a Sirococcus Dieback on Hemlock

Recently, a disease of western hemlocks has been found on eastern hemlocks in Maine. We need to monitor for this disease on our hemlocks in Wisconsin. Please let me know if you see symptoms of this disease. I suspect the end result of such a disease on hemlock would be similar to our Sirococcus blight of red pine – damaged regeneration. For more information, go to <http://www.state.me.us/doc/mfs/HemlockTipBlight.htm> .



Maine Forest Service, 2009
http://www.fhm.fs.fed.us/fhh/fhh_09/me_fhh_09.pdf
Figure 13. Tip blight on a hemlock's current season's shoot tips, caused by Sirococcus tsugae.

Forest Health in Other Parts of the State

- Ash Leaf Drop – Northeast Region, WI (reported 5/20/2010)
- Eastern Tent Caterpillars – Northeast Region, WI (reported 5/17/2010)
- EABs found – Allamakee Co., IA and Houston County, MN (across the river from the Victory, WI site)
- Adult June Beetles – Northeast Region, WI (reported 5/17/2010)
- Winter Cutworms – Marinette County, WI (reported 5/17/2010)
- See more forest health reports at <http://dnr.wi.gov/forestry/FH/intheNews/> .

Interesting Forest Health Reads

- Great new photo guide for invasive plants in Wisconsin:
[http://dnr.wi.gov/invasives/pdfs/WI_common_inv_Montage\(3-25\).pdf](http://dnr.wi.gov/invasives/pdfs/WI_common_inv_Montage(3-25).pdf)
- Have you seen lake flies on Doppler over L. Winnebago?:
<http://www.crh.noaa.gov/grb/?n=lakefly>

Valuable Forest Health Websites & Phone Numbers

- EAB Reporting:
 - (1) 1-800-462-2803
 - (2) email DATCPEmeraldAshBorer@wisconsin.gov
 - (3) online at <http://emeraldashborer.wi.gov> (click on **Report EAB** on the top menu)
- EAB Information: <http://emeraldashborer.wi.gov>
- Gypsy Moth Reporting:
 - (1) 1-800-642-MOTH
 - (2) email DNRFRGypsymoth@wisconsin.gov
- Gypsy Moth Information: <http://gypsymoth.wi.gov/>
- General Forest Health Issues: <http://dnr.wi.gov/forestry/Fh/>
- Sick Tree Diagnostic Keys:
 - <http://www.extension.umn.edu/gardeninfo/diagnostics/index.html>
 - <http://greenindustry.uwex.edu/diagnostics/index.cfm>
 - <http://imfc.cfl.scf.rncan.gc.ca/accueil-home-eng.html> (this is very useful!)
- Forest Insect and Disease Handouts for Landowners:
<http://council.wisconsinforestry.org/invasives/pdf/Appendix-G.pdf>

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Note: This pest report is an informal newsletter and covers forest health issues in the northern 18 counties of Wisconsin. The purpose of this newsletter is to provide forest owners and managers in the Northern Region with regional up-to-date forest health information. We welcome your comments/suggestions on this newsletter and your reports on forest health problems you observe in your area. If you would like to subscribe to this newsletter, please contact Brian Schwingle at brian.schwingle@wisconsin.gov. Previous issues of this newsletter and regional forest health updates from other Wisconsin regions are available from <http://dnr.wi.gov/forestry/FH/intheNews/>.