

Northern Region Forest Insect & Disease Report

Wisconsin Department of Natural Resources
Division of Forestry

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Across the Northern Region - by Shane Weber

Aspen Blotchminer (Phyllonorycter tremuloidiella)

While our popple stands escaped the onslaught of army worms this year they were not so lucky concerning this mid to late summer popple pest. Aspen stands north of U.S. 8 from the St. Croix to the Pelican River, and down into Lincoln County, are showing moderate to heavy damage from the tiny caterpillars. The initial symptom is small pale green blotches appearing on popple leaves. As the larval feeding continues between the upper and lower epidermi the blotches enlarge, coalesce and fade to brown. The tiny moths appear to be weak flyers as the damage is usually confined to the bottom 30 feet of the crowns. The ultimate appearance of popple trees suffering heavy damage involves a two toned crown – green on top and nasty, grungy brown below. Even in the lower crown new leaves out on branch tips will be green as they were grown by the tree after the moths finished laying their eggs. Because the feeding is heaviest along stand edges and in the bottom half to two-thirds of the crown, the trees rarely suffer any significant damage.





Figures 1 & 2. Cutting open an aspen leaf blotch in mid-July reveals a small caterpillar (left) or darker colored pupa. An aspen leaf infested with aspen blotchminers (right).

Alder Flea Beetle (Altica ambiens)

Pockets of severe defoliation of tag alder are scattered across northern Wisconsin from Washburn County to Langlade County. The culprit is the alder flea beetle which skeletonizes the upper and lower leaf surfaces of this common lowland shrubbery. Both the black larvae and the cobalt blue adults of this native Chrysomelid beetle feed on alder leaves. As their feeding progresses the leaves turn brown and curl up. Although very few people (other than avid timberdoodle hunters) care much about tag alder I did receive my first landowner complaint about this damage in my 30 summers in Wisconsin. I can assure him and you that the alders will recover from this feeding.





Figures 3 & 4. Alder flea beetle larva (left). Extensive feeding damage by the alder flea beetle larvae (right).

Pests in Western NOR - by Shane Weber

Jack Pine Budworm

This major native defoliator of jack pine had a mixed year. The acres of defoliation it caused dropped from over 4500 in 2009 to under 1000 this year. This was the result of a sizable pocket of 2009 defoliation west of the Minong Flowage subsiding and breaking into small pockets of light feeding. However, the jack pine budworm (<u>JPBW</u>) population which had a 19% decline from 2009-10 in the early larval survey, exhibited a 12% increase ('09-10) in the pupal survey. This result was the product of a largely healthy jack pine forest where the trees had an abundance of male flowers providing superb habitat for budworm larvae. The pupal survey also revealed numerous pockets of moderate to marginally high budworm populations scattered widely across the sand plains.

This JPBW population provides considerable difficulties for predicting its fate in 2011. However, as my job involves making such predictions, here goes. First, jack pine forests in all of Polk County and south of State highway 77 in Burnett and Washburn should have no significant feeding by JPBW. Over the rest of NW Wisconsin's jack pine type this population could go in one of three directions. Scenario 1 – The budworm population continues on the downward trend of the past few years as indicated by the early larval and defoliation surveys. The upward trend in

the pupal survey could be a one year anomaly caused by the excellent larval habitat. I put the probability of this delightful scenario at roughly 30%. There are too many budworms out there for me to consider this outcome probable. Scenario 2 – The JPBW population remains basically static producing scattered small spots of light to moderate defoliation imbedded in a sea of healthy green jack pine. I think this is the most probable outcome – odds 50%. Scenario 3 – Here the budworm population accelerates the rise seen in the pupal survey with the scattered spots of defoliation enlarging, intensifying, and coalescing to produce 20,000+ acres of at least moderate defoliation. I see this outcome as unlikely for two reasons: the 2010 JPBW numbers are not quite high enough and we should still be several years away from the next major outbreak according to long range trends. I give scenario 3 about a one in five crack.

Lazy Summer Days of Lace Bugs

With our first summer of decent rain in living memory our forests were lush and green until mid July. Since then bur oak, choke cherry and hazel leaves have a pale dusty look in many spots in northwest Wisconsin. This type of damage is termed bronzing (especially in oaks) and is caused by lace bugs. These delicate, dainty living dailies are rarely seen because they live exclusively on the underside of leaves. They feed by sucking the juice out of leaf cells causing the intact leaves to fade to a dull dusty bronze color. Each tree or shrub has its own species of lace bug which are native true bugs in the genus *Corythucha*. While unsightly, the damage is usually not at all serious.



Figure 5. Oak lace bug damage on bur oak. Photo Courtesy <u>Missouri Botanical Garden PlantFinder</u>.

Pests in Eastern NOR - by Brian Schwingle

The Plague of the Gypsy Moth

Location: eastern Langlade Co.

Details: Gypsy moth caterpillars ended their 2010 generation by defoliating about 6200 acres in

eastern Langlade County (not to mention about 306,000 acres in nearby Menominee, Oconto, and Marinette counties). Luckily, the terrific wet period of June and July provided optimal environmental conditions for two diseases of gypsy moths, and many caterpillars were killed before they had an opportunity to pupate (see

http://dnr.wi.gov/news/BreakingNews Lookup.asp?id=1748 for an article on the topic written by Bill McNee). This

plague may reduce the number of gypsy moth egg masses laid in 2010 (preliminary reports from the field confirm this) and will hopefully make for less defoliation in 2011. Only eggmass surveys will tell though, so encourage concerned citizens to get out there and do them! Also, keep in mind forest tent caterpillar larvae were marching around in 2010 in this area and may have escaped the poor luck of the gypsy moth larvae.



Figure 6. A dead gypsy moth caterpillar hangs in an upside down "V", signifying death by virus. Think "V" for "virus".

Odds & Ends

Keep a Look Out for Japanese Stilt Grass

Contributed from Tom Boos

Japanese stilt grass is an annual grass that has been spreading very quickly through the eastern and southern parts of the US in the last 10 years. It germinates in late spring and grows to 6+ feet, sprawling across other vegetation and forming a dense mat. In addition to blocking out light and killing tree seedlings and understory plants, it alters the nutrients and drastically alters fire behavior in forests and grasslands. Stilt grass produces a large amount of fine fuel that causes very high temperatures, high flames and very complete (not patchy) burns. Seedlings can continue germinating all summer and plants that germinate as late as August can produce seed before frost kills the plants. Seed production is very high. Seedling density can be as high as 150 seedlings per square inch.

The current known range of stilt grass is from New England and New York to Texas. In the Midwest it is not yet known north of Indianapolis, but it's presence in New York indicates it would likely thrive in Wisconsin. We do not want this plant spreading in the upper Midwest, so it is up to everyone to keep a look out for it. If you see anything that fits its description, go to one of the websites listed below to ID it or send in a specimen or photo to determine what it is. Look for a sprawling grass with short leaves (3-5") that come off at right angles from the stem. The key ID characteristic is a silver stripe of hairs down the middle on the upper side of the leaves.

When it is found in the state it will need to be controlled before it develops seed that first year. Be certain to locate the entire population and look in the vicinity for other possible patches. Hand pulling can be effective for small patches and mowing or weed whacking for larger patches, but return to the site several weeks later to be sure all plants have been removed. Burn or otherwise dispose of any plants that have begun developing seeds. Grass specific herbicides can be effective if used in late summer but before seed development.

Anyone finding Japanese stilt grass, or any other invasive plant listed as prohibited under DNR's new NR 40 invasive species rule, should contact the DNR's Invasive Plant Coordinators right away. You can email invasive.species@wi.gov or call Kelly Kearns at 608-267-5066 or Tom Boos at 608-266-9276. Do your part to look for this plant and make sure it gets contained before Wisconsin's forests are overrun by an invasive that makes garlic mustard look easy!

WEBSITES FOR MORE INFORMATION:

- http://dnr.wi.gov/invasives/fact/japanstgrass.htm WI DNR's fact sheet
- http://www.lukeflory.com/fire/management Management recommendations by the primary stilt grass researcher
- http://dnr.wi.gov/invasives/plants.asp WI DNR's list of prohibited and restricted invasive plants
- http://www.rtrcwma.org/stiltgrass/ Click on the link on the River to River CWMA web page for a short video showing the impacts of stilt grass and how to ID it.

Forest Health in Other Parts of the State

- Beech Scale Finds Ozaukee Co., Sheboygan Co., Manitowoc Co., Kewaunee Co., Door Co., Oconto Co., Marinette Co.
- Forest Tent Caterpillar defoliation and moth flight (mid-July) Columbia, Sauk, Dane, & Waupaca counties
- Elm Spanworm defoliation and moth flight (mid-July) Baraboo Hills
- EAB adult find (late June) Cudahy
- EAB infestation expansion in Victory is now 8 miles long and 4 miles wide
- Oak Wilt positive trees losing leaves quickly statewide
- $\bullet \quad \text{Japanese Beetle defoliation of birch and other plants (mid-July)} Southern \ Wisconsin$
- White Cedar browning and arborvitae leafminer presence (mid-July) Brown, Door, Oconto, and Marinette Counties
- High earwig population (mid-July) Northeastern Region
- Felt mites on birch (mid-July) Brown Co.
- Honeylocust plant bug damage (mid-July) Northeastern Region
- Kermes scale presence on oaks (mid-July) Northeastern Region

- Jack Pine Budworm population increases Jackson, Juneau, and Monroe counties
- See more forest health reports at http://dnr.wi.gov/forestry/FH/intheNews/.

Interesting Forest Health Reads

- Warning about sketchy tree care businesses in Wisconsin http://www.thewheelerreport.com/releases/July10/July1/0701datcpeab.pdf
- Article on SLAM (SL.ow A.sh M.ortality) http://www.treesearch.fs.fed.us/pubs/35023
- Thousand Canker Disease USFS Pest Alert http://na.fs.fed.us/pubs/palerts/cankers disease/thousand cankers disease low res.pdf
- Likely Thousand Cankers Disease found in Tennessee (1st report east of the Mississippi) http://www.wbir.com/news/local/story.aspx?storyid=129618&catid=2

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 <u>DNRFRGypsymoth@wisconsin.gov</u>
- 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

Acknowledgements

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Contact Us

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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 at http://dnr.wi.gov/forestry/FH/intheNews/.