

Northern Wisconsin's Forest Insect & Disease Newsletter

Wisconsin Department of Natural Resources
Division of Forestry

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Newsletter Information



Forest Health News Across the Northern Third

A Job Well Done by Mary Bartkowiak for the Northwest District

Mary Bartkowiak completed her forest health job in northwestern Wisconsin at the end of October. She trouble-shot problems to trees for many of you, ground-truthed well over 2000 acres of damaged forest mapped during aerial surveys, assessed jack pine budworm and gypsy moth populations, and more. Thank you Mary for all the hard work you put in. It was greatly appreciated.

Woodruff Foresters Put the Kibosh on Oak Wilt

If the battle against oak wilt in north-central Wisconsin was like a football game, the DNRers just scored 10 unanswered points. At 7 minutes left in the second quarter, the DNRers scored a safety against the Oak Wilters AND returned the ensuing kick-off for a touchdown. Jeff Tracy and Ken Hayes are in the running for game MVPs for recognizing and tackling the disease center.

Few Jack Pine Budworm Concerns for the Northwest District in 2014

Bartkowiak found very little jack pine budworm activity in the northwest part of Wisconsin. There was no concerning defoliation noted in 2013. Out of 40 plots predicting 2014 damage, only one location suggested light defoliation might occur. That was on the east side of the USFS's Washburn district in Bayfield County.

Twolined Chestnut Borer Outbreak in Burnett County

There are a whole lot of oaks with sick crowns in Burnett County due to the dreaded twolined chestnut borer (TLCB). The 2011 windstorm, 2012 drought, and 2013 damaging spring snowfalls made the county's oaks a very easy target for this borer. Control of TLCB is extremely challenging in woodland settings and often presents a Catch 22. Here are some suggestions:



Figure 1: The uprooted and charred remains of an oak infected with oak wilt on the NHAL State Forest. Destroying infected oaks prevents them from serving as a spore source the following spring. Complete control also involves disrupting the root-graft disease avenue, typically done before felling infected oaks.

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Creep of Confirmed Oak Wilt in the North

Burnett County: Aerial and ground surveys revealed an eastward expansion of oak wilt into Daniels township. Oak wilt is making a severe impact to the landscape in W. Marshland, Grantsburg, and Anderson townships. Oak wilt centers are within 3 miles of Washburn and 5 miles of Douglas counties, but undetected infections likely exist closer to these counties. Thanks to Bartkowiak for helping to clarify the sick oak scenario in this county.

Florence County: Aerial surveys revealed a 1 mile westward jump of the known oak wilt range in Homestead township. Oak wilt is within 2 miles of Hwy 101.

Langlade County: Aerial surveys revealed a 2 mile westward expansion of the known oak wilt range in Wolf River township. This disease center has been present for several years. Thanks to Dave Beer for enthusiastically helping landowners eradicate disease centers in this township.

Lincoln County: Oak wilt is not uncommon in the County Rd U area north of Tomahawk. Additional detections in 2013 were made in this area.

Oneida County: Oak wilt was confirmed on a single tree 2¾ miles northwest of Lake Tomahawk. The disease center was eradicated but oak wilt is likely present on the nearby developed lakeshores. Earlier in 2013, oak wilt was confirmed on the north shore of Lake Nokomis.

Rusk County: Cooperation with UW-Extension plus aerial and ground surveys revealed oak wilt has been present for several years in Rusk, Big Bend, and Washington townships.



EAB in Douglas County

A city of Superior tree crew found Emerald Ash Borer (EAB) in Superior while taking down a dead ash tree on August 8. A quarantine was subsequently placed on Douglas County. I flew a detection flight over the rural townships

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flanking Superior and did not find any obviously infested ash stands. Note that it would be difficult to detect infested ash stands unless they were large and infested for several years.

It is not surprising to find EAB wherever you have commerce, human traffic, and development. In other words, it's not unexpected to find EAB almost anywhere. People really move wood around. They like fires and warmth. Please plan accordingly.

Regarding the southwest WI infestation (i.e. Victory area), DNR's Greg Edge made the following comment: "Once we can easily find evidence of EAB, it probably is about 5 - 6 years to achieve heavy mortality in the stand. We saw significant mortality starting in stands close to the Victory infestation after about 3 years." The progression of EAB in northern Wisconsin's black ash stands may be different than that observed elsewhere. Infested black ash stands have not been observed yet in the country, to my knowledge.

Late Summer Basswood Defoliation

Leaf browning and light to heavy defoliation of basswoods in northeastern Wisconsin happened in early September. The culprit was a minute caterpillar. It took several forest entomologists to tentatively identify it as *Bucculatrix improvisa* (sorry folks, no common name). Linda Williams and I noted and received reports of this damage in the following counties: Ashland, Bayfield, Florence, Forest, Iron, Langlade, Oconto, Oneida, Price, and Vilas Counties. This is the 2nd year in a row of this defoliation in some of these counties, but since it happens so late in the growing season, the impact to the basswoods is minimal.



Figure 6 (left): These tiny caterpillars have a big appetite for basswood leaves in late summer. Figure 7 (right): Dinner is served in Langlade County.

Tamarack Mortality Continues

As was true last year, aerial surveys in summer 2013 detected scattered stands of tamarack with areas of eastern larch beetle infestation. For the infested tamarack stands on private lands, I thank those of you that have alerted the property owners. For timberland, I recommend merchantable and significantly infested tamarack stands be set up for regeneration harvest.

Kermes Scale Outbreak in North-central Wisconsin

Kermes scales continued their onslaught against northern pin oaks throughout Vilas County and down almost to Wausau. After two years of heavy infestation, some of these oaks are actually dying in the Tomahawk and Conover areas. This appears to primarily be a roadside issue, although I can't say I go traipsing through scrub oak stands much. People shouldn't confuse this with any other problem, since the scales are distinctive and they are tended by ants. The ants are quite aggressive and defend their dome-shaped, sessile, honeydew providers on branches. This general scale/ant mutualism could even extend to the tree under certain circumstances according to this [article](#).



Figure 8 (left): A pin oak heavily infested by scales. Figure 9 (right): Wart-like scales sucking the 'life-sap' out of an oak and the fearless ants that defend them to the death.

Spruce Budworm Defoliation Likely to Continue into 2014

Surveys this fall suggest we'll see spruce budworm defoliation in 2014 in at least Ashland, Price, Forest, and Florence counties. Defoliation in Florence Co. could be moderate in severity. That would be the 5th year in a row, at least! Maybe we'll get another cold, wet spring to soften the budworm's blow, as we did in 2013. Many stands are primed for salvage operations in Florence County.

The Positive Corner

A UW-Madison Dept. of Entomology graduate student, Todd Johnson, successfully recovered *Tetrastichus planipennis* (a parasitoid of EAB larvae) at an EAB biocontrol research site in Ozaukee County this summer. That means this wasp has a successful breeding population to feast on those annoying EABs. This is GOOD NEWS! The original set of wasps were released at the research site in 2011. To date, EAB parasitoids have been released in Kenosha, Milwaukee, Ozaukee, Vernon, and Washington counties.

The Canker Corner

Welcome to the Canker Corner. What happened to the rot room? Well the author thought Steganosporium ovatum was cool enough to supersede the rot room today. It's all about pathology here in the rot and/or canker quarter.

Liz Wood, assistant TO the State Forest Pathologist, identified *Steganosporium ovatum* for me, which I found commonly associated with old sapsucker damage, which was commonly associated with premature fall colors in mid-August on sugar maples in north-central Wisconsin. This fungus is a bark pathogen requiring a stressed or injured maple to achieve infection. It may hasten branch dieback.



*Figure 10 : Sugar maple branches flagging in mid-August (inset) may be caused by sapsucker damage (white arrows) and branch colonization by *Steganosporium ovatum*, seen as the black fruiting bodies flanking the old bird damage.*

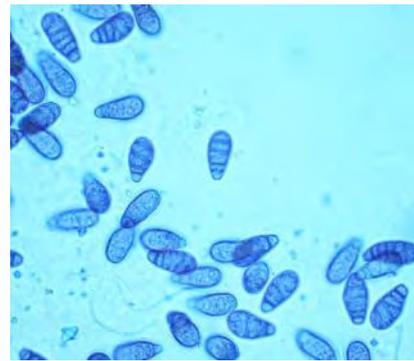


Figure 11: Spores from the black fungal fruiting bodies on the branch in Figure 10. Picture and i.d. by L. Wood.

Odds & Ends

How to Handle Citizen Complaints about Pesticide Misuse

This year a contracted crew “nuked” all the saplings under power lines between Eagle River and Three Lakes. This generated several complaint calls to yours truly. The DNR is not the regulating agency when it comes to these sorts of pesticide applications. If you ever have a citizen calling you wanting to simply find out what pesticide a certain company applied to their neighbor’s tree or the powerline right-of-way going through their property, they should try to contact the company that made the application to see if they’ll divulge the record. If the inquiring citizen developed acute pesticide exposure symptoms or if they have plants on their land that are damaged by pesticides and those plants were not in a utility’s right-of-way, direct them to DATCP’s pesticide misuse phone number (608-224-4500) or [website](#).

See Lots of Gypsy Moth Egg Masses?

If you happen to see substantial numbers of gypsy moth egg masses in the woods (e.g. 15 or more on a couple neighboring trees), let me know. I don’t anticipate we’ll see much for gypsy moths in 2014 due to the massive caterpillar die-off this year, but one never knows.

Banner Year for Wild Cucumber Vine

—from the Invasive Plants Team, late August 2013

This year, more than most, you may have noticed a flowering vine draping itself across the roadside vegetation like white netting. We’ve been receiving numerous calls and emails this month regarding this previously unnoticed roadside specimen. The vine gaining so much attention this year is [wild cucumber](#), *Echinocystis lobata*. A native annual vine, it seems to be responding well to this year’s odd weather patterns. From a distance, you’ll notice the vibrant green foliage and erect, white clusters of flowers. These tiny flowers have a wonderful fragrance. Later in the season, distinct round “cucumber” fruits covered in dense spines will hang from the vines.

Forest Health Web and Phone Resources

- Insects
 - Invasive Insect [Factsheets](#)
 - [Emerald Ash Borer](#)
 - * EAB Hotline—1-800-462-2803
 - [Gypsy Moth](#)
 - * Gypsy Moth Hotline—1-800-642-MOTH
- Diseases
 - Invasive Pathogen [Factsheets](#)
 - [Annosum](#) Root Rot (Heterobasidion Root Disease)
 - [Oak Wilt](#)
- Plants
 - Invasive Plant [Factsheets](#)
 - [Timing of Herbicide](#) Applications for Planted Trees
- Sick Tree Diagnostic Keys:
 - U. of Minnesota Extension—[What's Wrong With My Plant?](#)
 - [Natural Resources Canada](#)—navigate to a tree species to see insects/diseases
 - U. of Wisconsin Extension [Green Industry Website](#)

Front & Back Covers: Bleeding (resin production) at the base of a slightly chlorotic white pine (front cover). Bleeding was from Armillaria infection. All white pines around the oak stump (fell over 3 years ago) on the right had identical symptoms and Armillaria infection. I recommended the property owner stop planting conifers near this stump and promote the deciduous saplings.



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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 Northern Wisconsin with regional up-to-date forest health information. I 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/topic/ForestHealth/Publications.html>.