

Western and Central Wisconsin Forest Health Report – Feb 2016

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Arthropods

Hemlock Woolly Adelgid in MI

Michigan is working on determining the extent of an infestation of Hemlock Woolly Adelgid (HWA) along Lake Michigan in Muskegon and Ottawa Counties. This invasive bug from Asia has been found on planted yard trees previously in Michigan but this is the first known infestation in a native hemlock stand. Hopefully the infestation can be eradicated but the forest health team will increase our monitoring for this pest now that it is potentially established just across the lake. We ask that you let your local forest health specialist know about any suspicious dying hemlock. HWA is an aphid like insect. The adults are easy to identify because they cover themselves with white wool-like wax filaments. Figure 1. HWA adults feeding on hemlock needles. Photo by Chris Evans; invasive.org.

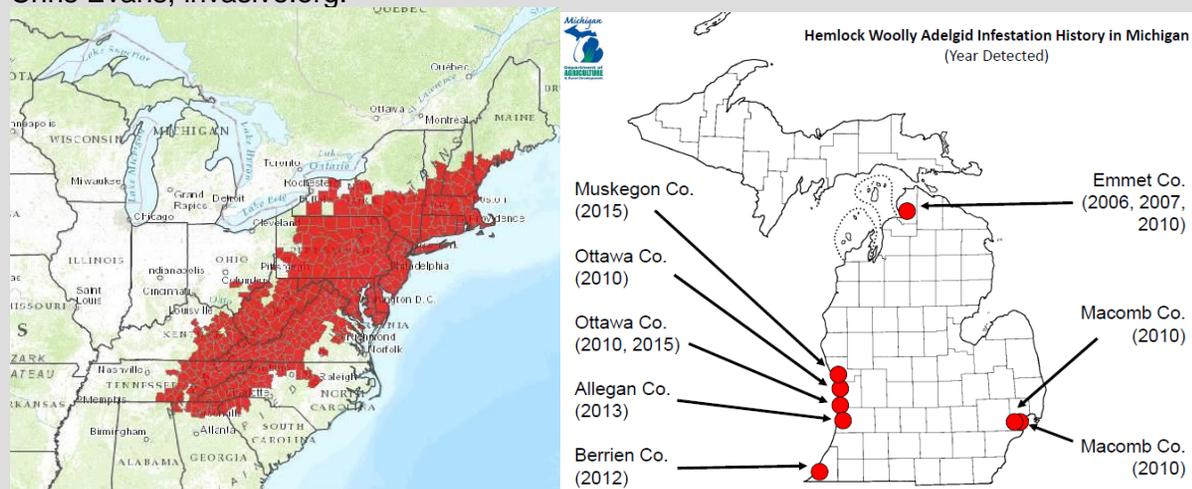
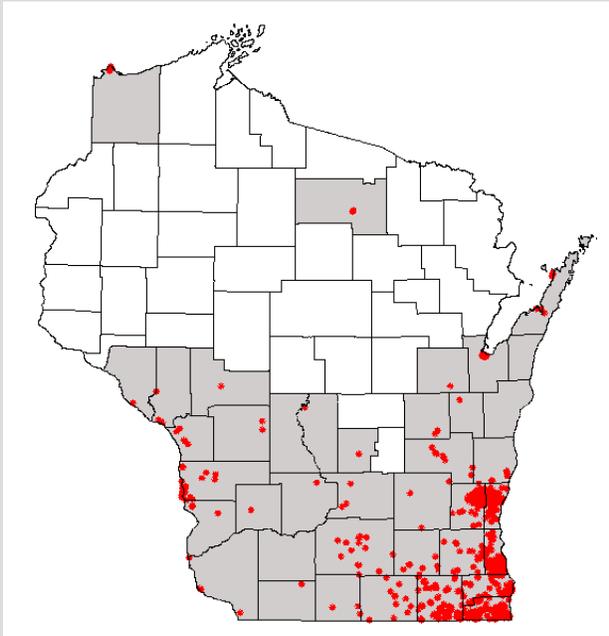


Figure 2. Distribution of HWA in the Eastern U.S. through 2014. Forest Service Forest Pest Conditions. Figure 3. HWA finds in MI since 2006. Michigan DARD.

Emerald Ash Borer



Emerald ash borer continued to spread in Wisconsin in 2015. Significant ash mortality is occurring in southeastern Wisconsin. Farther north and east and along the Mississippi River ash tree decline and canopy thinning is becoming apparent as EAB populations build and continue to spread.

In 2015, EAB was found for the first time in six new Wisconsin counties: Green, Jackson, Lafayette, Marquette, Outagamie and Richland. EAB was also detected in numerous new communities. Ozaukee County became the second WI County after Kenosha County where every town, village and city has a known EAB infestation.

Figure 4. Map of known EAB distribution in WI (quarantined counties in grey; red dots are confirmed infested sites).

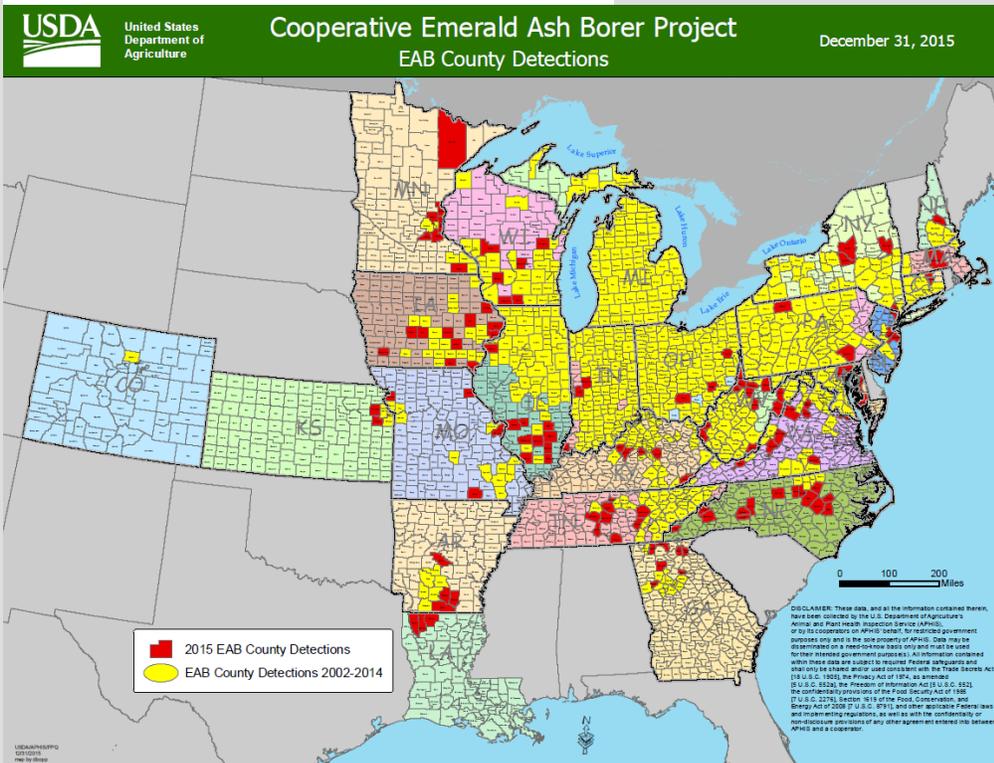
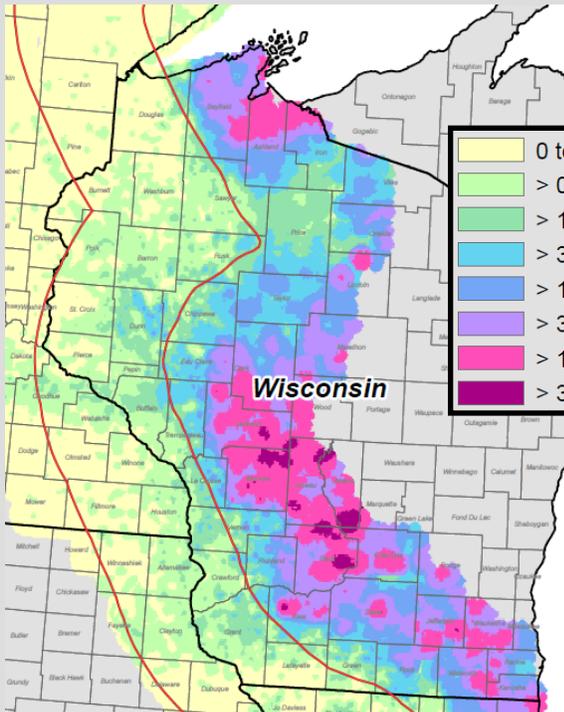


Figure 5. National distribution of EAB at the end of 2015 (new county detections in red, previous year detections in yellow). USDA APHIS.

Gypsy Moth



Statewide, trapped male gypsy moth numbers increased about 5000 moths from 2014 numbers to 97,505 in 2015. The largest increases occurred

in Dunn and LaCrosse Counties.

The highest numbers of moths were trapped in Monroe County (15,465 moths) and Jackson County (7,707 moths). Despite the increase, we received very few reports of nuisance caterpillars in 2015.

DATCP will continue treating in a number of western counties in 2016

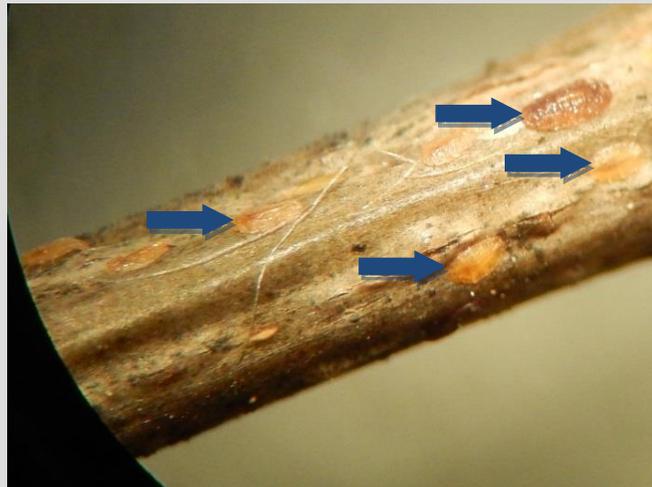
to slow the spread of gypsy moth. DNR suppression sprays are planned for two small areas in Rock and Sauk Counties.

Figure 6. Numbers of male gypsy moths per trap in 2015. Map from www.gmsts.org.

Lecanium Scale

Watch for the outbreak of lecanium scale on oaks to continue in 2016. Predators helped control scale populations in some areas in 2015 but large numbers of scales are still present in northern and central WI. Heavy populations of scales may result in dieback of infested branches but tree mortality is unlikely. No management is typically needed in forest stands. On yard trees, target crawlers (young scale insects) in May and June (monitor with sticky cards). Horticultural oil is a good treatment option but getting good coverage on large trees may be difficult. Another option is to use systemic insecticides this spring to protect trees.

Figure 7. Lecanium scale crawlers (blue arrows) on an oak twig. Photo by Linda Williams.



WI Pollinator Protection Plan

Interested in pollinator conservation? Read and review the new Wisconsin Pollinator Protection Plan at datcp.wi.gov (search 'pollinator protection plan').

Diseases

First Detection of Annosum in Marathon County (By Kyoko Scanlon)



Annosum root rot, recently renamed as Heterobasidion Root Disease (HRD), was found in Marathon County for the first time in December 2015. The disease was detected in a red pine plantation on private land by DNR forestry staff. Fruiting bodies were found at the base of infected trees and stumps. In the lab, the pathogen was isolated from wood samples collected from infected trees. The stand, established in the early 1960's, had several thinning operations prior to the confirmation of the disease. The new location is approximately 35 miles north and 40 miles east of the nearest previously confirmed stands.

With this find, HRD is now known to occur in 25 counties in Wisconsin, including Adams, Buffalo, Columbia, Dunn, Grant, Green, Iowa, Jefferson, Juneau, La Crosse, Marathon, Marinette, Marquette, Oconto, Portage, Richland, Sauk, Shawano, Taylor, Trempealeau, Walworth, Waukesha, Waupaca, Waushara, and Wood.

Based on this new find, a number of townships in Langlade, Lincoln, Marathon, and Menominee counties were newly included in [25-mile buffer zones](#) for implementation of the [guide](#). There will be a one year grace period for implementation of the guide for these townships.

Figure 8. HRD conks on a dead red pine in Marathon County.

Annosum (HRD) found in White Spruce Plantation

HRD was recently confirmed in a white spruce plantation in the Southern Unit of the Kettle Moraine State Forest. HRD has previously been confirmed on individual spruce trees in Wisconsin but this is the first confirmation within a spruce plantation in the state. Fruiting bodies were commonly found on white spruce stumps and occasionally on dead and dying trees. HRD has been previously confirmed in the Southern Unit of the KMSF. The stand was established in 1965 and was thinned during the winter of 2004/2005.

Figure 9. HRD conks on a spruce stump. Photo by Kyoko Scanlon.



Oak Harvesting Guidelines—Revised & Rolled Out!

Oak Harvesting Guidelines to Reduce the Risk of Introduction and Spread of Oak Wilt

Map Creation Date: Jan. 1, 2016 **Map good through: Dec. 31, 2016**

For the on-line interactive guide, visit dnr.wi.gov Keyword: oak wilt



The Oak Harvesting Guidelines (OHG) are a risk-based guide to harvest practices that reduce the introduction, spread, and impact of oak wilt. Following a review process involving internal and external partners beginning in 2014, the OHG were revised, approved, and took effect January 1, 2016. The guidelines are available on the Forest Health webpage: [Revised Oak Harvesting Guidelines](#).

Keys points of the revised OHG:

- Harvest timing: No change. The seasonally restricted time period for wounding/cutting oaks remains April 1 – July 15 in southern WI and April 15 - July 15 for northern WI (map in guide).
- Added flexibilities: Additional exceptions and modifications can be applied to specific situations, averting the need for harvest restriction in some cases.
- Applying “exceptions” vs. “modifications”:
 - Exceptions: require that timber sale documentation includes a brief explanation of the specific exception being applied
 - Modifications: recommends consultation with your regional DNR Forest Health Specialist or forester to assess applicability, and requires that justification be included in the normal approval process for harvesting (i.e., Form 2460-00; Form 2450-032).
- Distance to known oak wilt infection: No change. The oak wilt distance categories—not in the county, in the county, or in your stand—remain the basis for classifying disease risk and applying a potential harvest restriction. Note that the exceptions and modifications vary for each distance category.

For more information, or if your team/organization is interested in additional training on implementing the guidelines, please contact a [DNR Forest Health Specialist](#) in your area.

Invasive Plants

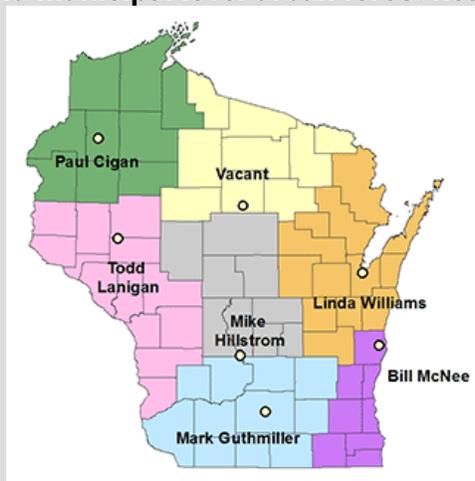
Amur Cork Tree

Approximately 14 new populations of Amur cork tree were recently discovered in Dunn County. The only previous known locations in Wisconsin were in Adams and Columbia Counties. DNR invasive plant experts are working with cooperators on eradication and control efforts. Cork tree is an aggressive invader so please let forest health staff know about any cork trees you discover. The key winter features of cork tree include the corky bark in older trees, bright yellow cambium, and pale bark in younger trees. Female trees are Prohibited under NR40 but male cultivars are not regulated.



Figures 10, 11. A cork tree in Dunn County and the diagnostic bright yellow cambium. Photos by Chris Gaetzke.

For general forest health and municipal level urban forest health issues contact:



<http://dnr.wi.gov/topic/ForestHealth/staff.html>

West Central WI:

Mike Hillstrom
Forest Health Specialist
715-459-1371
Michael.hillstrom@wisconsin.gov

Todd Lanigan
Forest Health Specialist
715-839-1632
Todd.lanigan@wisconsin.gov

Northwest WI:

Paul Cigan
Forest Health Specialist
715-416-4920
Paul.cigan@wisconsin.gov

Statewide reporting systems:

Report EAB:

by phone 1-800-462-2803
by email DATCPEmeraldAshBorer@wisconsin.gov
visit the website <http://emeraldashborer.wi.gov/>

Report Gypsy Moth:

by phone at 1-800-642-6684
by email dnrfgypsymoth@wisconsin.gov
visit the website <http://gypsymoth.wi.gov/>

For additional information visit the Forest Health web site: <http://dnr.wi.gov/topic/ForestHealth/>

Note: This report covers forest health issues occurring in the West Central District of Wisconsin. The purpose is to provide up-to-date information on forest health issues to foresters, forest landowners, and anyone else interested. We welcome your comments/suggestions on this newsletter as well as reports on forest health problems in your area. If you would like to subscribe to this newsletter, please contact Mike Hillstrom at Michael.hillstrom@wisconsin.gov. Previous issues of this update and regional forest health updates from NER, NOR and SOR, are available from the WI DNR Forestry website at <http://dnr.wi.gov/topic/ForestHealth/Publications.html>. Articles written by Mike Hillstrom unless otherwise noted.

Pesticide use: Pesticide recommendations contained in this newsletter are provided only as a guide. You, the applicator, are responsible for using pesticides according to the manufacturer's current label directions. Read and follow label directions and be aware of state or local laws regarding pesticide use.