

# West Central WI Forest Health Report

March 2011

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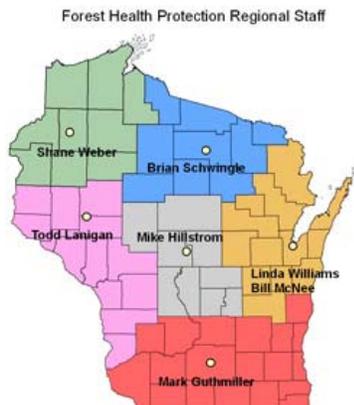
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## New Forest Health Specialist for Nine Counties in 2011

Welcome to 2011 in the WCR! To go along with the New Year, forest health has added a new forest health specialist (Mike Hillstrom) to cover six WCR counties (Clark, Marathon, Wood, Portage, Juneau, Adams) and three NER counties (Marquette, Green Lake, Waushara). If you



have not met me already, allow me to introduce myself briefly. I was born and raised in Neenah, WI. After Neenah, I moved to Madison to get my undergraduate and graduate degrees in Entomology. As many Wisconsinites, I spend most of my free time watching the Packers and Badgers and enjoying the numerous outdoor recreational activities Wisconsin has to offer. I'll be stopping by to meet or catch up with everyone in the counties I'm covering in March and April. Todd Lanigan will still be covering the western counties of the WCR. Please feel free to contact me with any insect or disease issues you encounter! My [contact info](#) is at the end of this report as well as on the DNR forest health website.

## 2010 Summary Forest Health Reports

Need to remind yourself of what happened in the forest insect and disease world around the Midwest last year? Check out the Wisconsin 2010 forest health summary document, as well as, those for our neighboring states. Note: some of the files are large and take a minute to load.

<b>Illinois</b>	<a href="http://fhm.fs.fed.us/fhh/fhh_10/il_fhh_10.pdf">http://fhm.fs.fed.us/fhh/fhh_10/il_fhh_10.pdf</a>
<b>Iowa</b>	<a href="http://www.iowadnr.gov/forestry/files/fhr2010.pdf">http://www.iowadnr.gov/forestry/files/fhr2010.pdf</a>
<b>Michigan</b>	<a href="http://www.michigan.gov/documents/dnr/FHH_344124_7.pdf">http://www.michigan.gov/documents/dnr/FHH_344124_7.pdf</a>
<b>Minnesota</b>	<a href="http://files.dnr.state.mn.us/publications/fid/2010/dec/fid_2010HealthHighlightsMN.pdf">http://files.dnr.state.mn.us/publications/fid/2010/dec/fid_2010HealthHighlightsMN.pdf</a>
<b>Wisconsin</b>	<a href="http://new.dnr.wi.gov/DocumentLibrary/Repository/Forestry/fh/AnnualReports/AnnualReport2010.pdf">http://new.dnr.wi.gov/DocumentLibrary/Repository/Forestry/fh/AnnualReports/AnnualReport2010.pdf</a>

## Invasives to Look for in 2011

### NR40 Forest Insects and Diseases

Seven species (5 insects, 1 fungus, 1 worm) are currently listed as **Prohibited** under Wisconsin Chapter NR40 regulations because of their potential to cause serious damage to forests. Prohibited species are either not currently found or only small populations are currently found in Wisconsin. Of the seven, only Emerald Ash borer and Beech Scale have been found in the state so far. The following descriptions, photos and maps show what these prohibited species look like and where they are currently established in the U.S. (zoom in on the maps to see all the detail). Please contact your forest health specialist immediately if you find these, or damage caused by these, pest species. Check out the links associated with each species to learn more about how to identify them, the damage they cause, and the treatment options currently available.

### Asian Gypsy Moth

Asian gypsy moth was first discovered in North America near Vancouver, Canada in 1991. Several populations have been or are being eradicated on both the East and West Coasts. Moths and/or egg masses have been found on ships at ports on all U.S. coasts. The biology of and damage caused by Asian gypsy moth is very similar to European gypsy moth. However, Asian gypsy moth has an even broader range of trees it feeds on and the female moths can fly which allows them to spread much more rapidly. Identification of Asian gypsy moths is extremely difficult because they look the same as European gypsy moths. What should you do about this insect? Continue to report gypsy moth issues to your forest health specialist and we will inspect the moths in more detail if we suspect Asian Gypsy Moth is the problem. For more information see: [http://www.aphis.usda.gov/publications/plant\\_health/content/printable\\_version/fs\\_phasiangm.pdf](http://www.aphis.usda.gov/publications/plant_health/content/printable_version/fs_phasiangm.pdf)

## Asian Longhorned Beetle (ALB)

**Tree species attacked:** Prefer Maples but will attack birch, horse chestnut, poplar, willow, elm, ash and black locust

**Signs and Symptoms:** ½ inch diameter exit holes; canopy dieback; egg pits; sawdust piles

**When to look:** Adults from July through September



Photo 1. An adult Asian Longhorned Beetle. Photo from beetlebusters.info

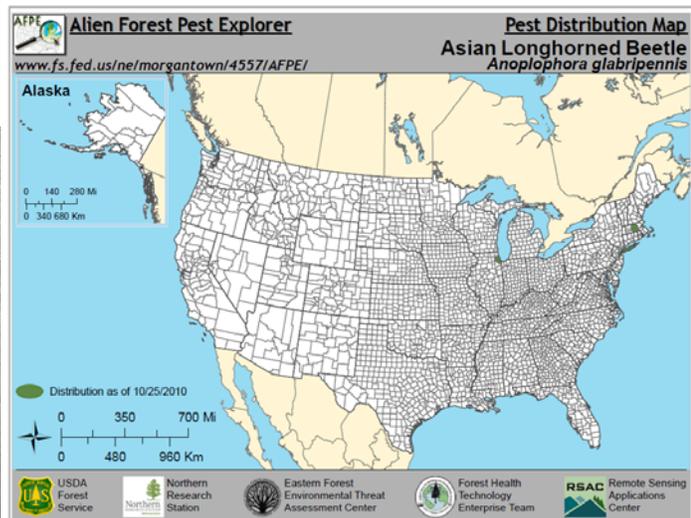


Photo 2. Map of current ALB distribution

Map from <http://www.fs.fed.us/nrs/tools/afpe/maps/ALB.pdf>

For more information:

<http://new.dnr.wi.gov/Default.aspx?Page=49e8f173-3ed9-4c35-828c-e5bd05739dda>

[http://www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/asian\\_lhb/index.shtml](http://www.aphis.usda.gov/plant_health/plant_pest_info/asian_lhb/index.shtml)

<http://www.beetlebusters.info/>

<http://www.invasive.org/browse/subinfo.cfm?sub=2178>

Watch the Feb 10<sup>th</sup>, 2011 Asian Longhorned Beetle Webinar at:

[http://www.emeraldashborer.info/eab\\_university.cfm](http://www.emeraldashborer.info/eab_university.cfm)

## Beech Scale

The beech scale (tiny aphid-like insect) spreads fungi (*Neonectria* spp.) that cause beech bark disease. This insect and fungus are a major concern in the Eastern part of Wisconsin where American Beech trees are present but should not be an issue in the WCR.

For more information:

<http://new.dnr.wi.gov/Default.aspx?Page=6c52cf22-3f93-423d-bd7b-447092e8bbd4>

## Crazy worm (*Amyntus* spp.)

Human activity has introduced many species of earthworms to Wisconsin. All native earthworms were eliminated from Wisconsin the last time glaciers covered much of the state more than 10,000 years ago. Although earthworms have a positive reputation with gardeners and fishermen, they can be extremely damaging to forests. Many species, such as the nightcrawlers many fishermen use, are widely established in Wisconsin and can not be eradicated. One species yet to reach Wisconsin, the crazy worm, could cause serious problems in Wisconsin forests. Check out <http://www.nrri.umn.edu/worms/default.htm> for all the details about this and other worm species in the Great Lakes region. Need a worm identified? Contact Bernie Williams at 608-266-0624 or [Bernadette.Williams@wisconsin.gov](mailto:Bernadette.Williams@wisconsin.gov).

## Emerald Ash Borer (EAB)

**Tree species attacked:** Ash

**Signs and Symptoms:** Crown dieback; epicormic sprouting; wood pecker feeding; 1/8 inch diameter D-shaped exit holes; S-shaped larval galleries under bark

**When to look:** Adults from late May through mid-July



Photo 3. An adult Emerald Ash Borer  
Photo from [Invasive.org](http://invasive.org)

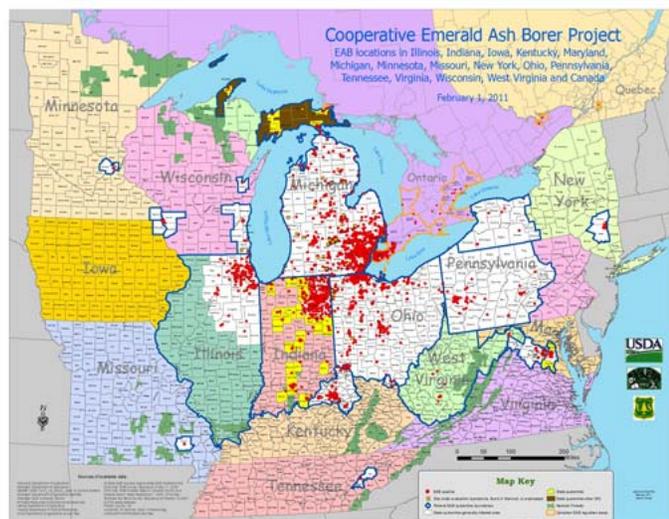


Photo 4. Map of current EAB distribution  
Map from <https://onlineservices.datcp.wi.gov/eab/index.jsp>

For more information:

<http://new.dnr.wi.gov/Default.aspx?Page=d6c49ba5-4aad-41c8-99b3-acde66e65099>

<http://www.emeraldashborer.info/>

<http://www.invasive.org/browse/subinfo.cfm?sub=7171>

Watch Emerald Ash Borer Webinars at: [http://www.emeraldashborer.info/eab\\_university.cfm](http://www.emeraldashborer.info/eab_university.cfm)

## Hemlock Woolly Adelgid (HWA)

**Tree species attacked:** Eastern and Carolina Hemlock

**Signs and Symptoms:** Declining trees (yellowing needles, branches with no needles, thin crown); white, cottony egg sacs

**When to look:** Two generations of adults each year. First in June-July, second in October.



Photo 5. White fluffy wool covering adult hemlock woolly adelgids and their eggs. Photo by Linda Williams.

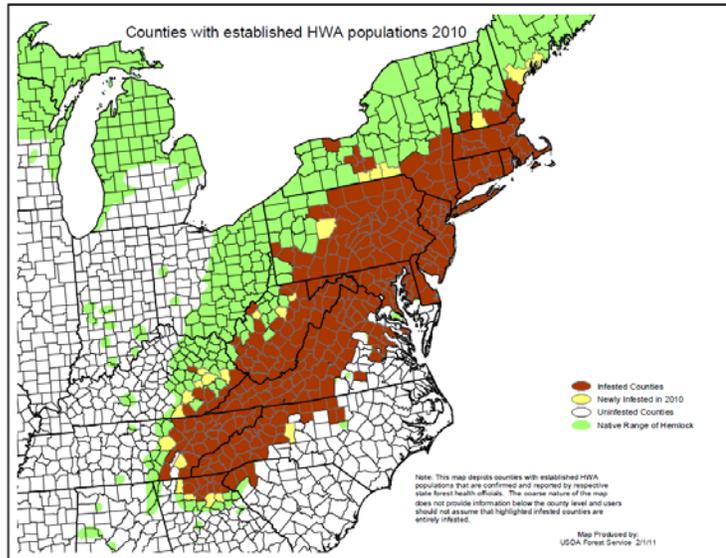


Photo 6. Map of current HWA distribution  
Map from <http://na.fs.fed.us/fhp/hwa/maps/2010.pdf>

For more information:

<http://new.dnr.wi.gov/Default.aspx?Page=97cbd5fe-8081-4108-88c5-470e82c10e6e>

<http://na.fs.fed.us/fhp/hwa/>

<http://www.invasive.org/browse/subinfo.cfm?sub=289>

Watch a Hemlock Woolly Adelgid Webinar March 10, 2011 at:

[http://www.emeraldashborer.info/eab\\_university.cfm](http://www.emeraldashborer.info/eab_university.cfm)

## Sudden Oak Death (SOD) (caused by the pathogen *Phytophthora ramorum*)

**Tree species attacked:** Oak and at least 60 other species. Red, black and northern pin oaks are highly susceptible.

**Signs and Symptoms:** Leaf lesions; stem cankers that ooze dark sap; discolored bark; branch mortality

**When to look:** Trees are most susceptible to infection during spring when leaves are expanding. A period of mild, moist weather during summer would likely cause symptoms to show.



Photo 7. Leaf lesions caused by *P. ramorum*.  
Photo from Invasive.org



Photo 8. Cankers oozing dark sap  
Photo from Invasive.org

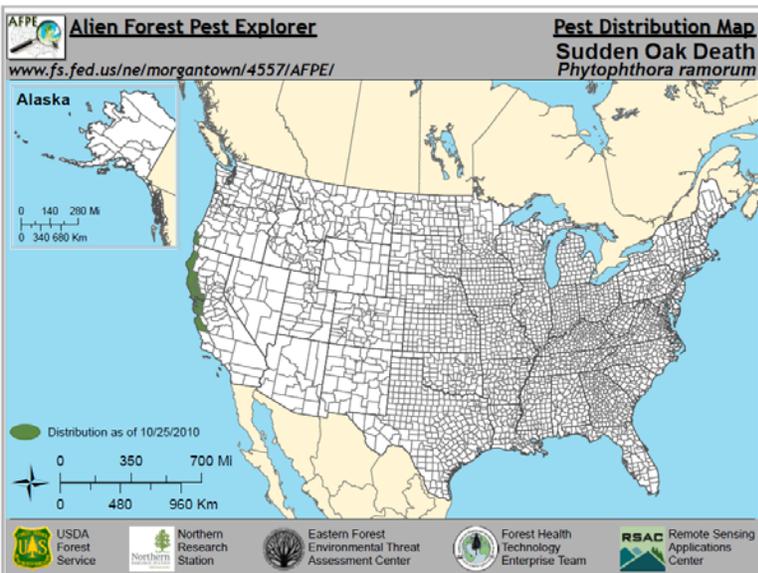


Photo 9. Map of current *P. ramorum* distribution.  
Map from <http://www.fs.fed.us/nrs/tools/afpe/maps/SOD.pdf>

For more information:

<http://new.dnr.wi.gov/Default.aspx?Page=a61a9e6f-964f-42a0-aa5f-1b9998cb1239>

<http://www.suddenoakdeath.org/>

<http://www.invasive.org/browse/subinfo.cfm?sub=4603>

<http://www.na.fs.fed.us/sod/>

## Other Insects/Diseases

Sirex woodwasp, thousand cankers disease and bur oak blight are three additional forest health concerns not yet discovered in Wisconsin. Please contact your forest health specialist if you find wasps that resemble Sirex or damage symptomatic of any of these species.

### Sirex Woodwasp

**Tree species attacked:** Pine

**Signs and Symptoms:** Fading or red needles; mid-bole resin; larval galleries with very fine sawdust; 1/8 to 3/8 inch diameter exit holes

**When to look:** July to September



Photo 10. An adult Sirex woodwasp.  
Photo from Invasive.org

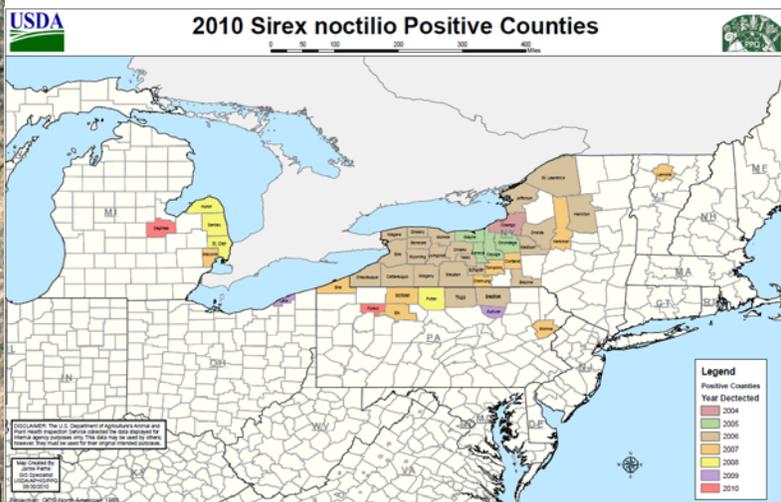


Photo 11. Map of current Sirex distribution.  
Map from [http://www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/sirex/downloads/postivecountiesbyyear.pdf](http://www.aphis.usda.gov/plant_health/plant_pest_info/sirex/downloads/postivecountiesbyyear.pdf)

For more information:

<http://www.na.fs.fed.us/fhp/sww/>

<http://www.invasive.org/browse/subinfo.cfm?sub=4093>

## Thousand Cankers Disease (TCD) (caused by the fungus *Geosmithia morbida*)

**Tree species attacked:** Eastern black walnut

**Signs and Symptoms:** yellow or thinning foliage; abundant small cankers; numerous pin sized entrance holes of the walnut twig beetle

**Status:** Discovered in Tennessee in July 2010 (first occurrence East of the Mississippi River). The Wisconsin Department of Agriculture Trade and Consumer Protection has created a temporary quarantine rule to prevent potentially infested black walnut material from entering Wisconsin from states confirmed to have TCD.



Photo 12. Cankers on a black walnut branch caused by the fungus *Geosmithia morbida*



Photo 13. Pin sized entrance holes of the walnut twig beetle

Photos from [http://na.fs.fed.us/pubs/palerts/cankers\\_disease/thousand\\_cankers\\_disease\\_print\\_res.pdf](http://na.fs.fed.us/pubs/palerts/cankers_disease/thousand_cankers_disease_print_res.pdf)

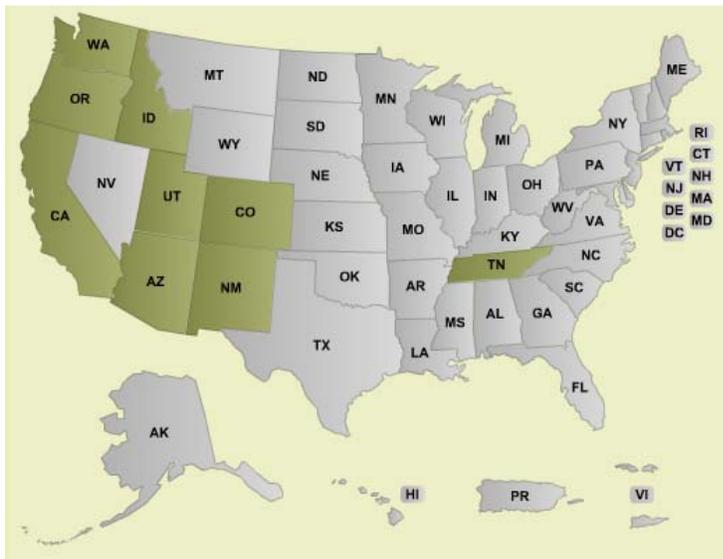


Photo 14. Map of states with trees confirmed to have TCD.

Map from <http://threatsummary.forestthreats.org/threats/threatSummaryViewer.cfm?threatID=638>

For more information:

- <http://www.thousandcankerdisease.com/>
- <http://www.invasive.org/browse/subinfo.cfm?sub=56599>
- [http://na.fs.fed.us/pubs/palerts/cankers\\_disease/thousand\\_cankers\\_disease\\_screen\\_res.pdf](http://na.fs.fed.us/pubs/palerts/cankers_disease/thousand_cankers_disease_screen_res.pdf)

**Bur Oak Blight (BOB) (caused by the fungus *Tubakia dryina*)**

**Tree species attacked:** Bur Oak

**Signs and Symptoms:** Black fungus on the petioles of dead leaves still attached to branches; dead tissue along leaf veins; browning tips or sides of leaves

**When to look:** Black fungus evident in May. Leaf symptoms from July to September.

**Status:** Discovered in Iowa and Minnesota. Find pictures and a more detailed description at (<http://www.ipm.iastate.edu/ipm/hortnews/2011/2-9/buroakblight.html>)

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



<http://new.dnr.wi.gov/Default.aspx?Page=4e114a1b-6bc4-4fd7-9e0b-755e7d11dd22>

**West Central Region:**

Mike Hillstrom  
Forest Health Specialist  
Wisconsin Department of Natural Resources – West Central Region  
715-421-7825  
[Michael.hillstrom@wisconsin.gov](mailto:Michael.hillstrom@wisconsin.gov)

Todd Lanigan  
Forest Health Specialist  
Wisconsin Department of Natural Resources – West Central Region  
715-839-1632  
[Todd.lanigan@wisconsin.gov](mailto:Todd.lanigan@wisconsin.gov)

## Statewide reporting systems:

### Report EAB:

by phone 1-800-462-2803

by email [DATCPEmeraldAshBorer@wisconsin.gov](mailto: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](mailto:dnrfgypsymoth@wisconsin.gov)

visit the website <http://www.gypsymoth.wi.gov/>

For additional information visit the Forest Health web site:

<http://www.dnr.state.wi.us/forestry/fh/>

Note: This report covers forest health issues occurring in the West Central Region 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](mailto: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/forestry/FH/intheNews/>. 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 any state or local laws regarding pesticide use.