

West Central WI Forest Health Report

August 2014

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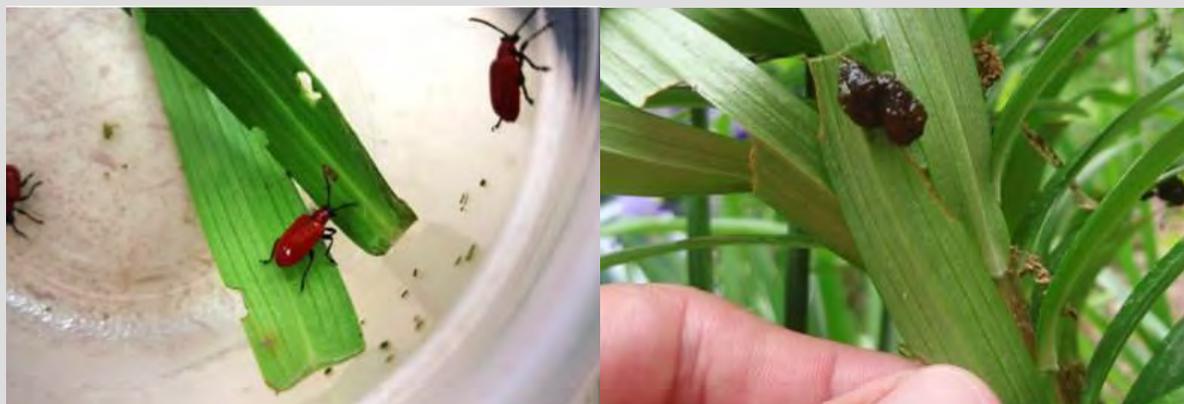
Arthropods

New Invasive - Lily Leaf Beetle

A new invasive insect, the Lily Leaf Beetle (*Liliioceris lili*), was recently found in Marathon County. This is the first detection of this insect in Wisconsin. The beetles are native to Europe and Asia and were first detected in the U.S. in 1992 (Massachusetts). The beetles pose an economic threat to nurseries and an environmental threat to native lilies and fritillaria. Daylilies are not considered hosts but bittersweet, hollyhock, lily of the valley, Solomon's seal, and potato have also been reported as hosts.

Adult beetles are bright red with black legs, head, and antennae and reach ~1/2" long. Larvae are dark colored and slug-like and protect themselves from predators by piling their own excrement on their backs. Both adults and larvae feed on foliage.

If you find the beetles or larvae please contact the DATCP Nursery Program at datcpnursery@wisconsin.gov.

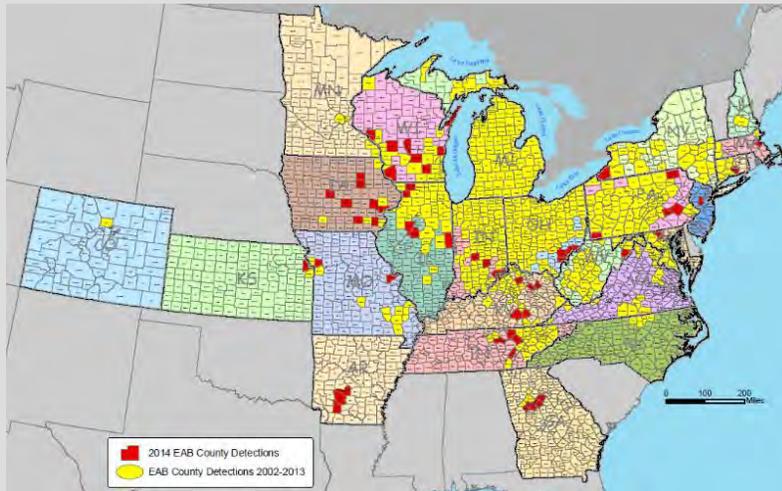
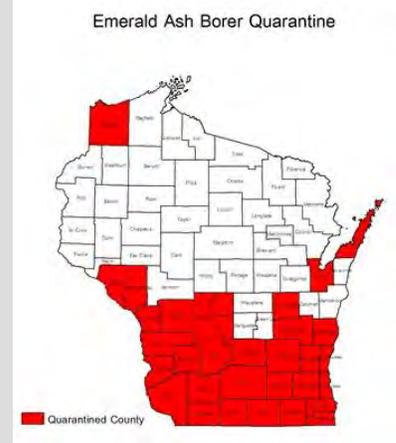


Photos 1, 2. Bright red adult and slug-like larvae of the Lily Leaf Beetle. Photos by Tim Allen, DATCP.

Emerald Ash Borer

Forest Health staff have been busy confirming new EAB finds all over Wisconsin. Six counties were quarantined because of first detections (Adams, Buffalo, Columbia, Door, Grant, Monroe) and another five were quarantined because of their proximity to counties with EAB (Green, Iowa, Juneau, Lafayette, Richland). Sheboygan County also had a first detection but was already quarantined.

Figure 1 (right). A map of counties quarantined for EAB in WI as of Aug 6, 2014.

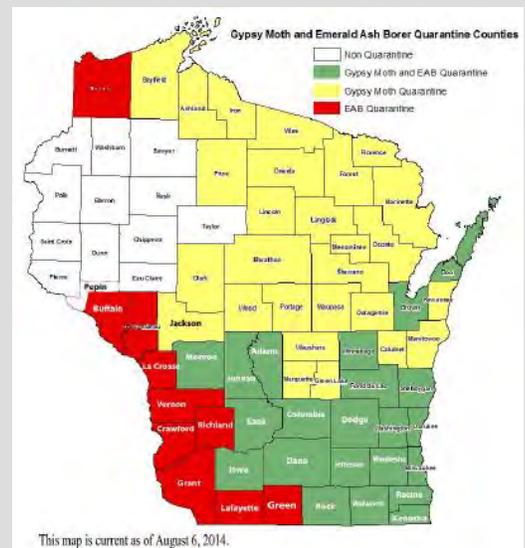


New Jersey and Arkansas recently became the 23rd and 24th states to detect EAB.

Figure 2. A national map of counties quarantined in 2014 (in red).

Firewood movement maps have also been updated as a result of the new EAB finds. The Firewood Movement in WI Map is available at <http://datcpservices.wisconsin.gov/eab/articleassets/Firewood%20Movement%20in%20Wisconsin.pdf> and the 10 mile radius state property maps are available at <http://dnr.wi.gov/topic/Invasives/FirewoodMaps.html>.

Figure 3. The firewood movement in Wisconsin map updated Aug 6, 2014.



Emerald Ash Borer Continued

DATCP recently clarified interstate movement of firewood into Wisconsin related to EAB quarantines. With firewood, WI has joined the “great big quarantine” allowing movement of firewood within contiguous quarantined counties regardless of state borders.

Firewood from neighboring states

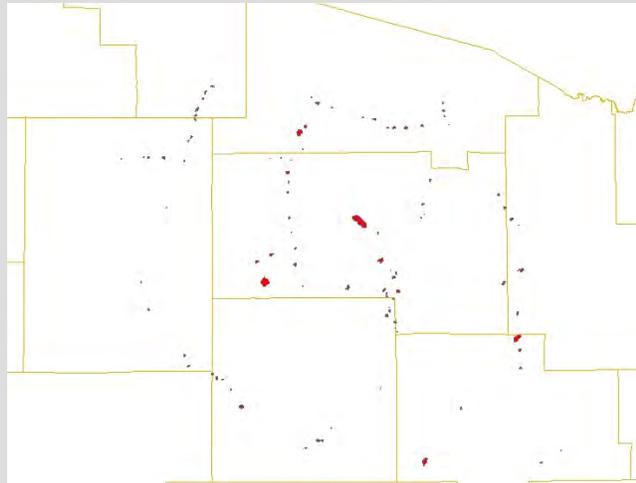
- may enter WI if
 - from an un-quarantined county
 - from a quarantined county and crossing into a quarantined WI county
- may NOT enter WI if
 - From a quarantined county and crossing into a un-quarantined WI county

Larch Casebearer

Larch casebearer defoliated tamaracks across much of north central Wisconsin this spring. Defoliated stands are re-foliating to various degrees but some mortality is already occurring because eastern larch beetle infestations were already active in some of the defoliated stands. Feeding by large numbers of first instar caterpillars may also be playing a role as an additional stressor to the trees. After a short feeding period, the tiny caterpillars will overwinter until next spring in mined out needles on the trees.

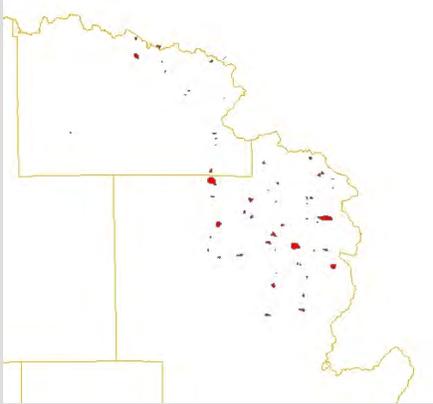
Defoliation occurred as far south as the Mead Wildlife Area and the Clark County Forest. Keep a close eye on tamarack stands (at least through 2015) for signs of ELB infestation so salvage harvests can be set up if necessary.

Figure 4. A map of tamarack defoliation caused by larch casebearer observed during an aerial survey in late June.



Photos 3, 4. Tamaracks defoliated by larch casebearer in 2014. Photos by Linda Williams.

Spruce Budworm



Spruce budworm is active again in 2014 defoliating balsam fir and spruce in northeast Wisconsin. An aerial survey found defoliation in Marinette and Florence Counties. Large numbers of moths were found in one spruce and balsam stand in Portage County but defoliation was very light.

Figure 5. Areas of spruce budworm defoliation (red polygons) in northeast Wisconsin.

Gypsy Moth

No major infestations of gypsy moth have been reported in Wisconsin in 2014. Large numbers of caterpillars were reported by a few landowners in Portage and Marathon Counties but defoliation was light except for two heavily defoliated yard trees. Egg mass surveys will be conducted in these areas this fall to determine the potential for more severe defoliation in 2015. The 2013 outbreak in southern Clark and northern Jackson Counties collapsed due to disease and very few caterpillars were found in 2014.

Cherry Scallop Shell Moth (By Todd Lanigan)

There are a lot brown cherry trees out there these days. The culprit is the Cherry Scallop Shell Moth and it seems like this was a good year for them. This is a native insect that defoliates black and other cherries. The caterpillar rolls the leaves together into a funnel or tube shape. As the caterpillars feed, the leaves turn brown. It is too late to control the caterpillars this year but you can get an early start on next year by destroying any pupae (cocoons) you find. Outbreaks can last a few years so be prepared to take action next year if you have trees you want to protect. Here is

a link to information on the Cherry Scallop Shell Moth
http://na.fs.fed.us/spfo/pubs/pest_al/cssm/cherry_scallop_shell_moth.htm.



Photos 5, 6. Damage caused by Cherry Scallop Shell Moth. Photos by Todd Lanigan.

Fall Webworm (By Todd Lanigan)

Fall webworm nests started showing up the last week of June. This is a native insect that feeds on deciduous trees and shrubs, and it is around every year. It forms loose webbing over branch tips and if it is a small tree, the entire tree can be completely webbed. Inside the webbing you will find the caterpillars, partially eaten leaves and frass. Fall webworm is more of an aesthetics problem that can be controlled like eastern tent caterpillars. Either open up the webbing so predators can eat the caterpillars or use a rake, fishing pole, etc. and roll the webbing up. Peel the rolled webbing off and place the entire web in a container of soapy water for a couple of days. Insecticides, if used, need to be labelled for caterpillars/fall webworm and the spray needs to penetrate inside the webbing. With all pesticides, the user needs to read and follow label directions. There is no need to prune off infested branches. If the tree is healthy, the defoliation should not harm the tree. Here is a link to information on the fall webworm <http://ento.psu.edu/extension/factsheets/fall-webworm>.



Photo 7. A silk nest formed by fall webworm caterpillars. Photo by Todd Lanigan.

Elm Sawfly (By Todd Lanigan)

I got my first call and photo of Elm Sawfly last week from Dunn County. I usually get a few calls on these every year. This is the largest sawfly found in North America. The larvae look like caterpillars of butterflies and moths, but are actually related to bees and wasps. Caterpillars are typically light yellow or green with a black stripe running down the back but occasionally are light pink or orange. The larvae prefer to feed on elm and willow, but there are a few more deciduous trees they will feed on. When the caterpillars are resting on the tree, they are usually curled up on the leaf. Elm sawfly caterpillars can cause significant defoliation to the tree. Caterpillars can be handpicked and dropped in soapy water or crushed. Insecticides are rarely necessary but should be labelled for sawflies if used. If the tree is healthy, the defoliation should not harm the tree. Here is a link to information on the elm sawfly <http://extension.missouri.edu/p/IPM1019-15>.



Photo 8. An elm sawfly larva. Photo by DNR forester Rob Strand.

Diseases

Hundred Cankers Disease of Hickory

Hundred Cankers Disease is the name of insect/disease complex that started causing hickory mortality in Wisconsin around 2005. Recently published research by Jenny Juzwik, with the US Forest Service, found that the native hickory bark beetle and the wilt fungus *Ceratocystis smalleyi* are the major players. As with other similar insect/disease complexes the bark beetles spread the fungus to the tree and the fungus kills the tree rapidly (within ~1 year).

For additional information on Hundred Cankers Disease check out:

- http://www.nrs.fs.fed.us/pubs/gtr/gtr-nrs-p-117papers/18-juzwik_2012-chfc.pdf
- http://www.fs.fed.us/foresthealth/fhm/posters/posters09/assessment_etiology_hickory_decline.pdf



Photo 9. Hickory killed by Hundred Cankers Disease.

Thousand Cankers Disease Found in Indiana

Thousand Cankers Disease was recently confirmed in Indiana, the closest find to Wisconsin so far. The most notable part of this detection was that although the disease was confirmed in the infected walnut trees the usual vector insect, walnut twig beetle, was not found. Further investigation revealed that the infection was likely brought in by weevils. Further research will be needed to determine how large of a role the weevils are likely to play in spreading TCD.

Crazy Worms

Need another invasive to worry about? Here come crazy worms, *Amyntas agrestis*! The invasive worms, that twist and jump when handled, were confirmed in the UW Madison



Arboretum in 2014. The worms are very damaging to the soil and are yet another major invasive concern for Wisconsinites. A few articles about them:

- <http://www.jsonline.com/news/wisconsin/asian-crazy-worm-is-latest-invasive-species-in-state-b99311904z1-267228811.html>
- <http://news.discovery.com/earth/plants/invasive-jumping-earthworm-found-in-the-midwest-140719.htm>

Photo 10. A crazy worm found at the UW Arboretum. Photo by UW Madison Arboretum.

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



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

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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 dnrfrgypsymoth@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 any state or local laws regarding pesticide use.