

# Southern Region Forest Health Update

## Wisconsin DNR, Forest Health Protection Unit

October 4th, 2013 Vol. 10 No. 6

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Articles in this newsletter were written by Mark Guthmiller, Regional Forest Health Specialist, unless otherwise noted.

### Emerald Ash Borer– Bill McNee

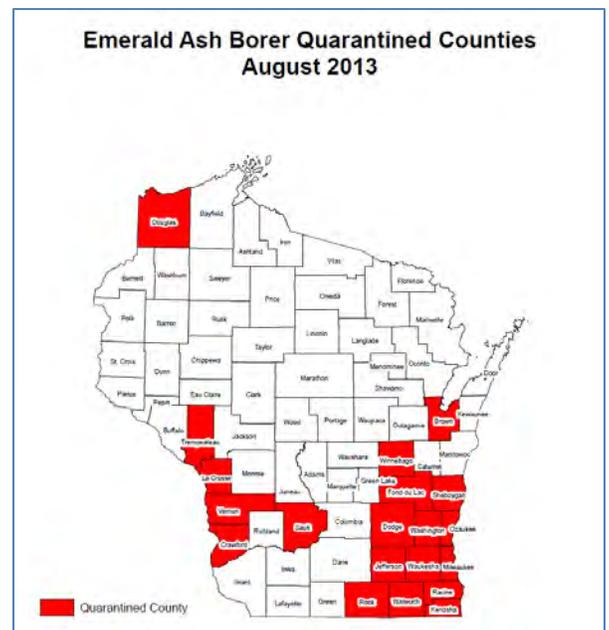
#### Wisconsin Quarantine and Detection Updates

Since the last Southern District pest update was sent out in August, we have had additional finds of EAB in southern Wisconsin counties where EAB was already known to be present:

- Waukesha County - City of New Berlin and City of Waukesha
- Milwaukee County – City of West Allis
- Walworth County – Town of Lafayette

Wisconsin has five new county detections of EAB so far this summer: Dodge, Douglas, Fond du Lac, Sauk, and Winnebago Counties. Signs of EAB were detected just across the border of Walworth County in Jefferson County. To officially confirm presence of EAB in a new county such as Jefferson County, a life stage such as a beetle, larva, or pupa is needed. Jefferson County has also been added to the EAB quarantine. A complete municipal EAB detection list is available online at:

<http://datcpservices.wisconsin.gov/eab/articleassets/ConfirmedEABFindsinWisconsin.pdf>.



EAB-quarantined counties as of October 1, 2013.



## Asian Longhorn Beetle-Bill McNee

We have learned of two new detections of ALB in the past few weeks: on Long Island, New York and in Mississauga, Ontario (a suburb of Toronto). Long Island has had a number of prior ALB detections, and some of them are still in the process of being eradicated (eliminated). ALB had been declared eradicated from Canada earlier this year, but it was hiding near the Toronto airport. ALB eradication efforts are currently underway in the states of Ohio, Massachusetts and New York, and will likely resume in Ontario.



Asian Longhorned Beetle adult and chewed-out egg pits. Photo from [www.forestryimages.org](http://www.forestryimages.org).

## Gypsy Moth- Bill McNee

### WI DATCP Male Moth Trap Catch Update

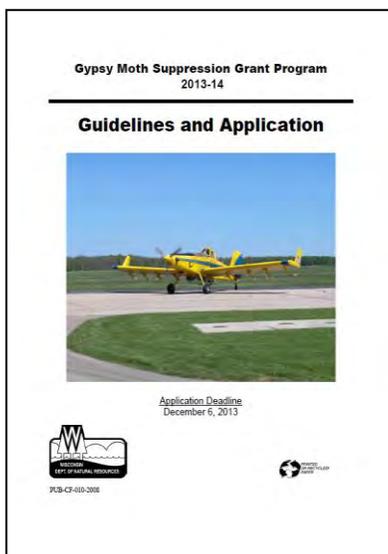
Trappers from the Wisconsin Dept. of Agriculture, Trade and Consumer Protection (DATCP) are currently taking down their grid of gypsy moth traps. 359,765 male moths have been trapped, with 99% of traps collected. Currently, the highest numbers of moths have been trapped in Bayfield County (83,930 moths), Ashland County (44,825), Jackson County (34,561), and Clark County (21,351).

### Egg Mass Predictive Surveys and Gypsy Moth Suppression

Egg mass surveys can now be done in order to predict gypsy moth populations in 2014. For more information on how to do egg mass surveys, visit [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov). Information on oiling or removing egg masses is also available at this website.



Gypsy moth egg masses. Photo by Bill McNee.



Applications for the 2013-14 DNR gypsy moth suppression program are due by Friday, December 6 of this year, and the application form is now available online at:

<http://dnr.wi.gov/topic/ForestHealth/documents/2400131.pdf>. A list of county and municipal gypsy moth contacts is available at [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov). If you decide to participate in the suppression program to spray in 2014, please let Mark Guthmiller or Bill McNee know in advance of the December deadline ([mark.guthmiller@wisconsin.gov](mailto:mark.guthmiller@wisconsin.gov) or [bill.mcnee@wisconsin.gov](mailto:bill.mcnee@wisconsin.gov)).

If an area is thinking of participating in the DNR suppression program to spray in 2014, oil the masses or wait until this December to remove them so that surveyors can determine if an area should be sprayed.

## Updated Guide to Privately-Organized Aerial Spraying

The DNR Forest Health Program has revised its guide to setting up privately-organized aerial spraying for forest pests. Legal changes have made it easier to organize your own spraying than in the past. The guide can be found online at: <http://dnr.wi.gov/topic/ForestHealth/documents/PrivateAerialSpray.pdf>.

## Firewood Rule Change Proposed-Bill McNee

In order to increase the protections against forest pests and diseases being imported to state properties, the DNR is proposing to reduce the allowable distance for importation of firewood brought onto state parks, forests and recreation areas from 25 miles down to 10 miles. Firewood that is certified by the Wisconsin Dept. of Agriculture, Trade and Consumer Protection (DATCP) would continue to be exempt from this rule. Public hearings will be held Oct. 29<sup>th</sup>. For more information visit: [http://dnr.wi.gov/news/BreakingNews\\_Lookup.asp?id=2950](http://dnr.wi.gov/news/BreakingNews_Lookup.asp?id=2950)

## Thousand Cankers Disease (TCD)

### WI DNR Walnut Beetle Trapping Update

Scott Schumacher, our summer trapping lead, is now in the process of taking down traps. Samples that have been collected and stored will continue to be screened over the next month for presence of the walnut twig beetle. To date, no walnut twig beetle has been found in Wisconsin.

### TCD Confirmed in Ohio

The walnut twig beetle, associated with TCD, was trapped in Ohio in 2012. Branch sample isolations detected the *Geosmithia morbida* fungal canker pathogen this year in Ohio, confirming the presence of this disease. For more information visit:

[http://www.agri.ohio.gov/public\\_docs/news/2013/08.12.13%20Tree%20Check%20Release.pdf](http://www.agri.ohio.gov/public_docs/news/2013/08.12.13%20Tree%20Check%20Release.pdf)



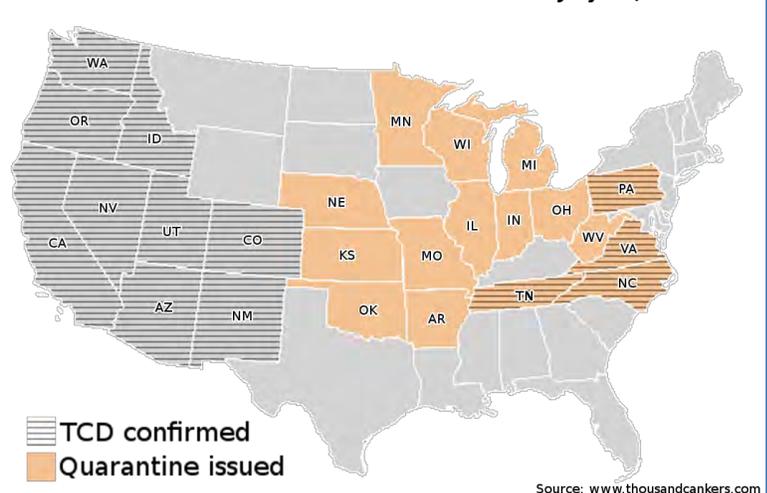
Educational sample showing walnut twig beetle holes and associated shallow cankers displayed at recent North Central Forest Pest Workshop. Note the arrows with circled cankers that form just under outer bark.

### Third Annual Conference on TCD and EAB in the Eastern United States

This upcoming conference is planned for December 13-15<sup>th</sup> in Knoxville, TN. For more details on this and past conferences visit:

<http://www.protecttnforests.org/conference.html>

Distribution of Thousand Cankers Disease as of July 12, 2013



Distribution range map for Thousand Cankers Disease. Note that the Ohio confirmation has not yet been added to the map.

## Hickory Mortality

Earlier this summer, I visited a woodland site in southeast Jefferson County that was experiencing mortality to shagbark hickory. After following up with samples and lab testing it does not appear to be related to the more commonly encountered hickory bark beetle and *Ceratocystis smalleyi* (and a few other fungi) complex. Hickory timber beetles, *Xyleborus celsus*, were collected from samples low on the main trunk which exhibited entry/exit holes going deep into the sapwood. The resulting inner wood discoloration was similar to what NE forest health specialist, Linda Williams, has observed with maple and ambrosia attack in the past. Lab isolations of the hickory discoloration zone confirmed the presence of *Phomopsis*, a fungus which is commonly associated with gall like growths and cankers on branches. If others are seeing similar issues of lower bole insect attack and inner wood discoloration with hickory, I would be interested in hearing from you.

For more information on hickory timber beetle visit;  
[http://wiki.bugwood.org/Archive:Borers/Xyleborus\\_celsus](http://wiki.bugwood.org/Archive:Borers/Xyleborus_celsus)

For more information on various issues of hickory dieback and mortality and *Phomopsis* visit:  
<http://dnr.wi.gov/topic/ForestHealth/documents/HickoryMortalityFactsheet.pdf>

<http://greenindustry.uwex.edu/problemdetails.cfm?problemid=14>



Hickory timber beetle attacks in lower bole of a shagbark hickory. Note arrows pointing to tunnels in sapwood.



Discoloration of inner wood appears to be associated with hickory timber beetle attacks. Lab isolations recovered the fungus, *Phomopsis*, from the discolored streaked area. What role this fungus may be playing in tree mortality is unknown.

## Two-lined Chestnut Borer

As anticipated after last year's drought, damage to oaks from two-lined chestnut (TLCB) borer appears to be on the increase. A number of reports and observations of oak mortality were attributed, at least in part, to this critter. Late season branch flagging was also very evident on many oaks in southern Wisconsin. While drought levels have been subsiding, the lingering effects will likely be felt for a year or two at least. We should remain alert for outbreaks of this pest going into next year.

Some of the TLCB related observations are listed below:

Devils Lake State Park, Sauk County:

Reports prompted some oak mortality surveys at Devils Lake State Park. Ten trees were sampled for oak wilt, two-lined chestnut borer, and Armillaria root rot. All ten trees were positive for oak wilt, two survey areas had evidence of Armillaria root rot, and seven of the sampled trees had extensive infestations of TLCB (along with oak wilt).

Grant County Red Oak Plantation:

Samples were submitted from a young red oak plantation experiencing mortality. Test results were negative for oak wilt but positive for TLCB, a round headed woodborer, and Botryosphaeria canker.

Iowa County Bur Oak

A rural woodland owner was reporting Bur oak declining on her property southeast of Dodgeville. While signs of Bur oak blight were evident on the most impacted trees, branch peeling indicated TLCB as a major player in the dieback observed. A visual survey of early browning of bur oak was conducted around this area. Although not confirmed specifically as bur oak blight, the area of early browning was quit extensive (but low frequency). I suspect we will see scattered individual bur oaks in this area with dieback and possible mortality going into next year, primarily by TLCB damage. Bur oak blight may be playing a role in added stress to these trees.



Extensive TLCB damage and numerous larvae found on the main bole down to the base at base of a number red oak at Devils Lake. These trees were also positive for oak wilt.



A young red oak plantation in Grant County was impacted by TLCB, round headed woodborers, and Botryosphaeria canker.



A bur oak, exhibiting signs of bur oak blight, had extensive damage by TLCB, causing major dieback in the most symptomatic trees.

## Cherry Scallop Shell Moth

Will conducting some ash surveys around Mirror Lake, I came across a small population of cherry scallop shell moth on black cherry at the Dell Creek State Wildlife Area. Cherry scallop shell moth was also reported in some central and western counties back in July as well. The larvae form feeding shelters by wrapping a number of leaves around the stem. I always thought these rolled shelters were the reason for the name of this critter but it apparently is due to the winged pattern of the adult moth. Pulling the leaves apart you can see the larvae and/or frass (droppings), depending on time of year. Cherry scallop shell moth can build to outbreak levels causing defoliation to black cherry. Parasitoid wasps are reported to do a pretty good job though keeping this critter in check. In New York, outbreaks were reported to lead to attack by peach bark beetle causing mortality. It would be good for folks to keep an eye out for this pest next season if working in stands with a high quality black cherry.



Funnel shaped rolled leaf cluster formed by cherry scallop shell moth.



Frass can be seen in an old cherry scallop shell moth feeding shelter if you pull the leaves apart.

For more information on cherry scallop shell moth visit:

[http://www.forestpests.org/acrobat/cherry\\_scallop\\_shell\\_moth.pdf](http://www.forestpests.org/acrobat/cherry_scallop_shell_moth.pdf)

Here is a New York write up on cherry scallop shell moth:

[http://www.dec.ny.gov/docs/lands\\_forests\\_pdf/csmoth.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/csmoth.pdf)

For more information on peach bark beetle visit:

<http://dnr.wi.gov/topic/ForestHealth/documents/BlackCherryPest2.pdf>

## White Pine Herbicide Injury

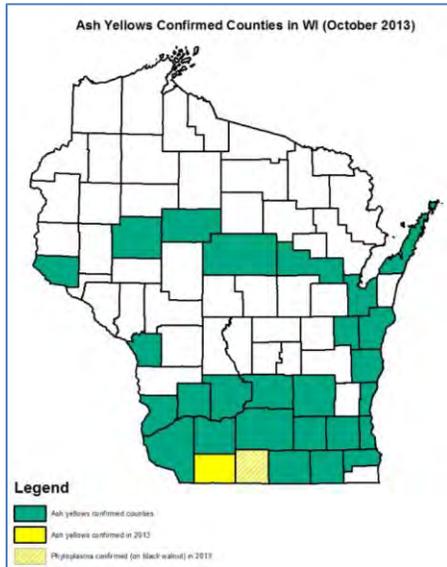
While out in Grant County on an oak wilt site visit with DNR forester, Allen King, the property owner asked us to take a look at some strange formed shoots on his small yard tree white pine. After checking the Sinclair and Lyon reference book, “Diseases of Trees and Shrubs”, the swollen terminal shoot symptoms are very similar to herbicide injury shown in the reference for Atlas cedar.



Suspect herbicide injury to young white pine showing swollen terminal shoots.

## Phytoplasma (Yellows) Test Results

DNR forest pathologist, Kyoko Scanlon, continued her annual request for samples of trees with suspect yellows. This effort started out with a focus mainly on ash yellows, but has expanded to other tree species. By expanding the species list tested, we have now confirmed yellows on a number of black walnut sites in southern WI over the last three years. Attached is a chart showing various hosts tested and the results by county. Thanks to Kyoko for satisfying my curiosity on some of these different plant species submitted. Testing results shown in the chart were conducted by the private lab, Agdia.



First county detections for ash yellows in Lafayette and yellows on black walnut in Green County shown on map.



Lafayette stand confirmed with ash yellows showing signs of dieback and mortality.

2013 Phytoplasma PCR test results		
County	Species	Result
<b>Brown</b>	<b>ash</b>	<b>Positive</b>
Dane	bush honeysuckle	Negative
Dane	black walnut	Negative
Dane	elm	Negative
Dane	hackberry	Negative
<b>Dane</b>	<b>white ash</b>	<b>Positive</b>
Dodge	basswood	Negative
Dodge	bitternut hickory	Negative
Door	white ash	Negative
Door	white ash	Negative
Door	black walnut	Negative
<b>Grant</b>	<b>black walnut</b>	<b>Positive</b>
Grant	elm	Negative
<b>Green</b>	<b>black walnut</b>	<b>Positive</b>
<b>Jefferson</b>	<b>green ash</b>	<b>Positive</b>
Jefferson	black walnut	Negative
Jefferson	green ash	Negative
Jefferson	black walnut	Negative
<b>Lafayette</b>	<b>ash</b>	<b>Positive</b>
Lafayette	boxelder	Negative
Lafayette	rasberry	Negative
Lafayette	green ash	Negative
Richland	white ash	Negative
Richland	balack walnut	Negative
Sauk	black walnut	Negative
<b>Sauk</b>	<b>white ash</b>	<b>Positive</b>
Sawyer	black ash	Negative



Closer inspection reveals “witches brooming” dense shoots, with stunted and chlorotic leaves.

## Miscellaneous Topics and Observations

### Bill McNee Gets New Office Phone Number

For those of you who have Bill in your EAB (or other forest pests) speed dial note that he now has a direct office number without an extension. The contact page at the end of this newsletter has been updated. His number is: 920-893-8543

### What is this? See answer below

I came across this critter while surveying ash trees in the Avon Bottoms of Rock County. The menacing looking face with mandibles would likely make a bird think twice before making this insect dinner. However this critter does not bite.



### Honeysuckle Aphid

While conducting yellows sampling, I came across some deformed shoots of bush honeysuckle. Since it was in the area of other suspect trees we sent a sample for yellows testing, which came back negative. This deformed growth is apparently caused by feeding of the honeysuckle aphid, *Hyadaphis tataricae*. I don't recall ever seeing this before but noticed it at two sites this year in Dane and Sauk County.

I found this write up from Illinois, where this insect started causing damage in the 1980's. Tartarian honeysuckles are apparently one of the susceptible species with some varietal exceptions. The article mentions aphid control recommendations but I had other ideas:

<http://urbanext.illinois.edu/hortanswers/detailproblem.cfm?PathogenID=94>



Honeysuckle "witches broom" growth caused by the honeysuckle aphid.

WI DNR information on invasive Tartarian honeysuckle:

<http://dnr.wi.gov/topic/Invasives/fact/TatarianHoneysuckle.html>

## King Alfred's Cake and Cramp Balls

King Alfred's cake and cramp balls! One can't make this stuff up. My cooking skills are probably not much better than King Alfred's, giving the fungus one of its common names (see link below). I was introduced twice in a month to this saprophytic fungus, that apparently is common on ash and other hardwoods. Liz Wood, our pathology lab assistant, explained how you can break open the "cramp ball" and see the concentric rings of the fungus, thus the latin name, *Daldinia concentrica*. A couple weeks later a co-worker brought in a sample from a piece of firewood, concerned about it being something nasty. I should have asked him about his cooking skills.



Concentric rings of King Alfred's cake, *Daldinia concentrica*.

For more information visit:

[http://en.wikipedia.org/wiki/Daldinia\\_concentrica](http://en.wikipedia.org/wiki/Daldinia_concentrica)

[http://botit.botany.wisc.edu/toms\\_fungi/dec2004.html](http://botit.botany.wisc.edu/toms_fungi/dec2004.html)

## DNR Nursery Tree and Shrub Applications and Tree Replacement Grant

Nursery tree sales started last month. For more information on ordering trees from the DNR visit the nursery program website. Note also on this site that there is a link to information on drought killed seedlings. Landowners who have experienced a significant loss this year in trees planted in 2008 through 2012 may be eligible to receive a grant for replanting the trees lost under the [Wisconsin Forest Landowner Grant Program](#). Emergency Funds have been designated again this year for tree planting failures of greater than 25 percent due to the 2012 drought in 49 counties. For more information visit: <http://dnr.wi.gov/topic/TreePlanting/>

## USDA Online ID Tools (check back later)

Dick Rideout shared this information with staff and it looks like a wealth of great information for identifying insects, plants, and other critters. For you taxonomists, check it out: <http://www.idtools.org/>

For more information on this resource:

<http://blogs.usda.gov/2013/08/14/busting-bugs-usda-creates-online-tools-to-id-pests/>

## What is this? Answers:

Giant Crane fly. I know, I know, I didn't put in the whole picture but it was an amazingly large crane fly with an interesting pattern. For more information and better pictures visit:

<http://www.americaninsects.net/f/tipula-abdominalis.html>

and if you are really into crane flies visit:

<http://iz.carnegiemnh.org/cranefly/>



# SOR Forest Health Assistance

## Wisconsin DNR, Forest Health Protection Unit

### October 2013

#### Contacts for DNR staff, municipal foresters, and forestry cooperators

<p>Mark Guthmiller          Forest Health Specialist          Wisconsin DNR          3911 Fish Hatchery Road          Fitchburg, WI 53711          Phone: (608) 275-3223          Email: <a href="mailto:Mark.Guthmiller@wisconsin.gov">Mark.Guthmiller@wisconsin.gov</a>  <b>Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, and Sauk</b></p>	<p>Bill McNee          Forest Health Specialist          Wisconsin DNR          1155 Pilgrim Rd.          Plymouth, WI 53073          Phone: 920-893-8543          Email: <a href="mailto:Bill.McNee@wisconsin.gov">Bill.McNee@wisconsin.gov</a>  <b>Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington, and Waukesha</b></p>
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**For a statewide forest health staff list:**

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

**Additional Program Web-based Resources:**

WI DNR Forest Health web site:

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

**Report Emerald Ash Borer:**

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://gypsymoth.wi.gov>

**(It is also recommended to report gypsy moth to your local government)**

**Please direct public inquiries regarding yard tree concerns to UW county or state extension offices:**

<http://www.uwex.edu/ces/cty/>



[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.]