Western and Central Wisconsin Forest Health Report – Sept. 2015

Topics covered this month:

Insects

- Emerald ash borer
- Gypsy moth
- EAB quiz
- Fall webworm outbreak
- Facebook photo
- Spruce budworm

Diseases

- Oak wilt in Rusk County

Invasives

- NR40 handouts
- Jumping worms

Arthropods

Emerald Ash Borer

Two new counties have been quarantined for emerald ash borer recently: Marquette and Jackson. A first detection also occurred in Richland County which was previously quarantined in 2014. This brings the total number of quarantined counties to 39. The Marquette and Richland County finds were beetles caught on traps. The Jackson County find was confirmed by larvae found in an infested ash tree.

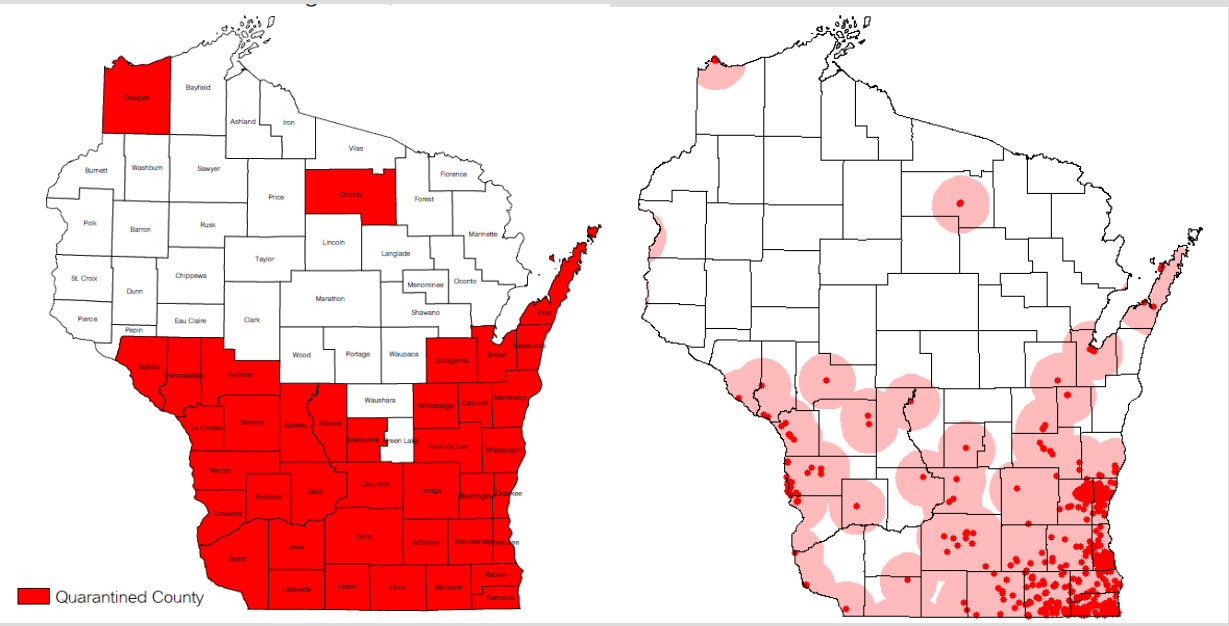


Figure 1. The 39 counties quarantined (in red) for EAB as of 09/01/15.
Figure 2. The known locations of EAB in WI (red dots) and 15 mile buffers (pink).

Photos 1, 2. An EAB infested tree outside the Black River Falls DNR office.

2016 Gypsy Moth Spray Program

Information on the gypsy moth spray program (guidelines and application) has been updated. If your county is thinking of applying for 2016, please check out this link. Forest health specialist Mark Guthmiller will be hosting a training session September 15 in Fitchburg for counties interested in the aerial spray cost share program. The training will be useful for county suppression coordinators, municipal foresters, town clerks or other municipal representatives, volunteers, DNR property managers, and consulting arborists or foresters who may be hired by county or local officials.

Photo 3. Gypsy moth egg masses on an oak branch.

EAB Quiz

You have 10 seconds! Is this EAB?

Photo 4. A photo of what may or may not be emerald ash borer.

Answer on next page

Note: I'm asking because an arborist texted me a photo of this beetle recently.

Answer: No, this is not EAB but it's in the same group of metallic wood boring beetles. This is *Buprestis striata* (no common name). Here is a photo with an EAB adult for comparison.

Photo 5. Comparison of *Buprestis striata* (left) and EAB (right).

The size and color are the most obvious differences. *B. striata* ranges in size from 13-20 mm in length. This specimen is 20mm long. EAB is 10-13mm in length so the size could be very similar. And color is highly variable (see the B. striata to the right and other color variations on BugGuide http://bugguide.net/node/view/74028). The raised stripes on the back of *B. striata* of are probably the most obvious distinguishing feature (in combination with the size, color and overall shape).

In Wisconsin, *B. striata* attacks dying spruce, hemlock and white pine.

If you would like to learn more about this group of insects check out a Field Guide to the Jewel Beetles (Coleoptera: Buprestidae) of Northeastern North America by S.M. Paiero et al. 2012 (published by Canadian Food Inspection Agency).
http://www.emeraldashborer.info/files/eab_id_guide.pdf

Photo 6. The bronze form of *B. striata.*

Unusual Fall Webworm Outbreak

Fall webworm damage is a common site in mid- to late summer on a variety of hardwood tree species include alder, ash, cherry, cottonwood, elm, maple, various fruit trees, walnut and willow. Typical damage is a few webbed and defoliated branches. Rarely a whole tree or a few trees are defoliated. But a recent outbreak reported to us by a landowner in Monroe County takes fall webworm damage to a new level! The landowner has a more than 5 acre stand of black ash with understory cherry (among a few other species) that was almost completely webbed and defoliated. Other patches of severe defoliation were found on this and nearby properties. Damage this severe is very unusual for this insect. The most severe fall webworm damage recorded occurs along river corridors so perhaps the stream running through this property is a contributing factor. Fall webworm has lots of predators and parasites so hopefully they will take care of the problem and allow the trees to recover. Fall webworm is a native insect and no management is typically necessary. As with Eastern tent caterpillars (spring defoliators) it's easiest to remove the tents and caterpillars by hand or with a tool if a landowner considers the damage unsightly. We will continue to monitor this site next year to see if the severe damage continues.

Photos 7, 8, 9. A fall webworm caterpillar feeding and the severe defoliation caused by the caterpillars.

Facebook Photo

Forest health specialists help out by identifying insect and disease pictures posted on the DNR Facebook page. We were recently asked to ID the excellent photo above submitted by Michele Thielke. This insect is not only very attractive but also a notorious parasite! It's a bot fly! The larvae are parasites (eat the flesh) of mammals, including humans. The larvae of this beauty are parasites of rabbits. The adults do not feed and often mimic bumblebees. Lots of gross videos on YouTube if you are so inclined.

Photo 10. A bot fly photo submitted to the DNR Facebook page by Michele Thielke.

Spruce Budworm Doc

Several forest health staff recently finished up a document to help foresters and landowners with management of the ongoing spruce budworm outbreak in northern WI. The handout is attached to the email if you receive this newsletter directly. If you are viewing this online and would like a copy please email us (contact info is at the end of this newsletter).

Diseases

Oak Wilt Strikes the Blue Hills of Rusk County

By Paul Cigan

In June 2015 an additional oak wilt infection was confirmed in Rusk County—Wilson Township. The infection was found in a mature northern red oak-dominated stand on Country Forest property in the heart of the Blue Hills. Additionally, although lab results for oak wilt were inconclusive, spore mat formation on dead oaks provided field diagnostic evidence of infection in the townships of Murray, Strickland, and Wilkinson. The primary risk factor linked to the infection in all cases was spring and early summer harvesting in 2014 resulting in bark damage and branch breakage on residual oaks. An aerial detection survey of these four townships in late August revealed multiple suspected infection sites located either near previously documented infection centers or in isolated, currently undocumented areas; further investigation of these sites will be performed via ground survey.

Photo 11. Oak wilt spore mats underneath bark of mature n. red oak killed in 2014 (Rusk Co).

The Rusk County Forestry Department expressed commitment to oak wilt management through the following mitigation strategies to reduce further disease spread and impact:

1. Amended timber sale contracts for stands in which oak wilt was recently detected; such contracts now require oak harvest restriction and verbal notification from contract loggers to mills about possible presence of infectious wood
2. Applied oak harvest restriction to future timber sale contracts for stands with a substantial oak component, as of 2014
3. Implementing the cut-stump herbicide treatment in September 2015 followed by pre-salvage harvest of infection pocket
4. Exploring participation in WI DNR frill-girdle herbicide, oak wilt containment study

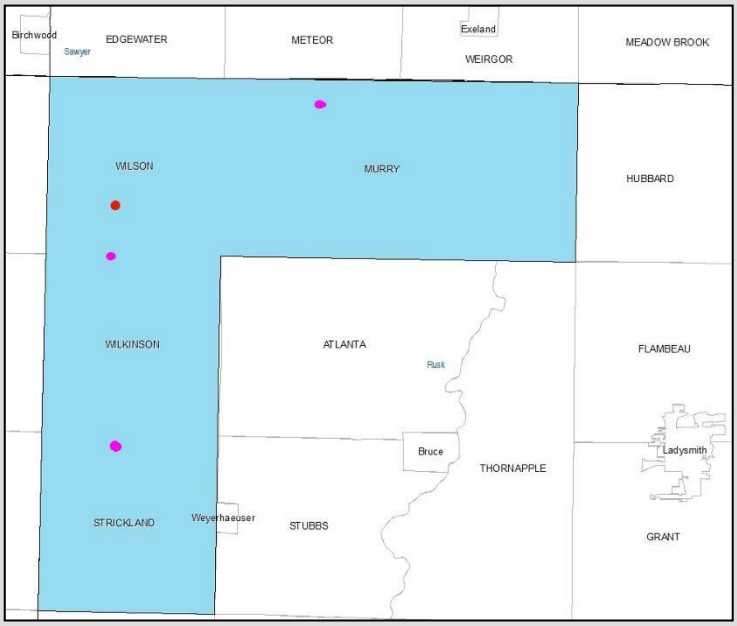


Figure 3. Townships (in blue) in Rusk County where oak wilt infection was confirmed in 2015 by either lab culture (red dot) or spore mat presence (purple dots).

Invasives

New NR40 invasive plant handouts

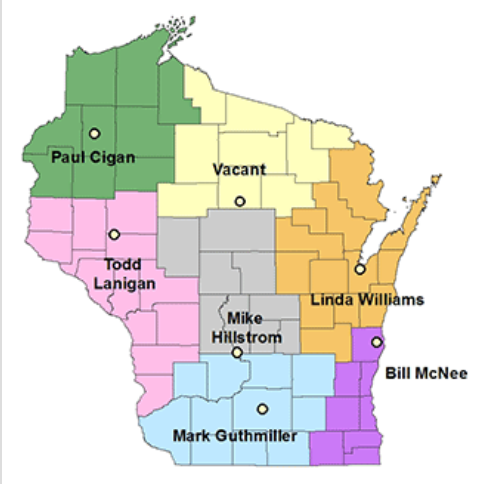
Handouts are now available for the terrestrial invasive plants newly listed on NR40 in 2015.

- http://dnr.wi.gov/topic/invasives/documents/NR40_handout_Rd2_Final_vcs5.pdf

Jumping Worms

If you are looking for information on jumping worms check out the new webpage on the DNR internet site (http://dnr.wi.gov/topic/Invasives/fact/jumpingWorm/index.html). We are continuing to search for new infestations of this extremely damaging invasive species. Currently, the area of greatest concern is four counties in southern WI (Dane, Jefferson, Waukesha and Milwaukee) where multiple finds have been confirmed.

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



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

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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 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 state or local laws regarding pesticide use.