Northeastern Wisconsin Forest Health Update

Wisconsin DNR – Division of Forestry

October 24, 2013

Topics covered this month:

Insects:
Asian longhorned beetle
Box elder bugs, ladybugs, and wasps, oh my!
Deer ticks
EAB new locations in counties already quarantined
EAB at Newburg 2012 to 2013
Gypsy moth

Diseases:
Ash yellows
Beech bark disease

Other:
Branch mortality on Norway maple
Firewood, fuelwood, or logs, are they all quarantined the same?
Firewood rule hearings

Of Historical Interest:
1953 – European pine shoot moth, smaller European elm bark beetle
1988 – oak wilt and Marinette County map

Insects

*information and photos in this document from Linda Williams unless otherwise noted.

Asian longhorned beetle – we get a lot of reports of Asian longhorned beetle (ALB) throughout the summer as folks spot our native White Spotted Sawyer (Pine Sawyer) beetles flying around. We can generally take a quick look and rule out ALB but it's important to keep looking. ALB was recently reported in Long Island, New York, and in Mississauga, Ontario, Canada. Both Canada and New York have previously had infestations that they eradicated (which includes 5 beetle-free years before eradication is declared). The newest finds were both outside quarantine zones, and outside previous eradication areas. If you get a sample in that

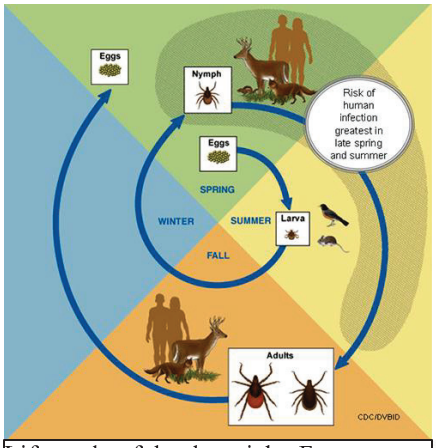
Asian longhorned beetle adult. Photo by PA DCNR.

you're not sure whether it's our native beetle or not you can send the sample to me (or your appropriate Forest Health Specialist) or send a picture.

Box elder bugs, ladybugs, and wasps, oh my! – it's that time of year, when cool nights and warm sunny days prompt some insects to congregate. This year I have not had any reports of major infestations, just your average year so far for box elder bugs, ladybugs, and wasps. If you're having problems with them invading your house you could consider spraying the exterior to keep them out, although it may be a bit late for it to do much good this year. When you get calls about ladybugs or box elder bugs inside the home you can recommend vacuuming the critters up (and disposing of the bag), since squishing them will stain whatever they are squished on.

Multicolored Asian ladybeetles.

Deer ticks – deer ticks are out! Just because the weather is cooling down and other insects are wrapping up their season, don't assume that the ticks aren't out anymore. Deer ticks have a 2-year life cycle, so in the fall of the year there are both adults and nymphs present. They can be active any time that the temps are above freezing, including some winter warm-ups. UWMadison has a webpage with more info on the ticks of Wisconsin http://labs.russell.wisc.edu/wisconsin-ticks/wisconsin-ticks/



Life cycle of the deer tick. From http://www.cdc.gov/lyme/transmission/blacklegged.html

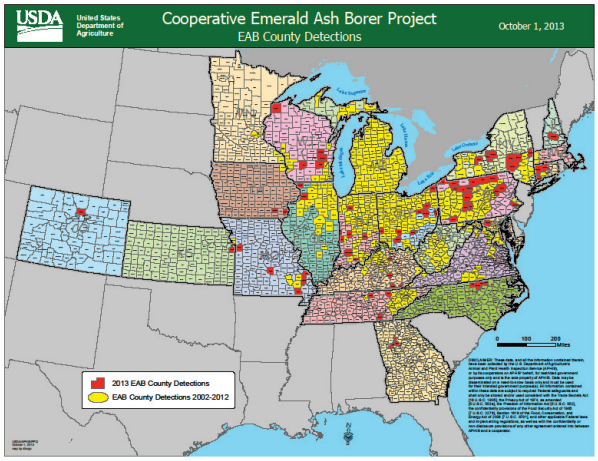
EAB new locations in counties already quarantined – when emerald ash borer is first found in a county it often makes the news; but what about after that, when it is found for the 2nd, 3rd, or 4th time in a county? Well, quite frankly, it may or may not make the news.

In the past month emerald ash borer has been identified in the following areas around the state:

- Racine County, Town of Dover

And now that the federal shutdown is over, the latest maps are out for nationwide EAB locations. The map below shows counties in red that have been newly quarantined in 2013. EAB continues to spread. The newest state to find EAB was Colorado at the end of September, when a City of Boulder Forestry staff person reported it. And lest you think that EAB is only a problem in North America … in Russia it is finding European Ash a suitable host.

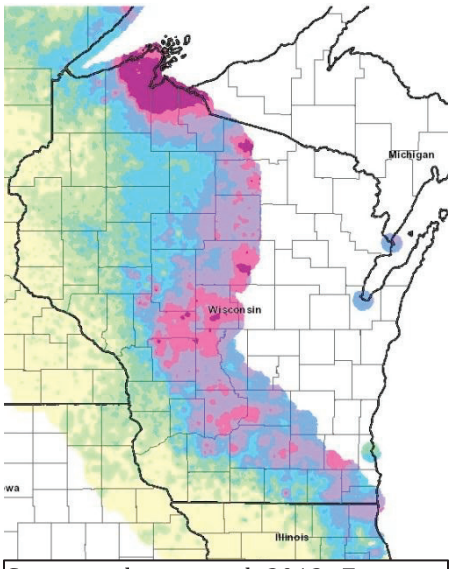
Counties quarantined for EAB shown in red.



EAB at Newburg 2012 to 2013 – Newburg, WI, was the first location where we found EAB, back in 2008. Recently Bill McNee shared a couple of photos that he took in that area, one from 2012, and one from August of this year. The mortality is quite impressive.

These are slightly different angles of the same stand, 2012 mortality (left) and 2013 (right).

Gypsy moth – the trap numbers are in. Map at right is from the Slow The Spread Foundation website http://skynet.ento.vt.edu/da/da.htm with darker colors indicating higher numbers of moths per trap.



Gypsy moth trap catch 2013. From http://skynet.ento.vt.edu/da/da.htm

Egg mass surveys can now be done in order to predict gypsy moth populations in 2013. For more information on how to do egg mass surveys, visit www.gypsymoth.wi.gov. Information on oiling or removing egg masses is also available at this website.

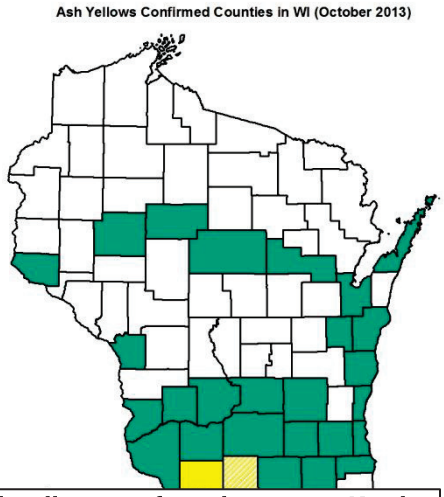
Applications to the 2013-14 DNR gypsy moth suppression program are due by December 6 of this year. Go to the Suppression page http://dnr.wi.gov/topic/ForestHealth/GypsyMothSuppress.html for more information on Applications (select Grants) and a list of local gypsy moth contacts (select Contacts then click on your county). If you decide to participate in the suppression program to spray in 2014, please let me know in advance of the December deadline (Linda.Williams@wi.gov). If you decide to do privately-organized spraying, a list of for-hire aerial applicators is available at http://dnr.wi.gov/topic/ForestHealth/documents/PrivateAerialSpray.pdf The December 6 deadline does not apply to privately-organized spraying.

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

Diseases

Ash Yellows – ash yellows is a disease that causes slow growth, branch dieback, and eventual mortality of ash. It is caused by a special type of bacteria - a bacterium without cell walls, called a phytoplasma. There is no known way to prevent or cure ash yellows.

There are a number of signs to watch for to determine if your trees are affected by ash yellows. Decline of the entire crown will occur, and leaves of infected trees may be smaller in size, and light green. Vertical cracks and cankers may appear on the trunk near the base. Infected trees often develop clusters of upright shoots, called witches brooms, along the trunk. The presence of witches brooms has been the key to confirming ash yellows in the field.



Ash yellows confirmed counties. Newly confirmed in 2013 on ash (yellow) and on walnut (yellow hash).

Sample collection and testing for phytoplasma has been completed for the year. There are now a total of 27 counties confirmed positive for ash yellows. Phytoplasma (yellows) was detected for the first time in Lafayette Co (on ash) and in Green Co (on black walnut) based on the PCR test conducted by Agdia (which does not distinguish the types of phytoplasmas). A variety of species were tested this year, including ash, black walnut, box elder, basswood, bush honeysuckle, elm, hackberry, bitternut hickory, and raspberry (only ash and black walnut were positive). Ash, black walnut, and butternut have been confirmed positive with phytoplasma in Wisconsin, based on the genetic test that we have been doing.

For more info: http://www.na.fs.fed.us/pubs/howtos/ht_ash/ash_yell.pdf or http://hort.uwex.edu/articles/ash-yellows The forest service factsheet recommends that trees with greater than 50% crown dieback be removed within 5 years and other affected ash during subsequent harvests.

Beech bark disease – beech bark disease has been confirmed on Rock Island. So far in Wisconsin we have only found the scale populations exploding in areas of Door County. If you know of any beech outside of Door County that appear to be whitewashed or have lots of white fuzzy stuff on their bark, please let me know, or take some pics and send to me.

Beech with heavy scale population (the white fuzzy stuff) on Rock Island. Photo by Randy Holm.

Other/Misc.

Branch mortality on Norway maples – in the August and September updates I posted info about sudden branch mortality on Norway maple this past summer. Samples were sent to Brian Hudelson (UW Plant Disease Diagnostic Clinic) for testing. Some samples turned up nothing, and the damage is attributed to drought stress and/or girdling root issues. But one sample that I sent in did have some fruiting bodies of *Tubercularia*, which Brian says is a "fungus that has been reported as an asexual stage of Nectria".
The current list of locations reporting this problem include Allouez, De Pere, Green Bay, Howard, Lena, Peshtigo, Oconto Falls, Oshkosh, Wausaukee, which equates to the following counties: Brown, Marinette, Oconto, and Winnebago Counties.

Firewood, Fuelwood, or Logs, are they all quarantined the same? – Chris Deegan, with WI DATCP, recently clarified a question regarding firewood versus logs as it relates to EAB quarantines and compliance agreements. He states:

All **non-ash** timbers greater than 4 ft. in length that will be transported out of an EAB quarantine are considered logs for our regulatory purposes, even if the eventual intended use may be split firewood.

At that size, identification to species is relatively easy, and there is virtually no EAB risk from non-ash timber products leaving the quarantine. For example, a 6 ft. hickory log is allowed to move, even if at some point the owner will split it for firewood. After splitting, that log will be regulated as firewood, but not before.

The purpose of this policy is to prevent any unnecessary increase in enforcement workload for both DATCP staff and DNR cooperators. In the EAB quarantine, only ash logs are regulated; it's not an efficient use of resources to regard non-ash logs in the EAB zone as falling under this stricter (but useless) scrutiny. So a maple/oak/cherry/*etc* log can leave the EAB forest unregulated, without inspection or documentation.

Note that the GM quarantine throws a broader net, since **all** logs coming out of a GM-quarantined forest are regulated, regardless of species or firewood intentions. That same maple/oak/cherry/*etc* log in the GM forest will be regulated as a log, and not as firewood – but it will still be regulated, requiring inspection.

Firewood Rule Hearings – on Tuesday, October 29, 2013, there will be public hearings around the state regarding the change to the firewood regulations on state lands. The public hearing notice for the proposed change to the firewood regulations on state lands is available at https://health.wisconsin.gov/admrules/public/Rmo?nRmoId=13863 where you can read the background, see the schedule of hearing locations, and email your comments in directly (at the bottom of the page).

Of Historical Interest

60 years ago, in 1953 –
Important Recent Insect Introductions

- European Pine Shoot Moth (*Rhyacionia buoliana*) – This pest of Norway pine continues to spread northward and has been found as far north as Manitowoc. Infestations were heavy in Milwaukee, Waukesha, and Sheboygan Counties. Infestations in Milwaukee are sustained largely by mugho pine.
- Smaller European Elm Bark Beetle (*Scolytus multistriatus*) – An isolated case was found in 1952 in Wauwatosa, a suburb of Milwaukee. This pest is associated with Dutch Elm Disease which follows shortly after the bark beetle vector. This is the only case reported to date in Wisconsin.

25 years ago, in 1988 –

- Oak Wilt – *Ceratocystis fagacearum* – No new counties reported oak wilt in 1988. Oak wilt control efforts have been intensive in two counties, Marinette and Menominee. One new pocket was observed in Marinette and two in Menominee. This was a significant drop in new infections compared to previous years. Two lined chestnut borer, drought, and Armillaria root rot affected many more trees than oak wilt in both these counties. Oak wilt was also prevalent on sandy sites in western St. Croix, Eau Claire, Jackson and eastern Monroe counties in western Wisconsin.

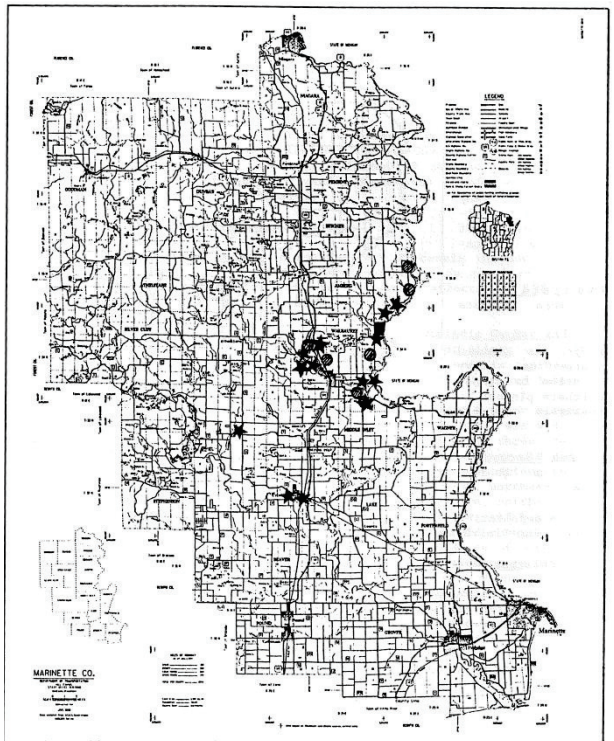
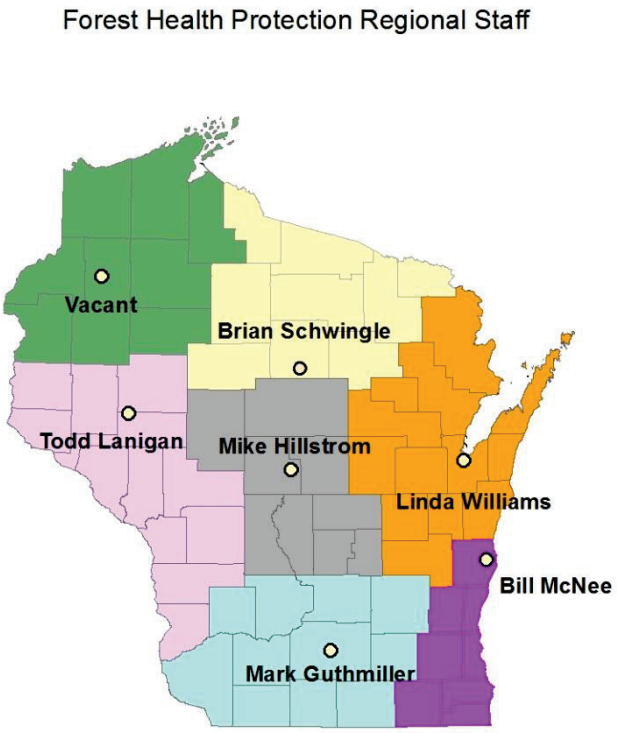


Figure 12. Locations of Oak Wilt pockets in Marinette County detected in 1988 (square), in 1987 (circle) and prior to 1987 (star).

Locations of oak wilt pockets in Marinette County detected in 1988 (square), in 1987 (circles), and prior to 1987 (stars).

Contact Us

Forest Health Staff - contact info for each Forest Health Specialist can be found our webpage at
http://dnr.wi.gov/topic/ForestHealth/staff.html



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://www.gypsymoth.wi.gov/

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Note: This pest update covers forest health issues occurring in Northeastern Wisconsin. This informal newsletter is created to provide up-to-date information to foresters, landowners, and others on forest health issues. If you have insect or disease issues to report in areas other than northeastern Wisconsin please report them to your local extension agent, state entomologist or pathologist, or area forest pest specialist.

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.