# Northeastern Wisconsin Forest Health Update

## Wisconsin DNR – Division of Forestry

## August 3, 2015

Topics covered this month:

**Insects:**
Ash bark beetle
Barklice
Cherry scallop shell moth
EAB new finds in WI
Fall webworm
Gypsy moth
Japanese beetle
Spider mites on tamarack
Spruce budworm
Yellowheaded spruce sawfly

**Diseases:**
Oak wilt
Spruce needle rust

**Other:**
Update on FH newsletter survey

**Of Historical Interest**
25 years ago - 1990 –
Balsam fir sawfly
Spruce budworm
60 years ago - 1955 –
Spruce budworm
Maple webworm

# Insects

**Ash bark beetle –** recently I saw ash trees in Brown County and Waupaca County that had the bark stripped off by woodpeckers going after larvae under the bark. It turned out the larvae were one of our native insects … ash bark beetle. Ash bark beetle creates small round holes,

Ash bark beetle galleries. Photo by Josh Waukau.

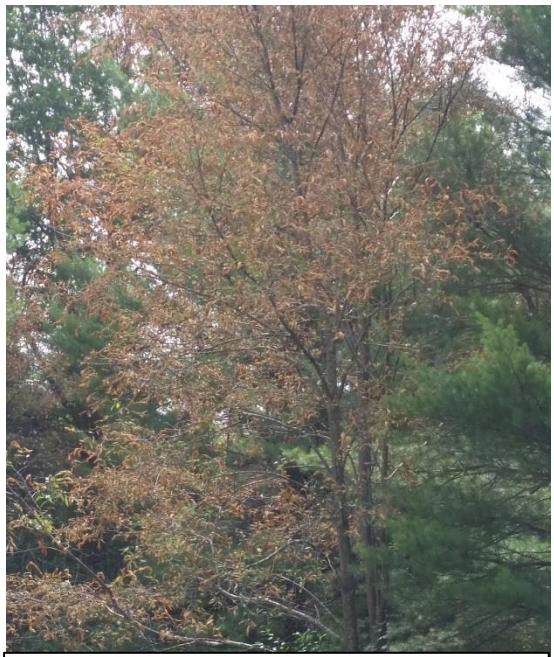
approximately 1mm in diameter, and there can be a lot of them under the bark. We have 3 different bark beetles that attack ash. Galleries underneath the bark are created by females as they lay their eggs. The eggs hatch and the larvae chew their own smaller galleries as they feed. This kind of damage can kill the tree or can kill branches, but usually only impacts trees under stress.

**Barklice –** barklice are congregating this year with the first reports coming in from Manitowoc, Shawano, and Waupaca Counties, but it seems to be an issue statewide this year. Barklice are not true lice, that's just their common name. They do not bite and they do not carry diseases. Barklice feed on dead outer bark, under dead bark, on lichens, fungi, and algae. I'm not sure why they are found in large groups, maybe they are just gregarious and like to hang out as a group, or maybe it's to make them look scarier to predators (they are soft and tasty after all). You can let them live, look close, and enjoy the little stripes on their abdomens, they don't really do any damage to the trees.

Barklice. Immature insects have stripes on abdomen. Note the recently emerged adult (with shed skin) in upper right. The wings will darken as they dry. Photo by Greg Le Grave.

Barklice congregations on the bark of a tree. Photo by Mike Schuessler.

**Cherry scallop shell moth** – significant webbing and damage is showing up in some areas of Marinette and Oconto Counties on wild black cherry. Trees growing in the open, as well as understory trees are affected. Moths emerged in June to lay eggs. The caterpillars feed in groups and tie leaves together, feeding within the webbed leaves which provide protection from predators. These webbed leaves eventually turn brown, although the tree is not dead. After feeding is done for the season, the larvae drop to the ground to pupate and overwinter. Defoliated trees may not send out any new leaves this year. Mature black cherry that has been severely defoliated by cherry scallop shell moth may be at higher risk for attack by Peach Bark Beetle, *Phloeotribus liminaris.* Understory black cherry usually recovers from this defoliation just fine.



Severe defoliation by cherry scallop shell moth. Photo by Derrick McGee.

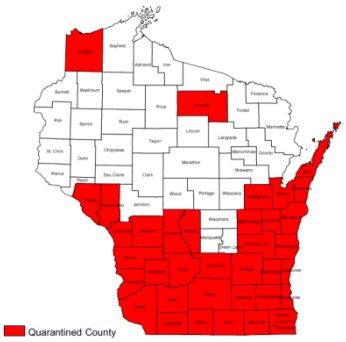
**EAB new finds in WI -** In the past month emerald ash borer has been identified in the following areas around the state:

New County Quarantines:

- none

New finds in Counties already Quarantined:

- Fond du Lac County – Town of Eldorado
- Grant County – Towns of Jamestown and Wyalusing
- Washington County – Village of Germantown
- Waukesha County – Town of Mukwonago



EAB Quarantine.

**Fall webworm -** webs are beginning to appear. Fall webworm does most of its defoliation later in the season, when the tree is preparing for fall. This will not kill the tree. It can be an ugly messy web nest that the insects create but again, it will not kill the tree. If it's just too ugly to look at I recommend tearing it down with a rake and soaking the whole thing in a bucket of soapy water to kill the caterpillars. There is no need to prune out portions of your tree just to get rid of the webs. Pruning out the branch that the web is on actually does more damage to the tree than the caterpillars themselves would do, likewise, burning them out with a flamethrower is considered overkill.


Fall webworm nest.

**Gypsy moth –** gypsy moth spraying (STS and Suppression) is done for the year. I've had one report from Brown County of high levels of entomophaga causing collapse of a population. Start watching for egg masses that you can scrape off and remove, or that you can oil, to help control the population.

**Japanese beetle -** these exotic invasive insects are starting to cause problems in some areas this summer, although so far reports and damage are generally light. These insects are occasionally mistaken for EAB because they have some metallic green coloring near their heads. More commonly people will refer to the Multicolored Asian Ladybeetles as Japanese beetles, but the ladybugs are ladybugs and Japanese beetles are scarab beetles.

Japanese beetle adults feed on the flowers and leaves of over 300 species of plants including trees, shrubs, and herbaceous plants. They can do significant defoliation. The larval stage of Japanese beetle is a white grub that lives in the soil and feeds on plant roots. University of Wisconsin Extension has more info including information on the damage caused by the adults, the damage caused by the white grubs, and what control measures are useful.


Japanese beetles.

**Spider mites on tamarack** – got yellow tamaracks? Heavy mite damage on tamarack causes the trees to appear dirty yellow from a distance. Up close the needles will look slightly off-color, have yellow stippling, and some fine webbing. Damage was widespread last fall in the north, and so far this year appears patchy but severe in some areas. I'm seeing this in Forest, Oneida, and Vilas Counties.

**Spruce budworm** – caterpillars are done feeding for this year. Moths have been emerging and should be done laying eggs soon, if they're not done already. An aerial survey was done to map areas of spruce budworm defoliation. Counties with extensive severe defoliation include Marinette County (pretty much all spruce and fir north of Crivitz), and Florence County (eastern half). Vilas County (especially northern Vilas) appears to have a building population, with some areas of severe defoliation, and other areas with lighter levels of defoliation.

Spruce budworm adult moth.

This native caterpillar goes through periodic cycles associated with the maturing of the balsam and spruce forests. Outbreaks can last 10-15 years. Some areas of Wisconsin are currently in their 4th year of defoliation, while others saw the first year of serious defoliation this year. I saw one localized area where tamarack was mixed with balsam fir and both were being defoliated by spruce budworm.

**Yellowheaded spruce sawfly** – a few widely scattered reports/samples of yellowheaded spruce sawfly have come in this year from Waupaca, Marinette, Door, and Vilas Counties. Some of the locations are in areas where spruce budworm is causing significant defoliation, which may mean some yellowheaded spruce sawfly damage is being reported as spruce budworm. Yellowheaded spruce sawfly will feed on all spruce, including Norway and blue spruce. They feed singly on the needles and can cause significant defoliation although it is usually patchy or limited to just a few trees. They do not clip and web needles together like spruce budworm does. Spruce trees growing in full sunlight are preferred. Sawflies are not a true caterpillar so Btk products labeled for use on caterpillars do not work for these critters, general insecticides will need to be used if you want to control them with pesticides. For more information check out the USFS document on Yellowheaded Spruce Sawfly.

Yellowheaded spruce sawfly larvae and feeding damage.

# Diseases

**Oak wilt** – symptoms of this disease are showing up now. Oaks that were infected with the fungus are currently dropping their leaves rapidly. Oak wilt is a non-curable fungal disease specific to oaks. Once a tree is infected with oak wilt the fungus will begin to spread outward

from the roots of the infected tree through root grafts and into the roots of neighboring oaks. In this way pockets will continue to expand, and each year more oaks will die.

***NOTE: To stop oak wilt you MUST do something about the root system. Simply cutting additional trees will NOT stop an oak wilt pocket because it doesn't address the root system.*** Want to discuss additional control alternatives besides the traditional trenching to cut the root grafts? Drop me an email or give me a call and we can discuss whether the use of herbicides to kill additional trees, or ripping stumps out of the ground would be a good solution for controlling your oak wilt pocket.

**Spruce needle rust** – has your blue spruce turned pink or orange? Or do you have black spruce or white spruce that appear yellowish from a distance? This is spruce needle rust, and symptoms can be worse at the top of the tree. Problems were noted in northern counties in 2013, 2014, and now again this year (Forest, Oneida, Vilas Co's). This fungus enjoys a moist spring, so this year it's doing well. As a rust it has an alternate host, probably a shrub in the heath family like Labrador Tea. The infected needles will drop prematurely. No treatment "cure" is available for the already infected needles. Preventative fungicide treatments for yard trees could be done next spring and early summer to protect new emerging needles but must be done before symptoms appear. Repeated treatments are necessary as the fungicide must coat the needle to protect it and has to be reapplied after it washes off or weathers off.

Spruce needle rust, orange coloring. Photo by Jason Quade.

Spruce with spruce needle rust looks off-color, either pink, orange, or yellow.

Spruce needle rust, pinkish coloring. Photo by Dan Beck.

# Other/Misc.

**Update on FH newsletter survey** – from Colleen Robinson-Klug. Thank you for your input! Earlier this year we asked you to complete a survey to provide feedback regarding the Forest Health Regional Newsletter updates you receive. The information you shared was extremely valuable to our team. As we continue to explore how to best serve you with these publications, we are carefully considering your input and the options available. We do not intend to change the way you receive these newsletters, or their format or frequency this year. We just wanted to send a belated and heartfelt thank you for sharing your time and thoughts with us. Stay tuned for more information about any improvements to your Forest Health Regional Newsletter Updates this winter.

# Of Historical Interest

**25 years ago, in 1990** –

- **Balsam fir sawfly** – *Neodiprion abietis* (Harris). Light defoliation was reported in one balsam fir plantation in Langlade County. No significant defoliation was reported in the northwestern counties where damage occurred in 1989.
- **Spruce budworm** – *Choristoneura fumiferana* (Clemens). Populations remained very low. For the second straight year, no egg masses were found in surveys in northwestern Wisconsin.

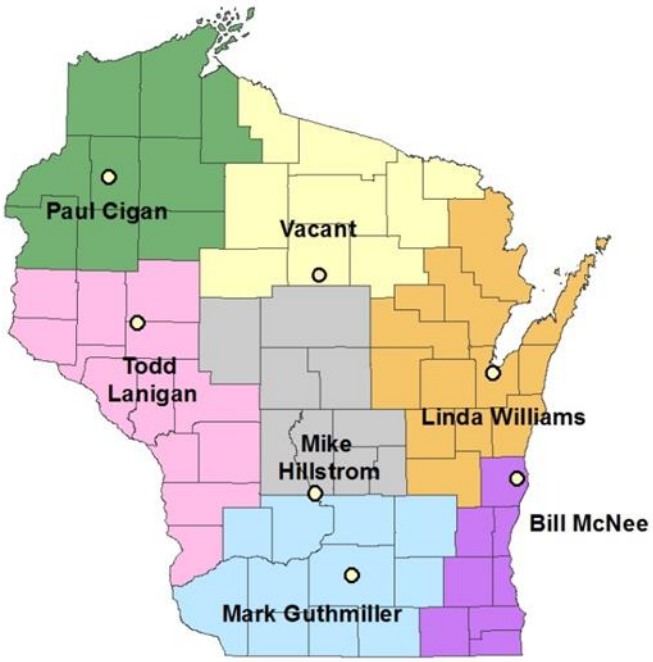
**60 years ago, in 1955** –

- **Spruce budworm** – *Choristoneura fumiferana* (Clem.) Only scattered specimens were found on white spruce in Vilas, Langlade, and Oneida Counties. Balsam fir in mixture with Norway pine in Chippewa County resulting in minor defoliation.
- **Maple webworm** – *Tetralopha spp*. Infestations in which defoliation was heavy to complete, occurred in Shawano, Marathon, Langlade, and Marinette Counties. Damage was most severe in stands that were predominantly hard maple.

# 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

Vacancy area coverage:
Oneida, Vilas, Forest, Florence Co's – Linda Williams
Lincoln, Langlade Co's – Mike Hillstrom
Price, Taylor Co's – Todd Lanigan
Iron County – Paul Cigan




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.**