

Northeastern Wisconsin Forest Health Update

Wisconsin DNR – Division of Forestry

October 28, 2015

Topics covered this month:

Insects:

Box elder bugs, ladybugs, and wasps
Brown marmorated stink bug
EAB new finds in WI
Gypsy moth
Lecanium scale
Pityogenes bark beetles in white pine
Spruce gall midge

Other:

Red pine needle browning update

Diseases:

Hypoxyton
Oak wilt guidelines approved

Of Historical Interest

25 years ago - 1990 –
Cytospora canker
Spruce needle rust
60 years ago - 1955 –
European pine sawfly
Introduced pine sawfly

Insects

Box elder bugs, ladybugs, and wasps – you’ve probably been getting complaints (or maybe you’ve seen something in the news) about ladybugs this year. In many areas of the state the numbers appear to be higher than last year, and it’s that time of year, when cool nights and warm sunny days prompt them to congregate. If you’re having problems with them invading your house you could consider spraying the exterior to keep them out (which will repel all insects for a time), 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 always avoid squishing, since squishing them will stain whatever they are squished on. Be sure to empty out any vacuum bags that you’ve sucked ladybugs up with as the ladybugs will start to smell bad



Multicolored Asian ladybeetles
(an exotic invasive ladybug).

after they die in the bag ... and apparently sometimes the ladybugs can crawl back out of the bags ... so empty the bags after vacuuming.

Contrary to what you might hear on social media or from folks who call or stop in ... multicolored Asian ladybeetles appear to have been introduced in the southern states many decades ago, and since then the beetles have been expanding their range and are found in many states now. It's also common for me to hear of folks mixing up the Multicolored Asian Ladybeetles with Japanese Beetles ... they're 2 different critters. And, finally, Multicolored Asian ladybeetles are indeed a ladybug. Both exotic and native ladybugs feed on aphids and scales and so are beneficial, but it's only the exotic ones that try to spend the winter in your house or garage.

UW Extension has [information](#) about what can be done to prevent them from entering your house, including spraying the outside of your house.

Brown marmorated stink bug – this exotic invasive insect has been found in Madison, Dane County and is suspected to be an established population. This stink bug originates from Eastern Asia. Many folks will find this pest obnoxious because it congregates in your homes in the fall, much like Multicolored Asian Ladybeetles, and Boxelder Bugs will do. They also feed on fruits and some vegetables, including apples, peaches, mulberries, soybeans, sweet and field corn, tomatoes, lima beans, green peppers, etc. They are already established in some states, like Michigan, but are just beginning to show up in Wisconsin. The same sprays and control options that you might apply to your house to keep the ladybugs and boxelder bugs out will work to keep out brown marmorated stink bugs as well. More info on control can be found on the multicolored Asian ladybug [UW Extension factsheet](#). UW Extension also has a factsheet on the [stinkbugs](#), including a photo, and control recommendations for crops. If you find a suspect brown marmorated stink bug in Wisconsin please email a photo to [PJ Liesh](#) with UW Extension in Madison (he took over for Phil Pellitteri).

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:

- Door County – Town of Sevastopol
- Waukesha County – Village of Eagle

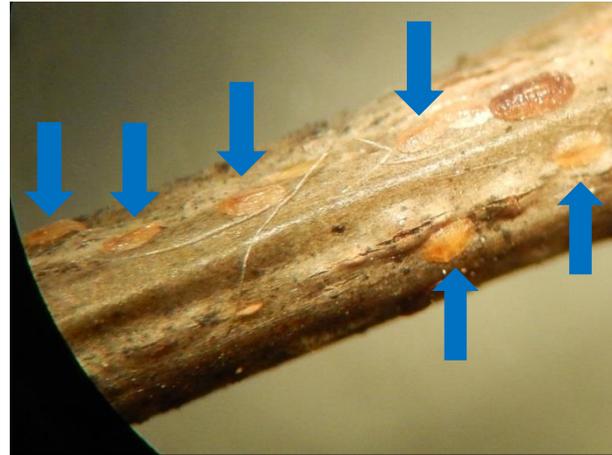


EAB quarantined counties shown in red.

Gypsy moth – spray program info is updated for [2015](#), and includes timelines and requirements for participating in the gypsy moth cost share program. Counties must have a designated gypsy moth program coordinator to participate. Some upcoming deadlines include Nov 4 county coordinators provide the DNR suppression program with an estimate of total acres proposed for treatment, and Dec 4 applications and digitized maps are due. If a county chooses not to participate, or doesn't qualify, homeowners and landowners can organize an aerial spray for themselves, or do some control just on their own properties. More info on gypsy moth and control options can be found [here](#).

Homeowners can be thinking about oiling eggmasses now. It's easiest to see the eggmasses after the leaves have fallen from the trees. Waiting until the leaves have fallen also allows any natural enemies to emerge from the eggmass before you oil it. Oiled eggmasses remain on the tree but the eggs have suffocated and caterpillars will not emerge from them next year. If you prefer to remove egg masses from trees, be sure you collect the eggs and dispose of them. If you just scrape them onto the ground they can still hatch, and they'll be protected by snow all winter.

Lecanium scale – although I saw significant mortality by parasitoids and fungi in the scale populations along the lakeshore counties this year, I did not see that level of mortality in the scale populations in the north. I recently checked the northern populations again and found large numbers of scale crawlers (immature scales) present on leaves and twigs. Based on that I would expect high numbers next year to continue to prompt calls about honeydew (sticky stuff) covering everything near infested trees.



Lecanium scale crawlers (blue arrows) on an oak twig.

Pityogenes bark beetles in white pine – these tiny bark beetles are just 2mm long and attack white pine that is under stress. They attack the branches and areas of smooth bark, and can also utilize slash. The white pine (or branches that are being attacked) must be under stress, or the attacking beetles are pitch drowned by the tree. External signs include 1mm round holes in the bark, and a very fine sawdust coating areas of rough bark and branches below the attack. We saw the populations of these beetles increase after the 2012 drought, especially in the central part of the state.



Small round exit holes and fine rusty colored sawdust indicated Pityogenes infestation in this white pine. Photo by Mike Schuessler.

Spruce gall midge – in the 8/31/15 pest update I mentioned a severe infestation of spruce gall midge on Black Hills spruce in Door County. During a recent conversation with a landowner it sounds like spruce gall midge is also present on his spruce in Marathon County. I believe it's mostly a problem on Black Hills spruce, but I know there are some plantations of Black Hills spruce (and old Christmas tree plantations) scattered around the state so let your forest



Spruce twigs swollen from multiple galls of spruce gall midge.

health specialist know if you're seeing it in other counties.

In case you missed the 8/31/15 update, spruce gall midge larvae feed at the base of developing needles in the spring, and the feeding prompts the twig to grow around the larvae, swelling as the larvae get larger. The tips of the twigs often die from the damage caused by spruce gall midge. Pruning off the damage in the fall can help reduce the population as the larvae overwinters inside the gall. A small parasitic wasp attacks the larvae and often provides adequate control of a population.

Diseases

Hypoxylon canker – this canker disease of aspen can be easier to spot when the leaves are off.

Things to look for include: yellowish-orange areas on the bark or at the edge of a canker face, blistering bark and small dark gray fruiting bodies on the canker face. Hypoxylon canker can result in broken stems and can kill trees by girdling them. Well-stocked stands are less susceptible to Hypoxylon than poorly stocked stands. Some aspen clones are more susceptible than others although intensive management and conversion to other species over the years has already eliminated many of these highly susceptible clones. Lightly infected stands can be managed on rotations longer than 40 years but stands with 15-25% of the trees infected should be considered for early harvest. The WI DNR Silviculture Handbook Aspen chapter states: Consider harvesting

infected, poorly stocked stands early to improve stocking through root sucker formation.



Top of aspen broke out of tree, due to hypoxylon canker (note rough bark of canker at bottom of photo).



Branch nearly girdled by hypoxylon canker. Only a small strip of live cambium was keeping the branch alive.



Bark at edge of hypoxylon canker removed to show canker margin.

Oak wilt guidelines approved – the updated guidelines to minimize oak wilt introduction and impact in a stand have been approved and will go into effect January 1, 2016. The updated guidelines are available on the [WI DNR Forest Health page](#), under the [oak wilt link](#), click on the Revised Oak Wilt Guideline link on the right side of the page in the Oak Wilt Guides box. The Forest Health Team will be rolling out some training on these updates so if you have a team meeting coming up and would like us to come speak to your team, please let us know.

The map at right shows counties in red where oak wilt is found throughout the county, and counties with lesser amounts of oak wilt have the pink townships where oak wilt has been found. The oak harvest guidelines for oak wilt should to be considered if oak wilt is found anywhere in your county.



Other/Misc.

Red pine needle browning update – In my 8/31/15 pest update I mentioned a problem I was seeing with red pine in several northern counties. The 1- and 2-year old needles would turn 1/2 brown, and remain on the tree throughout the growing season. I had eliminated road salt as a culprit because I find the brown needles occurring far off roads and in the middle of plantations as well. I suspected winter damage. After posting that report, Brian Schwingle (former WI Forest Health Specialist, current MN Forest Health Specialist) emailed me with info that he had seen the same thing in 2009 and 2010. After testing turned up nothing useful for him, he also concluded that it must be weather related, hypothesizing that a late spring frost, or some other widespread weather phenomenon was the cause. So, I think the final diagnosis to the needles turning 1/2 brown on red pine in some areas is ... weather related, not a disease.



Red pine needles. Older needles are 1/2 to 3/4 brown, with the base remaining green.

Of Historical Interest

25 years ago, in 1990 –

- **Cytospora Canker** – *Leucostoma kunzei* (Fr. Fr.) Munk. Cytospora canker was commonly observed on balsam fir in areas of the state where the drought was particularly severe such as Marinette County.

- **Spruce Needle Rust** – *Chrysomyxa* sp. Scattered ornamental blue and white spruce in Langlade, Oneida, and Shawano Counties were infected with spruce needle rust. Infection caused defoliation of current years needles. The alternate hosts were Labrador tea and leather leaf. No controls were recommended.

60 years ago, in 1955 –

- **European Pine Sawfly** – *Neodiprion sertifer* (Geoff.) Specimens collected by the State Department of Agriculture from a windbreak in Adams County in 1954 were identified late the same year as European pine sawfly. An intensive egg survey was conducted during the winter and early spring. Egg batches were marked and regularly observed preparatory to spraying. A 500-acre area was sprayed with DDT in an effort to eliminate the pest. The insecticide was applied on May 20 and on May 28, in cooperation with the University, a selective insect virus was applied. An intensive post-spray appraisal of the area could produce no European pine sawfly larvae. On November 2, adult chalcid parasites (*Dahlbominus fuscipennis*) (Zetterstedt) were released by the University in the Strong’s Prairie area.
- **Introduced Pine Sawfly** – *Diprion similis* (Htg.) The range of this pest has increased to include every county in the northwest. A total of 22 counties have reported the insect. Infestations were reported as light but resort owners near the city of Hayward sustained complete defoliation of ornamental white pines.

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

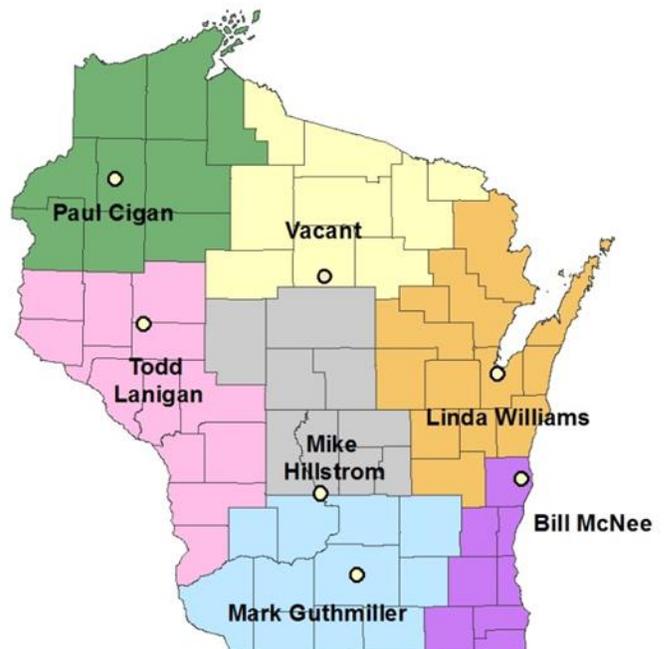
Iron County – Paul Cigan

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.

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.