

Northeast Wisconsin Forest Health Update

August 15, 2011

Topics covered this month:

Insects:

Emerald ash borer
Fall webworm
Gypsy moth
Japanese beetles
Ugly nest caterpillar

Diseases:

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Bur oak blight
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Other:

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Oak tatters
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Insects

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

Emerald Ash Borer – from Bill McNee. In late July, Emerald Ash Borer was detected in Racine County for the first time on three purple traps in the Town of Caledonia. These detections are about a mile south of the well-established infestation in Oak Creek. No infested trees have been found in Racine County.



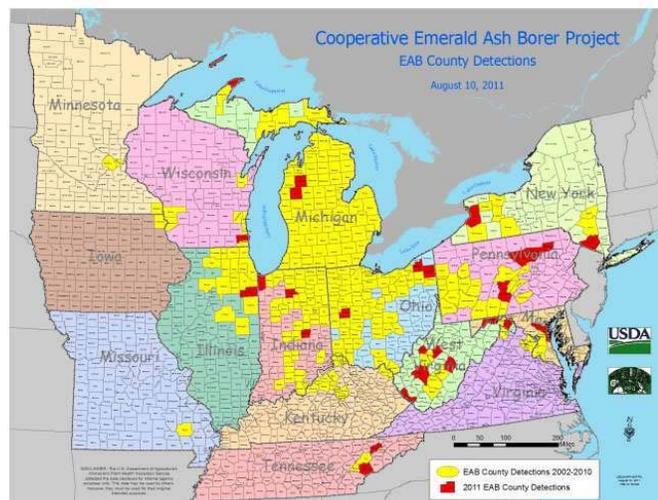
Purple EAB detection trap.
Photo by Renee Pinski.

The adult beetle flight is over in southern Wisconsin, and staff from DATCP will begin the final trap check and takedown in mid-August.

Statewide, all traps will be down by mid-September.

At right is the current map of

counties with first EAB detections in 2011 (in red). EAB was first found in Wisconsin 3 years ago. Since then, Iowa, Kentucky, Minnesota, New York and Tennessee have also had first EAB detections.



Fall Webworm - large webs will be appearing in trees soon, or some of you may have noticed some already. Fall webworm does most of its damage late in the season, when the tree is preparing for fall, so people should not be too concerned about this defoliation. It can be a very messy web nest that the insects create but it's not something that will kill the tree. If it's just too ugly to look at I recommend tearing it down with a rake, there is no need to prune out portions of your tree just to get rid of the webs as this does more damage to the tree than the insects themselves would do.



Fall webworm web nests.

Gypsy Moth – from Bill McNee. As of mid-August, the flight of male gypsy moths is nearly over in southern counties but still underway in northern Wisconsin. Trappers from the Dept. of Agriculture, Trade and Consumer Protection (DATCP) will begin taking down gypsy moth traps as early as this week in the southern counties. Preliminary catch numbers are similar to 2010. If you see pupae or a white, female moth sitting on a tree trunk or other object, crush them with a stick



Male gypsy moth. Photo by Bill McNee.

The summer of 2011 has turned out to be one of the quietest in recent memory, as the low populations generated very few nuisance caterpillar complaints statewide. No defoliation attributed to gypsy moth was spotted in recent aerial surveys, and areas that were heavily defoliated in 2010 had little tree mortality thanks to the rainy summer of 2010 and spring of 2011.

Japanese beetles - These exotic invasive insects are showing up in most NER counties including Door, Oconto, and Brown. 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. I stopped along a road to check on some defoliation and discovered that most of the defoliation was on the buckthorn along the road and that Japanese beetle was the culprit. In this case one invasive pest (Japanese beetle) was defoliating another invasive pest (buckthorn), kudos to the Japanese beetle! Now if we could just get them to feed exclusively on buckthorn we'd be all set! University of Wisconsin Extension has more info at



Japanese beetles defoliating a *Prunus* sp.

<http://hort.uwex.edu/articles/japanese-beetle> including information on the damage caused by the adults, the damage caused by the white grubs, and what control measures are useful. 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 there is clearly a difference there!

Ugly nest caterpillar – Ugly nest caterpillars web leaves together very tightly using strong webbing and feed within the protection of their web. These webs often follow along branches, weaving all the leaves together along the branch. When you rip open the web you'll find lots of frass as well as the caterpillars themselves. They will also pupate within the nest so you may find pupae. Preferred hosts include hawthorn and cherry but it will feed on other trees as well, these were spotted in Oconto County.



Ugly nest caterpillar webbing.

Viceroy caterpillar – there are lots of viceroy butterflies this year! The viceroy caterpillar looks a lot like bird droppings, which is one way to deter birds from eating it.



These caterpillars will feed on willow, aspen, and cottonwood, but never in high enough numbers to be considered a pest.

Diseases

Annosum in Waupaca Co – a new location of annosum has been identified in Waupaca County. The stand had one “pocket” that didn't much look like a pocket. We found fruiting bodies for annosum at the base of dying mature red pine, as well as on dead understory white pine and on a live understory cherry. We were also able to find fruiting bodies on old stumps in the area. This pocket seemed atypical to me in that the fruiting bodies were on trees that still had some greenish colored needles, and were not yet completely dead. The stand is located at T21N R11E Section 7.



Annosum fruiting body on old stump.

Annosum workshop – an Annosum Root Rot Workshop will be offered September 22, 2011 at the Melrose-Mindoro High School Auditorium in Melrose, WI. This is important training for foresters and loggers working in pine and other conifer stands and is a joint meeting for foresters and timber producers. There is an indoor portion where you'll learn about the biology, and management of Annosum, and a field portion where you'll see Red Pine plantations affected by Annosum and demonstrations of treatment options, both hand and mechanized.

Register through:

FISTA - loggers and foresters wanting to receive SFI credits

Forestry Training Office - DNR Foresters wanting to attend Registration Deadline is September 8, 2011. The class size is limited to 80 so register early! Bring your hardhat, ear protection, and lunch. For more details and an agenda contact Todd Lanigan (todd.lanigan@wi.gov).

Bur Oak Blight – from Kyoko Scanlon, DNR Forest Pathologist. A last minute sample collection to test for BOB was made last fall, and recently I received the results from Dr. Tom Harrington's lab of Iowa Sate University. Leaf and twig samples were collected from bur oak trees that were experiencing late season leaf necrosis in 2 locations, one in Dane County and one in Green County. "Tubakia sp. BOB" was isolated from both samples.

BOB is believed to be caused by a new species of Tubakia. Tubakia dryina has been known to be the causal agent of Tubakia leaf spot. However, BOB is considered a blight disease, than a leaf disease. In a severe case, all leaves on a tree will die late in the season. Symptoms of BOB have been reported in the Upper Midwest since 1990's, including Kansas, Iowa, Minnesota, Nebraska, and Wisconsin. Upon further investigation by Dr. Harrington's lab, T. dryina is now considered a species complex, and one species of Tubakia, currently called "BOB Tubakia" or "Tubakia sp. BOB" is associated with the disease. Dr. Harrington's lab is suggesting a new species name, and eventually it will have a more official sounding name than "BOB Tubakia".

Dr. Harrington's lab is interested in collecting additional samples from Wisconsin this summer. I hope you could help sampling efforts by spreading the word out. BOB symptoms usually start showing up around late July into early August. The best time to collect leaf and twig (stem) samples is August into mid-September. I plan to send you a reminder e-mail in early July or so. Samples can be collected from symptomatic leaves of any oak species. It doesn't have to be just bur oak as they are collecting the baseline data of various Tubakia sp. as well. It is noteworthy that our samples exhibited leaf symptoms somewhat different from what they have been observing in Iowa. With continuing collaboration with Dr. Harrington's lab, we should be able to learn more about what's happening to our oak trees in late summer.

More information about BOB, including Dr. Harrington's video that describes BOB and his research, is available at <http://www.public.iastate.edu/~tcharin/BOB.html>. Please note that Dr. Harrington says "BOB is not as bad as it looks". Trees may be able to sustain repeated defoliation because it starts late in the season, though secondary pests may kill trees that are stressed by repeated infection with BOB. It's important not to misidentify BOB as Oak Wilt, or vis-a-versa.



Bur Oak Blight – symptoms appear July - Aug



Oak Anthracnose – symptoms appear May-June



Oak Wilt



Tubakia Leaf Spot (*Tubakia dryina*)

Thousand cankers disease of walnut in PA & VA – this disease is a combination of a fungal disease and an insect, the walnut twig beetle, and is fatal to trees. It has been detected for the first time in Pennsylvania, in a Buck County in the southeastern part of the state, and a quarantine was put in place immediately. It was also detected for the first time in Virginia and 2 counties surrounding Richmond, Virginia, (Chesterfield and Henrico Counties) were quarantined.

The disease is caused when Walnut Twig Beetles, which can carry the fungus (*Geosmithia morbida*), tunnel beneath the bark of walnut trees. The fungus then causes small cankers to form. As more beetles attack the tree, introducing more fungus, the number of cankers increases, slowly starving the tree of nutrients and causing the tree to die within 10 years of initial infestation. There is no known cure.

The first known location of this disease east of the Mississippi was in Tennessee. The diseased tree in Pennsylvania was reported by the property owner to their Cooperative Extension Service. A pest alert with more information can be found at

http://na.fs.fed.us/pubs/palerts/cankers_disease/thousand_cankers_disease_screen_res.pdf

If you think you have found Thousand Cankers Disease on walnut in Wisconsin please alert your forest health specialist immediately. This disease could occur in urban trees, plantations, or natural forests so please be vigilant.

Other/Misc.

Imprelis herbicide info – DuPont voluntarily suspended sale of Imprelis on Aug. 4 and said it would begin a product recall and refund program by mid-August. Imprelis was sold only to commercial applicators and was not available over the counter. But it appears to have been widely used by some lawn care companies. The problem relates to how lawn application later affects conifers, causing severe symptoms and mortality and all sizes of trees.

Michigan State University has finalized details for testing for Imprelis residues. You can visit the MSU Diagnostic Lab website (<http://www.pestid.msu.edu/>) and use their submission form for sample submission. Simply indicate that you would like your sample to be tested for Imprelis. The lab will need about 50 g of needle tissue which translates into stuffing a one gallon zip lock bag with 4-6 inch long symptomatic branch tips from an affected tree. Pack the branch tips dry, NOT wrapped in moistened paper towels. Try to ship the branches via overnight mail, and definitely send the sample early in the week. Fresh samples are great, but samples can be frozen as well, if you need to collect a sample, but cannot mail it in right away. The cost for testing of out-of-state samples is \$200. The MSU lab will bill and takes checks and credit cards.

A “what can homeowners do” factsheet is available from MSU at http://news.msue.msu.edu/uploads/files/122/Imprelis%20homeowner%20factsheet_Bert%20Cregg.pdf and more information can be found on UW Extension’s website at <http://hort.uwex.edu/articles/potential-imprelis%C2%AE-herbicide-damage-conifers>

Oak tatters – one case of oak tatters was noted in Oconto County on white oak. Nearby red oak were completely unaffected. Although it's not known exactly what causes oak tatters to occur (cold temps, wind, or herbicides) the symptoms look like severe defoliation from insects. To identify oak tatters look closely at the leaves; you'll notice that the leaf edges aren't actually chewed by insects, rather the leaves just didn't form all the tissue that they should have, giving them a lacey appearance.



Pesticide applicator training – the 2012 schedule for Pesticide Applicator Training is now out. View it at <http://ipcm.wisc.edu/LinkClick.aspx?fileticket=Hj%2beSkpJmcE%3d&tabid=69> . You can find all the information at <http://ipcm.wisc.edu/pat> including how to register online and how to order the manuals, etc. Anyone applying pesticides “for hire” should take this training and become certified. I often get asked by loggers and consultants whether they need to be certified to treat stumps for prevention of annosum, the answer is yes unless you are treating stumps on your own property. So, if you need to be certified go to <http://ipcm.wisc.edu/pat> to get all the information!

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 dnrfgypsymoth@wisconsin.gov
visit the website <http://www.gypsymoth.wi.gov/>

Northeast Region Pest Update produced by:

Linda Williams
Forest Health Specialist
Wisconsin Department of Natural Resources - Northeast Region
Linda.Williams@wi.gov
<http://dnr.wi.gov/forestry/fh/>

For more information contact:

Bill McNee
NER Gypsy Moth Suppression Coordinator
920-662-5430
Bill.McNee@wi.gov

Linda Williams
NER Forest Health Specialist
920-662-5172

Linda.Williams@wi.gov

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.