

Northeast Wisconsin Forest Pest Update

August 17, 2010

Topics covered this month:

Insects:

Emerald Ash Borer
Great Ash Sphinx
Gypsy Moth
Imported Willow Leaf Beetle
Lacebugs
Monkey Slug Caterpillar
Redhumped Caterpillar
Spruce Gall Midge

Diseases:

Beech Bark Disease
Oak Wilt Symptoms Showing Up
Tar Spot
Thousand Cankers Disease in TN

Other:

North Central Forest Pest Workshop
Pollen Cones

Insects

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

Emerald Ash Borer (EAB) – from Bill McNee. The Wisconsin EAB Program's guidelines for urban ash trees have now been released. For a copy, visit:

<http://dnr.wi.gov/forestry/uf/pdf/ManagingUrbanAsh8-3-10.pdf>.

The purple EAB detection traps are currently being taken down as the beetle flight period comes to an end. Each trap is carefully inspected. Beetles have not been caught in monitoring traps in known infested trees since the beginning of August. So far in 2010, the only new cities to find EAB have been Cudahy in Milwaukee County (beetle on trap) and West Bend in Washington County (infested trees found).

Two EAB municipal webinars are being held on August 17 and 24. The August 17 session is 'Management of EAB for City Trees' and the August 24 session is 'Understanding EAB Cost Calculations.' For more information, visit www.treecarescience.com and click on 'Register Here for Upcoming Webinars.'

Other new EAB detections of note:

Eastern Tennessee near Knoxville (state's first find)

Upstate New York – several counties with new detections

EAB was recently detected in infested firewood at an agriculture inspection station in California. The wood was being transported by a pickup truck from Michigan and was intended for camping use.

Great Ash Sphinx – this large caterpillar was feeding on ash in Oconto County. What initially caught my eye was 2 ash leaves lying on the ground that had been nipped off and the entire leaf was lying on the ground. Further searching found this caterpillar feeding on the leaves. Great Ash Sphinx (*Sphinx chersis*), sometimes called Northern Ash Sphinx, feeds on ash, privet, cherry, and aspen. Sphinx caterpillars can change markings and colors dramatically as they grow, with each instar having a particular look. This caterpillar wasn't doing significant damage, and the adults are a sphinx moth or a hawk moth, so they are more of a novelty than a forest health concern.



Gypsy Moth – from Bill McNee. Now that egg laying has come to an end in northeast Wisconsin, interest in the gypsy moth has shifted to egg mass surveys to predict next year's infestation levels. Populations are down dramatically in most areas. However, populations remain high enough to qualify for the DNR Suppression Program in many areas of the northern counties. There continues to be considerable interest in aerial spraying in 2011. Tree refoliation in the areas defoliated earlier this summer has been excellent due to the ample rainfall.

Egg mass survey instructions are available at www.gypsymoth.wi.gov. There is also a list of county coordinators and municipal contacts for those who are interested in aerial spraying through the DNR next spring. County coordinators must apply by early December of this year for spraying in 2011.

A training session for local governments and associations interested in aerial spraying through the DNR Suppression Program will be held on Wednesday, September 29 at 9:30 AM. The session will be held at the DNR regional headquarters, 2984 Shawano Ave. in Howard (Brown County). The address to map is 2984 Shawano Ave., Green Bay, WI 54313.

Minnesota's first find of a gypsy moth caterpillar recently occurred in Duluth. Its origin is currently being investigated. Minnesota authorities believe that the pest has been breeding in the state for several years but no caterpillars had been seen.



Female gypsy moth laying egg mass. Photo by Bill McNee.

Imported Willow Leaf Beetle – at the end of July I saw what I suspect was Imported Willow Leaf Beetle defoliating willow in Oconto County. These small iridescent blue beetles (adults are 4-5mm long) feed on willow leaves. The larvae are a small dark green caterpillar and also feed on willow leaves. Damage can be extensive and there are 2 generations per year. Unfortunately I didn't get any photos as I didn't have my camera with me and the group I was with that day wasn't very excited about "bugs"; by the time I got back to the site weeks later I couldn't find any of the pretty beetles to photograph, so you'll have to check out the following website for photos, and more information, on this beetle

<http://www.entomology.umn.edu/cues/Web/154ImportedWillowLeafBeetle.pdf>

Lacebugs – these small insects can be found on the undersides of leaves. Wild black cherry trees with severe lacebug damage will look reddish from a distance; as you get closer the leaves appear pale or white (right) but upon closer inspection the pale areas are small areas where the insects



sucked the plant juices from the underside of the leaf creating a small dead area of leaf material. Flip the leaf over to look for adults (they will have wings) or smaller wingless juveniles (photo at left), you might also see the shiny dark brown droppings of the lacebugs. If the damage on your trees is already severe then I wouldn't recommend pesticides at this time because the damage is already done. You could monitor those trees next year to see if the lacebugs return



and decided whether or not to spray them next year.

Monkey Slug Caterpillar – Mike Schuessler sent me this photo of a Monkey Slug caterpillar which came into his office as a “bonus” on a branch with fungal leaf diseases. These caterpillars will turn into a Hag Moth. The description from one of my books indicates it is the most distinctive caterpillar in eastern North America. The “legs” that you see are actually just lobes, densely covered in urticating hairs which can be highly irritating if they get on your skin. One book calls these lobes “deciduous”, meaning that they can be lost. It is thought that this caterpillar mimics the cast skins of tarantulas (which also bear urticating hairs). Monkey Slug caterpillars feed on many forest trees and shrubs, especially oaks and cherries, although I have never seen this insect cause significant defoliation.



Monkey Slug Caterpillar on pen. Photo by Mike Schuessler.

Redhumped Caterpillar – this native caterpillar was found on oak in Oconto County. Oak is not listed as a host for this species although I did observe this one feeding on the oak leaf that it was on. These caterpillars are gregarious when younger, meaning that they feed in groups, but in this case this was the only one I found on this tree. There can be more than one generation per year and the final generation overwinters as a pupae on the ground. Native enemies usually keep the populations in check. For more info check out <http://www.entomology.umn.edu/cues/Web/194RedhumpedCaterpillar.pdf>



Spruce Gall Midge – swellings at the base of these spruce needles are caused by Spruce Gall Midge (*Mayetiola picaea*), a tiny fly-like insect. In late spring the eggs hatch and the larvae bore into the shoot, which swells around them. They spend the winter inside the swelling and emerge as adults in May when they will mate, lay eggs, and repeat the cycle. The photo shows an exit hole where an adult emerged (arrow). The damage from these insects can cause needles to brown and branch tips to die. Tiny parasitic wasps usually keep the population in check.

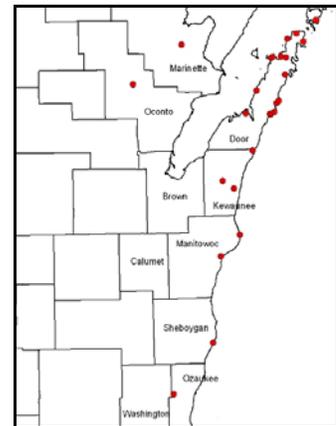


Diseases

Beech Bark Disease – from Bill McNee. Beech scale, the insect part of the insect-fungus combination that causes beech bark disease, has been found in Ozaukee and Sheboygan Counties. Scale populations were very low at the two sites where the insect was found. Beech scale has now been found in 7 eastern counties: Door, Kewaunee, Manitowoc, Marinette, Oconto, Ozaukee, and Sheboygan. Beech bark disease has only been found east of Sturgeon Bay in Door County. For more information about the disease, visit:



Small white spots are beech scale at low population.



<http://www.dnr.wi.gov/forestry/FH/bb-symptoms.htm>. Please report small balls of white wool on beech trees to a DNR forest health specialist if you should see them.

Oak Wilt symptoms showing up – if you have active oak wilt pockets you’ve probably noticed that the symptoms are beginning to show up this year. Oak wilt is a non-curable fungal disease specific to oaks. Trees in the red oak family will die quickly and completely from this disease while trees in the white oak family will die more slowly with a branch or portion of the crown becoming infected. Trees that were infected with the oak wilt fungus this year are currently turning off-color, dropping their leaves, and will soon be dead. Leaves that drop to the ground will be partially green (right). 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 trees. In this way, over several years, a pocket of dead oaks will be created and the disease will continue to spread through the roots unless something is done to break the root grafts, or, it will stop when the disease runs out of oaks in that area. A good brochure about oak wilt, including the biology of the disease and how it is spread, can be found at <http://learningstore.uwex.edu/assets/pdfs/G3590.pdf> or check out the oak wilt info on the DNR website at <http://dnr.wi.gov/forestry/FH/diseases.htm>



Tar Spot - Tar spot, a fungal leaf disease that affects maples, was found on these leaves from Door County (right). The areas with black speckles which are arranged in roughly circular patches are the fruiting body of the fungus. There appear to be 3 species of tar spot,



Rhytisma acerinum which is found on Norway maple, *R. americanum* which produces the large solid spots (left), and *R. punctatum* which produces numerous small spots rather than a solid black spot. I suspect the latest samples from Door County are *R. punctatum*. Usually tar spot is merely cosmetic since people don't like to look at spotty leaves.

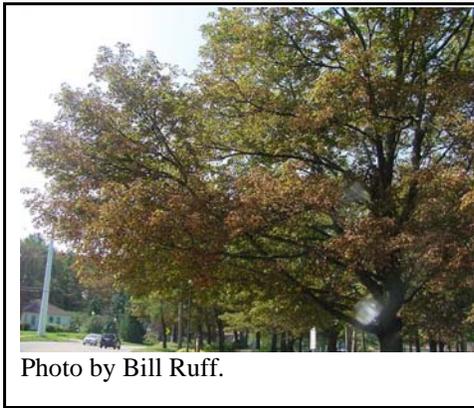


Photo by Bill Ruff.

Occasionally the damage will be so severe that the tree will drop its leaves early. The photo at left shows the overall browning of the trees this year due to tar spot.

In 2005 a severe infection of tar spot in Door County was noted as well (below right); in both years the wet springtime weather promoted this leaf disease. Infection begins early



Sample from 2005.

in the spring, developing as the summer goes on, and the fungus will overwinter on fallen leaves. Raking and removing the damaged leaves when they fall is the best option for homeowners concerned about this disease.

Thousand Cankers Disease in TN – in late July Thousand Cankers Disease of Walnut was reported in Tennessee. This was a significant find as it the disease was previously only known to be in western states. Thousand Cankers Disease of Walnut is a combination of an insect and a fungal disease that is fatal to the tree, often within 3 years. Signs and symptoms to watch for include crown dieback, yellowing or flagging of branches, and tiny exit holes from the beetle. More information, including photos of the signs and symptoms can be found at <http://www.colostate.edu/Depts/bspm/extension%20and%20outreach/Walnut%20Twig%20Beetle%20Pest%20Alert%2012Aug2010.pdf>

Other/Misc.

North Central Forest Pest Workshop - The 59th annual North Central Forest Pest Workshop will be held October 4-7 at the Osthoff Resort near Elkhart Lake. This year's theme is 'Changing Challenges and Innovation to Meet Them.'

Registration for the full Workshop is \$130. A block of rooms has been set aside at the government rate of \$70.00 for a single, \$130 for a double. This block of rooms will be held at these prices until September 3. To obtain a registration form and more information, visit: <http://www.forestpathology.org/hosted/ncfpw/>.

Pollen cones – the brown lumpy growths on these fir branches (right) are the remnants of the pollen cones. These cones were numerous enough on the tree to draw your eye, but they will wither and become less noticeable. Earlier in the season the cones would have looked like the photo at left. Each year I usually receive a sample or two of these pollen cones from landowners concerned about the strange growths on their tree.



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/>

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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.