

Southern Region Forest Health Update

Wisconsin DNR, Forest Health Protection Unit

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Mark Guthmiller (Southern Region Forest Health Specialist)
Articles in this newsletter were written by Mark unless otherwise noted

Gypsy Moth - Bill McNee

The summer of 2011 has turned out to be one of the quietest in recent memory, as the low populations have generated very few nuisance caterpillar complaints statewide. Male moths are now flying in southern Wisconsin. The males are brown, have feathery antennae, and fly during the afternoon. 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.



Female gypsy moth laying egg mass.
Photo by Mark Guthmiller.

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. Defoliation was observed in Crawford, Grant, and the Baraboo hills of Sauk County. This damage was attributed to other insect species. See article on Forest Tent Caterpillar and Elm Spanworm.

Emerald Ash Borer (EAB) - Bill McNee

EAB-infested trees have been found in Kenosha after trapping adult beetles at that west-side location for 2 years. An infested tree was found in the neighborhood, and soon after, additional infested trees were located in a nearby commercial area. Wisconsin now has 4 known infestations where larvae have been found, and one detection where only an adult EAB has been found (downtown Green Bay).

EAB adult flight has reached peak period in the southern two-thirds of Wisconsin.

Mid-season checks of the double-decker EAB traps in a number of state parks and recreation areas in southern Wisconsin did not find any adult EAB. Staff from the Dept. of Agriculture, Trade and Consumer Protection (DATCP) will be checking ~6,000 purple EAB traps during the summer. If you see a purple trap lying on the ground, please email Becky Gray at DATCP (rebecca.gray@wisconsin.gov). A trapper will rehang the trap.



Purple EAB detection trap
Photo by Rene Pinski.

EAB was just confirmed this past week in Racine County based on beetle trap catches. This was south of the known infestation in Oak Creek so not a surprising find. Racine County had already been placed in the EAB quarantine prior to this find. For more information see the DATCP press release:

<http://datcp.wi.gov/news/?Id=344>

Illinois has released an updated list of communities and parks that have found EAB. The list has grown to over 5 pages long, and is available at:

http://www.agr.state.il.us/eab/PDFs_for_web/Home/Confirmed_EAB_Locations.pdf. Illinois first found EAB only 5 years ago!

Beech Bark Disease -Bill McNee

A beech tree with very high populations of beech scale has been located on Washington Island in northern Door County. This is the only known whitewashed tree located outside of the original beech bark disease detection area near Sturgeon Bay. Very low populations of beech scale are known to occur in Ozaukee, Sheboygan and Washington Counties, but beech bark disease is only known to occur in Door County.



Beech tree heavily infested with beech scale.
Photo by Linda Williams.

Asian Longhorn Beetle (ALB) - Bill McNee

Asian Longhorned Beetle (ALB) has been found in and around Bethel, Ohio (about 25 miles east of Cincinnati). The pest was identified after a local vineyard owner noticed unusual damage to several maples. The most recent media reports indicate that about 400 infested trees have already been found in the area. ALB attacks many hardwood species, including maple, poplar, willow and elm.

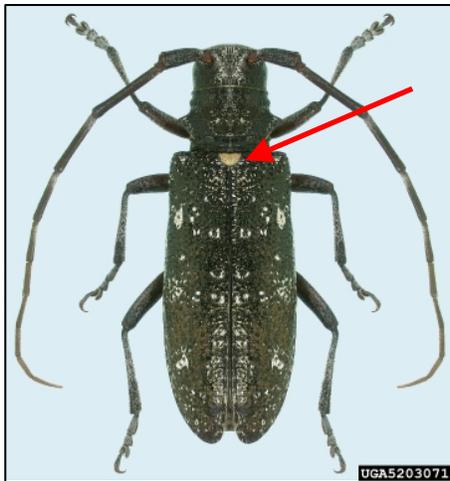


ALB Lookalikes Native to Wisconsin:

An APHIS outreach effort this summer generated numerous reports here in Wisconsin. To date those reports turned out to be the white-spotted sawyer, a native woodborer of stressed and recent dead pines. Here are links to ALB identification and how to distinguish ALB from the native lookalikes (most notably the whitspotted pine sawyer). ALB is glossy, has banded antennae, and lacks a white dot where the wing covers meet.

http://www.na.fs.fed.us/pubs/palerts/alb/alb_pa.pdf
http://massnrc.org/pests/blog/uploaded_images/ALBvsPinesawyer-715980.jpg
<http://www.uvm.edu/albeetle/identification/index.html>

Asian longhorned beetle adult. Photo from www.forestryimages.org.



Whitespotted pine sawyer.
Photo from www.forestryimages.org.



Cottonwood borer.
Photo from www.forestryimages.org.

Other:

Some creative New Englanders have come up with a novel use for public swimming pools – detection tools for invasive insects. Read more here:

<http://www.nashuatelegraph.com/news/925607-196/this-invasion-may-be-happening-in-your.html>

Forest Tent Caterpillar and Elm Spanworm

Forest tent caterpillar and elm spanworm made their presence known in parts of Crawford, Grant, and Sauk Counties this spring. There were localized areas of forest tent caterpillar defoliation in the valleys of Crawford and Grant Counties. The Baraboo hills in Sauk County had the most widespread defoliation. The damage was light to moderate with localized areas of heavy defoliation. Elm spanworm is attributed for the majority of the widespread defoliation while the more localized heavy defoliation was either forest tent caterpillar or a combination of forest tent caterpillar and elm spanworm. An area east of Natural Bridge state park had some of the heaviest elm spanworm populations observed. Damage was evident on numerous species including basswood, elm, maple, ironwood and others.



Elm spanworm making a mess with webbing and leaf debris hanging from defoliated trees



Masterful high wire spanworm wading up webbing into ball to hold on to. This was a common observation.



Dark phase of elm spanworm indicative of outbreak populations.

Thousand Cankers Disease of Walnut Detected in Virginia

Last summer we had the first confirmation of this insect and disease complex reported in the native range of black walnut in Tennessee. Recently the state of Virginia announced confirmation of thousand cankers diseases. The state has put in place a quarantine in two counties. The detections were made in urban areas in Virginia. For more info: <http://www.vdacs.virginia.gov/news/releases-b/072111tcd.shtml>

Surveys for Thousand Cankers Disease (TCD) in Wisconsin Underway

With growing concern for the health of Wisconsin's walnut resource in Wisconsin we are taking efforts to survey for this potential threat. To date TCD has not been detected in Wisconsin. We are starting to follow up on reports of declining walnut in woodlands and surveying our state park properties in southern WI. Although we are getting reports of declining walnut so far no evidence of TCD has been detected. We will continue following up on such reports. If you are woodland owner or municipal forester and observe suspicious walnut please contact a DNR forest health specialist.



Peeling 2-3" diameter walnut branch in search of walnut twig beetles.

In addition to DNR TCD surveys, WI DATCP is planning on surveying and sampling at mills that receive walnut, conducting outreach to non-state owned campgrounds and following up on leads. WI DATCP has an emergency rule quarantine in place prohibiting walnut from TCD quarantined areas. This rule is expected to become permanent in August. Here is a press release from January regarding the temporary emergency rule and contact information if you have questions: <http://datcp.wi.gov/news/?Id=218>

Rhizosphaera Needle Cast on Spruce

The cool wet spring was very conducive this year for conifer needle fungal pathogens. In particular we observed a fair amount of needle cast disease issues on spruce. Forest pathologist, Kyoko Scanlon, checked in with Brian Hudelson at the UW Plant Disease Diagnostics Lab. They also had received a number of samples from spruce. The primary agent identified causing the damage was believed to be Rhizosphaera needle cast. For more information on this pathogen see:

<http://www.plantpath.wisc.edu/pddc/factsheets/Full%20Color%20PDF%20Format/Rhizosphaera%20Needle%20Cast.pdf>



Lower crown needle browning and needle drop primarily caused by Rhizosphaera needlecast. Photo shared by forester, Mike Sieger.

Imprelis Herbicide

The lawn care herbicide Imprelis has been implicated as causing damage to conifers, in particular spruce and pine. This product is labeled for commercial applicators only so homeowners doing their own lawn maintenance should not have to worry that they may have used this product. For more information see:

http://hort.uwex.edu/sites/default/files/Imprelis%20factsheet%20Jull_0.pdf (a nice information sheet with some contact information and additional resources from Dr. Laura Jull, UW Dept. of Horticulture)
http://www2.dupont.com/Professional_Products/en_US/assets/downloads/pdfs/H65717.pdf (Label)



Symptoms on spruce implicated to have herbicide injury from the product Imprils

Japanese Beetle (Mike Hillstrom)

(Japanese beetle populations have been very high this year in many parts of Wisconsin generating numerous calls from concerned landowner. Mike Hillstrom, Forest Health Specialist out of Wisconsin Rapids had a nice write up on this pest in his regional newsletter. I have added it here. Thanks Mike!)

Forest health staff have received complaints about Japanese beetle outbreaks throughout central Wisconsin and as far north as Green Bay and Wausau as the population of this insect pest continues to expand across the state. Japanese beetle larvae live in the soil and eat the roots of turf grass and ornamentals. Adult beetles are pests of more than 300 plant species including Norway and Japanese maples, birch, crabapples, purple-leaf plums, roses, mountain ash and linden. They are such a destructive pest because of their wide host range, ability to fly (1/2 mile), and long (for an insect) adult feeding period (~ 2 months). Adult feeding on leaves creates a characteristic lace-like skeleton (Photo 1) as the beetles chew between the veins. Adult beetles are shiny, metallic green with coppery-brown wing covers (Photo 1).



Photo 1: Adult Japanese beetles feeding

Japanese beetle management- Management of Japanese beetles is typically frustrating and difficult. Putting up traps to capture beetles has been shown to attract more beetles to the area which can lead to more damage than if you did nothing. Maybe you'll be lucky and your neighbors will put up traps! Spraying the beetles with insecticide works for a few days but the beetles often return from nearby areas that were not treated. This means the only realistic option for many landowners is maintaining tree health and letting the beetles run their course (Photo 2). If you want to protect high value plants with insecticide keep in mind that both the adult and larvae cause damage and treatment of both life stages may be necessary. Insecticides for use on Japanese beetles can be found at any garden or hardware store and should be applied to foliage and flowers in the afternoon when the beetles are most active. Several biological control options (milky spore disease, nematodes, fungal pathogens) are available to kill larvae in the soil but their effectiveness is inconsistent. Find more info at (<http://entomology.wisc.edu/~rcwillie/x1062.pdf>).



Photo 2. Damage from Japanese beetle feeding on a little leaf linden in Tomah. Thanks to Christine Walroth for the great photo!

New Tick Borne Disease

Powassan virus is a new tickborne pathogen that has been detected in Wisconsin and Minnesota. Although the rate of detection is very low it is important to be aware of this additional tick vectored disease risk. For more information:

<http://www.health.state.mn.us/divs/idepc/diseases/powassan/powassan.pdf> (MN Dept of Health fact sheet)

<http://www.ncbi.nlm.nih.gov/pubmed/20443328>

<http://www.dhs.wisconsin.gov/communicable/tickborne/Powassan/POWApril2010WMJ.pdf>

Miscellaneous

Asian Longhorn Beetle Educational and ID Materials

Thanks to the new urban forestry assistant in southern region, Elizabeth Dierickx, for pointing out this link to a great education resource on Asian longhorned beetles.

http://www.beetlebusters.info/beABeetleBuster_educators.php

Here is a nice ID card that you can also print and carry with you when working in the field:

http://www.beetlebusters.info/downloads/pdfs/ALB_ID_Card_Template.pdf

These materials are linked under the “BeetleBuster” website:

<http://www.beetlebusters.info/>

Golden-backed Snipe Fly

While out ground checking defoliation in Sauk County this eye catching fly was observed quite commonly. Apparently not much is known about the lifecycle of this species. I did find reference to snipe flies that mentioned they are indicators of clean water and watershed health. The larvae are predaceous aquatic insects while the adults apparently feed on blood. I don't know if this may be true for this particular species but I didn't see fangs and they left me alone!



SOR Forest Health Assistance
Wisconsin DNR, Forest Health Protection Unit
September 2010 to September 2011

Contacts for DNR staff, municipal foresters, and forestry cooperators

For general forest health and municipal level urban forest health issues

Mark Guthmiller (SOR region: SCR & SER combined) 608-275-3223

For gypsy moth

Mark Guthmiller (SCR Team area) 608-275-3223

Bill McNee (SER Team area) 920-662-5430

Andrea Diss-Torrance (Statewide issues) 608-264-9247

For emerald ash borer

Mark Guthmiller (SCR Team area) 608-275-3223

Bill McNee (SER Team area) 920-662-5430

For beech bark disease/beech scale

Mark Guthmiller (SCR Team areas) 608-275-3223

Bill McNee (SER Team area) 920-662-5430

Direct public inquiries regarding yard tree concerns to UW county or state extension offices or:

Emerald ash borer hotline

1-800-462-2803

Emerald ash borer e-mail

DATCPEmeraldAshBorer@wi.gov

Gypsy moth hotline

1-800-642-MOTH

Additional Program Web-based Resources:

Forest Health web site: <http://www.dnr.state.wi.us/forestry/fh/>

Gypsy Moth web site: <http://gypsymoth.wi.gov/>

Emerald ash borer web site: <http://dnr.wi.gov/forestry/fh>

Emerald ash borer cooperative state web site: <http://emeraldashborer.wi.gov/>

Note: Southern Region is composed of both SCR and SER Team Counties

SCR Team Counties: Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock and Sauk

SER Team Counties: Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington, and Waukesha