

Southern Region Forest Health Update

Wisconsin DNR, Forest Health Protection Unit

March 24th, 2011 Vol. 8 No. 1

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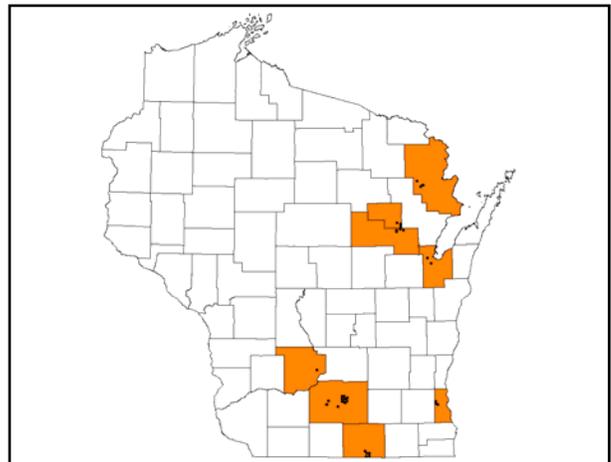
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Mark Guthmiller (Southern Region Forest Health Specialist)
Articles in this newsletter were written by Mark unless otherwise noted

Gypsy Moth Program Updates (Bill McNee)

Proposed Treatment Block Maps Available for Viewing:

Maps of the proposed DNR suppression program treatment areas are now available online at www.gypsymoth.wi.gov. This year the program plans to spray approximately 3,000 acres in 8 counties. Public notification meetings have been completed, with very low attendance this year. For more information, visit www.gypsymoth.wi.gov.



Counties with DNR gypsy moth program treatment areas are shown in orange.

Gypsy Moth Suppression Program Staff Retirement:

Gypsy moth grants manager Sue Kocken has retired after 7 years in the gypsy moth program. We wish her well in retirement. Kathy Hanson has taken over as the new gypsy moth grants manager in Madison. Kathy can be reached at Kathleen.Hanson@wisconsin.gov or (608) 266-9426.

WI DATCP “Slow the Spread” Proposed Treatments:

The Wisconsin Department of Agriculture, Trade and Consumer Protection’s Slow-the-Spread Program plans to aerially treat about 250,000 acres in 22 counties this year. Maps are now available online at www.gypsymoth.wi.gov. The State of Iowa will be doing its first slow-the-spread treatments this summer, with up to 70,000 acres proposed for mating disruption treatments in the far eastern counties. Minnesota will also be doing slow-the-spread and eradication treatments in 2011.

WI DATCP Gypsy Moth Program Hiring Trappers:

WI DATCP is soliciting applications from people interested in serving as gypsy moth trappers this upcoming season. The **application deadline is Thursday March 31st**. More information can be found at: http://datcp.wi.gov/Environment/Gypsy_Moth/index.aspx

Private Aerial Applicators Listing:

We have heard of significant landowner interest in hiring applicators to do aerial spraying for gypsy moth this spring, primarily in Marinette County. A list of for-hire aerial applicators is available on the state's gypsy moth website, www.gypsymoth.wi.gov. Callers interested in aerial spraying for gypsy moth or other defoliating insects can be referred to this website for the list and a guide to organizing private spraying. There are currently only two applicators licensed for aerial spraying in residential areas (defined as more than one residence per five acres being sprayed). It's too late to add any treatment areas to the DNR Suppression Program for spraying this spring. Applicators should be contacted as soon as is practical.

Spring Gypsy Moth Control Options for Homeowners:

Homeowners who are interested in reducing gypsy moth populations should consider oiling or removing egg masses well before they start hatching in April. Horticultural oils that suffocate the eggs are available at many garden centers and large retailers. In general, these are applied when temperatures are above 40° and freezing is not imminent. If removing egg masses, scrape them into a bucket of soapy water and then let them soak for a few days before discarding in the trash. Additional management options for homeowners and woodlot owners are available at www.gypsymoth.wi.gov.

Homeowners considering insecticide treatments this spring should contact an arborist or tree service soon. The Wisconsin Arborist Association has a list of certified arborists available at www.waa-isa.org. Additional businesses offering insecticide treatments may be found in the phone book under 'Tree Service.' Homeowners can also purchase insecticides (some applied as a soil drench) at garden centers and large retailers.



Female gypsy moth laying an egg mass.

Emerald Ash Borer Updates (Bill McNee)

New Survey Technique:

A new EAB survey technique was recently demonstrated in Green Bay by Dr. Krista Ryall of the Canadian Forest Service in Sault Ste. Marie, Ontario. The technique involves peeling mid-crown ash branches to look for EAB larvae and galleries, and has been shown to be an effective method of finding EAB before trees show symptoms of infestation. It is hoped that this survey method can be used by arborists and municipal forestry crews as part of their regular work to prune and remove trees. The methodology is available at http://www.oakville.ca/Media_Files/forestry/EABbranch_samplingRyall2010.pdf. For more information, contact one of the DNR Forest Health or Urban Forestry staff.



Samples of 2-3" diameter branches infested with EAB. (Branches are from Ontario, not Green Bay).

EAB Demo Kits:

The southern region has a few of the EAB demo kits available for educational purposes. If you don't already have one and would like a kit, email Bill McNee (bill.mcnee@wisconsin.gov) or Mark Guthmiller (mark.guthmiller@wisconsin.gov). Kits are first come, first serve. They have vials of the adult and larva, as well as split pieces of old infested wood showing galleries.

EAB Webinar:

If you missed the recent webinar, "Here Today – Gone Today: Mechanized Removal & Processing of Urban Trees," you can watch it online at:

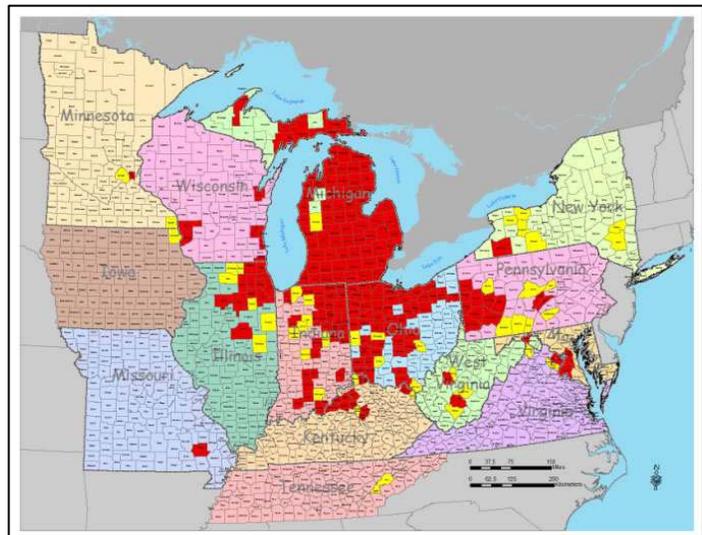
<https://umconnect.umn.edu/p78694155/>. This webinar discussed a demonstration project conducted in Oak Creek last fall, using traditional logging equipment to harvest large numbers of urban trees. The equipment is expensive to bring in and operate, but can cut and process trees very quickly. Economic analysis is in progress.



Processor removes an urban ash tree in Oak Creek, November 2010.

USDA EAB Map:

The USDA has recently released a map showing the counties where EAB was first detected in 2010. Of the 47 counties that had first detections, 27 were found by the purple traps and 19 were found through other surveys or investigations.

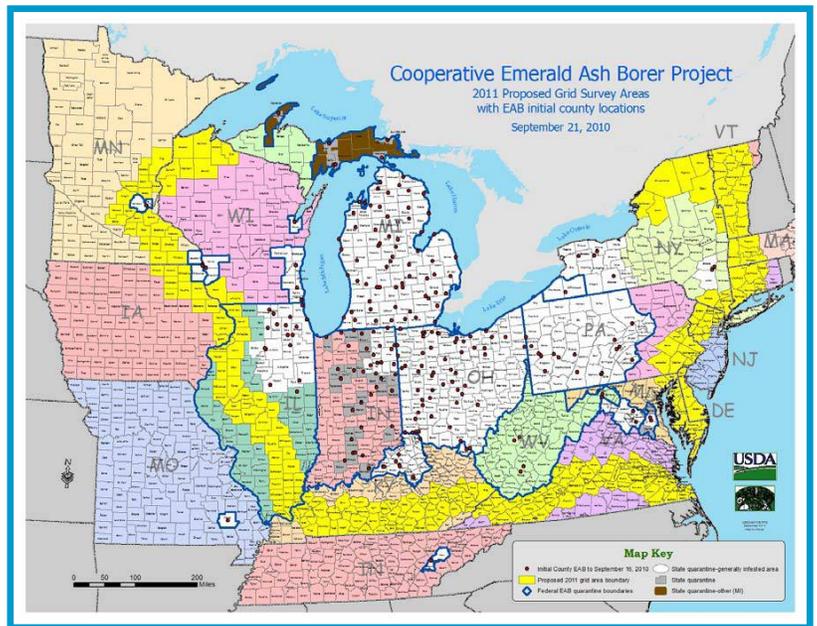
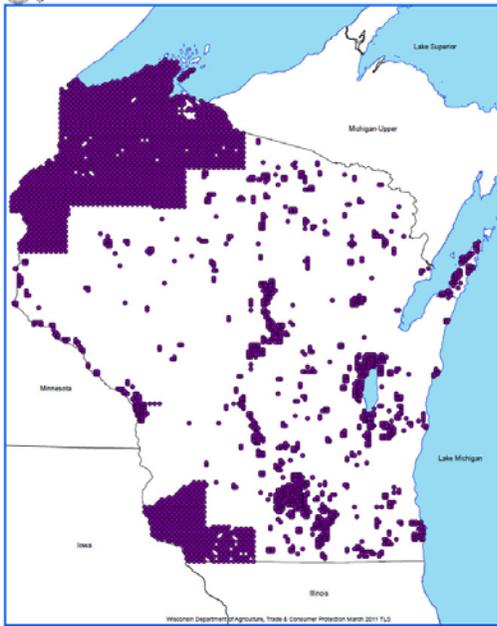


Counties with first EAB detections in 2010 are shown in yellow.

WI DATCP EAB Purple Panel Trapping Plan:

DATCP is planning to set up approximately 6,000 EAB traps this year. About 2,000 will be on a grid in northwest and southwest Wisconsin, while the rest will be risk-based and placed at campgrounds, wood-utilizing businesses, etc. Traps are not being placed in counties where EAB has already been detected. Traps can be purchased from two manufacturers; contact Bill McNee for details (bill.mcnee@wisconsin.gov).

2011 DATCP EAB Trapping Survey Program



2011 EAB trapping plan. State map by WI DATCP and multi-state map by USDA.

EAB DVD Available:

The Wisconsin Cooperative Emerald Ash Borer Program has recently put together a DVD with information on how to identify ash trees, EAB and ash trees infested with EAB. If you would like a copy of this 10 minute DVD please email Mark Guthmiller (mark.guthmiller@wisconsin.gov) or Bill McNee (bill.mcnee@wisconsin.gov).

EAB Natural Enemy Video:

This video clip features Dr. Deborah McCullough, Entomologist from Michigan State University and Dr. Jonathon Lelito, Bio-Control Facility Manager with the USDA. These folks discuss EAB impacts and work related to establishment of natural enemies against EAB. http://www.youtube.com/watch?feature=player_embedded&v=Jc668J_TxYs

WI DATCP EAB Program Coordinator Takes New Position:

Jen Statz, EAB program coordinator for the Dept. of Agriculture, Trade and Consumer Protection, has taken a new position within that agency. We wish her well. Questions about the EAB survey project can be directed to Melody Walker (melody.walker@wisconsin.gov), or to the links on the EAB website, www.emeraldashborer.wi.gov.

Brown Marmorated Stink Bug Pest Alert (Bill McNee)

The Asian ladybeetles may be annoying in the fall, but they're mild compared to a new pest that has been found in Michigan. The Brown Marmorated Stink Bug (BMSB) has a similar home-invading behavior, but has a much stronger odor. BMSB is also a serious pest of many fruit and vegetable crops, including tree fruits, soybeans and green beans. The pest was first found in Pennsylvania in the late



Brown Marmorated Stink Bug. Photo from www.forestryimages.org.

1990s and has since been found in a number of northeastern and west coast states. A breeding population of BMSB has not been detected in Wisconsin, although 2 specimens that were transported into Wisconsin from other states were identified by Phil Pellitteri in 2010.

For more information on BMSB, read this story: http://www.mlive.com/business/west-michigan/index.ssf/2011/02/brown_marmorated_stink_bug_cou.html.

Hemlock Woolly Adelgid Has Been Redetected in Michigan (Bill McNee)

Hemlock woolly adelgid (HWA) is an exotic insect from Asia that was first found in the US in 1924 and has since killed millions of hemlock in eastern states. It was accidentally imported on nursery stock into Michigan and was first found on naturally growing hemlock in 2006. Michigan attempted to eradicate the insect whenever it was found, but in 2010 HWA was discovered on ornamental hemlocks in three new counties in Michigan's Lower Peninsula.

HWA is a tiny insect that produces a white fluffy wool-like covering to protect itself. It inserts its mouthpart into the base of a hemlock needle and sucks the sap of the tree. The population of HWA on a tree will become so numerous that they will cause stunting, early needle loss, and tree death within a few years. They attack all ages of hemlocks anywhere that the tree can be found, from pure stands to yard trees. It has not been found yet in Wisconsin, so if you spot the white fluffy masses on hemlock twigs please report it to the DNR Forest Health staff.



White fluffy wool covering adult hemlock woolly adelgids and their eggs.

Oak Wilt Reminders

Pruning Guidelines:

As we approach April folks should remember that the critical infection period for oak wilt runs from April through July. The WI DNR recommends no pruning of Oaks during this time frame and if folks want to be more cautious they should wait until the dormant season. Also be aware that many local municipalities also have their own pruning restriction dates listed in their ordinances. If pruning is required or damage occurs during the critical infection period, a use of a tree wound dressing applied immediately to the open wound is highly recommended. For more information on oak wilt visit:

<http://dnr.wi.gov/forestry/fh/oakwilt/>

Harvesting Guidelines:

For those considering timber harvesting with an oak component involved please visit this web link with a risk rating guide to help in decision making regarding harvest timing and risk of oak wilt introduction:

<http://dnr.wi.gov/forestry/fh/oakWilt/guidelines.asp>

FTC EMS SOR TRNG CLS – text messaging for...

Forest Tent Caterpillar Egg Mass Survey Southern Region Training Class

Our first forest tent caterpillar egg mass survey training was conducted in southern region on March 8th of this year. As mentioned in a previous newsletter, we experienced an area of heavy defoliation from forest tent caterpillar in parts of Sauk and Columbia County in 2010. The native forest tent caterpillar is more

commonly a major defoliator in northern Wisconsin. Since this was a rare occasion for staff down here we set up a survey training field day. The survey is meant to predict defoliation severity for this coming spring. The new training class members are now official “experts” in the survey protocol used.



FTC EMS graduation class from left to right: West Central forest health specialist Mike Hillstrom, forestry team leader MaryAnn Buenzow, Sauk Co forester Paul Kloppenburg, Sauk Co. forester Rick Livingston, and UW-Madison post doc Ezra Schwartzberg.

Forest Tent Caterpillar Egg Mass Survey Results:

Three sites were selected east of Devils Lake in Sauk County to test the survey protocols. The survey protocol called for cutting two 6-12” dbh aspen trees at each site and counting all the egg masses found on the twigs of each tree. There was variation in egg mass counts between the three sites which ranged from 0 to 15 egg masses per tree. Based on these results the survey indicates possible scattered areas of light to moderate defoliation this spring in the areas we checked, which was east of Devils Lake. There was some question to the viability of some egg masses observed. The egg masses in question were not empty but no longer were completely covered with the outer protective coating found on tent caterpillar egg masses. Ezra Schwartzberg, who is conducting research on FTC parasitoids, collected all the egg masses and will let us know if the egg masses in question were still viable. These three sites will be monitored for defoliation this spring to compare predicted defoliation survey results with actual defoliation.



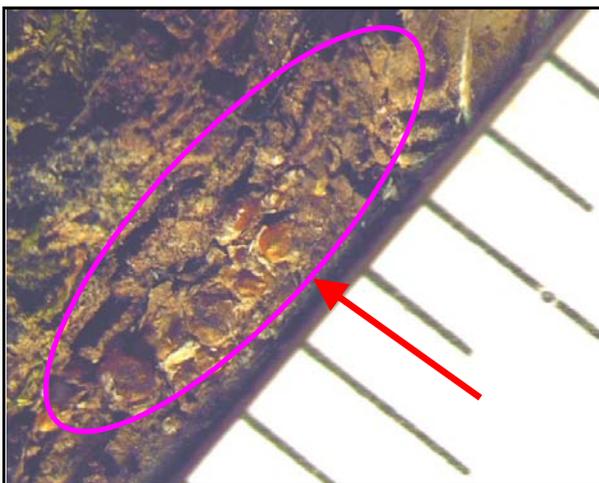
FTC survey team checking tree canopy branches for egg masses.



An example of a partially coated egg masses.

An Obscure Answer to Scale on Walnut

In the December SOR forest health update I had mentioned a scale species possibly associated with necrotic cankers on walnut in a woodlot in Dane County. In this case the scale was most commonly observed on early forming canker swellings but by the time the repeating open cankers were present the scale was not commonly found. Samples were sent in to Phil Pellitteri at the UW Madison Insect Diagnostics Lab for identification. Phil thinks they are some form of the Obscure scale complex in the genus *Melanaspis*. Although he could not confirm exact species with samples submitted, *Melanaspis obscura* (Obscure scale) is mentioned in the literature as a pest on Walnut. The obscure scale is considered mainly a pest on stressed urban oak species and other hardwoods and is considered native to the eastern half of North America. This armored scale insect causes its damage by sucking sap from the tree, and to a lesser extent, by forming layers of encrusted scale shells limiting branch photosynthesis. It has not been considered a pest to forested natural stands likely due to natural predators and disease. It is possible this was just a coincidence between observing the scale and the necrotic canker together on walnut or possibly the stress from the necrotic canker made the tree susceptible to the scale. I would appreciate reports both urban and rural walnut with cankers so I can continue to monitor any possible relationship between these two tree pests.



Clusters of small obscure scales less than 1/8th in size



Close up of the scale from the walnut canker area

Forest Health Program Goes to the Dogs

A few folks I have worked with might chuckle seeing this photo. They might likely remember my great fear of dogs and could imagine my subconscious anxiety as I approached this area for a site visit. As a child, at around the age of four, I was traumatized by the local town vet's dog, a giant St. Bernard. Bernie viciously attacked me one day by sneaking up and putting his huge paws on the lower step of my tricycle causing it to tip over and me to fall backwards onto the ground. Bernie began to viciously devour me by licking my face like a lollipop. Over the years this fear has produced great moments of embarrassment, such as the time I was dating my spouse and we went for a bike ride in the country and a local farm dog started chasing after us. I did not show any sense of chivalry and pedaled as fast as I could to stay in the front (she still married me). There was also the time when I was seeking permission to access some private woods for a survey while with our state program coordinator and a forest service employee. As I approached the rural home, walking halfway between the driveway and the house, a Great Dane came barreling around the corner. I was never in track but I think I may have won a first place ribbon that day as I dashed back to the safety of the car. Then there was another co-worker who knew of this fear and loved to pick on me. Of the many encounters that season I will mention the one about a black lab, named "Bear". It was an appropriate name as this dog's head was as huge as a bear. In proper teasing form, I was warned to be cautious around this dog as he was unpredictable. Of course it was a wonderful friendly lab and joined us for the survey in the woods...that was until a toad hopped in front of us. Bear turned into Cujo the rabid dog going after that toad. All though I became very nervous I did prevent the "flight" response from kicking in. I guess the point of these stories are that if you happen to be working with me in the field and all of a sudden see me running through the woods realize you are on your own when that wild dog comes nipping at your heels. And now you also know the real reason why I always carry an axe and a shovel into the woods.



Site Visit Findings

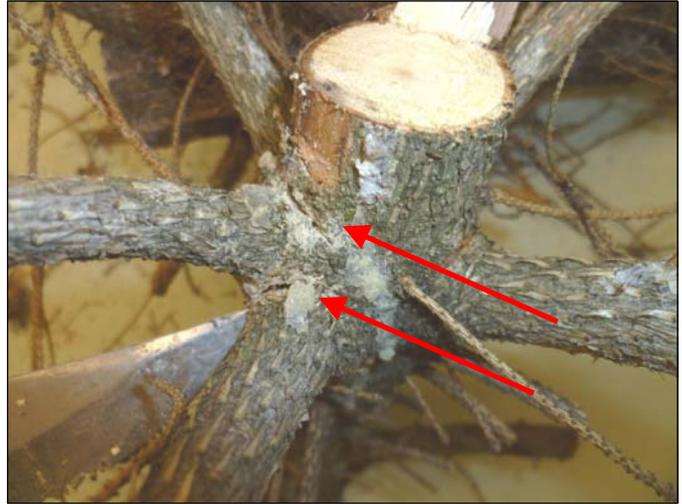
The dog stories were probably more entertaining than the observations at this site visit. The main problem was red pine mortality in an overstocked windbreak setting along with some scattered white spruce that had died. The windbreak pine had previously had some dead trees removed and remaining trees had been treated for bark beetle control at one point. The current declining and dead pine had no new signs of active bark beetle attack on the samples looked at. Diplodia shoot blight was quite extensive at this site likely due to the stress from overstocking competition. Also a portion of the windbreak had a spreading pattern of mortality indicative of *Leptographium*, but due to the frozen ground samples were not taken. Interestingly there were necrotic like fruiting bodies in association with diplodia fruiting on the branch samples. Kyoko Scanlon was able to confirm numerous spores from diplodia but we were not able to produce ascospores from the necrotic like



Orange necrotic like fruiting mixed with black diplodia pycnidia

fruiting body. UW Madison Forest Pathologist, Dr. Glen Stanosz, had previously confirmed the fungus *Scolecnectria cucurbitula* on white pine. Apparently this fungus has also been reported on other hard and soft pines in the literature and shows up on dead and dying pine branches. This fungus is apparently a weak pathogen or saprophyte and likely not a major health concern. I suspect this is what was observed on the red pine branch samples.

In terms of the scattered white spruce mortality at this site a specific cause was not determined. Cytospora canker was suspected but we could not isolate this in the lab. There also appeared to be extensive wounding of many branch unions to the main stem, likely due to heavy snow loads. This may have served as a port of entry for pathogens. The site also had experience a prolonged wet period the previous season which may have played a role in the mortality.



Branch union wounds likely due to heavy snow

Miscellaneous Topics

WI DNR Forest Health Annual Report for 2010 Available for Viewing:

The DNR's 2010 Forest Health Annual Report has been released, and is available online at:

<http://new.dnr.wi.gov/DocumentLibrary/Repository/Forestry/fh/AnnualReports/AnnualReport2010.pdf>.

HAPPY SPRING!

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 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 areas) 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://www.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