

Southern Region Forest Health Update

Wisconsin DNR, Forest Health Protection Unit

April 29th, 2013 Vol. 10 No. 3

Topics in this update

Emerald Ash Borer

NR40 Invasive Species Rule Update and EAB BMP's

Gypsy Moth

Walnut Twig Beetle and Thousand Cankers Surveys

Hazard Tree Training

Girdled Trees and Bark Stripping

Ticks

Miscellaneous

Articles in this newsletter were written by Mark Guthmiller, Regional Forest Health Specialist, unless otherwise noted.

Emerald Ash Borer – Bill McNea

Insecticide Treatment

Property owners who are considering treating their ash trees with insecticide should apply them during the spring. It may be appropriate to delay treatments by a week or two due to the cold spring weather that we have been having.

The current recommendation is to consider treating high-value trees with insecticide if within 15 miles of a known EAB infestation – a list of known detections can be found on the Wisconsin EAB webpage, www.emeraldashborer.wi.gov. This webpage also has a number of landowner and professional guides for insecticide treatments, including when to apply them.

University of Wisconsin Extension
Homeowner Guide to Emerald Ash Borer Insecticide Treatments
Dr. David W. Williams and P.J. Lewis, UW Extension

Emerald ash borer insecticide treatment considerations. Several insecticide products are available to homeowners for control of emerald ash borer (EAB). Based on current research, treatments are suggested only for ash trees located within 15 miles of a confirmed EAB site or 15 miles from other known infested areas. Insecticide treatments are not necessary for ash trees located outside of these areas. Call within the 15-mile radius. All trees should be treated. Due to the expense of yearly insecticide treatments, one should consider the value of a particular tree and the condition of the tree before making any treatment. In addition, consider the health of each tree before treating. Research suggests that insecticide treatments are approximately more effective on EAB-infested ash trees with less than 20% canopy dieback. Insecticide treatments are not suggested for trees with greater than 20% canopy dieback. Trees with greater than 50% canopy dieback should be removed and destroyed if insecticide with another partner.

Emerald ash borer insecticide treatment options. Insecticide products available for use by homeowners are summarized in Table 1. The table:

- A-Z-C-E-F System insecticide (Tree Insecticide)
- Bayer Advanced Tree and Shrub Insect Control (imidacloprid)
- Bayer Advanced Tree and Shrub Insect Control II (imidacloprid)
- Bayer Advanced Tree and Shrub Insect Control III (imidacloprid + imidacloprid)
- Ferti-Lome Tree and Shrub System: D-achin (imidacloprid)
- Green Light Tree and Shrub System: Insect Killer (imidacloprid)
- Green Light Emerald Ash Borer Killer (imidacloprid)
- Green Light System
- Ortho Max Tree and Shrub Insect Control (imidacloprid)
- Ortho Max One Year Long Tree and Shrub Insect Control (imidacloprid)

The Bayer Advanced Products: Borate-Away Tree and Shrub Insect Control, Ferti-Lome Tree and Shrub System: D-achin, Green Light Tree and Shrub Insect Control, and Ortho Max One Year Long Tree and Shrub Insect Control are systemic insecticides applied as soil drenches around the base of an ash tree or injected in the trunk and/or branches in mid-October. They are the Bayer Advanced Products (Tree and Shrub Insect Control, Tree and Shrub Insect Control II, and the Green Light products). Tree and Shrub Insect Control, Tree and Shrub Insect Control II, and the Green Light products are available in granular formulations. Be aware that many insecticide products available at hardware stores are granular contact tree sprays. Contact sprays do not provide systemic protection to make sure that insects reaching the central stem-killing system. Granular formulations are made and distributed in the first year following treatment. Current research findings also suggest that EAB-infested ash trees greater than about 50 inches in circumference (10-inch DBH) cannot be treated in the fall and again the following spring. Additionally, large trees may require two years of treatment before they are effectively controlled. Thus, treatment of large trees should begin before the tree becomes treated. Lastly, insecticide treatments must be repeated each year.

Although A-Z-C-E-F System Insecticide Tree treatments are available to homeowners, they are not suggested for use by homeowners because they require physically drilling into a tree during the application.

Revised Oct. 2, 2012

Big Foot Beach and Richard Bong State Park Updates



Removal of ash at the entrance to Big Foot Beach State Park creates a much more open environment.

Sample EAB insecticide brochure available at www.emeraldashborer.wi.gov.

Removal of EAB-infested ash trees began March 27 in public-use areas at Big Foot Beach State Park in Walworth County and at Richard Bong State Recreation Area in Kenosha County. The trees are being removed because they have become a safety hazard due to the likelihood of falling branches. Ash trees are prone to dropping their branches once they are in decline. Most of the trees being removed would die this year if left in place. All wood materials will be managed in a way that will not contribute to further EAB spread. It is expected that most trees will be turned into firewood and woodchips to be used on site, while some trees may be used for lumber. A mixture of tree species will be used during replanting efforts.

New EAB detections in southern Wisconsin

In the last month we have had several new EAB detections in southern Wisconsin:

Village of Bristol (Kenosha Co.)

Town of Burlington (Racine Co.)

City of Beloit (Rock Co.)

Village of Williams Bay, Village of Walworth, and Town of Lyons (Walworth County).

In these area's watch for woodpecker activity on ash trees. It is a common indicator of insects infesting the tree, and just might be emerald ash borer.



Beloit public works staff Mike Ferger and Bruce Slagoski along with WI DNR urban forestry assistant, Elizabeth Dierickx inspect suspect samples.



Example of an EAB gallery on a terrace ash tree removal that alerted City of Beloit staff to the infestation.

If you are located close to the Illinois state line, you may wish to look at the updated list of Illinois EAB detections and see if they have found EAB near your property or community:

http://www.agr.state.il.us/eab/PDFs_for_web/Home/Confirmed_EAB_Locations.pdf. Some Illinois 4th graders have been busy raising money for EAB treatments: <http://glenellyn.patch.com/articles/glen-ellyn-ben-franklin-students-raise-money-for-emerald-ash-borer-treatment>.

Other recent EAB detections

- Concord, New Hampshire (that state's first EAB detection).
- North Carolina - EAB larvae found in a sawlog originating from Pennsylvania (no known infestations in North Carolina, though).

NR40 Invasive Species Rule Update and EAB BMP's

Earlier this month we received final determination regarding a couple regulatory issues. In short, following the WI Dept. of Agriculture emerald ash borer quarantine regulations is considered the "reasonable precaution" as it relates to EAB and the WI DNR invasive species rule NR40. With that issue resolved a list of voluntary BMP's (best management practices) to reduce movement of infested ash has been developed and finalized for use within an EAB quarantine. Click here to view the voluntary [EAB BMP's](#)

If you have additional questions please contact Mark Guthmiller or Bill McNee.

Gypsy Moth- Bill McNee

Phenology

Biosim (software) simulations of gypsy moth development are predicting that we are about 2 weeks behind the average for 10% egg hatching in most cities modeled. We are very far behind 2012's very warm spring.

Biosim is predicting 10% hatching between May 5-9 in southwest and south central Wisconsin. 50% hatch is predicted between May 11-16, and the model suggests aerial spraying might occur between May 24-27 (note that for timing of treatment, at a regional level, we look at actual on-site development along with appropriate weather conditions).



Gypsy moth caterpillars hatching from an egg mass

Homeowner control options

Homeowners who are interested in reducing gypsy moth populations should oil or remove egg masses before they start hatching. 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 (sticky barriers, burlap bands, etc.) 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 at garden centers, hardware stores and large retailers.

It is getting very late to be able to set up privately-organized aerial spraying this spring, but if interested, a list of for-hire aerial applicators is available on the state's gypsy moth website, www.gypsymoth.wi.gov.

Walnut Twig Beetle and Thousand Cankers Surveys

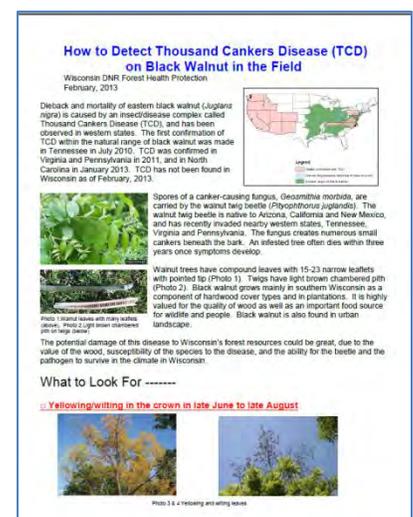
We are gearing up for this season's walnut twig beetle surveys and surveys to assess declining or dying walnut here in Wisconsin. We will be setting what are called Lindgren funnel traps (4 funnels) that are baited with a short distance male produce aggregation pheromone primarily on state DNR properties. I also encourage municipal arborists, landowners, and foresters to send me reports of declining or dying walnut for further investigations.

For more information on walnut twig beetle and thousand cankers disease visit the WI DNR forest health site:

[WI DNR Thousand Cankers](http://www.wisconsin.gov/dnr/foresthealth)

For detailed information on survey methods visit the UC Davis web site:

[UC Davis Thousand Cankers](http://www.ucdavis.edu/extension/foresthealth/)



WI DNR handout on how to detect TCD

Hazard Tree Training

As part of training for WI DNR State Parks, forest health specialists recently assisted DNR forest pathologist, Kyoko Scanlon in a hazard tree training session at Wyalusing State Park this past month. The training showcased basic diagnostics and some tools for making assessments.

For more information on tree defects and hazards see: [USDA Forest Service "How to Recognize Hazardous Defects in Trees"](#)



WI DNR park staff gathers for discussions on both the art and science of assessing tree failure risk.



Forest health specialist, Mike Hillstrom, demonstrates the low-tech tapping method of determining possible internal decay.



Forest health specialist, Brian Schwingle, demonstrates the high-tech resistograph drill for determining decay.



Forest pathologist, Kyoko Scanlon, explains how to read the graph created by the resistograph drill.

Girdled Trees and Bark Stripping

Now that the snow has finally melted and folks are getting outdoors they may notice some girdling at the base of trees or recent bark stripping on branches. Depending on where you are located it could be due to a number of critters including voles, rabbits, squirrels, porcupines, or other mammals.

UW Extension wildlife articles that may be of interest:

[Tree Squirrels in Wisconsin](#)

[Rabbit Ecology and Damage Management](#)

[Meadow Mice Control \(Voles\)](#)



Suspect vole damage to base of young tree

Culturally Modified Trees of British Columbia

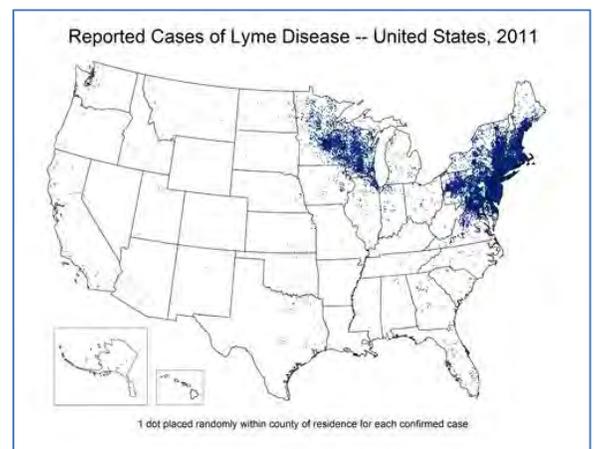
While searching for information of bark stripping related to some old basal damage to hemlock in Sauk County I came across an interesting document titled “Culturally Modified Trees of British Columbia”. While the document addresses a number western tree species and uses by aboriginal people, it also includes mention of trembling aspen, spruce, paper birch and hemlock species. This is a large document so for a sampling of what is in the book visit (note: large file 5MB) [Culturally Modified Trees of British Columbia](#) For more information or to view the full book visit: [Culturally Modified Trees of British Columbia](#)



Hemlock with undetermined cause to the basal wounds that were commonly observed at a state natural area in Sauk Co. Squirrels were suspect but no obvious tooth marks.

Ticks

It is that time of year to pay attention for ticks when working or recreating in the outdoors. The Center for Disease Control and Prevention has a great website with a lot of information and resources. I found the most recent (2011) reported cases map interesting. If you go the website you can see the reported cases data starting in 2001. I remember doing a tick survey back in the early 1990’s, collecting ticks from deer at a registration station as part of a statewide survey. At that time I recall the core incidence of Lyme bacteria infested ticks collected was mainly the west central Wisconsin and eastern central Minnesota at that time. I also recall for years not being overly concerned about Lyme disease and black legged ticks (deer ticks) while working in parts of eastern Wisconsin. No more! Visit the [Centers for Disease Control](#) for a lot more information on ticks and tick borne disease. For property managers don’t miss the [“Tool Kit”](#) site.



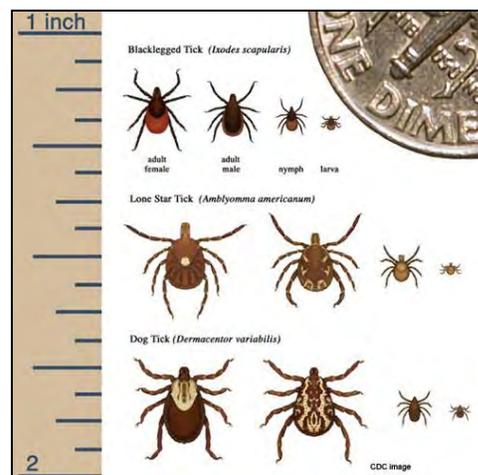
CDC map showing reported cases of Lyme disease (2011)

The [Wisconsin Department of Health](#) also has a great web site with resources including this ID reference card.

For this seasons prediction on deer tick populations visit the UW-Madison link for a short video: [deer-tick-outlook-for-2013](#)

Lyme Disease Quiz

If interested in testing your Lyme disease knowledge you can take this short quiz: [“Lyme Disease Quiz”](#)



WI Dept. of Health tick identification chart

Miscellaneous

Asian Longhorned Beetle Update

After an 11 year battle with the Asian Longhorned Beetle in New Jersey, USDA and state officials have finally declared the pest to have been eradicated (eliminated) from the state. Read more at: http://www.nj.com/middlesex/index.ssf/2013/03/nj_is_free_of_asian_long-horne.html. ALB has also been declared eradicated from Ontario, Canada:

<http://www.cbc.ca/news/technology/story/2013/04/05/science-asian-long-horned-beetle-eradicated.html>.



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

Other stories of interest:

- Monarch butterfly migration declines to its lowest level in decades: [monarch-migration-plunges-to-lowest-level-in-decades](#)
- Widespread honeybee deaths worry farmers: [/soaring-bee-deaths-in-2012-sound-alarm-on-malady](#)



DNR park staff inspecting for gypsy moth egg masses as part of recent property manager training session.

SOR Forest Health Assistance

Wisconsin DNR, Forest Health Protection Unit

April 2013

Contacts for DNR staff, municipal foresters, and forestry cooperators

<p>Mark Guthmiller Forest Health Specialist Wisconsin DNR 3911 Fish Hatchery Road Fitchburg, WI 53711 Phone: (608) 275-3223 Email: Mark.Guthmiller@wisconsin.gov Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, and Sauk</p>	<p>Bill McNee Forest Health Specialist Wisconsin DNR 1155 Pilgrim Rd. Plymouth, WI 53073 Phone: (920) 892-8756 x3043 Email: Bill.McNee@wisconsin.gov Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington, and Waukesha</p>
---	---

For a statewide forest health staff list:
<http://dnr.wi.gov/topic/ForestHealth/staff.html>

Additional Program Web-based Resources:
 WI DNR Forest Health web site:
<http://dnr.wi.gov/topic/ForestHealth/>

Report Emerald Ash Borer:
 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://gypsymoth.wi.gov>
(It is also recommended to report gypsy moth to your local government)

Please direct public inquiries regarding yard tree concerns to UW county or state extension offices:
<http://www.uwex.edu/ces/cty/>



[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.]