

Northeast Wisconsin Forest Pest Update – 1/16/09

Topics covered this month:

Insects:

Asian Longhorned Beetle in IL
Emerald Ash Borer Surveys
EAB Compliance Agreements
EAB Cost Calculators for Urban Forests
EAB Quarantine in the UP
EAB Website Updates
EAB and Winter Temps
EAB Who to report it to
Gypsy Moth Suppression Blocks
Gypsy Moth and Winter Temps

Diseases:

Butternut Canker
Phomopsis Canker

Other:

Forest Health Highlights on the web

Insects:

Asian Longhorned Beetle in IL – in August 2008 a single Asian Longhorned Beetle (right) was found in Deerfield in the Chicago area. Surveys followed but were unable to immediately locate any infested trees and the survey was expanded. I haven't heard any news of further finds in the area but will keep you informed when I do. Did you know that in its native lands the Asian Longhorned Beetle is called the Starry Sky Beetle?



Photo by PA DCNR

Emerald Ash Borer surveys – from Bill McNee. Visual surveys for EAB continue in the vicinity of Newburg, where the insect was first found last summer. An intensive, grid-based survey is being conducted within a two mile radius of the Village. From two miles to 10 miles away, a rapid visual assessment of ash trees visible from roadways is underway. Work on these surveys is expected to wrap up in March. The cut-and-peel survey in other regions of Wisconsin is complete. To date, no new infestations have been found outside of the Newburg area.



EAB - smaller than a penny!

EAB Compliance Agreements – from Bill McNee. Fifteen compliance agreements have now been signed with businesses that would like to move ash logs and other products out of the four EAB-quarantined counties (Fond du Lac, Ozaukee, Sheboygan and Washington Counties). Ten of those agreements are with the Federal Government and five are with the Wisconsin Dept. of Agriculture, Trade and Consumer Protection. A compliance agreement states how potentially-infested articles will be processed before leaving the quarantined area, in order to prevent the spread of EAB.

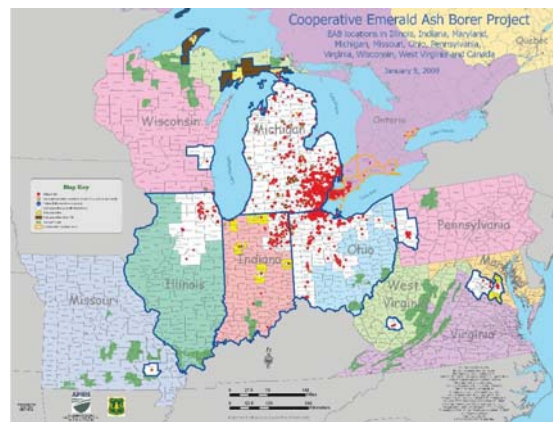
Sample compliance agreement text (for ash saw or pulp logs): This Emerald Ash Borer Compliance Agreement between the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) and (Company) provides a limited exception for the Company to the quarantine established pursuant to s. 21.17 Wis. Adm. Code and 7 CFR 301.53-3. Based upon the results of a DATCP inspection, DATCP certifies that all ash saw and pulp logs the Company plans to move out of the quarantine zone(s) a) are chipped/processed to a size measuring less than 1.0 inch in two dimensions; b) have had the bark and outer ½ inch of sapwood removed; or c) will be moved to a certified processing site between October 1 and March 31. (Note: Pick the applicable a, b or c.). All ash wood and ash debris must be processed by April 30.



EAB Gallery from WI infestation.

EAB Cost Calculator for Urban Forests – from Bill McNee. Purdue University Entomologist Cliff Sadof has developed an EAB cost calculator for urban foresters that can help estimate out-of-pocket expenses associated with a particular management strategy over a 25-year period. The calculator can be used to compare costs of management strategies that include mixtures of tree removal, replacement, and insecticide treatment. The calculator can be found at <http://extension.entm.purdue.edu/treecomputer/index.php>.

EAB Quarantine in the UP – some have asked me why the UP has those areas that are shaded in brown on the quarantine map (right). The map below shows a closer view of the UP. The yellow areas of the UP are a Level 2 quarantine for EAB and the brown areas of the UP are a Level 3 quarantine for EAB. Effectively the yellow areas are the quarantine surrounding an EAB find, while the brown areas are the “remainder” of the county in which the yellow Level 2 quarantine is located within. The counties in the UP are large counties so there is a lot of brown on the map. The 2 levels of quarantines are designed to keep EAB localized. Quarantined items cannot move



EAB range as of 1/5/09



out of the yellow Level 2 areas without a compliance agreement. Likewise quarantined items cannot move out of the brown Level 3 areas without a compliance agreement, although in this case quarantined items could be moved from the brown Level 3 area into an adjacent yellow Level 2 without a compliance agreement. So, did I make that as clear as mud for you?

EAB website updates - The state's EAB website, www.emeraldashborer.wi.gov, has several new additions worth looking at:

*Guide to managing EAB-infested wood

- *Sample compliance agreement for businesses (others will be on the website soon)
- *New North American EAB distribution map
- *January EAB Program newsletter

EAB and Winter Temps – from Bill McNee. What will the low temperatures do to EAB? This aspect of the bug's biology is not well studied, but the most likely answer is that the overwintering life stages would survive our recent temperatures with minimal mortality because of their location beneath the tree bark. Parts of the EAB host range, such as Russian Far East, Mongolia, and northeast China are very cold during the winter. Genetic testing indicates that North American EAB populations originate from northeast China, and thus would probably be well-adapted to cold conditions. In North America, EAB seems to have done just fine in places such as the Keweenaw Peninsula of Upper Michigan, Sault Ste. Marie, Ontario, and Ottawa, Ontario (their average January low temperatures are a little colder than Green Bay but comparable to Wausau, according to weather.com).

EAB – Who to Report it to – if you suspect that you have found EAB please call the hotline at 1-800-462-2803. Reports and/or digital photos of suspicious insects/trees can also be emailed to eab@datcp.state.wi.us. DATCP and/or DNR staff will visit symptomatic sites. For more information on EAB, visit the state's website, www.emeraldashborer.wi.gov. For compliance agreements and quarantine issues you can contact Bob Dahl at Robert.Dahl@wi.gov

Gypsy Moth suppression blocks – from Bill McNee. The Gypsy Moth Suppression Program received applications to spray 3,473 acres in NER this spring, including 127 acres at Gov Thompson State Park. The Program will be spraying in 10 of NER's 16 counties: Brown (486 acres at 8 sites), Fond du Lac (50 acres at 2 sites), Green Lake (560 acres at 7 sites), Marinette (127 acres at 1 site), Marquette (208 acres at 6 sites), Menominee (416 acres at 3 sites), Outagamie (156 acres at 3 sites), Shawano (1,084 acres at 5 sites), Waushara (257 acres at 7 sites) and Winnebago Counties (129 acres at 1 site). Statewide, 10,841 acres will be sprayed. Spray block maps will be available at www.gypsymoth.wi.gov at the end of January.

Gypsy Moth and Winter Temps – from Bill McNee. Will this week's very cold weather cause heavy mortality of gypsy moth egg masses? Probably not, due to the relatively brief exposure to critical temperatures. According to the book, 'The Gypsy Moth: Research Toward Integrated Pest Management,' significant egg mortality occurs after exposure to 16 F for several months or -9 F for shorter periods. In most of NER, night temperatures dropped below -9 F but warmed up again during the days. Another study found that significant mortality requires several days of exposure to -4 to -13 F temperatures. Two days of exposure to -22 F caused 100% mortality in a study from Massachusetts and Quebec. Relatively brief exposure to -35 to -40 F would cause heavy egg mortality.

Take winter mortality predictions with a grain of salt, though. Back in the winter of 2007, temperatures in NER briefly dipped below the threshold for egg mortality, but the populations wound up increasing dramatically that summer because weather conditions were so favorable for the caterpillars.

Diseases:

Butternut Canker – Butternut canker is a fungal disease caused by the fungus *Sirococcus clavigignenti-juglandacearum*. The fungus causes multiple cankers along the branches and main stem that can eventually girdle the tree. Butternut canker was first reported in Wisconsin in 1967. There is no cure for a tree with butternut canker but there are some butternut trees that are resistant to the disease. A butternut tree is considered healthy if at least 70% of the crown is alive and no more than 20% of the circumference of the tree is cankered for any given section of the main stem. A few cankers are ok but they should be small in size and they may appear as if the tree is trying to grow over the canker. Resistant trees will seem to be healthy and fairly canker free while neighboring trees within the same stand are heavily cankered. Photo at right shows a blackened area on the bark indicating a canker. If you peel the bark at one of those black spots you will find long black cankers under the bark. A Wisconsin Garden Facts Sheet on butternut canker can be found at <http://wihort.uwex.edu/gardenfacts/XHT1142.pdf>



Phomopsis galls – phomopsis galls are caused by a fungus and can be unsightly on the branches of your tree (people often notice them in the winter with the leaves off). They occur in hickories, maples, oaks, and a few other species. The most common trees that I find them on in northeast Wisconsin are oaks but hickory can be heavily galled (right). Infections are usually localized to a single tree, with neighboring trees completely unaffected, or a small group of trees may be infected, although larger infection centers can be found. There is no known treatment for Phomopsis galls other than to prune them out and dispose of them, or simply live with them. If left on the tree they may eventually cause dieback or girdling of the stem that they are on. Phomopsis galls range in size from very small to gall masses larger than your head. Genetic variability within a tree species probably plays heavily in how many galls a tree may have. Phomopsis galls may look similar to Gouty Oak Gall which is a gall that forms on a branch in response to insect attack from a small wasp.



Other:

Forest Health Highlights on the web – the 2008 Forest Health Highlights are now available on the web. It's a big document but there's a lot of great info in it. Check it out at <http://dnr.wi.gov/forestry/publications/FHH08.pdf> If you're a cooperating forester with dial-up the 5M file may be too large to download, contact me for a printed copy if you would like one.

New mailing address for the Green Bay office – please update your address books! Effective immediately, we will no longer be using the P.O. Box for our mail. We will now use the street address for all of our mail.

Wisconsin DNR
2984 Shawano Ave

Green Bay, WI 54313-6727

NOTE: THE ZIP CODE FOR THE STREET ADDRESS (above) IS DIFFERENT FROM THE PO BOX ZIP CODE.

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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.