Northeast Wisconsin Forest Pest Update – 12/15/08

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Insects:
Allegheny Mount Ants
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New mailing address for Green Bay office

Insects:

Allegheny Mound Ants – these are the ants that build very large mounds (right, at the base of a spruce tree along the roadside). They often inject formic acid into plants and vegetation near their mound to kill vegetation that could shade their mound. Studies in West Virginia showed that 2 to 5 year-old trees near large mounds are especially susceptible to damage but trees up to 8 feet tall could be killed. They are also capable of biting you, and the formic acid that they use when biting does indeed sting (personal experience!) so often people are not very tolerant of these ants. Mound ants feed on small insects and can be quite effective at controlling sawfly populations in young pine plantations. In addition to feeding on insects Allegheny mound ants will guard aphid colonies so that they can collect "honey dew" from the aphids as the aphids suck the sap of the trees.

Allegheny mound ants are difficult to control but can be controlled by direct application of a residual insecticide to the mound. A variety of products are labeled for ant control and new ones come out every year, but what you want is a product that can be used as a drench. For best results, the top of the mound should be scraped away with a shovel to expose the large tunnels below it. When you disturb the nest the ants will defend it so be prepared by having on long pants which have been tucked into socks or boot tops and brush off ants that crawl on you. After opening a mound, pour in the drench so that it soaks into the soil. Repeat the process at each mound. Mounds can go quite deep so don't be too stingy on the drench.

Asian Longhorned Beetle – from Bill Mcnee. The Asian long horned beetle infestation in Worcester, Massachusetts continues to provide lessons for forest health professionals. This time, it's the importance of basic pest signs and symptoms training. The New York Times recently reported that tree inventory crews hired by the city in 2006 failed to notice the infestation.

EAB biocontrol – researchers in Michigan have found *Atanycolus hicoriae*, a small native parasitic wasp (right), attacking EAB, and doing a fairly good job at it. Previously 3 parasitic wasps from China had been released in Michigan after extensive testing to determine that these parasitoids would attack only EAB. This newest parasitic wasp is unique because it's a native insect. It is unknown if the wasp has always been attacking EAB since it arrived in the US or if this was a special one-time event that allowed the wasp to be so successful recently. More research is proposed from Michigan State University.

Photo by Dave Cappaert, Michigan State University, Bugwood.org

EAB surveys continue in Wisconsin – from Bill McNee. The Wisconsin Dept. of Agriculture, Trade and Consumer Protection (DATCP) continues to survey for EAB near the Newburg infestation as well as statewide. To date, no additional infestations have been detected. The destructive survey is complete in 26 of 29 counties. Rapid Visual Survey in the Newburg area is complete. 14 sites identified through this method will have trees or branches cut and peeled, and 78 locations will have purple sticky traps next summer. All EAB hotline-initiated site visits have been completed without finding any additional infestations.

DNR Forest Health staff will be conducting additional visual surveys at a number of state properties in the four EAB-quarantined counties (Fond du Lac, Ozaukee, Sheboygan and Washington Counties) later this week.

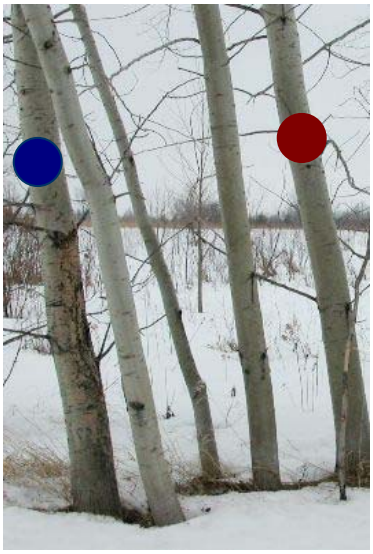
The next phase of the DATCP survey will begin in January, within 10 miles of the Newburg detection. Visual surveys (with some cut/peel work) will be conducted on all properties within 2 miles of Newburg. Between 2 and 10 miles from Newburg, all roadsides will be visually surveyed. Since last month's pest update, there have been no major new EAB finds. However, additional counties in Michigan and Illinois have been quarantined in response to earlier detections. A current EAB distribution map is available at: http://www.dnr.wi.gov/Forestry/FH/pdf/EABdistribution.pdf.

EAB Reporting in WI - Suspicious trees should be reported to the EAB hotline by calling 1-800-462-2803. Reports 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.

Gypsy Moth – from Bill McNee. Applications for the 2009 DNR Gypsy Moth Suppression Program have been received. NER's preliminary spray acreage is 3,470 acres at 43 sites in 10 counties. Last year's total was approximately 5,000 acres in 8 counties. The only NER DNR property requesting spraying in 2009 is Gov. Thompson State Park (127 acres). Counties submitting applications to spray were: Brown (492 acres), Fond du Lac (50 acres), Green Lake (545 acres), Marquette (208 acres), Menominee (416 acres), Outagamie (159 acres), Shawano (1,088 acres), Waushara (256 acres), and Winnebago (129 acres).

Diseases:

Hypoxylon canker – this canker disease of aspen can be easier to spot when the leaves are off. Things to look for include: yellowish-orange areas on the bark or at the edge of a canker face (right), blistering bark and small dark gray fruiting bodies on the canker face. Hypoxylon canker can result in broken stems and can kill trees by girdling them. Well-stocked stands are less susceptible to Hypoxylon than poorly stocked stands. Some aspen clones are more susceptible than others although intensive management and conversion to other species over the years has already eliminated many of these highly susceptible clones. Lightly infected stands can be managed on rotations longer than 40 years but stands with 15-25% of the trees infected should be considered for early harvest. The photos below show how quickly Hypoxylon can develop and kill the tree. All photos are of the same group of trees. Photo on left was taken in March 2004, middle photo was taken July 2006, right photo was Sept 2008. The tree on the left in the photos (blue dot tree) died during 2006, the tree on the right (red dot tree) has quickly developed a large Hypoxylon canker in just a few short years.



Powdery mildew on maple - a new powdery mildew species (*Sawadaea tulasnei*), first observed in Wisconsin in 2007, was noted on Norway maple in just a few areas of Northeast Wisconsin this year. This mildew is European in origin and seems to occur quite late in the season. Because of that trait, this powdery mildew doesn't pose much threat to the health of our maples. The photo at right shows the typical form of this particular powdery mildew, which occurs along veins, in fairly discrete patches, and can occur on seeds as well. Symptoms are more common in the lower portions of the crown. Homeowners can rake and dispose of leaves if they're concerned.

Photo by Andy Wallender, Kewaunee Co, Wisconsin.

Other:

J-rooting – J-rooting is a problem that is created when bare-root seedlings are not planted properly. If the roots are too long when the tree is planted and the person planting the trees sweeps the roots into the planting slit (right) or twists them (left, knife pointing at twisted roots), or if the trees are jammed into the hole causing the tips of the roots to actually stick up above the hole, all of these scenarios can create a J-rooted tree. These trees can survive for a number of years if environmental conditions are favorable but as the trees get older the J-rooted trees experience stress that a properly planted tree would not experience which can allow insects and diseases to attack. Mortality can be caused from armillaria root disease, diplodia shoot blight, bark beetles, or pine root collar weevil or they may simply die from drought. Proper planting can alleviate the aggravation of planting acres and acres of trees only to have them die 5 to 7 years later just as they're starting to look like a nice tree.

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.