Northeast Wisconsin Forest Pest Update

May 17, 2010

Topics covered this month:

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Eastern Tent Caterpillar
EAB
European Pine Sawfly
Gypsy Moth
June Beetles
Kermes Scale
Lake Flies
Maple Petiole Borer
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Winter Cutworm

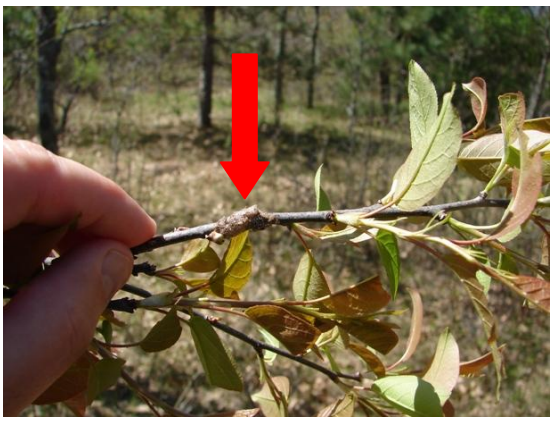
Diseases:
White Pine Blister Rust

Other:
DATCP Pest Bulletins available
Drought
Fir Cone Stalks
Firewood

Insects

Eastern Tent Caterpillar – for the second year in a row very high populations of eastern tent caterpillar are causing problems in Waupaca, Waushara, Marquette, and Green Lake Counties (other counties throughout the regions have smaller, but still noticeable, populations). Wild black cherry is the preferred food source and in the areas where populations are very high the caterpillars are eating the cherry leaves as fast as they are expanding, often with multiple web nests found in single trees (right). I would expect again this year to see the caterpillars host-shift after they've exhausted the supply of black cherry leaves and attempt to complete development by feeding on young oak, young maple, and other species.

If you examine trees with web nests in them you will see the eggmasses which hatched this spring (right, red arrow). After the caterpillars pupate, they will emerge a couple weeks later as moths, mate, and lay new eggmasses on the tips of branches (left, a new eggmass). If you



see these eggmasses throughout the remainder of the summer you could prune them out of the tree and dispose of them.

Several fires this spring have been attributed to people burning Eastern Tent Caterpillar web nests out of trees. A safer option is to use a rake to tear the webs out of the trees, then dump the messy webs, caterpillars and all, into a bucket of soapy water to kill them. Over the next few weeks the caterpillars will be migrating to find a good spot to pupate. Mass migrations across roadways and caterpillars crawling on houses and buildings will prompt many more phone calls from the public.

Emerald Ash Borer (EAB) – from Bill McNee. Now is the time to be applying most insecticides that are used to protect trees from EAB damage. A tree service will be needed to apply most of the approved insecticides. For more information, visit: http://www.emeraldashborer.wi.gov/articleassets/InsecticideOptionsForProtectingTreesFromEAB.pdf

EAB was found in far southeast Minnesota in late April. The infested trees are in Houston County, and are about one mile from the EAB infestation at Victory, Wisconsin.

Purple panel traps have begun appearing around Wisconsin for use in this summer's EAB trapping project. A total of 8,700 traps will be in use between May and September. A map of the trapping grid appeared in last month's pest update. EAB adults will start emerging soon.

EAB Awareness Week will be May 23-29, just prior to Memorial Day. This year will feature billboards, commercials, lawn signs and shirts to advertise EAB and the importance of not moving firewood.

European pine sawfly – last year large populations of European pine sawfly occurred in Waupaca, Waushara, and Marquette Counties, and scattered other locations. European Pine Sawfly caterpillars (right) are dark green in color with 3 pale stripes on the body and a black head and feed in groups, primarily on red pine and scotch pine. Damage can be severe but is usually limited to defoliation of the 2nd year needles. Tree growth rates can be reduced since only 1 years needles will be left on the tree to produce food. Control options include squishing colonies by hand, spraying colonies with an insecticidal soap, or spraying the insects with a general insecticide. Last year was the second or third year of large populations in many areas and although populations may begin to crash this year landowners that had defoliation last year should be prepared for more defoliation this spring.

Gypsy Moth – from Bill McNee. As of May 13, the DNR Gypsy Moth Suppression Program has completed spraying in Dane, Rock, Milwaukee, Racine, Sauk, Washington and Waukesha Counties. Spraying in Northeast Region (Outagamie, Brown, Menominee and southern Oconto Counties) started this morning, May 17. Maps of the treatment areas can be seen at www.gypsymoth.wi.gov.

There are two ways to find out when the spraying will occur:

- Sign up for daily e-mail notification at www.gypsymoth.wi.gov.

- Call the Gypsy Moth Information Line at 1-800-642-MOTH and select option 1 for a recorded message that is updated daily.

Spraying may occur any day of the week, and typically begins shortly after dawn. Spraying may continue into the afternoon if weather conditions remain favorable. Residents living in and near the NER spray areas should expect low-flying, loud airplanes that are yellow. The planes will only spray in the treatment areas, although they will be seen flying elsewhere in the area. Residents in the treatment areas are encouraged to stay inside with doors and windows closed while the spraying is occurring and for 30 minutes after, in order to avoid direct exposure to the spray. 'Foray' will be the insecticide used all sites except for one site at Legend Lake in Menominee County. 'Foray' contains *Bacillus thuringiensis* var. k*urstaki* (Btk), which is a naturally-occurring soil bacteria that kills gypsy moth caterpillars when they ingest it. The formulation of 'Foray' used is listed with the Organic Materials Review Institute as acceptable for use in certified organic food production. The Legend Lake site will be treated with 'Gypchek,' a viral insecticide that affects only gypsy moth caterpillars.


Photo by Bill McNee.

Whether or not a property is being sprayed, prepare burlap collection bands at least 12" above a sticky band by the end of May. Tie a piece of string around the middle of the burlap and then fold the upper portion over the lower portion. Check them daily, and kill any caterpillars found beneath the burlap. Use rubber gloves if touching the caterpillars because the hairs can cause skin irritation. Sweeping them into a bucket of soapy water is an efficient way to kill them.


Photo by Bill McNee.

Homeowners considering insecticide treatments this spring should contact an arborist or tree service as soon as possible. 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 and large retailers in order to treat small trees. For more information on pesticides, go to www.gypsymoth.wi.gov and click the pesticide link under the DNR tab.

June Beetles – I've seen a fair number of adult June beetles out already. These beetles are also called June Bugs, or May Beetles. As adult June beetles emerge they often congregate around lights and feed on nearby trees. Adults prefer oak in this area but will also feed on other species. Since they only feed during the night the defoliation seems to appear magically overnight, with no forewarnings. Control is difficult since defoliation is often complete before you even know that you should be spraying. Turning off exterior lighting can help by not attracting the adults to your yard.

On several evenings last year I collected June beetles from my oak seedlings by flicking them off the leaves (right) into a

bucket of soapy water where they drowned (quite satisfying actually!)

Kermes scale – The large round things that look like galls on these branches are actually scales. These large "galls" are actually the females of the native Kermes Scale. Feeding by these large scales can cause twig mortality and is more commonly found in younger trees although you can find it on mature trees as well. Lots more information on this scale can be found at http://edis.ifas.ufl.edu/in615 including some tidbits like each female can lay an average of 3,000 eggs, and although the females are a large round hard scale the males are winged and not fixed in place.


Photo by Tony Nowak.

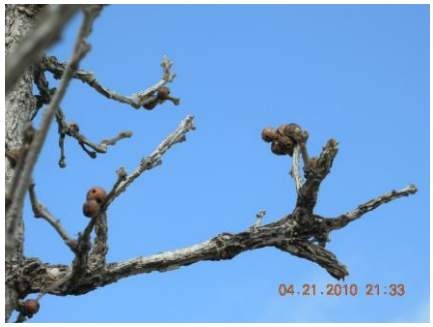


Photo by Tony Nowak.

Lake Flies – large hatches of lake flies have recently made the news. Lake flies are one of our non-biting midges that resemble mosquitoes (left). Lake fly larvae live in water, but adults emerge from the water and gather in "clouds" (right) where they will mate in the air. Females will release their eggs directly into the water, and adults die shortly after. The eggs hatch into larvae, which are eaten by assorted fish species. The adult emergence this year on Lake Winnebago was large enough to be captured on NOAA Doppler radar, check it out at http://www.crh.noaa.gov/grb/?n=lakefly


Photo by Ben Williams.


Photo by Ben Williams.

Maple Petiole Borer – homeowners and landowners may begin seeing green sugar maple leaves wafting to the ground. This is caused by a tiny sawfly larvae that bores into the leaf petiole and feeds within the petiole creating a weak spot which will break allowing the leaf to drop to the ground. Damage is usually light; even when the ground is covered you can look up and see a full canopy of leaves. No control is necessary.

Root Feeding Aphids – a recent article in the Wisconsin Christmas Tree Producers Association Quarterly Journal highlighted this particular pest. Root feeding aphids are aphids that live underground, and feed on roots of trees. In the photo at right you can see a cluster of aphids on a root. The article highlighted the problems that they can cause in fir, including decline and mortality. If you are seeing decline in young fir it would be worth your effort to dig a few dying trees and check the roots for these aphids. Look for small white soft bodied insects, about the size of a sesame seed. If you see this insect


Photo by Roger Bohringer.

please let me know.

Winter Cutworm – last year winter cutworm was reported to me from Brown, Calumet, Door, Manitowoc, Oconto, Outagamie, and Waushara Counties. I recently got a report of large numbers of winter cutworms in Marinette County. These large hairless caterpillars can sometimes be found crawling on the snow in late winter. Winter cutworm (*Noctua pronuba*) is a European species that has been in Wisconsin since 1997 and is primarily an agricultural and garden pest. It overwinters as large caterpillars that produce their own antifreeze-like chemical which allows them to be active anytime during the winter when the temperatures get above freezing. Phil Pellitteri (UW Extension Entomologist) says that although they will not harm turf they can feed on lots of things including flowers and garden plants. For more information on winter cutworm check out this information from Ontario http://www.omafra.gov.on.ca/english/crops/field/news/croptalk/2008/ct-1108a7.htm

Photo by Joe Schwantes.

Diseases

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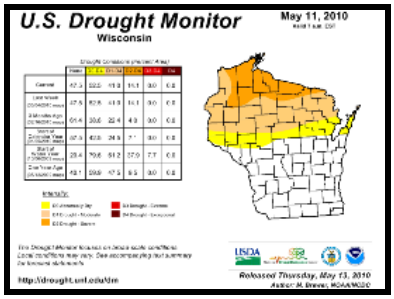
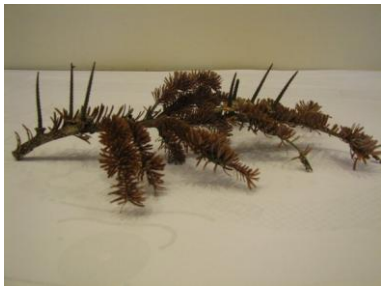
White pine blister rust – last month I mentioned white pine blister rust with information on the biology of the disease. Since then I have seen the rust fruiting on white pines. The orange powdery pustules emerge around the edges of the canker and release powdery spores. These spores will go on to infect *Ribes* leaves

Other/Misc.

DATCP Pest Bulletins available – weekly pest bulletins are produced by Wisconsin's Department of Agriculture Trade and Consumer Protection including agricultural pests, nursery pests, and forest pests. Check out the latest edition at http://pestbulletin.wi.gov/ and click on "print past issues" to check out previous bulletins and bulletins from past years.

Drought – some areas of the state are still dealing with droughty conditions. The picture at right shows the areas that are still suffering a shortfall, yellow is abnormally dry, the tan color is moderate drought, and the dark yellow peachy color is classified as severe drought. This graphic is from the U.S. Drought Monitor website.





Fir cone stalks – the spiky upright growths on the fir branches at right might alarm some homeowners who may think that some large fungal growth is occurring in their trees. But these growths are actually the stalks of the cones of fir. In fir trees the cones mature and the scales fall off, leaving the central stalk

Firewood – from Bill McNee. Starting June 1 of this year, the '50 mile firewood rule' for state parks and forests is being reduced to 25 miles. The new rule states that firewood being brought into a state park or forest must:

- originate from within 25 miles of the campground on that state park or forest, or from within 25 miles of the state park or forest if there is no campground
- be from within Wisconsin
- not be from a quarantine area that does not already cover the park or forest

Dimensional lumber (such as 2-by-4s) and firewood certified by the Wisconsin Dept. of Agriculture, Trade and Consumer Protection are exempt from this regulation. Campers with new or existing reservations are being notified of the change.

Report EAB:
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://www.gypsymoth.wi.gov/

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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.