West Central WI Forest Health Report

July 2013

Topics covered this month:

Insects

Emerald Ash Borer

EAB continues to spread rapidly in SE Wisconsin with numerous cities, towns and state parks reporting new finds in June and July. Jefferson and Sauk Counties will be quarantined as a result of the new finds. The complete list of finds is available at http://datcpservices.wisconsin.gov/eab/articleassets/ConfirmedEABFindsInWisconsin.pdf. The new find at Mirror Lake State Park is of the most concern for those of us in central Wisconsin. Mirror Lake State Park is more than 75 miles from the nearest finds to the south, east and west. The source and extent of the infestation is still being determined. It appears EAB has been at the park for at least 3 years. Park staff took quick action to remove 18 infested ash trees. The wood was chipped and spread in an open field to dry it out more quickly.

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Photos 1-2. Adult EAB beetles found at Mirror Lake State Park.
Photos 3-4. Larval galleries under a bark split and on a peeled tree. Note the D-shaped exit hole in the bark split.
Photo 5. Park staff cutting and chipping an infested tree.

Gypsy Moth

Gypsy moth nuisance calls started the last week of June in NW Wood and southern Clark Counties. Sites visits in the area on July 3rd turned up thousands of dead or dying caterpillars thanks to Entomophaga (fungus) and NPV (virus). An aerial survey of the area revealed patches of light defoliation with only one 25 acre area in south-central Clark County with greater than 50% defoliation. It appears that in most areas caterpillars were killed before they made it to the later growth stages when they do the most damage to trees. The high caterpillar death rate is good news for landowners who likely would have had an outbreak in 2014. Trap counts of male moths and egg mass surveys later this summer will help us determine what to expect for 2014. We have not had any damage reported outside of the Clark County area. Stay tuned for a fall update.

Spray Update: All gypsy moth spraying is done for the year. Wisconsin treated almost 163,000 acres in 25 counties.

Photos 6-7. Gypsy moth caterpillars killed by fungal (straight) and viral (v-shaped) diseases.
Photo 8. Defoliation in Clark County.

Jack Pine Budworm

Todd Lanigan and Mary Bartkowiak - Jack pine budworm larval surveys were conducted in Dunn, Eau Claire, Jackson, Monroe, Pierce, and St. Croix counties. The only location we found budworm larvae was in Jackson County in the Town of Manchester off of Partridge Road. The budworms are in a younger than normal jack pine stand, but that could be from the dispersal of the budworm from last year's unexpected outbreak in that part of the county. Based on the number of larvae that were found, the population is low and there should not be any observable defoliation. If there is defoliation, it should be very light. This fall we will conduct an egg mass survey in this stand to see what is going on.

Mike Hillstrom – Surveys of Adams, Juneau, Wood and Portage Counties revealed very few jack pine budworm larvae. Male pollen cones, the larvae's preferred food source, were very uncommon this spring so it is not too surprising we found so few larvae.

Fall Webworm (By Todd Lanigan)

I noticed fall webworm webs/tents forming in various hardwoods. This late season defoliator is usually more of an esthetics problem than a tree health problem. Small young trees can be killed if the entire tree is defoliated and enclosed in the tent. I have not seen this happen, but it could. However, with the severe drought we experienced last year and the preceding years, I cannot say for sure there will not be any mortality.

If homeowners want to do some kind of control of the caterpillars, the easiest control is to open up the web/tent like you do for Eastern Tent Caterpillar control. If the homeowner wants to use an insecticide, it should be labeled for caterpillars, and the spray would have to penetrate through the webbing/tent to be effective. Like for Eastern Tent Caterpillar control, the homeowner should not prune out the branch, burn the tent, or use something like WD-40. These practices can do more harm to the tree than what the caterpillar would.

Cherry Scallop Shell Moth

Cherry scallop shell moth is back again this year. We've had reports from the Wisconsin Rapids area again this year but also from Trempealeau and several other western counties. Damage appears as groups of brown, dead leaves that have been tied together in a funnel shape and fed on by the caterpillars. This is a native insect which typically does not cause mortality of cherries. But with the severe drought last year, trees (especially young trees) could be more severely affected by the damage.
Photo 9. Leaves tied together and eaten by cherry scallop shell moth caterpillars.

Eastern Tent Caterpillar (ETC)

The ETC population finally crashed this year after ~5 years of high numbers. We did not receive a single call about ETC in 2013. Outbreaks happen every 10 years approximately so hopefully we are done with ETC for a while.

Post Oak Locust

Post Oak Locust is back this year defoliating oaks south of Wisconsin Rapids. I've seen a few trees that are more than 90% defoliated. After the drought last summer this could be a major stress to affected trees. Homeowners should pay careful attention to watering and generally maintaining the health of affected trees to reduce the risk of attack by two-lined chestnut borer.

Photo 10. A post oak locust.

Two-lined Chestnut Borer

EAB's close relative, the two-lined chestnut borer is known for attacking stressed oaks. We expected the severe drought last summer would lead to lots of issues with wood borers this summer and that prediction has held true. We've seen TLCB activity and/or tree mortality from TLCB in many oak stands we've inspected this year. Check out http://learningstore.uwex.edu/assets/pdfs/A2902.pdf for more information and management tips.

Photo 11. The two-lined chestnut borer. Photo credit http://www.nyis.info/index.php?action=identification

Stag Beetles

I received a call in early June from a landowner on the Adams/Wood County line that was concerned about large beetles all over her yard and house (by lights). Inspection revealed several large rotten stumps in the backyard filled with larvae. She collected me 30 adults in 2 minutes at her porch lights! Turned out to be *Lucanus placidus*, a member of the stag beetle family rarely seen except for those who collect insects at lights at night. Very interesting and unusual!

Photo 12. An adult and larva of the stag beetle *Lucanus placidus*.
Photo 13. Stag beetle larvae feeding in a rotting oak stump.

Ticks

You've probably received a few emails by now about the lonestar tick which appears to be getting a foothold in the state. In case you missed them, here a few articles worth checking out:

- http://www.news.wisc.edu/releases/18054
- http://www.jsonline.com/news/wisconsin/new-to-wisconsin-lone-star-ticks-may-be-invading-state-b9959367z1-216462351.html
- http://labs.russell.wisc.edu/wisconsin-ticks/wisconsin-ticks/amblyomma-americanum-lone-star-tick/
- http://www.npr.org/blogs/health/2013/07/22/204527407/new-tick-borne-virus-lurks-in-missouri-s-woods

For information about the species of ticks found in WI and the diseases they carry

- http://labs.russell.wisc.edu/wisconsin-ticks/wisconsin-ticks/

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Photo 14. Adult female (left) and male (right) long star ticks collected in WI.

Diseases

Oak Wilt and Dutch Elm

Oaks infected with oak wilt and elms infected with Dutch elm disease have been very visible all over Wisconsin for the past few weeks. If you have areas you monitor for oak wilt now is a good time for a site visit.

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Photo 15. An oak wilt pocket at Buckhorn State Park.

Leaf and Needle Diseases

The majority of calls we've received over the past 6 weeks have been from landowners concerned about leaves falling off their deciduous trees or tips of pine branches turning orange. This was expected given our wet spring weather. Anthracnose and a variety of other leaf diseases have been extremely common on ash, oak and maple. Many ash trees in central Wisconsin (especially in the Wausau area) also had infestations of ash plant bug. Oaks also had large populations of aphids for much of late May and June. The bugs are gone but leaf and needle diseases are still prevalent. In most cases no management is necessary. See photos on the next page.

As for the pines, Diplodia took advantage of drought stressed trees from last summer and is common across the state. Diplodia can infect red, jack, scotch and Austrian pines. Damage has been most obvious on mature red pines where outer branch tips have been killed. The fungus can cause significant seedling and sapling mortality by girdling the root collar area. Stress from drought and Diplodia can lead to attack by bark beetles. Trees where more than 50% of the crown has been killed or where the leader has been killed back 3 feet or more should be removed. Prune dead branches off of yard trees between November and March.

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Photo 16. Anthracnose infected ash leaves. Ash photos by Brian Schwingle.
Photos 17-18. An adult ash plant bug and the leaf speckling it causes when it feeds.
Photo 19. Branch tips killed by Diplodia. Photo credit Linda Williams.

Abiotic

Flooding

Last year it was drought, this year it's flooding. This stand in Wood County was not too happy about taking swimming lessons this spring. Thanks to Steve Grant for the photo!

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Photo 20. Flood damage in Wood County.

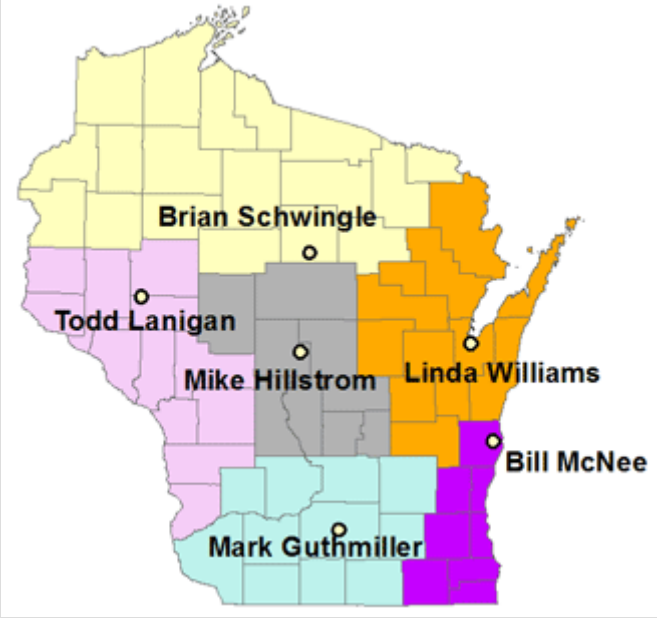
New Forest Health Staff

Welcome Mary Bartkowiak! Mary will be helping Todd Lanigan and Brian Schwingle cover the NW part of the state this summer. You can contact Mary at Mary.Bartkowiak@Wisconsin.gov or 715-839-3746.

Invasive Plants

Check out this new video from the Minnesota Invasive Plant Network http://www.youtube.com/watch?v=jW5FSZUMzJY. It shows how a few popular ornamentals like buckthorn and barberry impact natural areas in the Midwest.

For general forest health and municipal level urban forest health issues contact:



http://dnr.wi.gov/topic/ForestHealth/staff.html

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Statewide reporting systems:

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://gypsymoth.wi.gov/

For additional information visit the Forest Health web site: http://dnr.wi.gov/topic/ForestHealth/

Note: This report covers forest health issues occurring in the West Central Region of Wisconsin. The purpose is to provide up-to-date information on forest health issues to foresters, forest landowners, and anyone else interested. We welcome your comments/suggestions on this newsletter as well as reports on forest health problems in your area. If you would like to subscribe to this newsletter, please contact Mike Hillstrom at Michael.hillstrom@wisconsin.gov. Previous issues of this update and regional forest health updates from NER, NOR and SOR, are available from the WI DNR Forestry website at http://dnr.wi.gov/topic/ForestHealth/Publications.html Articles written by Mike Hillstrom unless otherwise noted.

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.