Topics covered this month:

**Insects**
- Jack pine budworm
- Gypsy moth
- Emerald ash borer

**Insect/Disease**
- Oak flagging

**Pesticide Use Information**

**Abiotic**
- Drought

---

**Insects**

**Jack Pine Budworm**

Todd Lanigan - Budworm surveys were conducted in Dunn, Eau Claire, Jackson, Monroe, Pierce, and St. Croix counties. Jackson County was the only county where budworm activity was evident this year. There was moderate to heavy defoliation of jack pine in the southern portion of the Town of Manchester in the area of Old Hwy I, Bacon Road to Partridge Road. There was some top dieback and mortality of jack pine in this area. No egg masses were found in this area. There was also some very light defoliation of jack pine in the Town of Brockway east of Airport Road along West Bauer Road. One egg mass was found in this area. Based on egg mass counts, there should not be any major budworm activity in any of the counties surveyed.

Mike Hillstrom - Budworm egg mass surveys were also conducted in Adams, Juneau, Portage and Wood Counties. Egg mass counts did not suggest any major budworm activity in these counties.

---

**Gypsy Moth**

DATCP recently released the final gypsy moth trapping numbers for 2012. The total number of adult male gypsy moths captured in the traps was down from 234,000 in 2011 to 174,000 in 2012. Two northern counties led the way: Bayfield with 46,000 and Ashland with 26,000 moths trapped. Three WCD counties had the next highest totals: Jackson (16,000), Wood (11,000) and Clark (10,000). Wood County also had the second highest number of moths caught per trap at 120. Applications for the 2013 suppression program are due by Friday, December 7th so if you are in an area of concern you should conduct predictive egg mass surveys in the next few weeks. Applications for the suppression program are available at [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov). If you plan to apply please let us know in advance of the December deadline. If you plan to participate do not remove egg masses until after surveyors have inspected the site.
Figure 1. Total adult male gypsy moths caught in traps in 2012 (left) and the average number of moths caught per trap (right).

Emerald Ash Borer (by Bill McNee)

In mid-August it was reported that EAB had been detected in Perrot State Park with the finding of EAB in a sticky trap. Further investigation found EAB larvae in a tree immediately adjacent to where the sticky trap was located, so the traps do work!

Recently there have been several new or updated EAB documents that may be useful to our Pest Update readers:

- UW Extension has updated its EAB insecticide guide for homeowners to add several new pesticides: [http://hort.uwex.edu/articles/homeowner-guide-emerald-ash-borer-insecticide-treatments](http://hort.uwex.edu/articles/homeowner-guide-emerald-ash-borer-insecticide-treatments)
- The Wisconsin Dept. of Agriculture, Trade and Consumer Protection (DATCP) has released an updated list of Wisconsin communities where EAB has been detected: [http://datcpservices.wisconsin.gov/eab/articleassets/EAB_Infested_Wisconsin_Communities.pdf](http://datcpservices.wisconsin.gov/eab/articleassets/EAB_Infested_Wisconsin_Communities.pdf)
- A simple to use EAB decision guide for homeowners has been produced by Purdue University in Indiana: [http://extension.entm.purdue.edu/EAB/pdf/NABB_DecisionGuide.pdf](http://extension.entm.purdue.edu/EAB/pdf/NABB_DecisionGuide.pdf)
- Iowa State University Extension has produced a guide to ash tree problems, including EAB: [http://www.extension.iastate.edu/pme/Publications/EAB/FAQSUL21AshTrees.pdf](http://www.extension.iastate.edu/pme/Publications/EAB/FAQSUL21AshTrees.pdf)

Figure 4. So far in 2012 there have been 63 new county detections nationwide, seven counties more than were found in all of 2011.

Figure 5. The 15 WI counties quarantined for EAB (in red) as of October 2012.


Suspicious beetles or symptomatic trees should be reported to the EAB hotline, 1-800-462-2803, or emailed to: DATCPEmeraldAshBorer@wisconsin.gov
Insect/Disease
Oak Flagging

We reported earlier this year that flagging oak branches were caused by botryosphaeria canker. Further investigation has revealed that Kermes scale is also involved. Kermes scale insects use their sucking mouthparts to feed on sap which commonly leads to twig death beyond the point where the insects feed. The large (for a scale insect), light brown, immobile females are typically found infesting twigs and branches near the buds. Heavy infestations can cause young trees to be deformed but control is rarely necessary because natural enemies usually provide adequate control.

Managing the fungus is also typically not necessary but pruning off dead twigs is an option when it is practical. Symptoms typically occur for a year or two and then subside but seedlings with top kill or larger trees affected for several consecutive years may take longer to recover.

Pesticide Use Information

Need some help figuring out what pesticide to use and what forms you need to submit? Check out the DNR intranet for lots of useful information. Just click on ‘Pesticide Use’ under DNR Tasks. The webpage contains links to FSC prohibited pesticides, herbicide tables and much more.

Abiotic
Drought

Some of you may have noticed a strange wet substance falling from the sky this month. Our research suggests this is known as rain. The recent rain should help trees store some much needed water going into the winter. Even with the rain this month we are still below yearly average rainfall totals in many parts of the state and we will almost certainly still see trees die this winter and next year as a result of the drought this year. Sites experiencing multiple stresses, for example oaks experiencing drought and gypsy moth damage, are most susceptible so keep this in mind if you plan to thin stands (thinning would add an additional stress) this winter or plant sites in spring 2013.
Figure 6. Drought conditions in WI as of October 23.

Figure 7. Wisconsin departure from normal precipitation (inches) this year to date.
Source: National Weather Service http://water.weather.gov/precip/

Figure 8. Wisconsin departure from normal precipitation (inches) this month to date.
Source: National Weather Service http://water.weather.gov/precip/
For general forest health and municipal level urban forest health issues contact:

![Map of Wisconsin](http://dnr.wi.gov/topic/ForestHealth/staff.html)

**West Central Region:**
- Mike Hillstrom
  - Forest Health Specialist
  - Wisconsin DNR
  - 715-421-7825
  - Michael.hillstrom@wisconsin.gov
- Todd Lanigan
  - Forest Health Specialist
  - Wisconsin DNR
  - 715-839-1632
  - Todd.lanigan@wisconsin.gov

**Statewide reporting systems:**
- **Report EAB:**
  - by phone 1-800-462-2803
  - by email DATCPEmeraldAshBorer@wisconsin.gov
  - visit the website [http://emeraldashborer.wi.gov/](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/](http://gypsymoth.wi.gov/)

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