

# *Northeastern Wisconsin Forest Health Update*

## *Wisconsin DNR – Division of Forestry*

### *May 16, 2013*

#### Topics covered this month:

##### **Insects:**

Deer tick population prediction  
From Phil Pellitteri

Eastern tent caterpillar

Emerald ash borer  
Awareness week  
Treatment video  
EAB and NR40  
Where is it in WI

Gypsy moth  
Gypsy moth program manual  
Insect eye digital camera  
Pine bark beetles

##### **Diseases:**

Annosum interactive guide  
Cedar apple rust



Goldsmith beetle.

##### **Other:**

Imprelis contaminated materials allowed in landfills for 2013

### **!! NEW SECTION !!**

#### **Of Historical Interest:**

This is a new addition to my pest updates! I will be going back through old WI DNR Forest Health Annual Reports and reprinting assorted info that I think you might find unique, interesting, or useful. Hope you enjoy this new section!

60 years ago, in 1953

Winter injury

Pine bark beetles

25 years ago, in 1988

Eastern tent caterpillar

Miscellaneous species – gypsy moth

## **Insects**

\*information and photos in this document from Linda Williams unless otherwise noted.

**Deer tick population prediction from Phil Pellitteri** – how many of you are noticing a change in the deer tick population compared to last year? Phil Pellitteri (UW Extension Insect Diagnostician) did an interview regarding what we might expect this year, including how the drought affected the deer tick populations. You can listen to the 3 minute interview at [http://fyi.uwex.edu/news/files/2013/04/phil\\_pellitteri\\_2013\\_deer\\_tick\\_season.mp3](http://fyi.uwex.edu/news/files/2013/04/phil_pellitteri_2013_deer_tick_season.mp3) or read the transcript <http://fyi.uwex.edu/news/2013/04/05/deer-tick-outlook-for-2013/>



Adult deer tick.

**Eastern tent caterpillar** – hatch has occurred and small tents are becoming visible in trees. This is primarily a problem in Black Cherry, but also in ornamentals like crab apple, apple, etc. The caterpillars are capable of completely defoliating the tree that their web nest is located in. They will feed outside the web and return to the nest to rest. Cherry generally handles this defoliation well, sending out a second set of leaves later in the season. Homeowners should avoid using fire to remove nests from trees, as this is a good way to kill portions of your tree and to start a wildfire.



Eastern tent caterpillars have hatched and begun making their webs.

**Emerald ash borer awareness week** – May 19-25, 2013 has been proclaimed Emerald Ash Borer Awareness Week. EAB was first found in Wisconsin in 2008, and is currently found in 13 counties. Learn about the signs of EAB infestation at [www.emeraldashborer.wi.gov](http://www.emeraldashborer.wi.gov) and report ash trees that show signs of infestation by calling the EAB hotline [1-800-462-2803](tel:1-800-462-2803) or emailing [DATCPemeraldashborer@wi.gov](mailto:DATCPemeraldashborer@wi.gov)

**Emerald ash borer treatment video** – UW Extension has put out a new video about how homeowners can treat ash trees to protect them from EAB. Insecticides must be applied every year, but they are quite effective in protecting single trees. If you have EAB in your area and homeowners want to keep certain trees alive there are several chemical treatment options that homeowners can choose from. There are additional options that require professional injection. Check out the video for more info <http://labs.russell.wisc.edu/eab/> (go to the bottom of the page). You can also refer homeowners to the UW Extension factsheet <http://labs.russell.wisc.edu/eab/files/2012/12/Is-My-Ash-Tree-Worth-Treating-for-Emerald-Ash-Borer.pdf> to help them determine if their trees are worth treating.

**Emerald ash borer and NR40** – since EAB quarantines are federal quarantines, have you ever wondered how NR40 fits in when you have an EAB infestation? Federal quarantines prevent movement of materials out of quarantine boundaries, but what about movement within the boundary. For example, Brown County is quarantined and has one known EAB infested area, so movement of ash materials and hardwood firewood out of the county is not permitted



A few ash logs. NR40 says to take reasonable precautions against moving EAB.

by the federal quarantine; but what about movement within the county? NR40 says to take reasonable precautions against moving EAB ... but what does that mean? There is now a document that describes just what that means! Check out the Reasonable Precautions For Emerald Ash Borer at <http://dnr.wi.gov/topic/invasives/documents/EABPrecautions.pdf> and more info on the BMPs, including a link to Forestry BMPs, can be found at <http://dnr.wi.gov/topic/invasives/bmp.html>

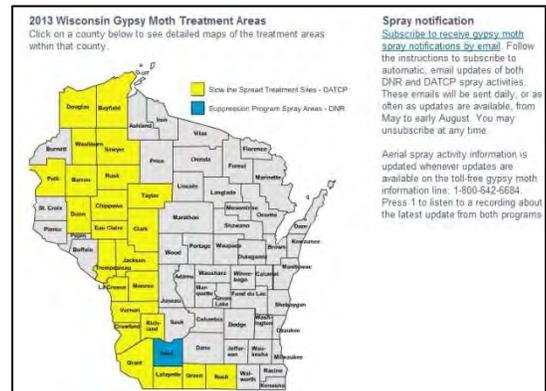
If you're not from Wisconsin and aren't familiar with NR40, it is our invasive species rule (Wis. Adm. Code ch. NR 40) which makes it illegal to possess, transport, transfer, or introduce certain invasive species in Wisconsin without a permit. More info at <http://dnr.wi.gov/topic/Invasives/classification.html>



Counties in red are currently quarantined for EAB.

**Emerald ash borer, where is it in WI?** – there's a link! The following site has a list of all known EAB infestations in Wisconsin. This is continuously updated so check back periodically [http://datcpservices.wisconsin.gov/eab/articleassets/EAB\\_Infested\\_Wisconsin\\_Communities.pdf](http://datcpservices.wisconsin.gov/eab/articleassets/EAB_Infested_Wisconsin_Communities.pdf)

**Gypsy moth** – the “winter that wouldn't end” has finally been forced into remission and has been replaced by spring, which means that gypsy moth hatch has finally begun in Wisconsin. Last year our first gypsy moth hatch occurred on April 2. Mark Guthmiller (WI DNR Forest Health Specialist located in Fitchburg), reported that as of May 11, almost 95% of egg masses had some hatch at Governor Dodge State Park in Iowa County. We will see this in the north soon, we just had to wait for the snow to melt. ☺ Spraying for gypsy moth is predicted to begin in the next 2 weeks, although there are no suppression spray blocks in the northeastern part of the state this year. An interactive map of spray sites is available at <http://gypsymoth.wi.gov/> just click on a shaded county to bring up the spray block locations.



Counties with suppression spray blocks (blue) and Slow The Spread spray blocks (yellow).

If homeowners are going to put up sticky bands or burlap bands they should start thinking about that now.

**Gypsy moth program manual** – did you know that USDA APHIS has a 274 page Program Manual for gypsy moth? In case you just can't get enough of gypsy moth, or want some “light” reading, it has recently been updated and can be found at [http://www.aphis.usda.gov/import\\_export/plants/manuals/domestic/downloads/gypsy\\_moth.pdf](http://www.aphis.usda.gov/import_export/plants/manuals/domestic/downloads/gypsy_moth.pdf) Enjoy!

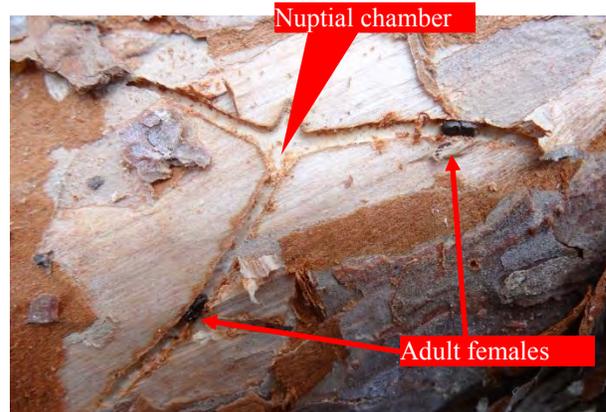
**Insect eye digital camera** – a recent article in National Geographic tells about building a digital camera that mimics insect eyes. You might think that the compound eyes of insects are quite primitive compared to ours (and they are), but they have some significant advantages, including creating a wide angle view that is clear and doesn't warp or fade at the edges, sharp focus at any distance without refocusing, and an ability to offer superior perception of movement as items show up in one



Six spotted green tiger beetle head with large eye.

lens of the eye and disappear from another. Read the article (and check out the cool pics) at [http://phenomena.nationalgeographic.com/2013/05/02/insect-eye-digital-camera-sees-what-you-just-did/?utm\\_source=Facebook&utm\\_medium=Social&utm\\_content=link\\_fb20130508ph-insectcam&utm\\_campaign=Content](http://phenomena.nationalgeographic.com/2013/05/02/insect-eye-digital-camera-sees-what-you-just-did/?utm_source=Facebook&utm_medium=Social&utm_content=link_fb20130508ph-insectcam&utm_campaign=Content)

**Pine bark beetles** – bark beetles are now active, having spent the winter on the ground in the duff layer. Males, which initiate the attacks on pine, have now chewed their nuptial chambers, attracted females, mated, and the females are currently laying eggs. The primary species of bark beetle that we see in red pine is the Pine Engraver (*Ips pini*), but you may also see Southern Pine Engraver (*Ips grandicollis*). In areas where the trees were stressed by the drought last year you may experience significant attacks continuing this year on the stressed trees. Even with the moisture this spring it will still take the trees a bit of time to fully recover from the stress of the drought last year.



Ips bark beetles in red pine. Adult females actively laying eggs at this time.

Eggs laid now will take about 4 weeks to complete development, emerge and start the cycle over again. If you have active pine

harvests from now to September, when the beetles are out, you can control the number of beetles emerging to re-infest the remaining pines in the stand by requiring that pine logs be removed from the stand within 3 weeks of being cut.

There is more info on the Forest Health webpage <http://dnr.wi.gov/topic/ForestHealth/BarkBeetles.html> and the table below is from the DNR Silviculture Handbook red pine chapter:

FOREST HEALTH PROTECTION (FHP) TABLE 1  
FOREST TREE HEALTH MANAGEMENT GUIDELINES FOR RED PINE

| Disturbance Agent and Expected Loss or Damage  | Prevention, Options to Minimize Losses, and Control Alternatives  | References*  |
|--|---|--|
| <b>MAIN STEM/ROOT INSECTS</b>  |   |  |
| <p><b>Pine Engraver Beetle (Bark Beetles) - <i>Ips</i> spp.</b><br/>Tunneling in inner bark causes mortality in sapling to sawlog sized trees, singly or in pockets. Weakened or storm-damaged trees, trees that have been struck by lightning, and overmature or overstocked stands provide a breeding ground for the beetles. Mortality is usually limited to a few trees during years of normal rainfall. However, during dry summers with suitable breeding material, beetle populations quickly build up and cause large scale mortality.</p> | <ul style="list-style-type: none"> <li>• Use the pine species and spacing intervals best suited to the site.</li> <li>• Thin stands to maintain vigorous and healthy growing conditions - Thin between September and March, if practical. If thinning during the growing season, remove harvested timber from the stand within 3 weeks of cutting. Utilize tops down to a 2" diameter. Leave branches attached to stem wood to speed drying.</li> <li>• Avoid overstocked and overmature stands.</li> <li>• Promptly salvage or destroy potential breeding material, such as pines that are severely damaged by wind, lightning, fire, disease, insects, or other destructive agents.</li> <li>• If trees have low vigor due to drought, defoliation, or disease, consider a pre-salvage harvest.</li> <li>• Harvest newly infested and adjacent trees before the following spring to reduce local populations.</li> <li>• Utilize as much of each harvested tree as possible.</li> <li>• Minimize logging damage to residual trees.</li> </ul> | <ul style="list-style-type: none"> <li>• Pine Bark Beetles in Wisconsin. 2007. Wisconsin DNR. Division of Forestry.</li> <li>• Bark Beetle Pest Alert: Southern Pine Engraver (<i>Ips grandicollis</i>) M. Guthmiller. 2003. Wisconsin DNR. Division of Forestry.</li> <li>• How to identify and manage pine bark beetles. 2000. Minnesota DNR. Division of Forestry.</li> </ul> |

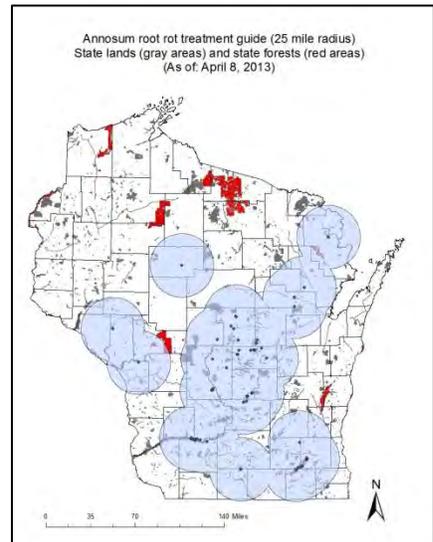
# Diseases

**Annosum interactive guide** – an interactive guide, to help determine whether stump treatment is recommended or not required, is now available online at <http://dnr.wi.gov/topic/foresthealth/RootRotGuide.asp> The purpose of the guide, from the webpage, reads:

This guide helps landowners and property managers determine whether to consider the fungicide treatment to reduce the risk of introduction of annosum root rot. The guide should also be used to help foresters and loggers communicate with landowners and property managers about the fungicide treatment option.

The first question in the interactive guide asks if the stand is within 25 miles of a known annosum infection location, and it includes a map of currently known locations. The interactive guide then asks you the pertinent questions to get you to an answer of whether it is recommended to treat.

Template language is being drafted for use in state land timber sale prospectus/contracts regarding treatment of stumps to prevent annosum. If you would like that language please contact me [Linda.Williams@wi.gov](mailto:Linda.Williams@wi.gov) or Kyoko Scanlon [Kyoko.Scanlon@wi.gov](mailto:Kyoko.Scanlon@wi.gov)



Known locations of annosum infections (as of 4/8/13) with 25 mile radius shaded in blue.

**Cedar apple rust** – cedar apple rust is getting ready to fruit. For most of the year the gall appears as a brown pitted lump, but in the spring it sprouts brown bumps that will turn into yellow/orange gelatinous arms, tendrils, or



Cedar apple rust sporulating. Gelatinous protrusions produce spores, then dry up and fall off.

spore-horns (you pick your favorite descriptor) with the next rainfall. This rust requires an alternate host (apple or crabapple) for part of its life cycle. It can



Development the galls as of May 9 in Waupaca Co.

cause serious defoliation and damage to fruit on apples, and can cause girdling of branches on cedar.

# Other/Misc.

**Imprelis contaminated materials allowed in landfills for 2013** – Imprelis is a weed control chemical previously produced by DuPont, that caused a significant amount of unintended tree

mortality when properly applied. It was available only to professionals, not over the counter. Materials affected by Imprelis, including the wood/branches of trees killed by Imprelis have been shown to contain enough Imprelis to have continuing impacts if that wood is then used around other plant material (for instance if used as woodchips).

Wisconsin has made a special exemption to allow Imprelis contaminated materials into landfills. This order continues for 2013. Below is a portion of a letter sent out to all Municipal Solid Waste Landfill Operators in December 2012:

There is evidence that Imprelis® may persist through composting and that compost and mulch containing Imprelis®-affected trees, grass, and other yard materials may adversely affect plants where the compost or mulch is used. DuPont has stated that clippings from grass treated with Imprelis® and trees that may have been injured by Imprelis® should not be composted. Therefore we believe there is a short-term need for an alternative option for disposing of trees and plant material that may contain residues of Imprelis®.

**This letter is to inform you that the Department of Natural Resources will continue to allow the landfill disposal of trees and plant material affected by Imprelis® for calendar year 2013. This extends the temporary, limited exception to our enforcement of the yard material landfill ban in s. 287.07(2), Wis. Stats., that we issued last year. Materials not affected by Imprelis® remain subject to the ban.**

For operators of licensed municipal solid waste landfills, this means you may continue to accept loads of wood chips or other plant material from customers who state that the material cannot be composted or used as mulch because it is contaminated with Imprelis®. This statement does not need to be in writing. We ask that, to the extent possible, you beneficially use the material in cover applications, consistent with the intent of the statutory yard material ban. We also ask that you maintain records of any material you receive under this exception.

If you have any questions about this you can direct them to Brad Wolbert ([Brad.Wolbert@wisconsin.gov](mailto:Brad.Wolbert@wisconsin.gov), 608-264-6286)

## Of Historical Interest

**60 years ago, in 1953** – The WI DNR Forest Health program officially began in 1949. The first annual report was produced after 5 years, in 1953. The following excerpts are from that report:

- Winter injury – due to the exceedingly dry fall severe damage was sustained in some stands of white pine in the Wisconsin River Valley. Although the mortality was heavy in several stands the damage wasn't nearly as great as was anticipated and must be termed light in general.
- Pine Bark Beetles (*Pityogenes hopkinsi* and *Ips pini*) – increase - attacked drouth (sic) injured white pine in large numbers. Where there was danger of populations spilling over to attack healthy trees, sanitation measures were undertaken to prevent such an occurrence.

**25 years ago, in 1988** – the WI DNR Forest Health program consisted of Steve Katovich, William Kearby, Frank Morse, Shane Weber, Jane Cummings-Carlson, Dave Hall, and Al Prey. It was noted that Jane and Dave “consolidated the district reports and wrote the final draft using personal computers”. The following excerpts are from that report:

- Eastern Tent Caterpillar – *Malacosoma americanum* (Fabricius). The numbers of tents and the defoliation of roadside black cherries continued at extremely high levels state wide. The population had a more northern distribution than in past years. The highest numbers of tents ever seen were reported in many locations state wide. Despite the combination of severe defoliation and drought, the only mortality of black cherry was reported in Jackson, Trempealeau and Eau Claire counties.
- Miscellaneous Species – Gypsy Moth – *Lymantria dispar* (L.). The number of adult males caught in pheromone traps increased tremendously from seventy-two in 1987 to 599 this year.

## Contact Us

### Northeast Region Pest Update produced by:

Linda Williams  
 Forest Health Specialist  
 Wisconsin Department of Natural Resources - Northeast Region  
[Linda.Williams@wi.gov](mailto:Linda.Williams@wi.gov)  
<http://dnr.wi.gov/topic/ForestHealth/>

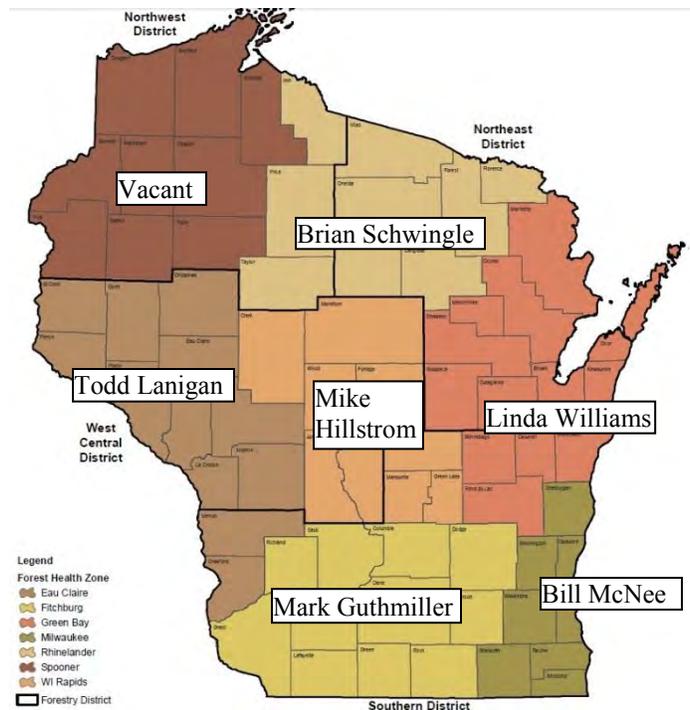
**WI DNR Forest Health Staff** - contact info for each Forest Health Specialist can be found our webpage at  
<http://dnr.wi.gov/topic/ForestHealth/staff.html>

### Report EAB:

by phone 1-800-462-2803  
 by email  
[DATCPEmeraldAshBorer@wisconsin.gov](mailto: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](mailto:dnrfrgypsymoth@wisconsin.gov)  
 visit the website  
<http://www.gypsymoth.wi.gov/>



**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.