

# Northeast Wisconsin Forest Health Update

March 16, 2012

Topics covered this month:

## **Insects:**

Asian longhorned beetle  
Eastern tent caterpillar  
Emerald ash borer  
Giant walkingsticks found  
Gypsy moth  
Mourning cloak butterflies  
Ticks are out  
Winter cutworm

## **Diseases:**

Annosum one-page handout  
Mossy top fungus and eutypella canker  
Oak wilt restrictions and warm spring temps  
Phomopsis galls

## **Other:**

Animal damage (squirrel and porcupine)  
Be careful in the field – drug grows and one-pot meth labs  
Disposing of Imprelis contaminated wood chips  
Invasive plants in Antarctica  
Poor branch structure or nature’s artwork?

## Insects

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

**Asian Longhorned Beetle (ALB)**- from Bill McNee. A recent webinar reported that ALB is now believed to have been present in Worcester, Massachusetts for more than 20 years (it was detected there 3 years ago). The current regulated area in and around Worcester is about 110 square miles.

Surveys in and around Bethel, Ohio have identified more ALB-infested trees. Currently ~6,600 infested trees have been identified. Crews have already begun removing host trees (maple and many other hardwood species) in the area in an attempt to eradicate this infestation.

It has also been reported that declarations of eradication are expected in several northeastern infestations and Toronto, Ontario over the next few years. More ALB information is available at:

<http://www.dnr.wi.gov/topic/ForestHealth/AsianLonghorned.html>



Asian longhorned beetles. Image from [www.forestryimages.org](http://www.forestryimages.org)

**Eastern Tent Caterpillar** - small webs created by Eastern Tent Caterpillar will be appearing soon on wild cherry trees and crabapples, among other species. In 2010 we had an early warm spring and I noticed the first webs in Oconto County on a crabapple tree on April 11 of that year, although typically hatch will occur near the end of April. The caterpillars are capable of completely defoliating the tree that their web nest is located in. They will feed outside the web nest and return to the nest to rest. Cherry is a favored species and you'll often see Eastern Tent Caterpillar webs in small cherries along roadsides during the spring. 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 start a wildfire. And there is no need to prune out the branches with webs on them, if you prune out the branches you actually do more long-term damage to the tree than the insects do even if they eat all the leaves off. Instead, homeowners can use a rake to pull the web out of the tree and dump it into a bucket of soapy water to kill any caterpillars inside. People may mistake eastern tent caterpillar for gypsy moth but gypsy moth does not create webs like Eastern Tent Caterpillar does.

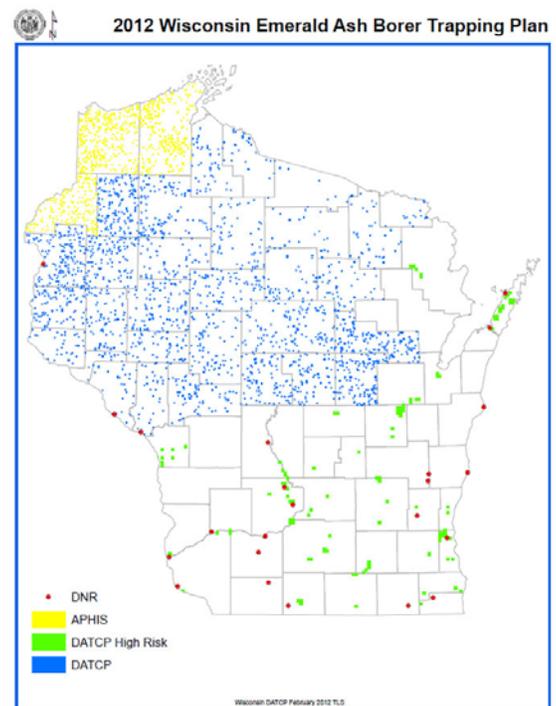


Eastern tent caterpillars recently hatched and starting their web nest.

**Emerald Ash Borer (EAB) – from Bill McNee.**

Wisconsin's 2012 EAB trapping plan has been announced (see map, right). The northern half of Wisconsin will have ~2,500 purple panel traps (blue and yellow dots), with trap locations determined by a new detection model. In the southern half of Wisconsin, there will be purple panel traps at selected high-risk sites (green dots) and double-decker traps at selected state parks and forests (red dots). Communities wanting to buy their own traps can purchase them from two vendors; contact Bill McNee for details ([bill.mcnee@wisconsin.gov](mailto:bill.mcnee@wisconsin.gov)).

Communities and property owners who are considering treating their ash trees with insecticides should apply them during the spring. A detailed brochure is available online at: <https://datcpservices.wisconsin.gov/eab/articleassets/InsecticideOptionsForProtectingTreesFromEAB.pdf>. The current recommendation is to consider treating high-value trees with insecticide if within 15 miles of a known EAB infestation.



Wisconsin's 2012 EAB trapping plan. Map by DATCP.

**Giant walking sticks found** – these are NOT in Wisconsin, it was just such an interesting article I had to share. Check out the link below with the story and photos of the 6 inch long insects <http://www.npr.org/blogs/krulwich/2012/02/24/147367644/six-legged-giant-finds-secret-hideaway-hides-for-80-years>

**Gypsy Moth** – from Bill McNee. Mild winter temperatures forecast an abundance of insects this summer as long as we don't have a cool and wet spring. A warm spring and summer is likely to start a rebound of the gypsy moth populations from their current low levels.

If there are groups interested in aerial spraying this spring, an applicator list and guide to aerial spraying are available online at [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov). Applicators should be contacted as soon as possible.

As soon as is practical, scrape off egg masses within reach and drown them in soapy water to help reduce this year's gypsy moth population. If temperatures are above 40° and there is no immediate danger of freezing, one of several egg mass oil products can be applied to suffocate the eggs as an alternative to scraping. Visit [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov) for more information.

The Wisconsin Dept. of Agriculture, Trade and Consumer Protection (DATCP) is now hiring seasonal gypsy moth trappers for work in the western counties this spring and summer. For more information and a map of the work areas, visit [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov). Employment applications must be postmarked by Friday, March 23.

**Mourning Cloak Butterflies** – I saw the first Mourning Cloak butterflies (*Nymphalis antiopa*) last week. These butterflies overwinter as an adult butterfly and emerge early in the spring to mate and lay eggs. Mourning Cloak caterpillars feed as a large group, which is more commonly seen in sawflies than in butterfly larvae. The caterpillars are a dark grey color with black spikes on their body and orange dots on their backs. Caterpillars feed on willow, aspen, cottonwood, and elm. They will pupate, then emerge as adults in the fall, spending the winter as an adult butterfly. Numerous sources say that the male butterflies are territorial but I must admit that I don't know how they defend their space. I just can't picture a butterfly fight being that scary.

I also recently saw the first Milbert's Tortoiseshell butterflies as well (in my garage no less!). These are sometimes mistaken for mourning cloak butterflies, although to me they look drastically different; maybe it's just that they both overwinter as adults and are some of the first butterflies out in the spring. Milbert's Tortoiseshell caterpillars are not a forest pest, they feed on nettles.



Mourning cloak butterfly. Image from [www.forestryimages.org](http://www.forestryimages.org)



Milbert's Tortoiseshell butterfly, from [wisconsinbutterflies.org](http://wisconsinbutterflies.org)

**Tick are out** – although I have not found any ticks on myself yet this year I have already picked deer ticks off my dog, so the ticks are out! For those of you in the northern parts of the region you may still have snow in some areas but other areas may be warm enough that ticks are already out so be aware. If you need Tick ID Cards, which compare a Deer Tick with a Wood Tick, you can order them (from 50 – 5,000+ cards) from Gunderson Lutheran at

<http://www.gundluth.org/?id=3933&sid=1> If you need just a couple let me know and I'll send them to you. The tick ID card has changed from past years (click on link above to see the card) but still shows the size and photos of deer ticks and wood ticks.



Deer ticks. Adults have reddish abdomen with a black “cape” near their heads, immatures are all dark.

If you've never seen the tiny 6-legged nymphal stage of the deer tick, or any of the other immature stages which have 8 legs like the adults do, you can stop by my office the next time you're at the DNR Headquarters in Green Bay and check out the specimens that I've collected over the years. Sometimes it's hard to picture just how tiny deer ticks are (especially the immature ticks) until you see them in person.

**Winter Cutworm** – so far this winter I have only had a couple reports of winter cutworm, all from Brown County. These large hairless caterpillars can sometimes be found in large numbers 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>



My dog, Dice, checking out a winter cutworm crawling on the snow this winter. No, she didn't eat it.

## Diseases

**Annosum one-page handout** – with the recent website redesign I was notified that some folks are having trouble finding the one-page annosum document (it was actually missing for awhile).

The link for the Wisconsin DNR annosum page is

<http://dnr.wi.gov/topic/ForestHealth/AnnosumRootRot.html>

And here is a direct link to that one-page annosum fact sheet

[http://dnr.wi.gov/topic/ForestHealth/documents/Annosum\\_Factsheet.pdf](http://dnr.wi.gov/topic/ForestHealth/documents/Annosum_Factsheet.pdf)

**Mossy top fungus and Eutypella Canker** – hiking in Door County I recently found the largest fruiting body of Mossy Top fungus that I have yet to see. Mossy Top (*Oxyporus populinus*)



Eutypella canker.

is usually associated with Eutypella canker (sometimes called the Cobra Head Canker) which is a fungus that attacks maple and creates a large lumpy canker, or dead spot (left). Mossy Top fungus is a canker-rot fungus that can enter these eutypella cankers and begin to rot the wood. Canker rot fungi are able to break through the compartmentalization that the tree does to try to limit the spread of fungal infections within the wood.

Since the tree cannot compartmentalize canker-rot fungi the fungi then continue to slowly decay the wood inside the tree. The only outwardly visible sign of Mossy Top will be a white fruiting body. These are typically small (less than the size of your fist), so the one at right would almost qualify as gigantic! Most eutypella cankers do not get Mossy Top but you will find it occasionally. Trees can live for decades with both Eutypella and Mossy Top.



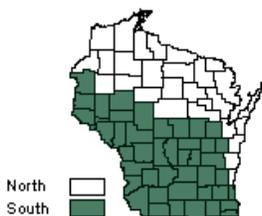
Mossy Top fungal fruiting body on old sugar maple borer wound



Closer view of Mossy Top fungal fruiting body.

**Oak wilt restrictions and warm spring temps** – I often get questions about insects emerging early and how that affects the oak wilt guidelines. The current

oak wilt guidelines for Wisconsin state that if you want to minimize the risk of introducing oak wilt into your stand you should avoid pruning, wounding, or harvesting during the high risk time periods of the year. In the northern counties (counties in white at left), the high risk time period is April 15-July 15, for southern counties the high risk time period is April 1 – July 15. In the urban setting, DNR's message is "Don't prune oaks April through July" (some municipalities have an oak wilt ordinance with different dates).



But what do you do if we have an early warm spring which allows the beetles to become active earlier? Should you stop pruning/wounding/harvesting early because of the weather? I asked Kyoko Scanlon this question last year and her answer follows: Dr. Jenny Juzwik, USDA Forest Service Forest Pathologist said her recent research showed that 7 consecutive days of ~60F temp encouraged beetles to come out of overwintering sites. It seems that fungal mat formation precedes beetle activity. So, one should consider stopping pruning prior to 4/1, if the daytime temp reaches ~60F for 7 consecutive days. This rule of thumb should not be used to continue pruning after 4/1 due to cold spring.

We've had some very warm weather lately. Think about the area that you live, and if you've had 7 days temps over 60 then you should consider implementing oak wilt guidelines now, rather than waiting until April 1.

**Phomopsis galls** – phomopsis galls are caused by a fungus and can be unsightly on the branches of your tree (people often notice them in the winter with the



Numerous galls along the main stem of bitternut hickory.

leaves off). They occur in hickories, maples, oaks, and a few other species. The most common trees that I find them on in northeast Wisconsin are hickory, but in some areas oaks can be heavily galled. Infections are usually localized to a single tree, with neighboring trees completely unaffected, or a small group of trees



Numerous galls in the crown of this bitternut hickory.

may be infected, although larger infection centers can be found. It is suspected that genetic variability plays a roll in the susceptibility of a particular tree. There is no known treatment for Phomopsis galls other than to prune them out and dispose of them, or simply live with them. If left on the tree they may eventually cause dieback or girdling of the branch

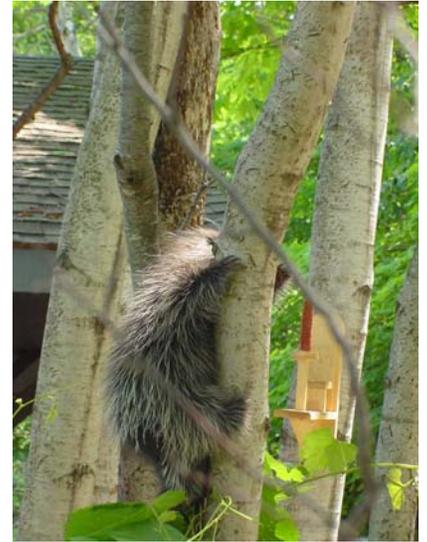
that they are on. The tree may live for many decades with galls on the main stem. The presence of galls does not guarantee the rapid death of the tree, but I'm not aware of any studies that have really explored this issue in depth. Phomopsis galls range in size from very small to larger than your head. Small Phomopsis galls may look similar to Gouty Oak Gall which is a gall that forms on a branch in response to insect attack from a small wasp.

## Other/Misc.

**Animal Damage, squirrel and porcupine** – squirrel damage has been showing up recently although not to the extent that I saw last winter. Squirrels, as well as porcupines, chew the bark off branches in the crowns of trees, which can girdle and kill branches. New damage is quite obvious right now because it shows up as very bright white wood in the crowns where the bark has been eaten. Branches that are not completely girdled will continue to grow and callus tissue will begin to grow over the wound created by the feeding. Crown decline, and branch mortality related to this damage may show up over the next growing season or two. One spot that I've been seeing a lot of squirrel damage this year is along canker margins on trees with old wounds, I'm not sure if this area is somehow tastier or just easier to chew on.

So how do you know what has been eating the bark off your trees? The size of the tooth marks is the key. For a gray squirrel the incisor widths vary from 1.3 -1.7 mm, for a porcupine its nearly 3x's that, or about 3.6-4.8 mm.

Rabbits, mice, and voles can cause damage similar to that from squirrels and porcupines but the damage will be located near the base of the tree instead of in the crown.



Porcupine I saw a couple years ago at Peninsula State Park.



Smaller tooth marks caused by squirrel feeding.



Larger incisor marks from porcupine.

**Be careful in the field – drug grows and one-pot meth labs** – working out in the field is one of the perks of the job (at least in my opinion) but it's important to pay attention to your surroundings. At our recent Forest Health work planning meeting a warden give a presentation to us on how to identify marijuana grow sites, how to remove ourselves from the location, and how to report them. We were also given information on a new danger of “one pot meth labs” which is a way of manufacturing meth in 2-liter bottles, with the remaining garbage being very unstable and explosive. If you work in the woods take some time to familiarize yourself with

what to watch for. The US Forest Service has a couple documents that are very useful, check them out:

Keeping Safe If You Come Across a Marijuana Grow Site

<http://www.fs.fed.us/t-d/pubs/pdfpubs/pdf10672317/pdf10672317dpi72.pdf>

Be Safe In The National Forests

[http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5302522.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5302522.pdf)

For Wisconsin DNR staff, if you would like to watch a video that DNR Law Enforcement put together click on the following link, then enter your email ID and current email password to watch the 16 minute video

<http://dnrmedia.wi.gov/main/Viewer/default.aspx?peid=353f9e3f950a4e818bc120ff8d5ca1c7>

**Disposing of Imprelis contaminated wood chips** – from Wisconsin DNR Bureau of Waste and Materials Management, Recycling and Solid Waste Section. The DNR has received inquiries from landfill operators regarding whether they can accept chipped wood from trees killed by Imprelis, a turfgrass herbicide from DuPont that was found last year to kill certain non-target tree species. This chipped wood would ordinarily be subject to the landfill ban on yard materials. However, the material cannot be composted or used as mulch because compost or mulch containing Imprelis tainted material is likely to kill trees and broadleaf plants. Although there may be other options for use, landfill disposal is the safest and most practical option in most cases.

After discussions with technical and legal staff, the consensus is that the DNR will allow landfill operators to accept yard materials contaminated with Imprelis, using enforcement discretion. This is comparable to how DNR handled disposal of invasive plants, prior to the statutory change that exempted invasive plant materials from the landfill ban.

This exception to the landfill ban should be a temporary situation; DuPont stopped sales of Imprelis last year. We do not know how long it takes for the active ingredient in Imprelis to become ineffective, but it seems likely most of the removal of affected trees will occur this year.

DNR also expects the need for landfill disposal of these materials to be limited. Imprelis was only used by licensed pesticide applicators—it was not available over the counter to the public—and it was expensive. DuPont reports about 2100 damage cases in Wisconsin, including some 50 golf courses.

DNR will send landfill operators a letter informing them that they may accept yard materials that the generator represents as having been contaminated by Imprelis. They will be encouraged to utilize these materials in cover applications where possible, consistent with the intent of the statute. DNR will also notify the licensed compost facilities of this temporary policy. DATCP has been in contact with landscapers and will inform them of the policy as well, and the DNR Division of Forestry has been notified about this issue as well.

This approach will maintain the integrity of the landfill ban on yard materials while providing a needed safety valve for material that might otherwise create serious problems at commercial and municipal compost facilities.

**Invasive plants in Antarctica** – from Bill McNee. A recent study has found that even Antarctica is being invaded by invasive plants. Tourists and scientists are unwittingly carrying alien seeds into the Antarctic areas they visit. About half of the seeds found came from cold parts of the world. Exotic species discovered include Iceland Poppy, Tall Fescue Velvet Grass and Annual Winter Grass, which are all from cold climates and are capable of growing in

Antarctica. To read the story, visit: <http://www.wired.com/wiredscience/2012/03/antarctica-plant-seeds/>.

**Poor branch structure or nature's artwork?** – On a hike in Door county I spotted this tree (photos below) with extremely poor branch structure, which just happened to create a slightly flattened heart. The poor branch structure could have been due to past injury by storms, logging damage, squirrel damage when the branches were younger, or an assortment of other reason. It was such a novelty I just had to take a pic.



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 [dnrfgypsymoth@wisconsin.gov](mailto:dnrfgypsymoth@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.