

# Southern Region Forest Health Update

Wisconsin DNR, Forest Health Protection Unit  
July 21, 2010 Vol. 7 No. 5

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## Odd fungal growth on Norway maple



A citizen brought in the picture on the left to DNR forester, Mary Ann Buenzow. The strange growth was on the stem of Norway maple. The citizen described it as a “cow’s udder with a missing teat”. Do you know what it is? Hint: the shape of a suction cup changed dramatically in a few days. The answer is on page 8.

## Gypsy Moth Update

**Bill McNee (NER Gypsy Moth Suppression Program Coordinator)**



Dead gypsy moth caterpillars.  
Photo by Bill McNee.

Earlier this spring and summer we saw a surge in caterpillar numbers due to the warm and dry spring. Since then, the wet weather conditions have caused a massive die-off of the caterpillars from *Entomophaga* fungal disease and NPV viral disease. Caterpillars killed by the fungus hang vertically, head down. Those killed by the virus hang in an inverted ‘V’ orientation.

Hardwood trees that were defoliated by gypsy moth caterpillars have been refoliating (producing new leaves). Healthy hardwoods will usually refoliate within a few weeks. If a defoliated tree hasn’t yet refoliated it may be waiting until next year or it may be dead. The last month’s rains will help in reducing tree stress.

Male moth flight and female moth egg laying should be in decline in southern Wisconsin. Northeast counties have been



Female gypsy moth laying eggs. Photo by Bill McNee. 1

generating more reports of egg laying than the southern counties. Reports received to date indicate that the overall egg mass numbers will not be nearly as high as they were a year ago.

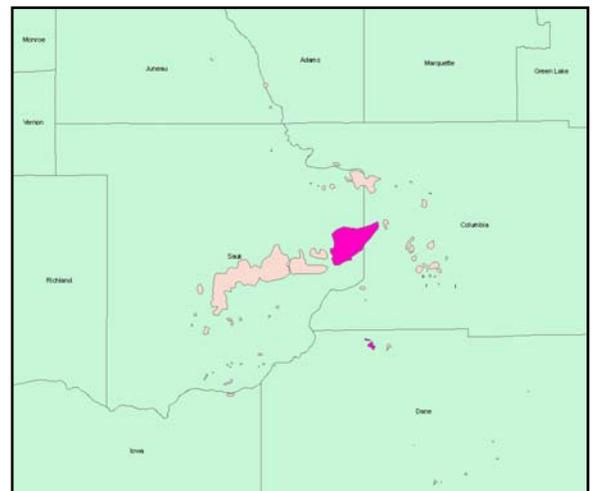
Egg laying should be complete by early August in the southern counties. Thus, communities and landowners wanting to do egg mass surveys to predict next year's infestation levels can get an early start this year. Survey instructions are available at [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov). There is also a list of county coordinators and municipal contacts for those who are interested in aerial spraying through the DNR next spring. County coordinators must apply by early December of this year for spraying in 2011.

Aerial defoliation surveys were conducted in late June and found large amounts of defoliation in Marinette, Menominee, Oconto and Sauk Counties. The preliminary statewide defoliation total is 348,000 polygon acres. Oconto County is this year's leader, with 146,000 polygon acres. Sauk County had the most defoliation in southern Wisconsin, at approximately 25,000 polygon acres.

Slow-the-spread treatments conducted by the Wisconsin Dept. of Agriculture, Trade and Consumer Protection in western counties have been completed for the year.

### **Sauk County Forest Tent Caterpillar, Elm Spanworm, and Gypsy Moth Update** **Mark Guthmiller (SOR Gypsy Moth Suppression Program Coordinator)**

Defoliation in Sauk and Columbia County was fairly widespread with moderate to pockets of heavy defoliation observed (see attached draft map). A few different culprits are to blame for this defoliation. Most of the area in Caledonia and Greenfield Townships (Columbia and Sauk Counties respectively) and a spot in northern Dane County are areas I am attributing most of the defoliation to forest tent caterpillar with lower to minimal levels of gypsy moth defoliation. As you go west into Devils Lake park property and the Baraboo Hills, gypsy moth appears to be the biggest culprit but spot checks and reports indicate some forest tent caterpillar activity in the Natural Bridge State Park area and possibly elsewhere. Elm spanworm populations were also high in many parts of the Baraboo Hills.



Pink: Forest Tent Caterpillar primary defoliation  
Salmon: Gypsy Moth primary defoliation  
Elm spanworm present in both of these areas

Elm spanworms have also now gone through pupation and adult emergence (had you been out a couple weeks ago you may have noticed a cloud of small white elm spanworm moths if you were to shake a tree where moth numbers were high). Caution for the public: These slightly smaller white elm spanworm adults should not to be confused with the non-flying white female gypsy moths with black markings. Although I could not find many new egg masses, based on adult flight numbers, elm spanworm may continue to be a problem next year. They feed on a number of tree species including ash, birch, elm, hickory, ironwood, maple, oak, and poplar. Maple and ironwood seem to be a couple of the favorites.



Note maple leaves bent over by elm spanworm pupating



Elm spanworm pupa does NOT create a cocoon



Adult elm spanworm is smaller than a gypsy moth and all white with no black markings



Elm spanworm eggs laid on a small 1/8<sup>th</sup> inch diameter twig



Elm spanworm eggs lean at an angle next to each other.

Forest tent caterpillars have also now gone through pupation and adult emergence. Forest tent caterpillar pupae make a papery white to yellow cocoon and also wrap up in tree leaves or in corners of outdoor buildings, etc. The pupal stage of forest tent and eastern tent caterpillar are indistinguishable and could be confused in areas where both of these populations were high. The forest tent caterpillar adult moths are a stocky tan to brown moth with generally two dark stripes (or a dark band) on the wings. The eastern tent caterpillar adult generally has two white stripes on wings.

Forest tent caterpillar adults (note dark wing stripes):

<http://bugguide.net/node/view/283485#430215>

Eastern tent caterpillar adults (note white wing stripes) <http://bugguide.net/node/view/558>



Forest tent caterpillar pupa in leaf. Note the yellow to white cocoon.



Numerous forest tent caterpillar cocoons on building structure

Here is a great caterpillar comparison handout that might be useful next season. Also note that forest tent caterpillars do NOT make tents like eastern tent caterpillars.

<http://web2.msue.msu.edu/bulletins/Bulletin/PDF/E2299.pdf>

DNR website on FTC:

<http://dnr.wi.gov/forestry/FH/FTC/>

Friendly flies were not yet observed but may show up in future or next year in Sauk Co.

Friendly fly factsheet at <http://dnr.wi.gov/forestry/fh/pdf/friendlyfliesfactsheet.pdf>.



Nymph wood cockroach

## Wood Cockroaches

**Mark Guthmiller**

A report was received from Beloit WI regarding a number of these critters hanging around the base of a tree. These are native wood cockroaches that generally live outdoors. They require a moist habitat and often found under rotting logs or woodpiles. Unlike the American cockroach they do not breed and multiply indoors. More information on this critter can be found at:

<http://www.ipm.iastate.edu/ipm/iin/woodcoc.html>

## Emerald Ash Borer (EAB) Update

**Bill McNee**



Emerald ash borer detection trap.  
Photo by Renee Pinski.

The city of Cudahy in Milwaukee County is the latest Wisconsin community to have an EAB detection. In late June, one adult beetle was found on a trap located east of the Milwaukee airport.

Several beetles were also caught on a trap south of the Milwaukee airport, in Oak Creek. This Oak Creek trap is about 3 miles from the known infestation area in Oak Creek/Franklin and about 2 miles from the Cudahy detection site. These detections are located within an existing quarantine area. An EAB infestation in West Bend was discovered last month. The 9 trees known to be infested have since been destroyed. Washington County is already under an EAB quarantine.

The known size of the Victory infestation (Vernon/Crawford Counties) has also been increased with new trap catches and finds of infested trees. This infestation is currently known to be about 8 miles long and 4 miles wide. If interested in maps of

any of these recent EAB detections, email Bill McNee ([bill.mcnee@wisconsin.gov](mailto:bill.mcnee@wisconsin.gov)) or Mark Guthmiller ([mark.guthmiller@wisconsin.gov](mailto:mark.guthmiller@wisconsin.gov)).

If you see a purple EAB detection trap lying on the ground, please email the WI Dept. of Agriculture, Trade and Consumer Protection so that they can put the traps back up. Downed traps are put back up as quickly as possible. The email address to report a fallen trap is: [DATCPEmeraldAshBorer@wisconsin.gov](mailto:DATCPEmeraldAshBorer@wisconsin.gov).

## **Lookout for your trees and your wallet** **When it comes to emerald ash borer and gypsy moth**

Excerpt from the news release by WI DATCP on June 30, 2010

Many people in Wisconsin love the trees in their yards and on their boulevards and, not too surprisingly, somebody somewhere will try to exploit that love for the sake of making a quick buck. Since the ash-killing emerald ash borer beetle was discovered in Wisconsin nearly three years ago, some businesses are using this relatively new threat as a way to scare customers into agreeing to expensive treatments or even outright tree removal, when neither may be warranted. "Determining whether an ash tree is infested with emerald ash borer (EAB) is not always an easy thing to do," said Jennifer Statz, the EAB program coordinator with the Wisconsin Department of Agriculture, Trade and Consumer Protection. "It sometimes requires microscopic examination to tell if a beetle is the emerald ash borer or some other native species."

By and large, the vast majority of tree care businesses operate on the up and up and no formal complaints have been made. But EAB program staff do occasionally hear from property owners who've been told the ash tree-killing beetle is present in their trees. Inspection of the trees typically turns up evidence of some disease or insect problem, but not the emerald ash borer. Not every misidentification comes with an offer to treat with chemicals or remove the tree.

"It's a good idea to get a second opinion, either from our program staff members, a DNR forester, a local UW Extension agent, or another tree care professional or certified arborist," Statz said. "Somebody who shows up at your door and claims they've identified EAB on your property should be viewed with a skeptical eye, especially if they're also telling you that they've got a guaranteed treatment or are willing to cut down your tree – for a price."

The same is true for property owners who've been told that the gypsy moth has killed their trees. This is happening in northeastern Wisconsin this summer after an explosion of gypsy moth caterpillars defoliated hundreds of thousands of acres of trees in several counties, but the trees aren't necessarily doomed. "It's a common misunderstanding that defoliation will kill an oak or other hardwood species of trees," said Bill McNee, the DNR gypsy moth suppression coordinator in Green Bay. "You don't have to cut down a tree this year just because gypsy moth caterpillars ate all the leaves. If the tree's in good health, it's likely to pull through and put out new leaves within a few weeks."

Some things to keep in mind if a person comes to your door and offers to treat or remove trees because of insect damage or disease include:

- Check their credentials. A business license doesn't necessarily mean extensive knowledge. The Wisconsin Arborist Association has a website with a list of certified tree care professionals.
- Check their license. If you hire someone to apply a pesticide on your property, that person must be licensed as an applicator, and the business must also be licensed.
- Check the EAB Website: The beetle has only been found in a few locations in Wisconsin. Some companies have told residents that EAB is already in their neighborhood, though the closest infestation is several counties removed. The map of known locations is always current.

- Check the Gypsy Moth Website: There are state-managed programs to help combat high populations of this insect, and several homeowner strategies to keep backyard numbers in check. “Many other problems that affect ash trees in Wisconsin share similar signs and symptoms of EAB infestation,” Statz said. “If someone comes to your door and gives you some line about guaranteed treatments, thank them for the information and then call our hotline or your local Extension agent to get an unbiased opinion. Chances are good that your tree is affected by something other than EAB.”

## Asian Longhorned Beetle (ALB) Update

**Bill McNee**

ALB has been discovered in Boston, Massachusetts, in trees bordering a hospital parking lot across the street from the country's oldest public arboretum. Groundskeeping staff noticed the sawdust created by tunneling beetles. So far approximately 50 ALB life stages have been found. ALB infests many species of hardwoods, including maples, and would be very destructive if it escaped into New England's hardwood forests.

## Beech Bark Disease

**Bill McNee/Kyoko Scanlon**

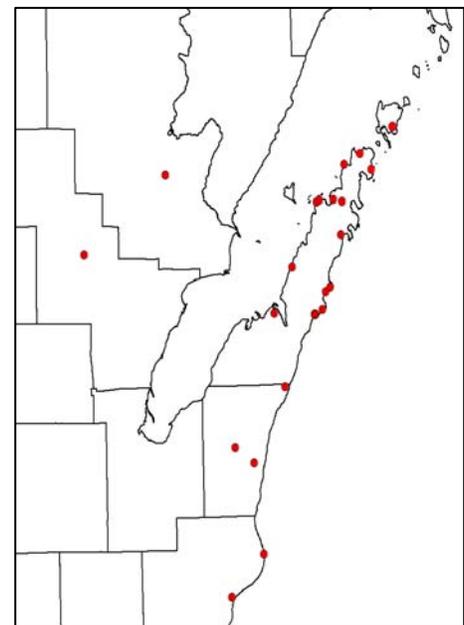


Beech scale at low populations.  
Photo by Linda Williams.

Beech scale, the insect part of the insect-fungus combination that causes beech bark disease, has been detected in Manitowoc County. Beech scale is now confirmed in 5 counties - Door, Kewaunee, Manitowoc, Marinette, and Oconto. Scale numbers are still very low at all collection sites away from the original detection area near Sturgeon Bay. So far, tree mortality has only been

found in the vicinity of the original detection site.

Additional surveys for beech scale will be conducted in the southeast counties this summer to fall. Please report small balls of white wool on beech trees to a DNR forest health specialist if you should see them.



Sites in Wisconsin where beech scale was confirmed (red dots)

## Oak wilt symptoms showing up

**Kyoko Scanlon**

Rapid wilting of leaves, caused by oak wilt, is now appearing in infected trees in southern Wisconsin. Oak wilt is a fungal disease that plugs the water and nutrient conducting channels in the tree. It is a serious disease of oak, especially in the red oak group. In the red oak group, once wilting symptoms become visible, the tree loses most of the leaves and dies very quickly, often within a few weeks. This disease is commonly found in the southern two-thirds of Wisconsin



A red oak tree that was showing wilting symptoms of oak wilt (the picture was taken on July 2, 2010). Branch samples were taken from this tree to conduct a lab test. Lab test confirmed that the tree was infected with oak wilt.

The first symptoms of oak wilt are branches with wilted leaves and leaves on the ground in summer. These fallen leaves are partially green or a bronze-green and are not completely dry. Landowners who have an oak tree that is rapidly losing its leaves may want to have the tree examined for oak wilt. Homeowners who suspect oak wilt can send branch samples that have wilting leaves to the University of Wisconsin, Plant Disease Diagnostics Clinic for oak wilt laboratory test. The samples should be roughly 1/2-inch in diameter and 4 to 6-inches long from three different branches with wilting leaves. The samples must have live tissue.

Details for submitting samples are available on the Internet at <http://www.plantpath.wisc.edu/pddc/> or by calling the University of Wisconsin's Plant Disease Diagnostic Clinic at 608-262-2863. For more information about oak wilt biology and management, please visit the Wisconsin DNR website at <http://dnr.wi.gov/forestry/fh/oakWilt>.

## Japanese beetle skeltonizing leaves

**Kyoko Scanlon**

Infestations by the Japanese beetle (*Popillia japonica*) on birch and many other plant species have been observed in Southern Region. The beetles were feeding on leaves, causing skeltonizing or lacy appearance on leaves. The Japanese beetle feeds on the leaves and flowers of over 300 plants. Preferred tree species include birch, Japanese and Norway maples, crab apples, lindens and mountain ash.

As the name implies, the beetle is native to Japan, and was first found in the US in New Jersey in 1916. It is believed that larvae of the Japanese beetle were accidentally introduced to the United States with a shipment of iris bulbs from Japan.



The Japanese beetle adult  
Photo: David Cappaert,  
[www.forestryimages.org](http://www.forestryimages.org)

The Japanese beetle adult is about 3/8 inch long, and metallic green with copper-brown wing covers. There are six pairs of white tufts of hairs along the sides and back of the body. Adults are found from mid June to mid September. Population peak starts around mid-July and lasts for 4-6 weeks as individual beetles live about 30-45 days. The immature form of the Japanese beetle is a white grub and feeds on the roots. The Japanese beetle overwinters as a grub in the soil. For grub control, a soil drench application of imidacloprid and thiomethoxam in mid to late June can be effective. The Japanese beetle has one generation per year.

If they are in low numbers, adults can be removed by hand picking. Traps are effective to capture beetles, however, these traps may attract more beetles to your property. Insecticides, such as

carbaryl, malathion, cyfluthrin, and permethrin, can be sprayed to control the adult beetles. Repeated applications may be necessary on a weekly basis when the adult population is high. Always follow label directions.

For more information about the biology and management of the Japanese beetle, please visit the University of Wisconsin Extension at <http://wihort.uwex.edu/gardenfacts/X1062.pdf> and the University of Minnesota Extension at <http://www.extension.umn.edu/distribution/horticulture/dg7664.html>.

## Answer: Odd fungal growth on Norway maple



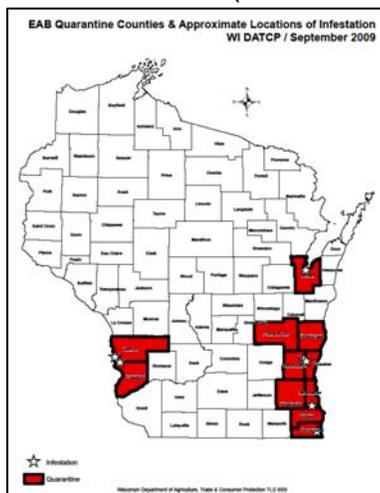
Dryad's saddle mushroom (photo by Mary Ann Buenzow)

The odd fungus growing on Norway maple was Dryad's Saddle (*Polyporus squamosus*). The photo on the left was taken by DNR forester, Mary Ann Buenzow, a few days after the first inquiry by the citizen. It is amazing how quickly they can grow when they decide to do so! The identification was made by Dr. Dan Lindner of Forest Service, Mycology Research Station.

According to the website by Dr. Tom Volk, Professor at UW-La Crosse at the Department of Biology, the mushroom can be up to 2 feet across. The fungus fruits on hardwood stumps, logs, or living trees. The common name Dryad's saddle was from a character in Greek mythology. A dryad is a tree-dwelling nymph and someone who was imaginative and romantic must've thought that these mushrooms were suitable for her to sit on. It causes a white rot. For more information about Dryad's Saddle, please visit Dr. Tom Volk's website at [http://botit.botany.wisc.edu/toms\\_fungi/may2001.html](http://botit.botany.wisc.edu/toms_fungi/may2001.html).

## Correction: New Firewood Rule Kyoko Scanlon

The article below was included in the newsletter Vol. 7 No. 4. I apologize that the article didn't include all of the quarantined counties for the emerald ash borer. Below is the article with correct counties and a map that shows quarantined counties for the emerald ash borer. Thank you to Dick Rideout (DNR Urban Forestry) and Jo Ann Cruse (USDA APHIS) for pointing it out.



### New Firewood Rule

It's warm, it's sunny, and it's time for camping! While you pack up your tent, utensils, and marshmallows, please consider obtaining firewood locally to where you will be camping. A variety of forest insects and diseases can hitchhike on firewood, and we want to avoid accidental long-distance movement of those pests.

DNR has developed a permanent rule that prohibits visitors from bringing firewood into Wisconsin State Parks and onto other state-managed lands from out of state or from locations farther than **25 miles away** from the property. Some of you may be saying "Hey, wasn't it 50 miles?" A new rule became effective as of June 1, 2010,

and it is now 25 miles. If you would like to know the 25 mile-radius around your destination, please check out a map that shows the 25-mile radius around each state property, available at <http://dnr.wi.gov/invasives/firewood/firewood-maps.htm>.

In addition, if you live in counties under quarantine for the emerald ash borer, make sure you are aware of the state and federal laws that prohibit the movement of firewood out of emerald ash borer quarantined areas. Currently, the quarantined counties include Brown, Crawford, Fond du Lac, Kenosha, Milwaukee, Racine, Ozaukee, Sheboygan, Vernon, Washington, and Waukesha counties. Firewood that has been stored, purchased, harvested, or that has moved through the quarantine areas with stops longer than what it takes to re-fuel a vehicle, may not be moved out of these areas. Furthermore firewood may not be moved from counties in eastern Wisconsin to anywhere farther west under gypsy moth quarantines (see the gypsy moth quarantine map). Many county parks and private campgrounds as well as national parks have firewood restrictions in place for their properties as well.

It is getting complicated to move firewood, isn't it? Maybe it's easier to buy firewood locally. For more information about firewood rules, please visit the WI DNR website at <http://dnr.wi.gov/invasives/firewood/>.

### **About the newsletter**

"Southern Region Forest Health Update" is an informal newsletter created by the Wisconsin DNR, Forest Health Protection Unit. The purpose of this newsletter is to provide foresters in the Southern Region with regional up-to-date forest health information. This newsletter will be issued monthly during the growing season and on an irregular basis during winter as topics come up. We welcome your comments/suggestions on this newsletter and your reports on forest health problems you observed in your area. If you would like to subscribe to this newsletter, please contact Kyoko Scanlon at [Kyoko.Scanlon@wisconsin.gov](mailto:Kyoko.Scanlon@wisconsin.gov).

Previous issues of this update and regional forest health updates from NER, NOR and WCR, are available from the WI DNR Forestry website at <http://dnr.wi.gov/forestry/FH/intheNews/>. Articles were written by DNR forest health specialists who cover Southern Region unless otherwise noted.

### **Please report to us**

We appreciate reports of forest health problems in your areas. Please contact the following staff for regional forest health problems/questions. Thank you.

### **Forest health and gypsy moth assistance staffing changes - Mark Guthmiller**

Some temporary changes have been made to forest health staff assistance. For forest health assistance in southern Wisconsin, please check the list below of staff and forest health concerns they can assist you with. This would be a good page to print out and keep for future reference.

# SOR Forest Health Assistance

## Wisconsin DNR, Forest Health Protection Unit

### Contacts for DNR staff, municipal foresters, and forestry cooperators

#### **For general forest health issues**

Jane Cummings-Carlson (northern part of SER Team area) 608-275-3273  
Kyoko Scanlon (southern part of SER Team area, and SCR) 608-275-3275

#### **For municipal level urban forest health issues (other than Gypsy moth and EAB)**

Mark Guthmiller (SCR and SER Team area) 608-275-3223

#### **For gypsy moth**

Mark Guthmiller (SCR area) 608-275-3223  
Bill McNee (SER Team area) 920-662-5430  
Andrea Diss-Torrance (Statewide issues) 608-264-9247

#### **For emerald ash borer**

Mark Guthmiller (SCR Team areas) 608-275-3223  
Bill McNee (SER Team area) 920-662-5430

#### **Direct public inquiries regarding yard tree concerns to UW county or state extension offices or:**

Emerald ash borer hotline 1-800-462-2803  
Emerald ash borer e-mail DATCPEmeraldAshBorer@wi.gov  
Gypsy moth hotline 1-800-642-MOTH

#### **Additional Program Web-based Resources:**

Forest Health web site: <http://www.dnr.state.wi.us/org/land/forestry/FH/>

Gypsy Moth web site: <http://www.gypsymoth.wi.gov>

Emerald ash borer web site: <http://dnr.wi.gov/forestry/fh>

**SCR Team Counties:** Columbia, Dane, Dodge, Grant, Green, Iowa, Lafayette, Richland, Rock and Sauk

**SER Team Counties:** Kenosha(S), Milwaukee(S), Ozaukee(N), Racine(S), Sheboygan(N), Walworth(S), Washington(N), and Waukesha (N) (S=Southern Counties serviced by Kyoko Scanlon and N=Northern counties serviced by Jane Cummings-Carlson)