

# SCR & SER Forest Health Update

## Wisconsin DNR, Forest Health Protection Unit

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### **Gypsy moth updates- Mark Guthmiller**

#### **Gypsy moth calls are still coming in! What do I do?!**

Gypsy moth reports may still be coming in to some folks. Homeowners hearing about gypsy moth from neighbors, seeing the end of the male moth flight or noticing the large white females laying egg masses may generate additional calls this summer and fall.

#### **So what do you do if you get a call?**

- 1) Direct residents to the gypsy moth web portal: <http://gypsymoth.wi.gov>. This site has lots of general information on ID, control options, and how to participate in the gypsy moth suppression program for next year.
- 2) If residents don't have web access or have additional questions have them contact the gypsy moth hotline to leave a message with their contact information. 1-800-642-MOTH(6684)
- 3) Mention there is a DNR aerial suppression program that is coordinated by the county and is a voluntary program at the request of landowners and municipalities. **This is important:** direct them to the following web site to find out who they need to contact to report a problem and request a fall survey for egg masses (this is how we predict the need for treatment the following year). <http://dnr.wi.gov/org/land/forestry/fh/GM/coordinators.htm> (If no county or local contact is available have them report to the gypsy moth hotline listed above and leave contact information.)
- 4) For other management options direct them to the web portal above for more information.
- 5) Request homeowners leave any egg masses present for now so they can be counted during egg mass surveys. After the first hard frost homeowners can then oil the egg masses with a product such as "golden pest spray oil". This is a soybean based product that suffocates the eggs. Waiting until the first hard frost allows for beneficial parasitic wasps to finish their life cycle.

Thanks for your assistance on directing these calls!

## **Gypsy moth activity quieting down for the year**

Gypsy moth activity was definitely on the increase in most all of eastern Wisconsin this year. The warm dry spring and summer weather was perfect for gypsy moth survival and indeed gypsy moth populations are increasing in many south central counties and we are getting scattered reports of building populations back in southeastern Wisconsin. I will give a full update of affected counties and general locations in the next newsletter after reviewing hotline call data.

In south central Wisconsin the gypsy moth activity is rapidly winding down for the year. Most of the large white (with black markings) females have completed laying their golden buff felt-like egg masses and the brown fluttering male moths are not very noticeable anymore. You may still find an occasional straggler in parts of south central region. In southeastern Wisconsin gypsy moth development was behind the south central part of the state. We continue to get isolated reports of male moth flight and egg laying in this part of the state. This activity in southeastern WI will likely be winding down in the next week or two.

## **Rocky Arbor State Park update**

If you didn't catch the news, Rocky Arbor State Park located just outside of WI Dells, was closed in late June for 10 days due to a severe gypsy moth outbreak. The park was closed during the later part of the caterpillar life stage period due to sheer nuisance levels present, concerns of caterpillar movement off the property, and health concerns related to contact with caterpillars. The park reopened after the 10 day period, and with assistance from WI Department of Agriculture staff and park staff, campers heading out of the gypsy moth quarantined areas were inspected for straggler caterpillars, moths, pupae and egg masses. The trees that were heavily defoliated have started to leaf out again. It is possible we will see some mortality over the next few years on some of the most stressed trees. Timely rains will alleviate some of the risk for possible mortality. A big thank you to everyone who assisted with issues related to the park closure! A lot has been learned from this experience and we will be working at establishing a treatment block for this area next spring.

## **Aerial defoliation surveys**

Aerial gypsy moth defoliation surveys were conducted in areas reporting problems. Survey results indicated an increase in damaging population levels since the 2004 population crash. Here is a summary of defoliated acres observed:

Adams - 176 acres

Green Lake – 37 acres

Marquette – 11 acres

Juneau – 80 acres

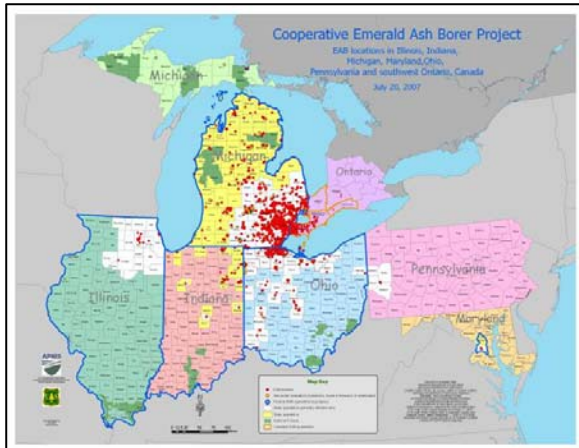
Marinette - 22,690 acres (mostly light but some patches of moderate and heavy defoliation).

In addition to aerial surveys we have reports of isolated or small groups of trees experiencing defoliating levels of gypsy moth in Dane, Columbia, Sauk, Rock, Milwaukee, and Racine Counties.

## **EAB updates**

**Emerald Ash Borer Detected For the First Time in Pennsylvania - Renee Pinski**

On June 21, 2007, the Pennsylvania Department of Agriculture announced the first confirmed detection of the emerald ash borer in Pennsylvania. Two adult emerald ash borers were collected by sweep net from an ash tree in Cranberry township, Butler County (western PA, near the Ohio boarder), PA by two USDA APHIS surveyors. The two emerald ash borer adults were detected by the USDA APHIS surveyors while they were conducting visual surveys that are part of the joint EAB taskforce detection effort in Pennsylvania. Consequently, state and federal officials are intensifying their survey efforts near the detection site to determine the extent and severity of the infestation.



At this time no further information has been released as to the number of infested ash trees. The Pennsylvania Department of Agriculture has imposed a quarantine in Butler, Allegheny, Beaver and Lawrence Counties to slow the spread of emerald ash borer by restricting the movement of ash nursery stock, green lumber, logs, wood chips and any other ash material from the quarantined area.

Besides the first find in Pennsylvania, additional infestations have been found in states where EAB is present (the map on the left shows infestations as of

July 20, 2007). The emerald ash borer has not been confirmed in Wisconsin yet.

### **Updates on EAB visual survey in campgrounds by DNR staff Renee Pinski and Kristin Peterson**

WI DNR staff workers have so far conducted visual surveys for emerald ash borer in 42 private and county campgrounds across seven counties in southeastern Wisconsin (with the exception of Marinette County). Counties surveyed for emerald ash borer thus far include Dane, Dodge, Green, Jefferson, Ozaukee, Marinette, Rock, and Washington Counties. No symptoms or signs of emerald ash borer have been detected in any of the 1450 ash trees surveyed across 3163 campsites.

### **Check out the revised Firewood webpage!**



The DNR firewood webpage is revised with great information. The website address is <http://dnr.wi.gov/invasives/firewood/index.htm>. As you may know already, the Wisconsin DNR prohibits bringing firewood onto any DNR properties from more than 50 miles away or from outside of Wisconsin. This rule was created to protect state parks and forests from firewood hitch-hikers, such as the emerald ash borer, gypsy moth, oak wilt etc. This includes campsites in state parks and forests. The website describes firewood rules with an interactive map to help the public understand the 50-mile radius around each state property. The website also explains the types of acceptable firewood with easy to understand photos.

You can also call the toll-free firewood information line at 1-877-303-WOOD (9663) for more information about firewood.

## Maple dieback and branch flagging starting to show up-Mark Guthmiller

It is looking like another tough year for many of the maples in southern and south eastern Wisconsin. Norway, black, and sugar maple are starting to show stress symptoms with yellowing leaves, branch flagging with dried reddish brown leaves, or branch dieback from the top. A number of possible causes have been implicated including drought, Verticillium wilt, and woodborers.



Fall 2006 with branch flagging



Spring 2007 with sloughing bark



Extensive larval galleries of *Agrilus masculinus* Horn

Last year, a black maple on our regional office grounds had a few branches that browned up in the summer. Over the winter the bark sloughed off. On closer inspection extensive woodborer galleries were observed as well as the typical green streaking of Verticillium wilt on one sample. Samples were bagged to rear any insects present in the branches. A number of critters emerged and were sent into UW Madison entomology department for identification. The insects reared from the branches included a native agrilus known to attack maple, *Agrilus masculinus* Horn, a sawfly, *Xiphydria maculata* Say, a number of braconid wasps parasitizing the sawflies and a parasite parasitizing the braconid wasps. What a complex of critters! What ever the stress caused to these maples (likely Verticillium wilt) the insects are taking advantage. If others are seeing similar symptoms on maples with woodborer activity please report this to Kyoko Scanlon or Mark Guthmiller. Thanks to Renee Pinski and Steve Krauth at UW Madison for helping identify these critters.

## Japanese beetles feeding on birch



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

Infestations by the Japanese beetle (*Popillia japonica*) on birch and other plant species were observed in Dane and Rock Counties. The beetles were feeding on birch 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.



Skeltonized or lacy appearance of birch leaves due to feeding by the Japanese beetle

As the name implies, the beetle is native in 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 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 in 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 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>.

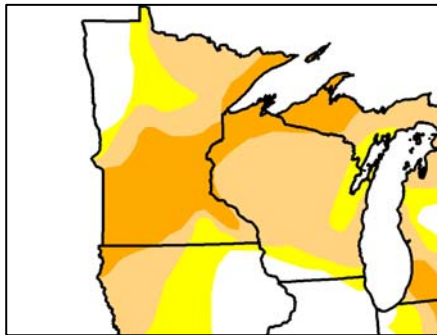
### Fall Webworm nests showing up - Mark Guthmiller

Usually we start seeing the loose webbing of fall webworm in August and September but nests were noticed on a drive back from southeastern Wisconsin this week in Jefferson County. I suspect others are starting to see nests in other parts of southern Wisconsin. Get ready for the next wave of calls with people thinking they have gypsy moths!

For more information on this pest check out this website:

<http://www.entomology.umn.edu/cues/Web/133FallWebworm.pdf>

### Dry conditions continue



US Drought Monitor Map as of July 31.  
Yellow=Abnormally dry;  
Salmon=Moderate drought;  
Orange=Severe drought  
Copied from US drought monitor website at  
<http://drought.unl.edu/dm/monitor.html>

Much of Wisconsin, as well as the neighboring states, continues to suffer dry conditions as hot and dry summer persists. With hot and dry weather continuing through the summer, some trees may start to show immediate symptoms of drought damage. These symptoms include wilted or rolled-up leaves, necrosis/chlorosis on leaves, premature coloration on leaf margins and premature leaf drop. Street or yard trees that already suffer some stress or that have root problems, such as girdled roots or near pavement are more susceptible to drought damage. If this hot and dry condition continues, more destructive long-term effects of drought may show up on established trees later. Severely damaged trees may show top dieback, and stressed trees may later be attacked by opportunistic pests. For example, stressed oak trees are often attacked and killed by secondary pests, such as the two-lined chestnut borer and Armillaria root rot.

For more information about drought injury, please visit <http://www.colostate.edu/Depts/CoopExt/4DMG/Garden/drought6.htm>.

## Periodical Cicada Damage



Egg laying damage on elm (the sample was submitted by Rick Livingston)

The 17-year periodical cicadas are gone, until 17 years later. However, they left us with damage on trees and it is showing up in the areas where mass emergence of the periodical cicada was observed earlier this summer. Adult female cicadas cut slits in small branches that are about the size of a pencil and lay eggs in straight rows. About 24-48 eggs are laid on each twig portion. A female cicada deposits up to 600 eggs. This process

causes small branches to wilt and die or break off. On large trees, you will find many dead or broken tips (flagging), but the health of the trees should not be affected. However, young trees may be seriously damaged or killed with a heavy infestation. The egg laying damage was seen on a variety of deciduous trees, such as oak, birch, hickory, ash, and elm. A DNR forester, MaryAnn Buenzow reported that damage was observed even on buckthorn.

For more information about the 17-year periodical cicada, please read the WI DNR factsheet at <http://dnr.wi.gov/org/land/forestry/fh/pdf/CicadaUpdate.pdf> and the University of Wisconsin Extension factsheet at <http://wihort.uwex.edu/gardenfacts/XHT1068.pdf>.

Thanks to DNR foresters, MaryAnn Buenzow, Rick Livingston, and Randy Cooper for reporting cicada updates.

## Other pests reported

**Oak wilt and Dutch Elm Disease** - Wilting leaves on oak and elm have been observed throughout southern WI.

## Please report to us

We appreciate reports of forest health problems in your areas. Currently, there is no regional forest health specialist assigned in SCR or SER. At this point, please contact the following staff for regional forest health problems/questions. Thank you.



A mature elm infected with Dutch elm disease.

### For general forest health issues

Jane Cummings-Carlson (northern part of SER)

608-275-3273

Kyoko Scanlon (southern part of SER, and SCR)

608-275-3275

### For gypsy moth

Andrea Diss (Statewide issues)

608-264-9247

Mark Guthmiller (SCR/SER)

608-275-3223

Emerald ash borer hotline

1-800-462-2803

Emerald ash borer e-mail

[eab@datcp.state.wi.us](mailto:eab@datcp.state.wi.us)

Gypsy moth hotline

1-800-642-MOTH

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://emeraldashborer.wi.gov/>

### **About the newsletter**

“SCR & SER 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 South Central Region and Southeastern 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@dnr.state.wi.us](mailto:Kyoko.Scanlon@dnr.state.wi.us).

Previous issues of this update and regional forest health updates from NER and WCR are available from the WI DNR Forestry website at <http://dnr.wi.gov/org/land/Forestry/FH/intheNews/index.htm>.

Articles were written by Kyoko Scanlon, unless otherwise noted.