

Northeastern Wisconsin Forest Health Update

Wisconsin DNR – Division of Forestry

November 15, 2013

Topics covered this month:

Insects:

EAB new locations in quarantined counties
EAB parasitoids established in Newburg
EAB, a decade of research
European chafer (new state record)

Other:

None

Of Historical Interest:

1953 – Walking sticks and Pine webworm
1988 – Chestnut blight

Diseases:

Annosum (Grant County)
Armillaria
Oak wilt
Thousand cankers disease
White pine blister rust mutation

Insects

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

EAB new locations in quarantined counties – when emerald ash borer is first found in a county it often makes the news; but what about after that, when it is found for the 2nd, 3rd, or 4th time in a county? Well, quite frankly, it may or may not make the news. In the past month emerald ash borer has been identified in the following areas around the state:

- Ozaukee County – Village of Saukville

Although the Town of Saukville discovered EAB in the summer of 2008, this is the first find within the village.

EAB parasitoids established in Newburg - a total of 40 *Tetrastichus planipennis* were recovered from the Newburg EAB bio-control release site in Ozaukee County this summer! That's

**Emerald Ash Borer Quarantined Counties
August 2013**



good news and indicates that at least one of the biocontrol agents has established itself in that area. *Oobius agrili* (egg parasitoid) and *Spathius agrili* (larval parasitoid) were also released at this site but it's still unclear if they have established a population there.

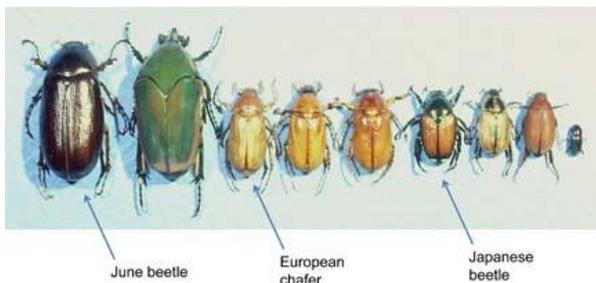
EAB parasitoids were first released at Newburg, Wisconsin, in 2011. To date, EAB parasitoids have been released in Kenosha, Milwaukee, Ozaukee, Vernon, and Washington Counties. As I noted in the July pest update, we are no longer doing releases of *Spathius agrili* as research has shown that they do not establish well in our colder climate.

EAB, a decade of research – the Forest Service did a nice 4-page summary of the research that their scientists have done on EAB (complete with references if you want to read more) <http://www.nrs.fs.fed.us/news/review/20> Be sure and read down to the section titled “Saving Ash” as there is some interesting research taking place with genetics, hybridizing, and “lingering” ash trees.

European chafer (new state record) – this non-native beetle was positively identified in Wisconsin, for the first time in July 2013. Adults were collected from Door County. They look a bit like a smaller, more pale June beetle. European chafer has been reported to be a more serious pest of home lawns than Japanese beetle due to their habit of feeding late into the fall



European chafer adult. Photo from www.bugwood.org



Comparison of some scarab beetles. Photo by Dave Shetlar, OSU.

and starting very early in the spring. They are found

throughout the Lower Peninsula of Michigan, and here's a link to more info

<http://www.turf.msu.edu/european-chafer>

Diseases

Annosum - Annosum root rot was recently confirmed in Grant County for the first time, in a red pine stand. It was on state land in the Lower Wisconsin State River Way, west of Muscoda. Annosum root rot is now found in 24 counties in Wisconsin.

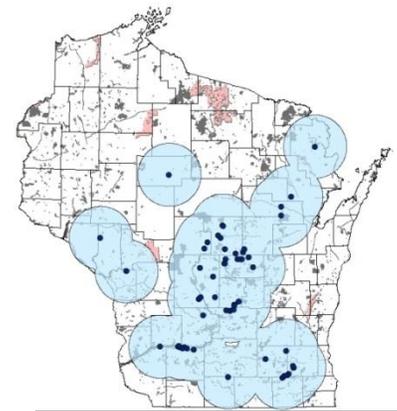
There is a one year grace period for implementation of the annosum treatment guide when a new stand is confirmed and the 25-

Annosum root rot confirmed counties in Wisconsin (November 2013)



mile buffer map is updated. The grace period is provided to give foresters and loggers in the area enough time to prepare for the possible inclusion of the treatment at the time of timber sale setup.

Remember, using the annosum guide is required on state owned lands that are within 25 miles of a known annosum location. The guide can be used to generate discussions on non-state lands. The 25-mile buffer map will be updated online shortly.



25-mile buffer zones in blue surrounding known annosum locations. Map updated November 2013.

Armillaria – this root rot pathogen usually lives quietly under the soil or under the bark. Armillaria attacks trees under stress and can thrive following droughty years like 2012, when it will advance in the root system, killing the roots as it goes, and eventually killing the tree. Typical signs that many of you may have seen is the white mycelial mat found under the bark of recently dead or dying trees, or the black shoestring rhizomorphs that resemble small roots. At a recent training session for the newest class of DNR Foresters, forest health staff found some fabulous external indicators of armillaria root rot ... honey mushrooms!



Brian Schwingle (left) models a monster-sized honey mushroom, which were common at this site in Portage County, while Mark Guthmiller (right) displays a nice-sized clump of honey mushrooms.

Oak wilt – a new Wisconsin oak wilt distribution map has been posted on the DNR oak wilt page (and at right) <http://dnr.wi.gov/topic/foresthealth/oakwilt.html>. You'll notice that the red counties are considered "generally infested", meaning oak wilt is found fairly regularly throughout the county. The pink areas on the map indicate oak wilt at a township level, in those counties where oak wilt is still uncommon. This will help forest managers, in those areas where oak wilt is still uncommon, to

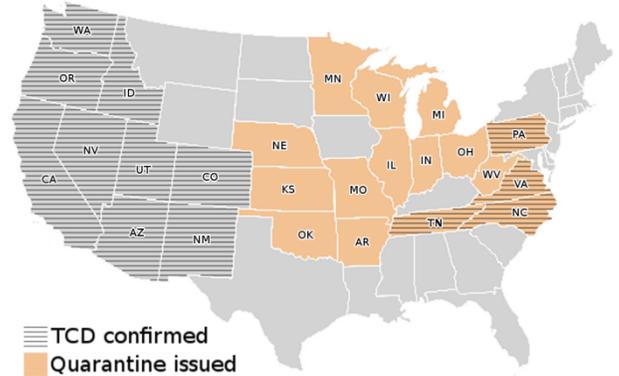


make the best choice regarding management for their stand.

Note – the interactive oak harvesting guide (where you enter your info and it spits out a recommended time to harvest or not harvest your oak stand), still has a county-level distribution map since the current guide is based on county-level distribution.

Thousand cankers disease – Tennessee recently found this disease in 2 additional counties, adding to their quarantine. This is the latest-greatest insect/disease combo to hit black walnut, and it's a killer. We have not yet found thousand cankers disease (TCD) in Wisconsin, although we continue to look for it. We do have a quarantine in place in Wisconsin to try to prevent TCD from being brought into the state on walnut logs, wood, or other walnut products.

Distribution of Thousand Cankers Disease as of July 12, 2013



White pine blister rust mutation – a new mutation in the fungus that causes white pine blister rust (WPBR) is allowing it to infect new species of Ribes. A press release by the Forest Service quotes a researcher as saying that “up to 50% of previously immune Ribes plants were now infected with WPBR”. If you remember from the life cycle of WPBR it requires an alternate host (Ribes) to complete its life cycle and cannot be transmitted directly from one white pine to another. For more info <http://www.na.fs.fed.us/nanews/nastories/News-Release-WPBR-DRAFT-102913a-w-template.pdf> or to review the life cycle of WPBR check out <http://www.apsnet.org/edcenter/intropp/lessons/fungi/Basidiomycetes/Pages/WhitePine.aspx>

Other/Misc.

None

Of Historical Interest

60 years ago, in 1953 –

Important Recent Insect Introductions

- Walking Sticks (*Diaperomera femorata*) – Heavy to moderate infestations were reported locally in several counties. Damage was concentrated in the northeast and was spotty elsewhere. There appears to be a definite increase in the number of infestations over 1951. (This insect has a 2-year cycle, therefore comparisons cannot be made with the previous year but two years previous).

- Pine Webworm (*Tetralopha robustella*) – This insect reversed from heavy in 1952 to very light populations in 1953.

25 years ago, in 1988 –

- Chestnut Blight – *Endothia parasitica* (Murrill) Anderson and Anderson. Chestnut blight was first reported in Wisconsin in 1986 in Richland and Sauk Counties, southwestern Wisconsin. In 1987, chestnut blight was detected in LaCrosse County. Eradication was attempted in 1987 in LaCrosse County after stroma were observed on four trees. A foam, normally used to control forest fires, was sprayed on the infected trees in May 1987, to inhibit spore dispersal during felling. The foamed, infected trees were placed in a trench and covered with topsoil. In 1988, this procedure was repeated in May, when stroma were again observed on four trees within 100 feet of the previously infected trees. Extra precautions taken in 1988 included: covering stumps of infected trees with topsoil to prevent sprouting, resurveying after eradication, washing the bulldozer with water and disinfecting the shoes of all workers with ethyl alcohol.

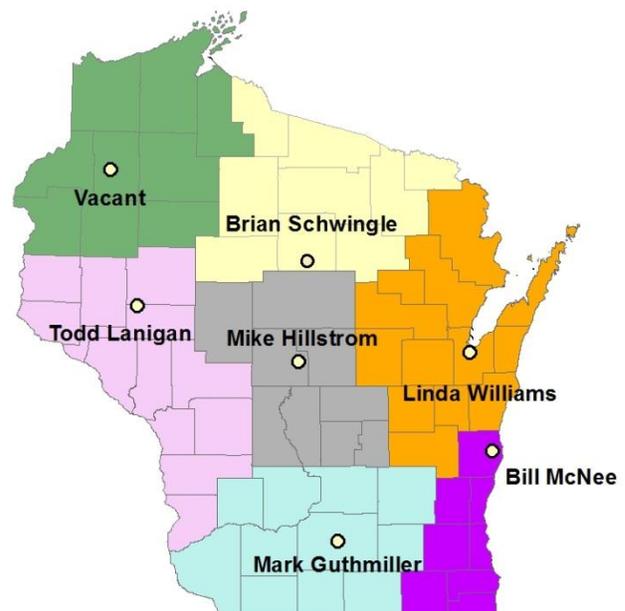
Contact Us

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

Forest Health Protection Regional Staff

Report EAB:
 by phone 1-800-462-2803
 by email 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
 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.