

West Central WI Forest Health Report

May 2011

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April 10th Storm Damage

On Sunday April 10th, 2011 severe thunderstorms ripped through Wisconsin. The National Weather Service confirmed an April one-day Wisconsin record of 14 tornadoes. Several strong EF2 or EF3 tornadoes were reported. In addition to the record number of tornadoes, strong winds and large hail caused significant damage in central and northern Wisconsin. In central Wisconsin most news coverage focused on the EF2 tornado (winds of 125 mph) in Adams Co. that tracked for 17 miles from Arkdale to Coloma. The same storm also caused scattered damage in Waushara County as it tracked ENE.

Damage to conifer and hardwood forests was noted across central Wisconsin. Storm damage may cause a number of concerns to consider during clean-up. Linda Williams provided an excellent list of topics to consider in her recent forest pest update:

- Oak wilt issues – high risk time period extends to July 15, delay cutting until after that
- Annosum preventative treatments are recommended if you're harvesting conifers
- Move pine quickly to avoid bark beetle problems
- Hardwood salvage can usually wait longer than pine salvage
- Staining of damaged wood
- Hail damage in pine can allow Diplodia to cause significant needle and twig mortality
- Hail damage to other species can cause wounds on main stem and branches
- Damage to young trees can be more severe than the same damage to older trees
- And always remember, safety first. Cracked, leaning and otherwise compromised trees should be dealt with by professionals trained in hazard tree removal

If you have any questions related to these topics or have damage to forests to report please contact Todd Lanigan or Mike Hillstrom.



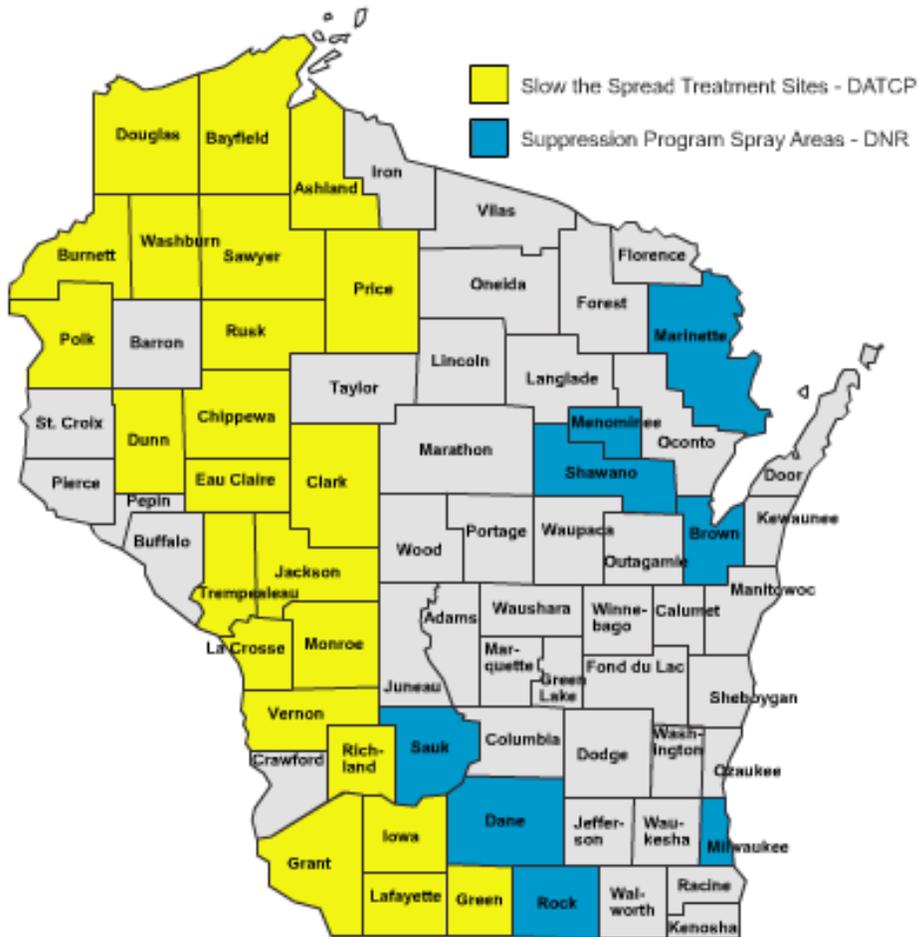
Photo 1. Damage to a stand of pines in Waushara Co. from the Sunday April 10th, 2011 storms.



Photo 2. Storm damage near Cottonville (Photo by John Hintz).

Gypsy Moth 2011

The cool, wet spring weather has kept all but a few gypsy moth caterpillars from hatching so far. But with the warmer weather forecasted this week, gypsy moth caterpillars will start hatching in many areas (depending where you are in the state). For example, the first reported hatch in Beloit occurred this morning (05/09/11). This means spray season will not get underway until late-May this year. DNR will be spraying approximately 3000 acres in 8 counties in 2011 (Figure 1). No WCR counties are included in DNR spraying for 2011. However, DATCP “Slow the Spread” spraying will continue in many WCR counties again in 2011 (Figure 1). It is also important to note that effective May 1st, 2011 Jackson and Price counties will be added to the list of gypsy moth quarantined counties. As usual, be on the look out for gypsy moth larvae this spring and please report any damage you see to Todd or me.



2011 Wisconsin Gypsy Moth Treatment Areas

Figure 1. 2011 DATCP and DNR Gypsy Moth treatment areas.

Spring Defoliators

In addition to gypsy moth (Photo 3), a number of other spring defoliators may soon appear. Populations of Forest Tent Caterpillars (FTC) (Photo 4) appear to be on the rise in some parts of the state. Outbreaks typically occur every 6-16 years in Wisconsin. The last outbreak started in 1999 and peaked in 2001. If you know of areas defoliated the last time FTC populations were high you may want to check aspen in the area for signs of caterpillars or defoliation. Remember that FTC do not make tents! The silk tents commonly found on black cherry trees belong to the Eastern Tent Caterpillar (ETC) (Photo 4), another early season defoliator. Populations of ETC in the central part of Wisconsin have been high the past couple of years and may remain high or start to decline this spring. Yet another group of caterpillars to watch for are the loopers, a.k.a. inchworms. Several species of looper were found defoliating trees in the south central part of the state last spring.



Photo 3 (left). Gypsy moth caterpillar. Photo 4 (right). Forest tent caterpillar (caterpillar on left) and eastern tent caterpillar (caterpillar on right). Gypsy moth has a yellow head with black markings followed by rows of blue then red spots. Forest tent caterpillar has a blue head and a row of keyhole or footprint shaped yellow marks down the back. Eastern tent caterpillar has a dark head and a solid white or yellow stripe down the back.

Jack Pine Budworm (By Todd Lanigan)

Jack pine budworm is usually active about the middle of this month, depending on weather (it is active around the same time gypsy moth aerial treatment activities are taking place). Second instar caterpillars emerge from their overwintering hibernacula (cocoon) and will begin feeding on the male pollen cones. The male pollen cones give the caterpillar a good jump start on life. If male pollen cones are not present, the caterpillars will begin to feed on the new growth. The caterpillars are sun loving, so they feed from the top down. As the caterpillars feed and grow, they tie needles/shoots together with silk and construct tunnels to crawl back and forth in to avoid predators (Photo 5) (The mature jack pine budworm caterpillar looks very similar to the Spruce Budworm caterpillar, see Photo 8 below). By mid July, the trees with budworm feeding in them will have an orange, almost fire-scorched look to them. This coloration is caused by dried out needles that were fed on by the caterpillars but stayed attached to the branch because of the silk webbing (Photo 6). In a light infestation, this coloration can be very hard to see.



Photo 5. Needles and shoots tied together by a jack pine budworm caterpillar.



Photo 6. Orange, fire-scorched look to jack pine trees fed on by jack pine budworm caterpillars

Based on egg mass surveys conducted last fall, jack pine budworm could be active in jack and red pine stands in the following counties:

- Adams, the Town of Big Flats, section 14 (red pine)
- Jackson, the Town of Brockway, section 17 (jack pine)
- Juneau, the Town of Armenia, section 32 (red pine)
- Wood, the Town of Saratoga, section 36 (red pine)

Jack pine budworm may also be active in other areas in these counties or in other parts of the state so let Mike or I know if you find suspect caterpillars or damage. Jack pine budworm has a habit of surprising me at times, so who knows what this year will really bring.

Spruce Budworm

Starting in July be on the lookout for Spruce budworm defoliation (Photo 7) on white spruce and balsam fir. Spruce budworm (Photo 8) populations are on the rise in northern Wisconsin and the U.P. of Michigan. The last large outbreak of budworm in Wisconsin (1970's) lasted 10 years and killed up to 50% of trees in the most heavily defoliated areas.

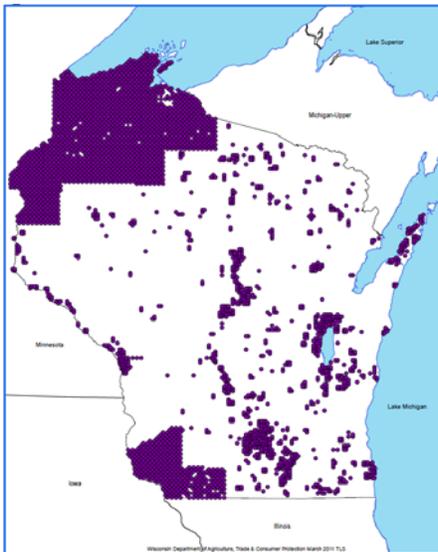


Photo 7. Extensive feeding damage from a spruce budworm outbreak in the western U.S.



Photo 8. Spruce budworm larva.

2011 Emerald Ash Borer Trapping



Several new EAB finds have already occurred this year near Chicago, Minneapolis and in the U.P. of Michigan. DATCP and DNR will continue trapping this summer to detect potential new EAB infestations in Wisconsin. DATCP began hanging 5,935 purple panel traps on Monday, April 25th, 2011. More than 2000 grid based traps will be deployed in the NW corner of the state (Figure 2). The remaining traps will be set at risk locations across the state. All detection traps will be removed after 1500 Growing Degree Days. In addition to DATCP's traps, DNR forest health employees will be installing double-decker traps at 10-15 State Parks around the state.

Figure 2. Location of DATCP EAB traps in 2011.

Release of Wasps to Fight EAB in SE Wisconsin

The first release of three wasp species that kill EAB will occur in Wisconsin this summer. This recent article (<http://www.jsonline.com/news/wisconsin/121358734.html>) describes the project.

Annosum Root Rot Workshop (By Todd Lanigan)

FISTA and the Wisconsin DNR will be hosting an Annosum Root Rot workshop in WCR September 22, 2011. Check out the agenda below. This will be a great opportunity to learn more about the disease, management practices to stop it from spreading and how to apply fungicides to stumps. For DNR folks in other regions that would like to attend the workshop, it is on the DNR training calendar, so you can have your supervisor sign you up. For non-DNR folks interested in attending, you can register through FISTA.

Annosum Root Rot Workshop

Thursday, September 22, 2011

Melrose-Mindoro High School Auditorium
N181 State Road 108, Melrose, WI 54642

A G E N D A

Indoor session:

Please use side entrance to auditorium.

8:30 a.m. – 9:00 a.m. Registration

9:00 a.m. – 9:05 a.m. Welcome

Arvid Haugen, DNR West Central Region Forestry Leader

9:05 a.m. – 9:30 a.m. Biology and History of Annosum Root Rot

Mike Hillstrom/Todd Lanigan - Forest Health Specialists, WI DNR

9:30 a.m. – 10:00 a.m. Red Pine Pocket Mortality and Annosum Root Rot Research

Bob Murphy – Forest Health Specialist, WI DNR

10:00 a.m. – 10:10 a.m. Break

10:10 a.m. – 10:30 a.m. Video showing - "Stump treatment to prevent root rot"

Produced by Skogforsk

Forestry Research Institute of Sweden

10:30 a.m. - 11:00 a.m. Management and prevention of Annosum Root Rot - logistics of fungicide applications (pesticide certification/license, winter applications, etc.), DNR Policy Update

Kyoko Scanlon, Forest Pathologist, WI DNR

11:00 a.m. – 11:30 a.m. Drive to Hoeth Forest – LaCrosse County Forest

11:30 a.m. – 12:15 p.m. Lunch - ***DNR folks, bring your own lunch***, beverages provided

Field session:

12:15 p.m. – 2:30 p.m.

Demonstration of manual applications of Sporex and Cellu-Treat

Demonstration of Cellu-Treat spray attachment on a processor – Troy Lambert, Logger

Annosum Harvest Discussion

Forest Service Looking for American Elm Trees

If you know of an American elm tree at least 24 inches DBH that is located in an area exposed to Dutch Elm Disease (DED) (tree NOT treated with a fungicide to prevent DED) please report it to the Forest Service (http://nrs.fs.fed.us/disturbance/invasive_species/ded/survivor_elms/).

Insect Identification Software

With well over 1 million species of insects identified around the globe, recognition of insects is a daunting task. Trying to identify an insect in the field can be nearly impossible due to the small size and/or lack of easily identifiable features. Xiaozheng Zhang and colleagues think they have a solution. They are developing software that would allow users to upload a digital photo that would be compared to 3D images of insects (created using 3D image software and insect specimens) stored in a database. The software would identify key features of the insect in the photo and use them to determine how well the features match insect species in the database. The first tests will focus on identifying important invasive pests such as fire ants and longhorn beetles. Just imagine if anyone could snap a photo of a metallic green insect and immediately find out if it's EAB! I wouldn't count on this technology as a Smartphone app anytime soon but with the continuous influx of new invasives it could be an extremely helpful tool in the future.

Arthropod Proverb: (Greek)

Until the crickets sing it is not summer.

For general forest health and municipal level urban forest health issues contact:



<http://new.dnr.wi.gov/Default.aspx?Page=4e114a1b-6bc4-4fd7-9e0b-755e7d11dd22>

West Central Region:

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Statewide reporting systems:

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/>

For additional information visit the Forest Health web site:

<http://www.dnr.state.wi.us/forestry/fh/>

Note: This report covers forest health issues occurring in the West Central Region of Wisconsin. The purpose is to provide up-to-date information on forest health issues to foresters, forest landowners, and anyone else interested. We welcome your comments/suggestions on this newsletter as well as reports on forest health problems in your area. If you would like to subscribe to this newsletter, please contact Mike Hillstrom at Michael.hillstrom@wisconsin.gov. Previous issues of this update and regional forest health updates from NER, NOR and SOR, are available from the WI DNR Forestry website at <http://dnr.wi.gov/forestry/FH/intheNews/>. Articles written by Mike Hillstrom unless otherwise noted.

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.