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Articles in this newsletter were written by Mark Guthmiller, Regional Forest Health Specialist, unless otherwise noted.

Winter Weeds and the New Flora of Wisconsin – Nisa Karimi

Winter Weeds
Winter. Shortened daylight hours and lack of photosynthesizing vegetation often helps us forget the battle of invasive species. However, watching a hungry bird feed on buckthorn (*Rhamnus cathartica*) berries reminds us that even in winter invasive plant identification and management planning is possible. Practice recognizing buckthorn in winter; keep an eye out for the black shriveled berries on mature female trees. Male trees do not produce fruit, so instead look for the smooth dark bark with large raised lenticels. Bark becomes rough and scaly as the tree ages so examine the branches for stout, sharp thorns. Dried leaves can sometimes be seen hanging on the branches into January. If you are uncertain, knick into the bark with a knife– buckthorn will reveal a bright orange inner bark.
The robust stature of exotic honeysuckle shrubs (*Lonicera spp.*) can also be easily spotted when surrounding vegetation goes dormant. Look for shrubs with a large spreading habit and shredding bark. For positive identification, snapping a twig or branch in half will reveal a dark-brown hollow inner pith unmistakable for any look-alike shrubs. Native honeysuckle shrubs have solid white inner pith.

Certain herbaceous invasive plants, including garlic mustard (*Alliaria petiolata*) and Japanese hedge parsley (*Torilis japonica*), can remain green under a dusting of snow and even survive under dense insulating snow. Garlic mustard and Japanese hedge parsley both over-winter as rosettes so keep an eye out for them now till spring.

Japanese knotweed’s (*Fallopia japonica*) dried bamboo-like canes stand tall through the winter season; they can be seen standing even after the heaviest of snow. Look for these remains along forest edges, waterways, and any disturbed area. Oriental bittersweet’s (*Celastrus orbiculatus*) bright colored berries are still hanging on their vines, but the native American bittersweet (*Celastrus scandens*) persists as well so be sure to review identification tips. Bittersweet is found throughout wooded areas and along fence lines. Teasel (*Dipsacus spp.*) might be seen easiest this time of year; as five-foot tall stalks with the spiked remains of tiny clustered flowers. Keep an eye out for teasel plants along roadsides, forest edges, prairies and other open disturbed areas.

Winter too can be a great time to observe invasive species on the landscape. As DNR Invasive Species Specialist Bernie Williams says, “Don’t be seasonally challenged!”
New Additions to the Flora of Wisconsin

Wisconsin is becoming more diverse, but unfortunately not in a good way. New exotic species are making their way into the state, threatening the integrity and biodiversity of our natural landscapes. As any botanist knows, practicing your plant identification skills doesn’t have to stop when the snow falls. Winter provides a new canvas for observing characteristics perhaps otherwise overlooked against the summer shades of green. As you are out exploring this winter, keep an eye out for a few “early detection” invasive species.

Giant Hogweed (*Heracleum mantegazzianum*)

This plant attains impressive stature at maturity; a monocarpic perennial with dried stalks standing near 15 feet tall or more, and giant flat-topped umbels spreading several feet across. During the growing season, this plant is often confused with the native cow parsnip (*Heracleum lanatum*) or another invasive species poison hemlock (*Conium maculatum*), but the impressive size of a mature giant hogweed is unmistakable.

In its native habitat of the Caucasus Mountain region, you find it growing along riverbanks and forest edges. In Wisconsin, you’ll most likely find it invading fields and roadsides, forest edges, scattered in forest openings, or along waterways. This species known extent in Wisconsin is disjunct with populations in Iron, Portage, and Manitowoc counties, but its appeal as a curious ornamental suggests it could be found anywhere.

Amur Cork Tree (*Phellodendron amurense*)

I hate to say it, but what a beautiful tree. A member of the Rutaceae family, this tree has a broad spreading crown and somewhat irregular, low-branching habit. As the common name suggests, deeply-furrowed, corky-spongy bark makes this tree quite distinct even in winter. Damage to the bark by a pocket knife reveals neon-yellow inner bark under the thick exterior. The phytoconstituent berberine gives this tree’s bark its remarkable yellow color. An important compound in herbal medicine, it makes this species one of the fundamental ingredients of herbal formulas in Traditional Chinese Medicine. This is also the same alkaloid that gives goldenseal (*Hydrastis canadensis*), its yellow roots as well as members of the genus *Berberis*.

Trees are dioecious, with female trees producing prolific amounts of fleshy clusters of drupes that turn from green to black as they age. These fruits can be seen hanging on trees well into winter months. Amazingly resilient, controlled experiments show that even with severe defoliation, seed-set remains consistently high. Additionally, seed germination rates have been found higher after cold stratification making this species potentially more concerning in Wisconsin than in more moderate climates.
Current distribution of this species is scattered with populations in Dunn, Adams, and Waukesha counties. At one site, trees of all sizes are found from scattered to dense across 50 acres. Preferring rich moist soils, they are also tolerant of urban stress, drought and all soil types from dense clay to sand. Male trees are used in urban landscaping across eastern United States; you may have seen this tree planted in your nearby town center. If you live in the Madison area and are interested in seeing a live specimen – stop by the State Capital building as there is currently a tree planted on the grounds.

Report Invasive Species

As fascinating and potentially useful these species may be, preventing them from further invading our natural areas is critical. If you find either of these species, collect a herbarium specimen and send the DNR a report. Submit reports online at, http://dnr.wi.gov/topic/Invasives/report.html, or email Nisa Karimi, WDNR Early Detection Coordinator, at nisa.karimi@wisconsin.gov.
Emerald Ash Borer—Bill McNee

Low temperatures
With the recent frigid temperatures, experts predict that many overwintering EAB larvae will die, but the ash tree-killing pest isn’t going away. Their native habitat in eastern Asia experiences cold winters and the pest is adapted to them. They are somewhat protected beneath the tree bark and many of them will survive the recent cold temperatures. It will be a little warmer beneath the bark than the outdoor air temperature, and the wind chills do not affect them because they are sheltered. Populations of the pest are likely to rebound this summer, since each female beetle that emerges this summer will lay 50-100 eggs. At this point in time it is not known how heavy the larval mortality will be at any site, or if it will significantly delay ash tree mortality. Forestry experts do not recommend changing EAB management plans solely due to the cold weather.

- Continue to look for EAB in ash trees. Woodpecker damage is a good sign that an ash tree is infested with EAB or other pests.
- Insecticide treatment of high-value ash trees near known infestations should be continued this spring.
- Don’t delay tree removals or timber harvests that are already scheduled. Giving non-ash tree species more time to grow means that the future impacts of EAB will be reduced.
- Continue planting non-ash tree species.
- To help slow the spread of EAB, buy firewood in the local area where you plan to burn it, or buy Wisconsin-certified firewood that has been treated to eliminate pests.

Additional information about emerald ash borer, insecticide treatments and forest management can be found online at www.emeraldashborer.wi.gov.

New EAB Detections
Since the last Southern District pest newsletter in November there have been several new EAB detections to mention:

- City of Madison, Dane County
- Town of La Prairie, Rock County
- Town of Fond du Lac (just outside the city limits of the City of Fond du Lac)
- City of Onalaska, La Crosse County
- North Andover, Massachusetts (now the easternmost known EAB infestation)
- Creston, Iowa (western Iowa’s first EAB detection)

Dane County has been added to the EAB quarantine area due to the detection in Madison in late November. A newly-updated, complete list of Wisconsin detections is available online at: http://datcpservices.wisconsin.gov/eab/articleassets/ConfirmedEABFindsInWisconsin.pdf.
Questionable EAB Offers
Even in the middle of winter we have heard about a questionable EAB offer in Iowa: [http://whotv.com/2014/01/17/johnston-solicitor-city-warns-against-fake-tree-treatments/](http://whotv.com/2014/01/17/johnston-solicitor-city-warns-against-fake-tree-treatments/). Property owners are reminded to check the qualifications, licenses and experience of anyone you might hire to do tree work or apply insecticides. Some advice from the Better Business Bureau can be found here: [http://epi.bbb.org/council/migration/other-news/2012/03/hiring-a-tree-service-after-a-disaster/](http://epi.bbb.org/council/migration/other-news/2012/03/hiring-a-tree-service-after-a-disaster/).

Keep an Eye Out for Woodpecker Activity
EAB larvae beneath the bark are a good-sized meal for a woodpecker, so keep an eye out for signs of woodpecker activity on ash branches and tree trunks as the birds hunt for larvae. Woodpeckers pick away the rough outer bark over an EAB gallery, and then drill down through it to get the EAB larva. We are far enough along in the winter that new ‘flecking’ should be apparent if the tree is moderately infested.

Firewood Restrictions for DNR Lands
The Natural Resources Board recently agreed to the DNR lowering the allowed distance for letting uncertified firewood onto DNR properties. The change will reduce the distance from 25 miles to 10 miles. This rule will go into effect for the 2014 camping season. For more information visit: [http://dnr.wi.gov/news/Weekly/?id=414#art5](http://dnr.wi.gov/news/Weekly/?id=414#art5)

Gypsy Moth- Mark Guthmiller & Bill McNee

**Wisconsin Gypsy Moth Suppression Program 2014**
The application deadline for counties to apply to participate in the voluntary DNR Gypsy Moth Suppression Program was December 6th. One application was received statewide from Rock County with a small 29 acre proposed block in the Village of Afton, southwest of Janesville. The final spray block map will be posted after the public noticing process and can be viewed at: [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov)

**Iowa County to be added to the Gypsy Moth Quarantine**
On March 31, 2014, Iowa County will be added to the state gypsy moth quarantine, joining most of eastern and central Wisconsin already considered to be generally infested with the pest. Iowa County is the 49th of Wisconsin’s 72 counties to be quarantined for gypsy moth. For additional regulatory information and contacts regarding this quarantine visit: [http://datcp.wi.gov/Environment/Gypsy_Moth/Quarantine_Regulations/](http://datcp.wi.gov/Environment/Gypsy_Moth/Quarantine_Regulations/)

**Winter Management Options** - During the winter, property owners and managers can look for gypsy moth egg masses to predict the pest’s population size and potential damage to trees this summer. For more information on how to do egg mass surveys, visit [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov). It’s currently too cold to apply an egg mass oil, but you can scrape the masses into a can of soapy water and then let them soak for a few days before discarding in the trash.
Gypsy moth egg masses typically start hatching in April in southern Wisconsin. Property owners looking to hire a business to do insecticide treatments this spring should contact them soon. The Wisconsin Arborist Association has a list of certified arborists available at [www.waa-isa.org](http://www.waa-isa.org). Additional businesses offering insecticide treatments may be found in the phone book under ‘Tree Service.’ Homeowners can also purchase insecticides (some applied as a soil drench) at garden centers and large retailers. For larger areas, a guide to organizing aerial spraying and a list of for-hire aerial applicators is available on the state’s gypsy moth website, [www.gyps moth.wi.gov](http://www.gypsy moth.wi.gov).

### Thousand Cankers Disease

**Wisconsin Walnut Twig Beetle Trapping Survey**
The walnut twig beetle, *Pityophthorus juglandis*, is known to vector the fungus, *Geosmithia morbida*. Together they are known as “thousand cankers disease”. WI DNR placed 45 traps on both state land and some private lands. We finished screening all samples in December that were collected during the growing season. We did not detect any suspect walnut twig beetles this past season. To date, thousand cankers disease has not been found in Wisconsin. For more information on thousand cankers disease visit:  

**New UW Extension Fact Sheet on Thousand Cankers Disease**
The University of Wisconsin-Extension program recently developed a new fact sheet regarding Thousand Cankers Disease. For more information or to print copies visit:  
[http://hort.uwex.edu/articles/thousand-cankers-disease](http://hort.uwex.edu/articles/thousand-cankers-disease)

The Plant Disease Diagnostics Clinic resource page also has versions of this posted along with many other publications:  
The Great Gatsby and Hemlock Woolly Adelgid

A fluffy white story on a cold winters day
It was during the time that F. Scott Fitzgerald was working on his new book, The Great Gatsby, that hemlock woolly adelgid was first discovered and described in the state of Oregon (Annand 1924)*. The Great Gatsby was first published in 1925. However, it was not until 1951, 11 years after F. Scott Fitzgerald passed away, that hemlock woolly adelgid was collected in the eastern United States in Richmond, Virginia (Ward, et al 2004)**. My personal first encounter with Hemlock Woolly Adelgid was on account of F. Scott Fitzgerald in the spring of 2013. Last spring, on a return trip from South Carolina, I was “forced” to make a stop at a prom dress store in Asheville, NC. My daughter, who was a junior in high school at the time, was in need of a dress. The store however was at least three miles out of the way! Since I had to endure this painful stop, I thought it only fitting that I get an opportunity to visit some historical or cultural site. Using smart phone technology I found a nearby historic place called The Grove Park Inn and Spa. As it turns out, it was a get-away place for F. Scott Fitzgerald and my daughter was currently reading the Great Gatsby for class…what a perfect place to visit! When my daughter and spouse returned from the prom dress store empty handed, I indicated we now were going to visit an historical site a few miles away. This was met with echoing groans. To speed up the story, the Grove Park Inn and Spa is a beautiful operating large old solid stone inn overlooking Ashville. We spent about a half hour walking around and found a photo on the wall of famous people who stayed there, including F. Scott Fitzgerald. My daughter did not get the warm and fuzzy feeling that she was connecting with a great American literary author that I had hoped for. She “asked” impatiently that we leave and get back on the road. As we ventured back to the car, the sun was shining down through some large hemlock boughs near the Inn entrance and as I looked up…low and behold…there were hemlock woolly adelgids coating the boughs. I stopped and paused, thinking about the future of that beautiful tree. Like the book The Great Gatsby, that did not see a revival until after F. Scott Fitzgeralds death, I hope that one day, after the death of many hemlocks, that other hemlocks out east see a revival from the scourge of hemlock woolly adelgid.

Hemlock woolly adelgid has not yet been found in Wisconsin. For more information visit:  
http://dnr.wi.gov/topic/ForestHealth/Adelgid.html

Miscellaneous Topics and Observations

Madison Area Woodland Owners Conference March 1st
The Madison Area Woodland Owners Conference is coming up March 1st at the American Family Headquarters Training Center. This is a great session for current members or woodland owners thinking about getting more involved with managing their woodlands. The conference topics include growing black walnut for fun and profit, land transfers to the next generation and reflections from the national tree farmer of the year, a forest insect and disease update, attracting woodland birds, and creating a wildlife management plan. For more information see the link below:

EAB Lifecycle and Firewood Video
Forest Health Specialist, Linda Williams, shared this video showing a sped up life cycle of EAB with a message of the risks of moving firewood. The hatching larvae are particularly interesting as few people, including me, get to see this or at least don’t take the time.
http://www.youtube.com/watch?v=9G-0eG632O1

Wisconsin DNR Nursery Newsletter for January
Some of the highlights for the January Nursery Newsletter are:
- Funding for replacing drought killed seedlings is still available through the WFLGP program
- Improved jack pine seedlings available
- Featured herbicide – Oust XP
- Featured tree species – Red oak
- Deer Repellent trials

Monarchs and Black or Pale Swallow-wort
This interesting article was recently shared by Tom Boos, our invasive plants coordinator. It discusses impacts to monarchs by invasive swallow-wort species. Black and Pale swallow-wort can out compete native milkweed species, the monarchs are attracted to laying eggs on exotic swallow-wort but cannot feed and don’t survive. Note that there is however a native swallow-wort species, the “smooth swallow-wort”, that is a host to monarchs.

Invasive Plants Association of Wisconsin (IPAW) Web Site Update
If you have not been to this web site before or for a long time check it out. It has recently been updated and has a lot of information on various invasive plants.
http://www.ipaw.org/

Minnesota Invasive Species Advisory Council 2014 Calendar
The Minnesota Invasive Species Advisory Council has put out a downloadable calendar. It is a nice resource with photos of a variety of invasive species.
http://files.dnr.state.mn.us/eco/invasives/invasives_calendar.pdf
**Computer Ants?!**

My daughter was doing her homework on her laptop a few weeks ago when she yelled out “there are ants coming out of my computer!” Her father retorted, “What are you “crazy”, it is the middle of winter!” not referencing at all the fact that it is strange to have ants coming out of a computer. It was not like a major colony of ants marching out from the crevices of the keys on the keyboard, but over a couple weeks she saw about 6 ants. I jokingly told her she has “computer ants” and that her laptop will be destroyed before finals. Of course she no longer believes anything I say, so for fun I told her to google “computer ants”. And, well I guess I wasn’t joking….there are such things as computer ants! Apparently there are ants known as “tawny crazy ants” that are able to destroy computers and electrical wiring of all sorts. This is a relatively new exotic ant which has been found from Florida to Texas apparently causing millions of dollars of damage to electrical equipment, and who knows how many high school final exam papers have been destroyed on computers! Now the panic had shifted from my daughter to her father, worrying that his homes electrical system might be in peril! I was eventually able to catch one of the ants. I am VERY happy to report it is not the tawny crazy ant. I identified the ant as the “odorous house ant”, *Tapinoma sessile*. They are apparently very common ants, extending from Canada to Mexico and highly adaptable in both outdoor and indoor environments. They feed on a broad diet from sweets to meat and they like honeydew of aphids…and who wouldn’t? The laptop often sits next to a house plant so I will be inspecting it for aphids. And now that I can relax that I don’t think I will need to call in an exterminator, I can get on with the finer things of life. Apparently the odorous house ant, also nicknamed the “stink ant”, gets its name from the rotten coconut smell given off when crushed. Humm…?

For more information on the odorous house ant, visit:
[http://lancaster.unl.edu/pest/ants/odorousant.shtml](http://lancaster.unl.edu/pest/ants/odorousant.shtml)

For more information on the tawny crazy ant, visit:
[http://urbanentomology.tamu.edu/ants/rasberry.html](http://urbanentomology.tamu.edu/ants/rasberry.html)

A good identification reference for the tawny crazy ant:
[http://urbanentomology.tamu.edu/ants/images/1_node/exotic_ant/rca_id_characteristics.jpg](http://urbanentomology.tamu.edu/ants/images/1_node/exotic_ant/rca_id_characteristics.jpg)

Note that other ants, including fire ants, are also associated with electrical component damage:
Contacts for DNR staff, municipal foresters, and forestry cooperators

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For a statewide forest health staff list:
http://dnr.wi.gov/topic/ForestHealth/staff.html

Additional Program Web-based Resources:
WI DNR Forest Health web site:
http://dnr.wi.gov/topic/ForestHealth/

Report Emerald Ash Borer:
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://gypsymoth.wi.gov
(It is also recommended to report gypsy moth to your local government)

Please direct public inquiries regarding yard tree concerns to UW county or state extension offices:
http://www.uwex.edu/ces/cty/

[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.]