



The Door County Invasive Species Team

as managed by the Door County Soil and Water Conservation Department, empowers citizens with the education, tools and skills necessary to control invasive species.

Invasive Species Workshops, News, and Volunteer Opportunities

January/February 2018

Door County Land Trust Receives “Green Gift” to control Chambers Island Invaders

Recycling old cell phones is good for the environment in more than one way! The recycled phones aren't just being kept out of landfills – they are playing a role combating invasive species on Chambers Island in the Town of Gibraltar.

Cellcom is using funds generated by from their cell phone recycling program to fund green non-profit initiatives, known as the Green Gifts program. The Land Trust was one of thirty organizations that received a share of the \$40,000 in Green Gifts from Cellcom in 2017.

The Door County Land Trust will be using their grant of \$3,350 to control two invasive species, Phragmites and garlic mustard, on Chambers Island's 600-acre nature preserve. Both species threaten the island's ecological integrity and important habitat. The Door County Land Trust is a partner organization of DCIST and we congratulate their staff and volunteers on their grant, and their continued hard work to combat invasive species on their preserves!



Tom Clay, left, Door County Land Trust director, Russ and Deb Feirer of the Chambers Island nature preserve committee, Rob Van Gemert, Cellcom business sales manager and Amanda Pyke, land stewardship manager. Photo courtesy of Cellcom.

National Invasive Species Awareness Week – February 26 to March 2, 2018

National Invasive Species Awareness Week returns for another installment in 2018. The annual event explores how non-native, invasive plants, animals and pathogens impact people, as well as what we can do to prevent the spread and effectively manage them. Visit www.nisaw.org to learn more and view events around the United States. Closer to home, we offer some simple ways you can observe NISAW every week:

- Clean hiking boots, waders, boats and trailers, off-road vehicles and other gear to stop invasive species from hitching a ride to a new location. Visit www.playcleango.org to learn more!
- Volunteer to help remove invasive species from natural areas.
- Plant only native, non-invasive plants in your garden and remove any known invaders.
- Learn more about invasive species, especially those in Door County. Visit the DCIST website or the Wisconsin DNR (search “invasive species”) to explore our local invaders.



Invasive Species Targeted in Kewaunee County through the Bay-Lake Regional Planning Commission GLRI Grant

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Bay-Lake Regional Planning Commission has recently been awarded a grant of nearly \$600,000 in Great Lakes Restoration Initiative (GLRI) funding to manage invasive species in our neighboring Kewaunee County. The project will involve the mapping and inventory of target invasive plants, outreach and education to County residents, and chemical or mechanical control of the invaders on 1,000 acres within the County. The invasive species targeted through the project include Phragmites, wild parsnip and Japanese knotweed. The project is being kicked off with the development of a plan to inventory the invasive plants, followed by a treatment plan and a request for proposals by contractors. Treatments are expected to start as soon as summer.

In addition, Bay Lake Regional Planning is taking the lead in forming the Lake Michigan Regional Invasive Species Coalition (LMRISC), which DCIST representatives will participate in. LMRISC will take the existing Bay-Lake Phragmites Advisory Council, comprised of professionals that manage Phragmites in northeast Wisconsin, and expand the focus to include more species and a larger geographic area. LMRISC will foster the sharing of ideas and experiences and improve the coordination and success of invasive species projects in the region. In addition, several other local organizations also received grants to tackle invasive species including The Lakeshore Natural Resource Partnership and Wisconsin DNR.



A dense stand of Japanese knotweed, one of the species that will be targeted in Kewaunee County through BLRPC's GLRI grant. Photo credit: Gary Fewless.

Pesticide Applicator Training & Certifications for those Controlling Invasives with Herbicides



A volunteer from the Clark Lake Advancement Association hand-swipes herbicide on Phragmites during a 2017 workday near Clark Lake.

It is important that you obtain a pesticide certification in Category 5.0 (aquatic & mosquito) if you would like to control Phragmites or other invasive species in wetlands or waterways on your property. Certifications are good for five years and can be obtained by purchasing materials (<https://patstore.wisc.edu/>), studying, and taking a multiple-choice test. There are testing dates available in Brown County every Friday. Be sure to register early at: <http://pestexam.datcp.wi.gov/RegistrationMap.aspx>

In addition, The Department of Agriculture, Trade and Consumer Protection (DATCP) is offering pesticide applicator trainings in early 2018. There is a training session for Category 5.0 in Madison on February 22nd. The session will cover important information that will appear on the exam that follow it. For more information on this session, visit <https://fyi.uwex.edu/pat/commercial-training-season/>.



www.facebook.com/dcist

Have you checked out the DCIST Facebook Page yet? You can find us at www.facebook.com/dcist where we're sharing additional invasive species news, volunteer opportunities, and more – including our current job posting for invasive species seasonal employees!

Did you know that even when the temperature plummets and a layer of ice covers the water there are still plants growing under the surface? Unfortunately, many of these are non-native plants, alga and mussels that survive the winter and come back in spring in full force. Aquatic plants to be particularly on the lookout for are Eurasian watermilfoil and curly-leaf pondweed. Both plants are tolerant of darkness and cold, making it easy for them to survive over a frigid winter. Curly-leaf pondweed sprouts young plants (turions) in late fall/winter that remain green will and grow under ice if enough light comes through, allowing it to get a head start in the spring over many native plants. Also, be on the lookout for starry stonewort and zebra mussels. Starry stonewort, an invasive alga, has plant parts that will die over the winter, but the reproductive centers (white, star-shaped bulbilis) survive in the sediments of the lake.



A zebra mussel latching onto an aquatic plant, even in a Wisconsin deep freeze. Photo credit: Paul Skawinski.

If you're venturing out on the ice this weekend for Wisconsin's Free Fishing Weekend (January 20-21st), you can help prevent the spread of invasive species. If plant materials get caught up in your fishing lines, dispose of them in the trash or leave behind on top the ice before moving to a new a fishing spot or lake. Any leftover bait should also be disposed of in the trash – never release minnows or other bait into a lake as means to dispose of them!

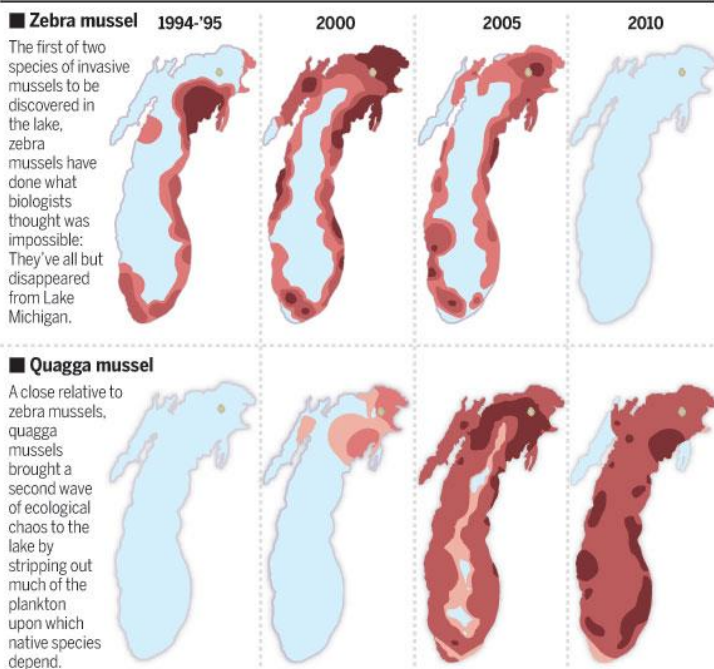
The Expanding Impacts of Quagga Mussels on Lake Michigan...and the Climate!

An ecological changing of the guard

The Great Lakes are home to more than 185 exotic species, but none has done so much to disrupt the base of the food web as zebra and quagga mussels. Zebra mussels were once the dominant invasive mussel species in Lake Michigan, but they virtually have been eliminated by their close relative, the quagga mussel. In just a decade, the filter-feeding mollusks literally have turned life upside down in Lake Michigan by sucking to the bottom much of the plankton that sustained a healthy commercial fishery.

Changing mussel density in lake

DENSITY PER SQUARE METER
 100 1,000 10,000 100,000



Source: Tom Nalepa, National Oceanic and Atmospheric Administration (NOAA)

Journal Sentinel

Research from the Wisconsin Sea Grant has further established the negative impacts of quagga mussels on Lake Michigan. The research shows that the invasive mussels' sheer numbers and feeding efficiency are changing the dynamics of the lake's ecosystem substantially. The work, published in 2017 in the *Journal of Great Lakes Research*, found that each mussel can filter up to 578 gallons of water every year. In addition, when mussels "exhale", they pump out feces, dissolved nitrogen, phosphorus, and carbon dioxide. With estimates of 750 to 950 trillion quagga mussels in Lake Michigan, so much carbon dioxide is being expelled that Lake Michigan is oversaturated with CO₂ – leading to more carbon dioxide being released into the air to contribute to climate change. To compound that, the researchers found that the quagga mussels are changing the way phosphorus, a vital nutrient needed for other species in the lake's food web, is cycled. By blanketing the bottom of the lake, the mussels do not allow the natural resuspension of phosphorus during winter months and storms. To read the entire article and learn more about the research, visit <http://bit.ly/2EY5Zy5>.

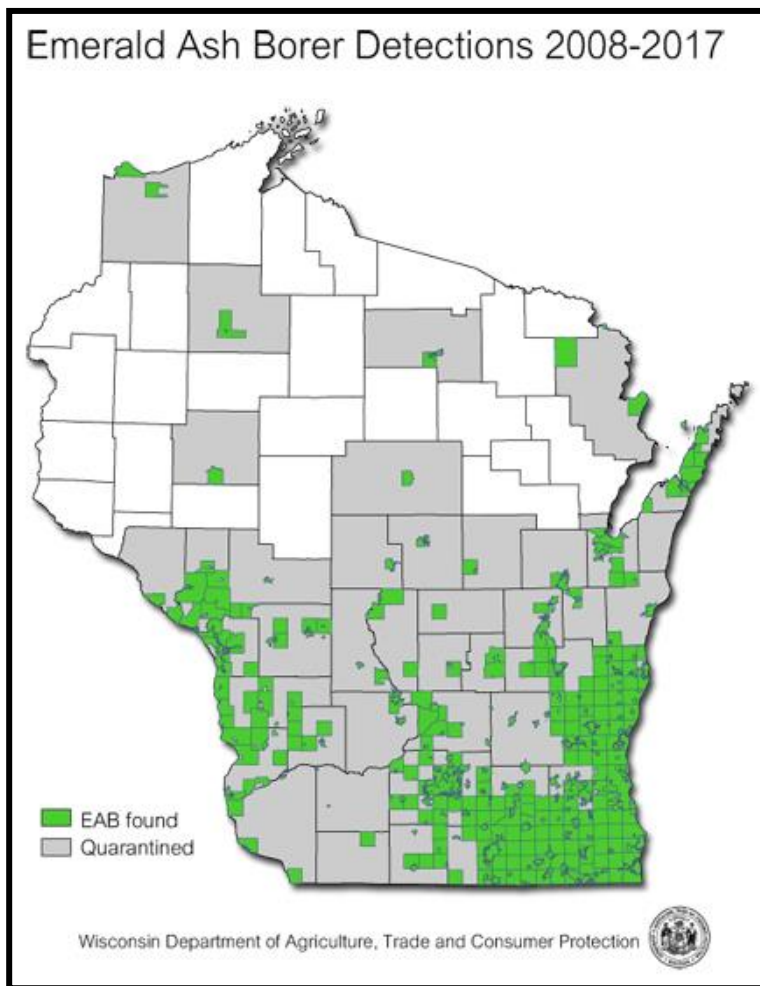
Emerald Ash Borer Continued to Expand its Range in 2017

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In the past year Emerald Ash Borer (EAB) continued to spread across the state including new findings in Door County. Municipalities with confirmed EAB are the City of Sturgeon Bay, Gibraltar, Nasewaupée, Sevastopol, Town of Sturgeon Bay, Ephraim, Egg Harbor, Union, Clay Banks, and Jacksonport. The plight of Door County's ash trees gained a lot of media attention in early 2017 with articles like [this one](#) in the Green Bay Press Gazette. Many boasted the headline *Emerald Ash Borer eats its way through Door County trees*.

While EAB may be here to stay, it's important to recognize that it is just one non-native pest among many. Acting to prevent the spread of Emerald Ash Borer is good practice to stop the spread of any non-native pests that may hitchhike in wood.

Buy firewood from local sources and burn it where you buy it. Visit www.firewoodscout.org for information on local firewood vendors. If you have an EAB-infested tree that you would like to use as firewood, be aware that EAB can continue to emerge from the wood for two years after cutting. To avoid spreading EAB, split and leave the wood to age near where you cut the tree for two summers. After two years of drying, EAB that may have been within the wood will have emerged or died. The aged firewood poses little risk of introducing EAB and you may move it freely within the limits of the quarantine (i.e. within Door County). For more information on what landowners can do to protect their ash trees, visit <http://datcpservices.wisconsin.gov/eab/>.



Upcoming Invasive Species & Stewardship-related Workshop and Conferences:

February 20-22, 2018 – Wisconsin Wetlands Association Science Conference, Lake Geneva, WI

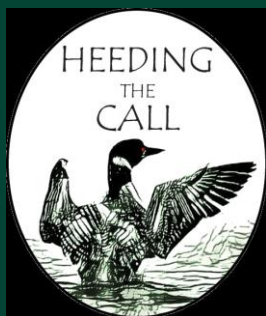
This year's theme is *Wetlands Resilience for a Changing World*. This two-day conference brings together wetland scientists and managers from across the State and includes a keynote address, symposia, presentations, a poster session, working groups and field trips. Learn more at <http://conference.wisconsinwetlands.org>.



April 18-20, 2018 – Wisconsin Lakes Partnership Convention, Stevens Point, WI

This convention will again join with the Water Action Volunteers (WAV) Symposium to bring citizens and professionals together to work on not only lake matters, but expand these efforts into the watershed. Topics of presentations will include aquatic invasive species, research, waterway restorations, understanding watershed connections and water quality, policy as it relates to our water resources, and fisheries and restoration ecology. For more information:

<http://www.uwsp.edu/uwexlakes>



Invasive Plant Profile: Multiflora Rose

An Early Detection Species in Door County

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Multiflora rose (*Rosa multiflora*) is an invasive shrub that can invade open woodlands, roadsides, savannas, and prairies. It is primarily found in southern Wisconsin; however, it has been identified in many more northern counties including Door County. Multiflora rose can form very dense, impenetrable thickets that exclude native species. It has a reproductive advantage in that it can produce up to 500,000 seeds per year, which remain viable for 10-20 years.

As the leaves and flowers are not present in winter, its identifying factors are its branches and berries. In winter, the branches of the multiflora rose are brown to reddish-brown in color with stiff, curved and sharp thorns. The thicket can reach 10-15' tall and 9-13' wide and is typically more spreading than it is tall. The seeds are dispersed most commonly from birds who consume the hard, bright red fruits which develop in summer and remain throughout winter. The shrubs can also spread vegetatively (underground) once it is established on a site. Be aware that we also have native rose species that commonly grow on the Door Peninsula. The large, recurved thorns of multiflora rose will distinguish it from others.

If you come across this in the spring or summer months, you will likely notice the leaves and flowers. The leaves are alternate with 5-11 small (0.5-1") sharply-toothed oval leaflets, nearly smooth on upper surface and paler with short hairs on underside. There is a pair of fringed stipules (a leaf-like structure) at the base of each leaf. The flowers bloom in mid to late-spring and are white to slightly pink and fragrant.

Control is difficult in large populations due to the dense tangles of stems and sharp thorns. Repeated cutting will keep it from advancing and treating the stumps with an appropriate herbicide helps, but a consistent program over several years is necessary to gain control. If you are planning on mechanical removal, make sure you remove all roots, as new plants can develop from the fragments of the roots.

In Wisconsin multiflora rose is listed as "restricted" under Chapter NR 40: Wisconsin's Invasive Species Rule. 'Restricted' means the plant is widely established across the state and that high environmental and/or economic impacts from the species are evident.



The Door County Invasive Species Team – Kari Hagenow, Coordinator

DCIST Message Line: 920-746-5955; Email: dcist1@gmail.com

<http://map.co.door.wi.us/swcd/invasive/default.htm>