

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

July 2014

Wisconsin's First Detector Network Training
"Native Wasps as Indicators of Exotic Beetle Invasions"
Friday July 25th from 9:30-11:00am
Bailey's Harbor Sports Complex
2623 Summit Road (or Steiglitz Road)

Concerned about invasive species? Our friendly native *Cerceris* wasp is an indicator of native and exotic bugs. It feeds on buprestid beetles, like the Emerald Ash Borer, making it easy to monitor existing or newly establishing wood boring beetle populations by surveying for the wasps. *Cerceris* wasps commonly nest in the sandy gravel of baseball diamonds. These parasitic wasps have no stinger and are easy to survey during your Sunday Door County community baseball league game. Join the invasive species experts from UW-Extension, USDA/APHIS, and DCIST for an educational training on how you can be involved in this fun summer project. Participation is free! For more information on the Wisconsin First Detector Network or the *Cerceris* wasp, visit the network website at http://fyi.uwex.edu/wifdn/trainings.



Cerceris fumipennis, a native wasp that feeds on beetles
like the Emerald Ash Borer.

Conserve our County Parks - Join us as we identify invasive species in the parks (Note: Date changes from previous newsletter!)



Throughout the summer months DCIST will be working with Door County Parks to identify invasive species concerns within our parks. Members of the public are invited to join Kari Hagenow, the DCIST coordinator, as she hikes the trails and gets off the beaten path to explore the flora of our County Parks. Participants will learn to identify the various invasive species that may be found and will receive a tutorial on how the County maps these species using a handheld GPS. Listed below are the dates and locations for the month of July. Hikes will begin at 10am in the respective parking area for each County Park – most will last approximately two hours. Information on all of Door County's Parks is available at http://map.co.door.wi.us/parks/. For more information on the invasive species hikes contact Kari Hagenow at dcist1@gmail.com or 920-743-8695 ext. 306.

<u>Friday July 18^{th*}</u> – Door Bluff Headlands, Town of Liberty Grove <u>Wednesday July 23^{rd*}</u> – Sugar Creek, Town of Gardner <u>Wednesday July 30th</u> – Ellison Bluff, Town of Liberty Grove

*Note that the dates for the Door Bluff Headlands and Sugar Creek hikes have changed from the previous newsletter.

Help Preserve the Biodiversity of The Ridges! Crown Vetch Control

Tuesday July 22nd from 1:00-3:00pm Monday July 28th from 4:00-5:30pm

For over seven years, The Ridges has been vigilant in controlling persistent crown vetch at the Ridges Beach. Although still distributed over the same areas, previous treatment has been successful resulting in fewer plants and plants with reduced vigor — come be parkt of this important work! Volunteers will meet at the trail west of the Ridges County Beach. Wear work clothes: long pants, long sleeves and sturdy shoes or boots, as they will be using herbicide with dye in it. Please contact Marne if you plan on attending at marne@ridgessanctuary.org or 920-839-2802.



Save the Date!

Where Ecology Meets Economy – Season 2 A Forum for Green Industry Professionals & Land Managers September 17, 2014 - 8:00am-3:30pm at Johnson's Nursery, Menomonee Falls, WI

After a successful forum in 2013 and in a continued effort to close the gap between the plant nursery industry and invasive plant ecologists, the Southeastern Wisconsin Invasive Species Consortium (SEWISC) and Johnson's Nursery Inc. bring you "Where Ecology Meets Economy – Season 2". This day-long conference will feature educational sessions that bring together Green Industry Professionals (nurseries, landscape architects, arborists, contractors) and Land Mangers (natural area managers, educators, and conservationists). The purposes of the forum are to (1) create personal dialog between the two groups that have not traditionally shared their experiences and (2) to develop working relationships that will both create business opportunities and help improve the state of our ecological communities. Registration will open in early August and more information can be found at www.sewisc.org. The agenda includes the following presentations and tours:

- Cultivating Nature in Our Landscapes: An Ecologic, Economic & Cultural Necessity for Future Prosperity – Neil Diboll, Owner of Prairie Nursery
- Case Studies on Plant Invasions from a Public Garden –
 Kurt Dreisilker, Manager of Natural Resources at The Morton Arboretum
- What is Local Genotype: A Complicated Question with Significant Consequences – Kelly Schultz, Nursery Coordinator, Native Seed Nursery
- Obtaining Project Appropriate Plant Materials for Landscaping
 What is Right? Michael Yanny, Senior Horticulturalist at Johnson's Nursery and Owner of JN Plant Selections
- Panel Discussion local experts answering your questions including how to improve restoration project success, plant availability solutions, perspectives on the outlook for invasive plants and the nursery industry, what changes can we expect across out local landscapes going into the future, and more!
- Afternoon Tours at Johnson's Nursery include: (1) Seed Harvest, Processing and Planting of Woody Plants, (2)
 Container Culture: How We Grow Quality Plants in Containers, (3) B&B Landscape Plants: Their Culture and Handling, (4) What Sells & Why, (5) New Plant Development Cultivars and Nativars and (6) Designing with Native Plant: The Inside Scoop on What's Worked for Me

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Research on mussel-killing bacterium continues in Wisconsin

In our April 2014 edition we included an article about a product that was being developed called Zequanox. The product is actually a bacterium that kills zebra mussels but appears to have little or no effect on other organisms. Zequanox has been undergoing tests for several years with promising results – killing more than 90% of mussels in test tanks containing water from Lake Carlos in Minnesota while leaving native freshwater mussels in the same tank unharmed. On June 11th, a *Journal Sentinel* online article stated that for the first time scientists will be applying Zequanox to a public water in Wisconsin. Researches with the U.S. Geological Survey were seeking permits to apply the biological pesticide this month to sections of Keyes Lake in Florence County in hopes of killing zebra mussels that have attached themselves to native mussel beds. If experiments prove successful, the treatment becomes one step closer to one day being a tool to control the spread of destructive zebra mussels within high-value areas such as bays, beaches, docks and marinas. Keyes Lake was targeted for the study because zebra mussels were first found there in 2010 and the lake still sustains a healthy population of native mussels.



A cluster of invasive zebra mussels attached to a native freshwater mussel from Lake Carlos in Minnesota. Credit D. P. Molloy/University at Albany via The New York Times.

Uncovering a Link between Invasive Species and Monarch Butterfly Decline





The small flower and milkweed-like pod of black swallow-wort. Several populations of this invasive plant are known in Door County.

Monarch butterflies face a perilous journey each year as they move between their breeding areas in the northern United States and Canada and their wintering grounds within a mountainside forest in Mexico. The 2013 fall migration of Monarchs dropped precipitously to the lowest level yet documented. The entire hibernating populations in the 2013-2014 winter season occupied a mere 1.6 acres of forest, a 44% decrease from the previous year. Reasons for the decline include extreme climatic events in the U.S. and Canada, deforestation in Mexico, and widespread destruction of milkweed across much of the Monarch's range in the Midwest, an important breeding area. Researchers have also recently discovered another compounding variable in the decline of the monarchs.

Monarch butterflies need milkweed plants (those of the genus *Asclepias* and a few closely related genera) as their caterpillars cannot feed on other host plants. Female Monarchs find milkweed using a combination of visual and chemical cues. An alien invader is jeopardizing this process by confounding female monarchs during the egg laying process. Black swallow-wort and pale-swallow-wort (both of the genus *Vincetoxicum*) are members of the milkweed family (*Asclepiadacea*) native to Europe and considered invasive in North America. Laboratory tests have shown that monarch caterpillars cannot feed on swallow-wort plants, but Field studies have shown that female monarchs will lay eggs on black swallow-wort, even when it is growing the same field as common milkweed. Thus, swallow-worts may act as a 'sink' for monarchs; caterpillars from eggs laid on these invasive plants will not survive. In addition, swallow-worts can crowd out native milkweeds, which eliminate appropriate food sources for caterpillars and further aides in their decline. For more information on the Monarch butterfly and swallow-wort, visit www.monarchjointventure.org.

July Plant Profile: Garden Valerian

Also known as garden heliotrope or common valerian, garden valerian (*Valeriana officinalis*) is a tall herbaceous perennial that was introduced to the United States as a medicinal plant. It invades a range of habitats including upland forests, open fields, wetlands, marshes, woodland swamps and stream edges. Tolerant of both wet and dry conditions, garden valerian is rapidly expanding its range in northern Wisconsin, including Door County. Early emergence, vigorous growth habit, and the ability to self-seed give this species a competitive advantage resulting in the displacement of native species.

Garden valerian can be identified by its white to palepink, five-petaled flowers arranged in tight clusters that may resemble Queen Anne's lace or other umbels. It will bloom from May to August. Unlike many of our other umbels however, its leaves are opposite and pinnately compound with 5-25 toothed leaflets. The fruits are small oblong capsules that release abundant powdery seeds while the roots are white, fleshy rhizomes with thick fibrous roots and a pungent odor.

Small populations or individual plants can be pulled or dug before seed set, taking care to remove as much of the root system as possible. It is yet unknown how long the seeds will remain viable in the soil though, so annual follow-up is important. Mowing of plants prior to flowering may also work to manage the plant, but will likely not eliminate it. It can presumably be controlled using available herbicides, though little of no information exists to confirm the efficacy of this approach.

Current invasive species rule revisions In Wisconsin propose to regulate garden valerian as 'restricted'. Restricted means the plant is widely established across the state and that high environmental and/or economic impacts from the species are evident.











