

Door County Aquatic Invasive Species Education, Prevention, and Planning Annual Progress Report

Project Number: AEPP-421-14
Project Period: October 1, 2013 – December 31, 2014

The Nature Conservancy was again contracted through the Door County Soil and Water Conservation Department as the Door County Invasive Species Team Coordinator for calendar year 2014. This document outlines the accomplishments of the Soil & Water Conservation Department (SWCD), Door County Invasive Species Team (DCIST), and The Nature Conservancy (TNC) pertaining to aquatic invasive species education and community outreach in 2014. Funding was also obtained in 2014 from the US Forest Service, to conduct both aquatic and terrestrial invasive species education and control work in Door County. Within the report there may be times that aquatic invasive educational work overlapped with terrestrial or control efforts, as it was typical to discuss all topics at numerous public meetings to spread the awareness of invasive species. All terrestrial invasive work that was conducted was funded through the US forestry grant program, and all controlled work was funded by local donations and again through US Forest Service grants.



Photo: Invasive species display presented by DCIST at the Bay Shore Property Owners Annual Meeting in September 2014.

For this project it was SWCD's intent to maintain and improve both the water and habitat quality of Door County's shorelines, wetlands, and inland lakes. Goals were to be achieved through mapping of invasive species, organizing public workshops for education, conducting water craft inspections, and developing prioritized control plans for NR 40 and other high concern invasive aquatic plants.

The following goals and accomplishments are primarily reported by the DCIST coordinator as required in the Door County contract to coordinate invasive species education. This report will focus on each of the

categories and deliverables mentioned in the original application and grant agreement, and will highlight activities and accomplishments in 2014.

1. DCIST steering committee meetings.

The DCIST organized and held meetings with the members of the steering committee on the third Thursday of the following months: January, March, April, June, September, November, and December. For each meeting, DCIST drafted an agenda that included coordinator updates, agenda topics provided by members, and agency updates if pertinent. In addition, a number of DCIST steering committee members met on July 16th with Paul Schumacher in recognition of DCIST's reception of a statewide Invader Crusader Award.

At the end of the previous contract, DCIST noted that in the two years that TNC has operated as the group's coordinator, a number of steering committee members are no longer serving with the same agencies or in the same position resulting in a smaller steering committee. In 2014, DCIST and the SWCD sought participation from our County Parks and WDNR foresters. Erik Aleson with Door County Parks attended a number of the steering committee meetings, which resulted in a sparked interest in invasive species within the parks and his participation in a number of identification hikes within Door County parks which were hosted by DCIST. Chris Plzak and Bill Ruff, our County foresters, have not attended meetings in person, but continue to receive meeting invites and notes at their request. We will continue to deliberate on how we can engage steering committee members further (e.g. seek out more opportunities for collaboration within the DCIST program) or explore options for engaging new partners in the County.

2. DCIST email and message line.

The DCIST coordinator checked the message line and email account on a weekly basis if not daily. Inquiries were handled promptly and when necessary, inquirers were directed toward applicable agencies (i.e. SWCD, Wisconsin DNR) to have further questions answered. This year, the DCIST coordinator fielded approximately 20 messages left on the line from Door County landowners and interested parties in regards to invasive species. Four of these messages resulted in site visits by the DCIST coordinator with the landowner on their property. Additional inquiries that were forwarded were mainly requests for information about the progress of Phragmites treatments in 2014, which was partially funded through USFS. Those who were communicated with through the message line or email account were listed in a Microsoft Excel spreadsheet along with additional persons that the DCIST coordinator connected them with.

3. Public educational meetings.

The coordinator was tasked to provide aquatic outreach activities, as presentations and activities. However, both aquatic and terrestrial invasive questions and activities would frequently overlap, throughout the year. Again, terrestrial and control efforts were funded through USFS funding and local donations.

Educational efforts continued throughout the County in 2014 - outreach consisted of public meetings and speaking engagements with community groups and homeowner associations. Invitations to these meetings were sent to applicable, priority groups that included community organizations, property owners associations, lake associations, private landowners, businesses, and municipalities.

The following public and organizational meetings were conducted by the DCIST coordinator:

- **February 18th – Presentation for Gibraltar Parks and Lands Committee**
Presented basic invasive species information. Then discussed species that we have mapped in Fish Creek, such as *Phragmites*, and the surrounding area and how we can work together for further control of these species by the Township and with landowners.
- **February 19th and 20th –Hikes for groups with The Clearing Folk School in Bailey’s Harbor**
The hike took place at TNC’s Meissner Preserve (headwaters of Peil Creek) with approximately 25-30 participants each of the two days. Invasive species topics discussed included managing reed canary grass in wetlands, identifying non-native *Phragmites* from native *Phragmites*, and the large scale control of *Phragmites* in Door County funded by the USFS and local donations.
- **April 23rd – Gibraltar Schools Earth Day Symposium**
The DCIST coordinator set up an education booth with hands-on activities, and invasive plant and animal samples, such as the Sea Lamprey, for the students of the Gibraltar schools. The symposium was also open to members of the public and lasted approximately four hours, during which students and others could listen to educational lectures or explore booths for DCIST or other non-profit, local, state agencies and groups. An estimated 150 students and 20 community members stopped at the DCIST booth and/or took invasive species brochures or information during this event.
- **May 2nd – “The Importance of Early Detection” Workshop with UW-Extension, Bailey’s Harbor**
Workshop was hosted by DCIST and included a 45-minute lecture on early detection species by the DCIST coordinator as well as a mapping segment presented by Anthony Summers from UW-Extension Weed Science. Anthony’s hands-on portion demonstrated the latest online resources, like the Great Lakes Early Detection Network (GLEDN), and provided instruction on new technology/software that enables volunteers to map invasive species establishment using their smartphone. The workshop was very well attended with approximately 40 participants of the general public.
- **September – Bay Shore Property Owners Association (BSPOA) Annual Meeting at Horseshoe Bay Golf Course, Egg Harbor**
Spoke briefly at annual meeting about DCIST in conjunction with discussion of BSPOA’s 50/50 grant program where members can apply for a grant from the Association that will pay 50% of the cost to hire a local contractor to control invasive species on their property. Organized and brought display to meeting that included live examples of common invasive species in the Bay Shore Drive area. Stayed throughout meeting and talked to more than 10 members (plus their

spouses/family in some instances) afterwards about invasive species identification and possible control options on their properties.

- **October 4th – Wetland Landowner Event with Wisconsin Wetlands Association**

The DCIST and SWCD were present providing DCIST educational materials to the, approximately, 25 wetland landowners that participated. Both SWCD and the DCIST coordinator answered landowner questions about invasive species before and after the formal program. The DCIST coordinator provided a brief overview about the role of DCIST during the lecture portion, and answered landowner questions during the discussion portion of the program.

Although not considered a community meeting, the DCIST coordinator prepared and organized an educational display about DCIST and invasive species that was shown at the Sturgeon Bay Branch of the Door County Public Library during the entire month of April. In addition, as part of a November “Learning in Retirement” presentation to 40 Door County residents, TNC staff shared DCIST information and materials and promoted DCIST as a resource for landowners. Staff fielded several questions from interested residents about invasive species control and available assistance.

In addition, the DCIST coordinator presented a course at the Green Bay Botanical Gardens on invasive species. Many of the participants were Brown County residents that own properties in Door County and attended to inquire concerns specifically regarding their Door County property. This presentation resulted in at least two property owners taking steps to control invasive plants in Door County.



Photos: Left – April display at the Sturgeon Bay Branch of the Door County Library. Right – Educational materials for children and members of the public at the Gibraltar Earth Day Symposium on April 23rd.

4. Equipment loan program.

The DCIST coordinator worked to promote the DCIST equipment loan program to volunteers, landowners, homeowner associations, and community groups whenever the opportunity arose. This included specific information about the program and tool examples displayed at the public library during the month of April.

DCIST and SWCD will explore options of how partner groups that have used the equipment in the past can help advertise the program through their materials or outreach.

Advertisement for the equipment loan program was present at the Festival of Nature and any other presentations that were given by the DCIST coordinator. Also, the coordinator dispersed a number of DCIST handouts to public locations (i.e. libraries) in the County in 2014 that included a small insert that was added describing the equipment loan program specifically. In addition, the equipment loan program was repeatedly advertised in the DCIST newsletter and other publications written or submitted by the coordinator. The coordinator also provided specific information on the program (i.e. the list of available equipment and required deposits) to private landowners during landowner visits on their properties.

5. **Website management.**

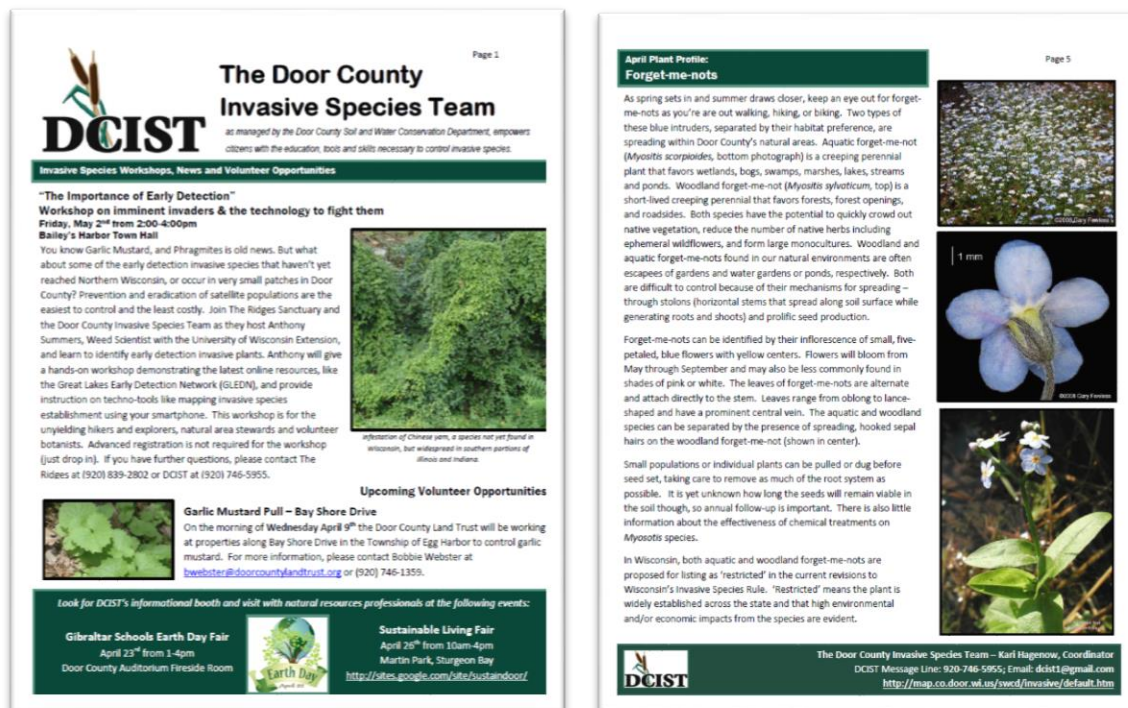
The DCIST coordinator reviewed website in January/February of 2014 and searched for outdated links and material. A number of links to the Wisconsin DNR webpages were inoperative, similar to last year. Links should continue to be checked periodically. Other webpage updates included the addition of factsheets for a number of species and additional information and links under 'Why Care?' and 'Native Plants' sections. DCIST newsletters and other monthly updates were posted to the webpage which highlighted important invasive species topics for the County (i.e. Emerald Ash Borer and Clean Boats for Clean Waters) and our current volunteer opportunities.

6. **Compile/create and distribute informational factsheets and the DCIST.**

During the public meetings, landowner visits, events, and workdays described in this report the coordinator made available brochures and informational factsheets. At a minimum, the coordinator provided the Door County Invasive Species brochure that describes what invasive plants are (including but not limited to AIS), why property owners should care, information on the equipment loan program, and who/what DCIST is, as well as the "Keep a Lookout for Invasive Plants in Door County" brochure that pictures Door County's top 15 invaders. Volunteer log sheets and donation forms were also made available in most instances. The DCIST brochures and the "Keep a Lookout" brochure was also distributed to libraries around Door County in early 2014.

The DCIST newsletter, sent out during seven months in 2014, kept the 800+ local and regional people on our mailing list informed not only about our volunteer opportunities, but also about local events and actions, statewide invasive species happenings, and relevant activities at a regional scale with the ultimate goal of generating further interest in the natural environment and invasive species management. Each newsletter contained a monthly plant profile that included that plant's identifying characteristics, as well as why it is invasive, how it spreads, and its status in Wisconsin under the NR-40

rule. If applicable, native look-alikes and alternatives were also discussed.



Photos: An example of the DCIST April 2014 newsletter that was provided to subscribers. One of the plant profiles shared was Aquatic Forget-me-nots.

The coordinator also generated a number of factsheets to provide to private landowners, community organizations and other stakeholders. One example of the materials that the coordinator generated in 2014 are single page sheets that describe each of the invasive plants that were proposed for regulation by Chapter NR-40 (revisions were approved by NRB on December 10th with no changes) that are currently found in Door County. A number of factsheets that show pictures of newly regulated prohibited plants – broken down between aquatic, terrestrial, and wetland habitats – that can be given to plant nurseries, landscapers, and landowners in 2015 to make them aware of NR-40 changes were created.



Photos: Installation of a new boot brush at the entrance of the North Bay State Natural Area to prevent the spread of invasive species in September (left), and coordinator holding a *Phragmites* runner extended out approximately 30-feet across the marsh at North Bay in September.

7. Early Detection and Rapid Response Plan for aquatic species that may materialize in Door County.

Work is being done to produce an Early Detection and Rapid Response (EDRR) plan for the Door Peninsula in cooperation with DCIST partners. The EDRR plan is composed of a scope and purpose, along with definitions on what early detection and rapid response mean. The overall goal of the plan is to guide local resource managers and DCIST members when responding to newly discovered invasive species and to offer a consistent reporting recommendations for doing so. The plan also offers recommendations for how DCIST can continue to educate landowners and interested parties about early detection species before they can physically see them on the land.

The bulk of the plan is a communications protocol for when new invasive species are found on the Peninsula. This includes offering reporting recommendations for what to record to document the infestation, what means are available for reporting (e.g. online regional databases), and whom the reports should be directed to locally. The communications protocol also identifies how the occurrence will be verified and who on the DCIST team will make the verification. Once verification has been done, the plan attempts to identify whether or not further notification may need to occur - for example, notifying the Department of Natural Resources if it is a species that is prohibited in Wisconsin. This may also include notifying landowners, associations, or other parties that should be engaged outside of DCIST members.

Aside from an initial communications protocol regarding the finding of an early detection species in Door County, the plan also outlines further assessment needs for new occurrences and attempts to identify potential funding sources for control of the infestation. Further assessment needs may include inventory or mapping, evaluating the threat that the species possess to conservation opportunity areas on the Peninsula, assessing the need for public or targeted outreach, and determining what state and/or federal permits are necessary to conduct control of the infestation. The plan also makes brief

recommendations for actions post-treatment and stresses the need for continued monitoring and evaluation at sites where a rapid response action has taken place (i.e. setting up a small team of volunteers or LTE's that will assess these sites each of the following years for five years).

The plan being developed does not specifically address the process to control individual plant species. The control methods that will ultimately be used to respond to the infestation of a new invasive plant after it is identified could depend heavily on the time of year, location of the occurrence, density and size of the occurrence, NR-40 status, and multiple other factors. The plan does, however provide information on 25 selected species (both prohibited and restricted by Chapter NR-40) that are in closest proximity to the Door Peninsula but have not yet been found here (or found in very low densities such as black swallow-wort). These species are both terrestrial and aquatic plants that were selected due to their current distributions. Distributions were determined by talking to local and state resource managers and data mining on large regional invasive species databases such as Early Detection & Distribution Mapping System (EDDMapS). The information provided for these species also includes their pathways of introduction (e.g. plant nurseries) to best target outreach on these species to applicable parties.

8. Obtain volunteer hours related to aquatic invasive species control.

Volunteer hours were tracked in Microsoft Excel and shared via dropbox.com as volunteer effort sheets were provided to DCIST. As of 12/31/2014, a total of 440.25 aquatic invasive species volunteer hours were collected for work done in Door County. Common aquatic species activities included Eurasian Water Milfoil mapping at Kangaroo Lake, *Phragmites* mapping, and mapping of Japanese knotweed. Of the total above, 42 of the aquatic hours were also garnered at our early detection and mapping workshop hosted in Bailey's Harbor – many of the early detection species discussed were those of aquatic habitats (i.e. wetlands) and the mapping methods taught were applicable to any habitats.

9. DCIST Coordinator efforts with Limited Term Employee's

provided input about the intensity of use at Door County boat launches to help aide the selection process. LTE's from the SWCD and TNC collected data at the launches during the selected days.

- On a final note regarding *Phragmites* - Greg Coulthurst with the Soil and Water Department coordinated much of the county-wide efforts and planning for *Phragmites australis* as the SWCD received a significant amount of federal and private funding to control *Phragmites*. The coordinator supported these efforts through public education, landowner follow-up, and mapping efforts. The WI DNR will also be providing a sub-award to the County to conduct additional treatments for 2015. Informational packets, regarding *Phragmites* and its ecological impact on native species, have and will continue to be provided to shoreline landowners, and to municipality board members at municipality meetings. SWCD staff annually meet with each municipality prior to treatments in each designated treatment area to provide the same information in an open and public format. DCIST members also continue to strategize about how best to reach landowners with the message that they must be vigilant and maintain the areas. An additional note worth mentioning is that from 2010 to present the entire shoreline of Door County has now received at least one year of treatment for *Phragmites*.

The following illustrates SWCD *Phragmites* program accomplishments in 2014.

- SWCD staff met with 5 Town boards and 3 Villages to educate and discuss past successes and future efforts
- 25.8 acres of *Phragmites* inventoried in Northern Door County
- 39.6 acres of *Phragmites* treated (13.8 acres follow up treatments)
- 2,273 educational letter packets mailed to shoreline landowners
- \$15,040 donated from private landowners to aid in invasive species efforts
- \$4,150 donated from Town governments for the control of *Phragmites*

10. **Contractor Match**

In order to meet match commitments, the coordinator continues to submit volunteer time, valued at \$12 per hour, for aquatic invasive species work in Door County. In addition, the DCIST coordinator will submit documentation for in-kind services for aquatic invasive species work. As of 12/14/15, \$5797.20 of aquatic in-kind services and \$1,728 of volunteer time (144 hours) have been accrued.



Photos: Volunteer Ryan Pesch helps map Eurasian Water Milfoil on Kangaroo Lake on July 31st (left) and the DCIST coordinator explains how to identify Eurasian Water Milfoil to volunteers doing hand-removal of the plant on August 28th.

Additional activities:

All of these activities were used as opportunities to distribute information on identification, monitoring, and control techniques for aquatic invasive species relevant to Door County.

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- January 29th – Mapped invasive plants at Dunes Lake for treatment under NAWCA grant
- February 18th – Presentation on invasives for Gibraltar Parks and Lands Committee
- Library display on DCIST and invasive species for month of April
- April 23rd – Participated in Gibraltar Schools Earth Day Symposium
- August 26th – Educational booth at the Sustainability Fair in Martin Park, Sturgeon Bay
- May 7-8th – Attended the statewide AIS Partnership Meeting in Steven’s Point, WI
- May 23rd – Educational display for the Festival of Nature in Bailey’s Harbor
- May 30th – Developed educational handout about the spread of invasive species by birds (and birds as invasive species) that was given to participants in the Door Island Bird Festival on Washington Island during the weekend of May 30th.
- June 13-15th – Drain Campaign weekend
- June 18th – Attended public hearing for NR-40 rule revisions in Green Bay
- June 27th – Mapping of Eurasian Water Milfoil in Kangaroo Lake
- June 28th – Joint workday with the Door County Land Trust at Kangaroo Lake
- July 3rd-6th – Landing blitz weekend
- July 5th – Spoke briefly about DCIST and invasive species at the Kangaroo Lake Annual Meeting
- July 7th – Mapping workday along Logan Creek and Clark Lake Shorelines
- July 16th – Spoke at BSPOA board meeting about expansion of their 50/50 grant program to include aquatic species
- July 22nd – Workshop with The Ridges Sanctuary for crown vetch control in coastal habitats
- July 24th- Wisconsin First Detector Network training (described on Page 3)
- July 30th – Ellison Bluff invasives inventory as part of County Park ID Series

- July 31st – Mapping of Eurasian Water milfoil in Kangaroo Lake with volunteers
- August 1st – Mapping of Eurasian water milfoil in Kangaroo Lake
- August 28, September 4th – Manual removal of Eurasian water milfoil from Kangaroo Lake with KLA volunteers
- September 13th – Clark Lake *Phragmites* fest
- September 27th – Bay Shore Property Owners Annual Meeting (see Page 3)
- October 7th – Attended Upper Great Lakes Invasive Species Conference in Marquette, MI
- October 8th – Attended AIS partnership meeting in Steven’s Point, WI
- Participation in CWMA/CISMA statewide phone conference(s) that will continue in 2015
- Invasive species article submitted for South Lake Michigan Drive’s Spring Newsletter
- On-going advertising of our public meetings and volunteer opportunities in the Peninsula Pulse, Door County Daily News, and periodically via other media outlets.

In 2014, the DCIST program also received statewide recognition from the Wisconsin Invasive Species Council with an “Invader Crusader” award in the professional group category. Among the nine groups and individuals recognized, DCIST was the only in this category. DCIST also nominated the Bay Shore Property Owners Association for an award in the volunteer group category. BSPOA did not receive an award, but will be considered for next year as 2014 was the most competitive year that the Invader Crusader Awards have seen.



Photos: DCIST members being presented with a Wisconsin Invader Crusader award by Paul Schumacher (left) and the award (right).