

Door County Aquatic Invasive Species Education, Prevention, and Planning Final Report

Project Number: AEPP-334-12
Project Period: October 1, 2011 – December 31, 2013

The Nature Conservancy was contracted through the Door County Soil and Water Conservation Department as the Door County Invasive Species Team Coordinator for 2012 and 2013. This document is the Door County Soil and Water Conservation Department's Final Report for Project Number AEPP-334-12.

Goals

The goals for this project were 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 and physical removal, conducting water craft inspections, and developing prioritized control plans for NR 40 and other high concern invasive aquatic plants.

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 for each of the two grant period years.

Steering Committee Meetings:

2012: The DCIST coordinator organized and held meetings with the members of the steering committee in the months of April, May, June, August, September, October, and December. For each meeting, the coordinator drafted an agenda that included agency updates and any additional agenda items provided by the members. The coordinator also provided an update of activities and DCIST happenings for the previous month. The agenda, coordinator update, and meeting notes for each month were provided to the SWCD.

2013: The DCIST coordinator organized and held meetings with the members of the steering committee in the months of March, May, July, August, October, and December. For each meeting, the coordinator drafted an agenda that included agency updates and any additional agenda items provided by the members. The coordinator also provided an update of activities and DCIST happenings for the previous month. The agenda, coordinator update, and meeting notes for each month were provided to the SWCD. The July meeting featured a presentation by Paul Schumacher from the Wisconsin Invasive Species Council regarding the Statewide Strategic Plan for Invasive Species and how the DCIST and partners can contribute to the effort. In October Tracy Hames and Katie Beilfuss from the Wisconsin Wetlands Association attended the DCIST steering committee meeting to discuss their new Wetland Landowners Handbook and how DCIST members could utilize for future landowner engagement efforts.

DCIST Message Line and Email

2012-2013

The DCIST coordinator checked the message line and email account on weekly basis if not daily. Inquiries were handled promptly and either answered by the coordinator or directed to the appropriate DCIST member. Those who were communicated with through the message line or email account were listed in a Microsoft Excel spreadsheet for tracking and accountability. This file is maintained by the coordinator and is provided to the Door County SWCD on an annual basis. There are currently 750+ contacts in the DCIST email "contacts" list for news letters and or other news updates.

Public Education

Educational efforts in 2012 and 2013 consisted of public meetings, speaking engagements with community groups, landowner visits, newsletters, public access channel videos, and educational letter packets which were sent to property owners within proposed *Phragmites* control project areas.

In 2012 SWCD staff presented at 8 Town boards and 3 property associations in preparation of a *Phragmites* control program. In addition 1,902 letters and educational packets were sent to property owners within the proposed treatment areas. Landowners were invited to participate in a County organized control effort and were informed as to what actions will be necessary on their behalf to prevent a re-infestation. In 2013 SWCD staff presented at 11 Town meetings, one WI Towns association meeting, one property association meeting and at two public meetings; all for the status and preparations for proposed *Phragmites* control efforts. In addition 2,344 letters and educational packets were sent to landowners within the proposed treatment areas for the 2013 effort. In 2013 the DCIST newsletters, workshops, and public access television videos carried out a "What is blooming now" theme. In all cases featured plants corresponded to invasive plants that would be the most visible at the time and would include key identification characteristics, how the plant spreads the status under NR 40 rules and of course the best ways to control the plants. When applicable native look-a-likes were also compared and contrasted.

Invitations to public meetings organized by the DCIST Coordinator were sent to applicable, priority groups that included community organizations, property owners associations, lake associations, private landowners, businesses, and municipalities. All meetings are listed because the DCIST Coordinator is funded by this aquatic grant and by other funding sources to address terrestrial invasive species needs. In most case these meetings overlap the aquatic/terrestrial discussion boundaries. The following is a list of DCIST Coordinator organized public meetings over the course of the grant period.

2012:

May 10th - 12th – AMBLE Presentations at Washington Island Community Center, Newport State Park, Crossroads at Big Creek. Presented to citizen monitors taking part in USGS's Avian Botulism Monitoring for Lakeshore Events program. Volunteers were taught a few common shoreline invaders to watch out for while doing beach monitoring and what you can do should you encounter them

July 2nd – “What’s Up with DCIST” public meeting; Door County Government Building.

Discussion of 2012 control projects and goals for DCIST.

July 9th – Glidden Drive Annual Meeting; Sevastopol Town Hall. Gave a brief talk about DCIST, common invasive species on Glidden Drive, and the WDNR's Lyme grass project. Many landowners wanted more information about Lyme grass project and the coordinator's attendance sparked a number of one-on-one landowner visits.

July 18th – Bay Shore Property Owners Association; Bay Lake Bank building, Sturgeon Bay.

Presented for BSPOA after their monthly steering committee meeting. Presentation included information on what constitutes an invasive species, why landowners should care, the DCIST program, how DCIST can be a resource for landowners, and common invasive species they may encounter along Bay Shore Drive. Great attendance from members of the BSPOA as it was advertised to all of their membership. This meeting sparked a number of landowner contacts and visits and has resulted in the BSPOA creating a 1:1 cost share program from landowners to have woody invasives treated on their property.

July 19th – Sturgeon Bay Home and Garden Club.

Presentation on invasive species and how individual landowners can help control them. Also discussed vectors for invasive species spread and the role that horticulturalists play.

August 20th – Slow the Spread – Implementing Wisconsin's Invasive Species Rule with Businesses; Crossroads at Big Creek.

Chrystal Schreck from the Wisconsin DNR joined DCIST to talk about the NR-40 Invasive Species Rule and how the WDNR has been working with many partner groups and agencies to slow the spread of invasive species throughout the state.

September 13th – Presentation for Door County Library staff

On the basics of our invasive species work and why it is an important issue in our County

September 19th – Presentation for the Door County Board of Realtors; Log Den in Egg Harbor.

Discussion of invasive species and shoreline issues – included what realtors and new homeowners would need to know in terms of control of invasive species and permitting. Also included discussion of NR-40 and other applicable laws.

November 19th – DCIST Phragmites and parsnip informational meeting; Forestville Town Hall.

Presenting information about Door County control projects and how volunteers can help us achieve goals in the future. Poor attendance.

December 5th – DCIST Phragmites and parsnip informational meeting; Nasewaupsee Town Hall.

Presenting information about Door County control projects and how volunteers can help us achieve goals in the

future. Poor attendance.

December 19th – Aquatic Invasive Species in Wisconsin, Public Meeting; Crossroads at Big Creek.

Laura MacFarland from the River Alliance discussed aquatic invasive species threats and their identification. Also talked about the River Alliance of Wisconsin and their citizen monitoring program.

2013:

April 17th – “Insect and Disease Issues from 2012: What did the year bring us and what should we expect” at Crossroads at Big Creek.

Linda Williams, a Forest Health Specialist with the Wisconsin DNR gave a presentation about last year’s unique weather events, specifically the drought and heat, and how it has impacted and will continue to affect our trees and forests. This included a discussion of insect pests that caused problems last year, the impacts of weather on these pests, and what we can expect in the future. Updates on invasive species such as Emerald Ash Borer and beech bark disease were provided as well. Advertisement of this presentation was focused on forest landowners in the County. Well attended and lots of good questions/discussion were had.

June 26th – “Restoring Landscapes with Native Plants” at the Sturgeon Bay Branch of the Door County Library.

Ned Dorff, co-president of the Green Bay Chapter of Wild Ones (a national non-profit that strives to educate members of the community about the benefits of landscaping with native plants), talked about his experience in landscape restoration and the successes/challenges that come along with fighting invasive species. He also discussed a current project involving the mapping of managed public and private areas that are landscaped with native plants to facilitate a corridor for migrating pollinators – integrating into the discussion the role Door County can play. Poor attendance.

August 30th – Phragmites Symposium at Crossroads at Big Creek, Sturgeon Bay.**

Symposium included presentations by Stacy Schumacher (Wisconsin DNR) on the mapping of wetland invasive species and the differences between native and non-native Phragmites and Kari Hagenow (Door County Invasive Species Team) on control options for Phragmites. Also presenting was Matthew Peters, a graduate student from the University of Wisconsin – Green Bay, who gave an overview of his research “A Comparison of Ecological Services between Native and Invasive *Phragmites australis* in Door County, WI”. Fair attendance

September 28th – 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 honeysuckle and buckthorn on their property. Stayed throughout meeting and talked to more than 10 members (plus their spouses/family in some instances) afterwards about invasive species identification and control on their properties. At the meeting four volunteer forms totaling 27.5 hours of invasive species control work were collected.

October 26th – Planned public meeting on Washington Island for October 26th. The coordinator was working out details of this meeting with Steve Waldron, a teacher at the school on the Island. Unfortunately, the meeting did not take place as planned due to a scheduling conflict (not on the part of the coordinator). A public meeting is planned for early 2014 on the island and will occur prior to the optimal control timing for garlic mustard and hound’s tongue, two very common terrestrial invasives found on the Island.

December 18th – “Asian Carp – What is eDNA and what does it mean for Door County?” Tim Strakosh, a fish biologist from the U.S. Fish and Wildlife Service presented on the recent Asian Carp eDNA findings, what it means, and the next steps in the search for and prevention of Asian Carp.

Equipment Loan Program

2012: The equipment was used frequently by Stacy Schumacher (SWCD Invasive Species LTE) and for a number of DCIST work parties. The DCIST coordinator promoted the equipment loan program to numerous groups and landowners whenever possible and during any outreach activities. Many of our county groups whom organize work parties for invasive work have their own supplies (i.e. The Ridges Sanctuary, The Door County Land Trust, Friends groups, etc.)

2013: The DCIST Coordinator explored marketing options to increase usage of available equipment for public invasive species work. Options included advertising in public parades and various electronic and standard media with local newspapers, property association newsletters and DCIST partner websites. Two problems continue with the primary being that most dedicated landowners have their own tools and the second being the up front cost to loan the equipment. One of the most common requests through informal surveys with work group participants was a request to provide herbicide instead of tools. Of course this has numerous issues and is an ineligible cost through the AIS grant

program. A survey for equipment users has also been developed and will be used for future decisions regarding this topic.

Website Management 2012-2013

The DCIST coordinator systematically went through the website in 2012 and 2013 and searched for outdated links and material. In 2012 nearly all of the links to DNR web pages were inoperative (40+ links), as the DNR had recently overhauled their webpage. In 2013 many of the web pages were again inoperative due to continuing DNR web page changes. In some case changes are now linked to pdf fact sheets vs. WDNR web links. Monthly updates were posted to the webpage as well which highlighted important invasive species to look for or treat during that month and our current volunteer opportunities. New in 2013 was the addition of a link to subscribe to the monthly DCIST newsletter and email message. Several requests to be added to the mailing list occurred after the addition of this link.

Volunteer Hours

2012: Volunteer hours were tracked in Microsoft Excel as volunteer effort sheets were provided to the coordinator. A total of 618.25 (\$9,057.31) aquatic volunteer hours were collected. Equipment used during 2012 totaled 177.25 hrs. (\$2,956.47). Many of the aquatic invasive species activities which volunteers submitted hours involved Phragmites efforts in the County.

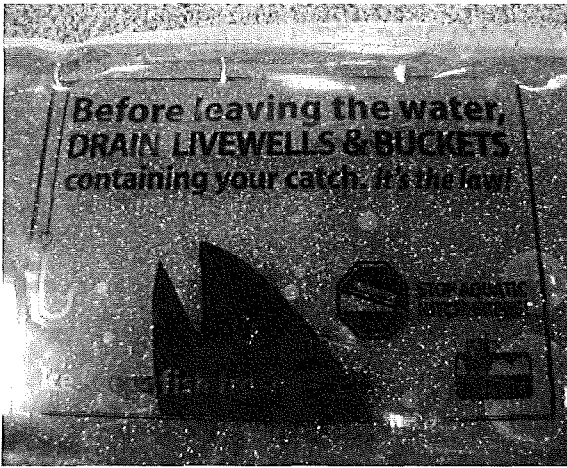
2013: Volunteer hours reported in 2013 included 403 hours (\$5,438.86 equivalent) for aquatic invasive species, with *Phragmites* again being the primary species of concern/control. Volunteer equipment use was calculated at 124 hours with an equivalent value of \$1,320.65.

Limited Term employees (LTE's) and Clean Boats Clean Waters (CBCW)

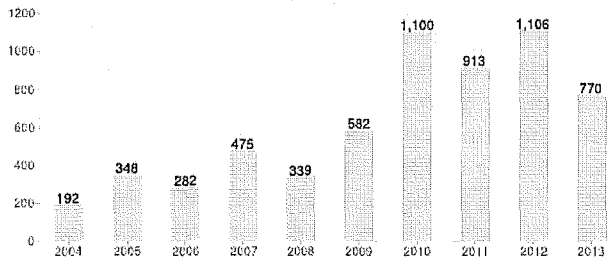
2012: Two LTE's were hired by the SWCD. One LTE was responsible to conduct a minimum of 200 hours of CBCW inspections with the remaining time designated for SWCD conservation assistance for agricultural activities. The second LTE was hired as a full time invasive species employee, that would primarily inventory and control invasive plants, contact landowners, evaluate previous control efforts, and assist with CBCW inspections during the Landing Blitz and or during other designated times. The DCIST coordinator also assisted with inspections during the Landing Blitz. As a participant in the Landing Blitz, DCIST received towels with the AIS message on them which were then handed out to boaters. Both of the Door County SWCD's LTE's and the DCIST coordinator participated on the June 30th Landing Blitz weekend. In Door County, a total of 155 boats were inspected and 376 persons contacted with AIS prevention messages during Landing Blitz weekends (this includes inspections done by Wisconsin DNR LTE's). Seven boat landings had inspectors stationed at them during the landing blitz.

2013: Two LTE's were again hired. A combination of AIS grant funds, USFS funds and donation monies were used to employ both LTE's as full time invasive species employees. LTE's were responsible to inventory invasive plants, follow up on mowing and herbicide applications, work with private landowners on mechanical control efforts, and perform water craft inspections. Roughly 65% of their time was to be spent on Aquatic issues and approximately 35% on terrestrial species topics. Combined they were to spend a minimum of 200 hours for the CBCW program and again focus efforts during the Landing Blitz (July 5th -7th). The DCIST coordinator and WDNR LTE's also participated in the Landing Blitz. In both years LTE's handed out educational materials and free bobbers with the Stop Aquatic Hitchhikers logo. Towels were not handed out in 2013, however DNR wardens in Door County Participated in an "Ice Your Catch" campaign on Sunday June 16th. Wardens inspected 37 boats and contacted approximately 100 people at 9 different Door County launches while handing out 52 ice packs. In addition six warnings and one citation were issued. Due to the short notice of this event SWCD LTE's were unable to attend. WDNR LTE's also operated a boat wash station at the Sawyer Park boat launch. SWCD LTE's coordinated with WDNR LTE's as to avoid duplication of boat inspection efforts. This may account for a reduction in the numbers reported by SWCD efforts from 2013 vs. 2012.

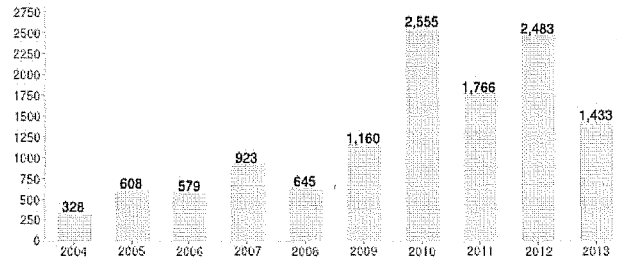
The following includes a series of photos and charts illustrating CBCW efforts in Door County.



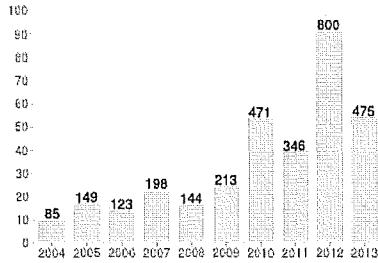
Boats Inspected



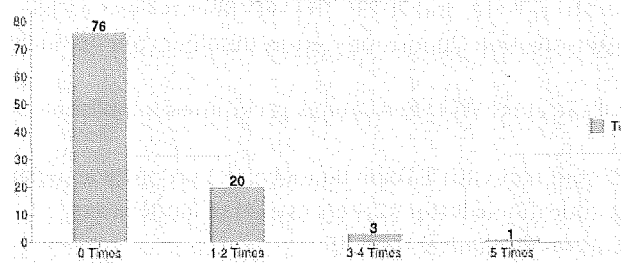
People Contacted



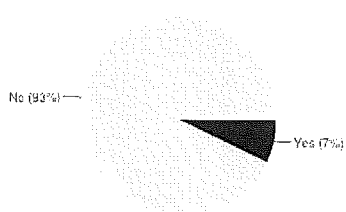
Hours Spent



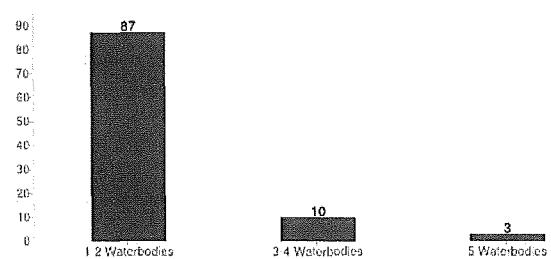
Times Contacted (2012-2013)

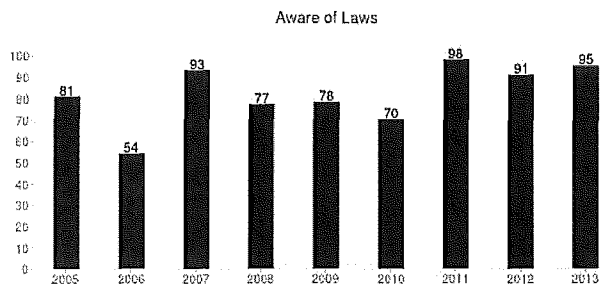


Boat Used During Past 5 Days On Different Waterbody? (2010-2013)



Waterbodies Visited (2012-2013)





Phragmites inventory, education, and Control efforts 2012-2013:

During the grant period the SWCD staff, the DCIST coordinator and local volunteers have all made major contributions to this extensive effort of controlling *Phragmites* along Door County shorelines and right of ways. The control costs in both years have been obtained through grants from the US Forest Service (USFS), The Lakeshore Natural Resource Partnership inc., and through donations from local landowners, Town governments and associations. Educational costs were utilized from this AIS grant, the Raibrook Foundation, the USFS, and again from local donations. Overall this continuing effort has had overwhelming support from numerous public and private entities. As stated earlier in this report SWCD staff met with local Town officials for support and to provide advanced education prior to their jurisdictional areas being proposed for control efforts. The main activity that preceded these educational meetings included GPS inventories of *Phragmites* populations by SWCD LTE's, the DCIST coordinator and local volunteers. Once the towns were informed of the extent of the proposed treatment areas and the estimated cost, an educational letter, informational materials, project area map, a permission form, and a voluntary donation form were provided to each landowner within the project areas. After permissions were received, maps were provided to an Aquatic approved herbicide applicator to complete the permit requirements and herbicide treatments. Annually the SWCD updates the GPS inventories and treatments on the County Web Map so that any resident can be aware of these efforts and can visually confirm how grant and their donation monies were utilized. The following link (<http://map.co.door.wi.us/map/>) will bring you to the Door County Web Map where the inventories and control areas can be found by clicking on the "Conservation" folder. It is also important to note that the WDNR was also concurrently working with the SWCD and DCIST partners on *Phragmites* control efforts in Door County in 2011, 2012, and 2013. The WDNR effort was conducted primarily on public lands and limited private lands with in Conservation Opportunity Areas (numbers are not included in this report).

The following illustrates SWCD *Phragmites* program accomplishments in 2012 and 2013.

2012:

- SWCD staff met with 8 Town boards and 3 property associations
- 1,902 educational letter packets mailed to landowners
- 36 acres of *Phragmites* treated
- \$14,091 donated from private landowners
- \$19,790 donated from Town governments

2013:

- SWCD staff met with 11 Town boards, 1 WI Town Association meeting, & 1 property association
- 2,344 educational letter packets mailed to landowners
- 54 acres of *Phragmites* treated (36 acres follow up treatments)
- \$17,358 donated from private landowners
- \$1,000 donated from Town governments
- 30 acres of *Phragmites* inventoried for future control efforts in 2014



Phragmites Mapping along Lakeshore Road in Jacksonport

On a final note regarding *Phragmites* mapping all of the Door County shorelines, and all of the southern Door right-of-ways have been completed. Northern Door right of ways and visual inventories of all Door County private lands from road surveys were started late in 2013. Prioritization and the level of future educational and control plans need to be developed taking into account areas that are most heavily infested, areas which have already been treated, areas that have the highest probability to spread, and critical habitats.



Phragmites treatment at North Bay & TNC intern Katy Cummings sampling and mapping Phragmites at the Mink River



Results from Fall 2011 treatments

NR-40 Outreach

2012: The coordinator brought in Chrystal Schreck, a Wisconsin DNR Invasive Species Education and Outreach Specialist for a public presentation in August to expand and coordinate education with the WDNR focusing on Chapter NR 40. Chrystal has been working on a statewide initiative to identify prohibited and restricted invasive species in trade and to educate businesses on the NR-40 rule before the state would pursue enforcement. Chrystal's presentation in Door County was geared toward businesses such as nurseries and landscapers. Our local businesses were sent information encouraging them to attend this meeting however, no representatives from this industry joined. Because of the poor representation, Chrystal supplied the coordinator with outreach materials for these businesses, which the coordinator provided to a number of Door County Nurseries and Landscapers through visits or mailings. Some businesses were contacted by Chrystal and the Wisconsin DNR, and therefore were not contacted by DCIST. A compiled list of all of these businesses has been provided to the Soil and Water Conservation Department. The coordinator also visited a number of Door County farm markets to hand out information about DCIST and invited local farmers to the NR-40 presentation. A compiled list of local farm markets where outreach was conducted or may be conducted in the future was also generated.

2013: Outreach with nurseries, landscapers, and farm markets were again the focus of NR 40 activities. In addition SWCD staff monitoring non-metallic mine operations are informing mine operators that they can not transport restricted or prohibited species. Many have now hired contractors to treat existing populations of *Phragmites* and Japanese Knotweed.

Purple loosestrife assessment and need for bio-control.

2012: The coordinator revisited a number of known Purple Loosestrife occurrences within Door County and mapped any new areas that were found during the summer, however it is the opinion of the DCIST partnership that bio-controls for this plant are not necessary at this time. Infestations identified were small and could be controlled easily with physical removal methods. All populations have been inventoried and mapped on the County's Arc View system and will be monitored for future efforts.

2013: One of the LTE's hired by the SWCD spent about 6 hours physically cutting and removing several plants that were discovered blooming in a couple of marginal farmed wetlands. Last summer was wetter and cooler than previous years and this population was not observed in previous years. This control work has been noted on our GIS tracking program for future follow up efforts. Overall Purple loosestrife populations remain in check, however control efforts can and will be implemented as appropriate. Bio-control conversations continue to be a hot topic for spotted knapweed and other invasive plants with in Door County.

Additional aquatic activities:

2012: All of the following activities were used as opportunities to distribute information on identification, monitoring, and control techniques for aquatic invasive species relevant to Door County. All activities were organized and led by the DCIST Coordinator unless noted. Activities specifically for terrestrial activities have not been included.

- Bi-weekly invasive species work days with volunteers of the Door Stewardship Alliance
- Fifteen landowner visits throughout Door County
- Clark Lake *Phragmites* Fest, September 8
- *Phragmites* workshop, September 1st, Island Circle Drive in Southern Door County
- *Phragmites* workshop, October 11th, DCLT Ship Canal Preserve
- Invasive Species ID workshops, October 19th and 24th, Anhapee State Trail
- Outreach letters to landowners on Lakeshore Road in Jacksonport (*Phragmites*)
- Work with the Kangaroo Lake Association in developing Eurasian Water Milfoil control program to better track and target EWM infestations in the lake
- DCIST coordinator and SWCD staff attendance at GLRI *Phragmites* Public Meeting on August 16th, Bailey's Harbor Town Hall
- DCIST coordinator Attendance at WI Towns Association meeting in Jacksonport on November 1st, Greg Coulthurst (SWCD) was presenting on County's *Phragmites* control work
- Attendance at both spring and fall Wisconsin AIS Coordinators Meetings in Steven's Point.
- Presentation at Invasive Species Education Summit in Horicon Marsh
- Presentation and panel member at the RRIP-IT-UP (Rapid Response Invasive Plant Intervention Team of the Upper Peninsula) Conference in Marquette, Michigan
- Attendance at the Upper Midwest Invasive Species Conference

- Article in Bay Shore Property Owners summer newsletter

2013: All of the following activities were used as opportunities to distribute information on identification, monitoring, and control techniques for aquatic invasive species relevant to Door County. All activities were organized and conducted by the DCIST Coordinator unless noted. Activities aimed specifically for terrestrial activities have not been included.

- Bi-weekly invasive species work days with volunteers of the Door Stewardship Alliance.
- May 28-30th – Barberry workdays at the Rushes on Kangaroo Lake; provided technical assistance and participated with volunteers in the control of Japanese barberry and exotic honeysuckle on May 29th.
- June 19th – Participated in Invasive Species Education Summit in Eagle River, WI on a CWMA panel about our efforts in Door County.
- June 28th – Planned training and work party for *Phragmites* mapping in Egg Harbor. Previously trained volunteers from the Bay Shore Property Owners Association mapped majority of Egg Harbor shoreline during summer.
- July 22th – Knotweed workday with landowners along Little Creek in Sturgeon Bay.
- August 6th – Attended Invasive Plant Association of Wisconsin (IPAW) Plant ID and Management Field Day in Madison, WI with coordinators and agency representatives from across the state.
- August 8 – Participated in Lake Levels Meeting at Crossroads with Greg Coulthurst and other local representatives. Invasive species impacts due to low lake levels were discussed.
- August 29th – Planned *Phragmites* control demonstration and workday. No RSVPs. Treated *Phragmites* at Clark Lake with volunteers in its place.
- September 10th – *Phragmites* workday with Clark Lake Advancement Association volunteers.
- Sept. 16 – Knotweed workday with landowners along Little Creek in Sturgeon Bay.
- October 11th – *Phragmites* workday at TNC's Mink River Preserve.
- October 23-24th – Participated in the Northern Great Lakes Invasive Species Conference in Marquette, MI.
- October 29-30th – Participated in Fall Aquatic Invasive Species Coordinator's Meeting in Steven's Point. SWCD staff attended one day for the purpose of learning more about future funding issues and solutions.
- November 12th – Attended the Lakeshore Invasive Species Management Area (LISMA) partner forum. LISMA is a newly forming CWMA that covers Kewaunee, Manitowoc, Calumet and Fond du Lac Counties. In the future when LISMA is better established, there may be opportunities for DCIST to partner on larger-scale invasive species projects.
- Eight landowner visits throughout Door County.
- Full-page article titled "Invasive Plants on Door County's Shorelines: Six to watch for" in the Peninsula Pulse's 2013 Sustainability Issue in April.
- Article on Invasive Species Awareness Month and Door County activities in the June 7-14th issue of the Peninsula Pulse.
- Shared Wisconsin DNR's Aquatic Invasive Species public service announcements with all local radio stations. The Lodge/Door Country 97.7 and WDOR both aired the PSAs throughout the month of June.
- Article titled "Plants out of Place: Three invaders to watch for this summer on Glidden Drive" in the July 2013 Glidden Drive Association 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.

