

# Door County Aquatic Invasive Species Education, Prevention, and Control Planning Coordination: FINAL REPORT

Project Number: AEPP-215-10

Project Period: October 1, 2009 – December 31, 2011

**GOAL:** Continue to maintain and enhance the water and habitat quality of Door County near shore waters, shorelines, wetlands, and inland lakes.

## WORKSHOPS, WORK PARTIES, and PRESENTATIONS

### **2010**

#### Aquatic Invasive Species Demonstration Control Workshops (please see attached photos)

Workshops took place within five landscapes of distinction (LOD) throughout Door County. These landscapes include Potawatomi/Sawyer Harbor, Clark-Lost Lake/Whitefish Dunes/Cave Point/Logan Creek, The Ridges Sanctuary/Toft Point/Mud Bay/North Bay, Washington Island, Newport/Mink Rive, and the Southern Lake Michigan Shoreline. A total of twenty demonstration workshops and work parties were held throughout these landscapes. Majority of the workshops involved education, prevention and control for Phragmites, but there were several workshops that included training on Reed Canary Grass, Purple loosestrife, European Swamp Thistle, and Exotic Bush Honeysuckle and glossy buckthorn in aquatic habitats.

These workshops allowed for the ability for neighborhood groups to organize and implement work parties on their properties to control aquatic invasive species. These work parties increased the control effort county-wide allowing for the contribution of more volunteer hours dedicated to species control work. There were approximately twenty-two individual work parties throughout Door County within the five mentioned LODs above.

With numerous shoreline owners, workshops, and work parties have allowed property owners associations to become much more actively involved in controlling aquatic invasive species on their owned shorelines. Many of these organizations have contributed much time and dedication at invasive species control work in their own neighborhoods and beyond.

### **2011**

#### Phragmites Informational Meetings, Mapping Trainings and Control Projects

Management of exotic Phragmites clones on the shorelines and coastal wetlands is the largest invasive species problem that Door County faces. The majority of the time in educating and in coordinating control efforts of aquatic invasive species is spent regarding Phragmites issues. Landowner interest, sensitive shoreline habitat and the magnitude of the problem expresses the need for DCIST led and supported projects.

- Phragmites inventory and mapping training, Little Sturgeon Bay, 2/14
- Phragmites inventory and mapping training, 2/23
- Phragmites inventory and mapping training, Little Sturgeon Bay, 2/28
- Phragmites inventory and mapping training, Little Sturgeon Bay, 3/7
- Phragmites inventory and mapping training, Strawberry Creek, 3/15
- Phragmites inventory and mapping training, Whitefish Creek, 3/29
- Phragmites inventory and mapping training, Little Sturgeon Bay, 3/26
- Phragmites inventory and mapping training, Washington Island, 4/9-4/10
- Phragmites inventory, Coffey Swamp, 4/21-4/22
- Phragmites inventory and mapping training, Little Sturgeon Bay, 4/30
- Phragmites inventory and mapping training, Little Sturgeon Bay, 5/7
- Phragmites inventory and mapping training, Newport SP, 4/5



Jacksonport Phragmites control, 9/20

- Phragmites inventory and mapping training, Newport SP, 4/7
- Phragmites inventory and mapping training, Ridges Rd, 5/23
- Harbor Ridges Association meeting Phragmites and shoreline issues presentation, 5/28
- Phragmites inventory and mapping training, Ridges Rd, 5/28
- Lead hike to Moonlight Bay to discuss Phragmites control efforts, Festival of Nature, 5/26-28
- Phragmites identification and mapping training, North Bay, 6/6
- Phragmites inventory and mapping training, Toft Point, 6/8
- Phragmites identification and mapping training, Spikehorn Bay, 6/14
- Phragmites identification and mapping training, Moonlight Bay, 6/16
- Phragmites inventory and mapping training, Jarman Property/Mud Lake Preserve, 6/16
- Phragmites inventory of the swales in The Ridges Sanctuary, 6/21
- Lake Forest Park Dr. homeowners meeting 6/25
- Phragmites mapping workshop with Lake Forest Park Drive volunteers, 7/12
- Phragmites mapping workshop with WFD volunteers, Glidden Dr, 7/13
- Jacksonport Phragmites information at meeting, Lakeside Park 8/9
- GLRI Phragmites control project monitoring workshop, The Ridges Sanctuary 8/19
- Clark Lake “Phrag Phest” Phragmites workday, 9/10
- Northern Jacksonport, .04 acre treated through volunteer lead project, 9/20
- Bjorklunden, head grounds docent organized and treated one acre of Phragmites, September
- Clar-lin Road, Clay Banks, .1 acre treated through volunteer lead project, 9/30, 10/3
- Phragmites mapping workshops, Tornado County Park, 11/11 and 11/12
- Phragmites mapping workshop, Sugar Creek Park 11/20

#### Other Aquatic Education and Outreach Initiatives

- Eurasian Marsh Thistle control, Bedrock Beach SNA, 6/23, 6/29
- Treatment of Crown Vetch at Ridges Beach, July
- Japanese Knotweed workshop, Crossroads at Big Creek, 8/31
- Japanese Knotweed workshop, Martin Park, Sturgeon Bay 9/7
- Eurasian Marsh Thistle control, Ridges Sanctuary boardwalk, 9/10



Phragmites Mapping, Little Sturgeon Bay, 3/7

#### Outreach Events, Presentations and Steward Enrichment

Used DCIST monthly email to promote DCIST and invasive species initiatives throughout Door County for volunteer labor, potential policy changes, new state and federal regulatory action, invasive species information, and best management practices. The DCIST listserv reaches over 900 recipients including interested citizens, local and regional coordinators and land managers. Communication duties also included following up with individuals with questions utilizing the DCIST phone hotline. Other outreach included:

- Hosted an Aquatic Pesticide Application Study Group for 7 volunteers, January 2011
- Aquatic Invasive Species Northeast region meeting attendance, 1/19
- DCIST booth at the Door County Sports Show, Quietwoods RV Center, 3/19-21
- Designed two invasive species management plans for local volunteer leaders; Bjorklunden and Gibraltar Parks and Land, to set education and biodiversity goals for the 2011 and 2012 seasons
- Invasive species identification training presentation, Gibraltar fires station, 5/7
- DCIST outreach booth at Festival of Nature, 5/26-28
- Sturgeon Bay Parks LTE invasive species training, 6/17

- DCIST Steering Committee presentation on roles and fieldtrips, Washington Island, 6/22
- Attended AIS strategic planning meeting with regional AIS coordinator, Green Bay, 6/27
- DCIST outreach booth at the Baileys Harbor Independence Day celebration, 7/4
- Presentation at the Liberty Grove Homeowners association meeting, 7/29
- DCIST presentation at Chambers Island Association meeting, Chambers Island Lighthouse, 8/6
- DCIST presentation on WDOR, as part of Master Gardener time slot, 9/15
- Cooperative Weed Management Areas (CWMA) presentation “Door County Invasive Species Team; Educating Land Stewards”, at the North Central Weed Science Society/Invasive Plant Association of Wisconsin/Midwest Invasive Plant Network conference, Milwaukee WI, 12/14

## **LANDOWNER SITE VISITS**

### **2010**

The Door County Invasive Species Team (DCIST) Coordinator focused, in 2010, on performing more one-on-one landowner site visits. Visiting with individual landowners is a way to tailor educational outreach to individuals regarding natural history, ecological processes, and the threat of exotic species establishment. DCIST is aimed to educate individuals about the natural world that exists in “their own backyard”. Door County has many shoreline landowners given the large amount of shoreline the county has.

Landowner site visits occurred throughout the county and within six different LODs, including The Southern Lake Michigan Shoreline, Bay Shore Bluff lands, The Ridges/Toft Point/Mud Bay/North Bay, Little Sturgeon/Brussels/Gardner Swamp (Ahnapee Corridor), Fish Creek/Peninsula State Park, and Sister Bay. A total of twenty-two individual landowners were met with and educated about ecological processes and the threat and ID of exotic invasive species in their own backyard and/or business.

### **2011**

Land owner visits have been highly successful in educating landowners using their own private property as a platform for learning about biodiversity. Whether regarding a particular invasive species concern or naturalist guided identification, the one on one contact is first step to early detection or identifying control resources. Individual land owner visits have been very effective in educating the public because many Door County landowners are second home owners and are available only at certain times, inhibiting them to attend workshops. Likewise, when a specific inquiry is presented to the coordinator, action is more likely to take place because the landowner shows initiative themselves. For instance, many of the landowner visits particularly involving Phragmites issues, a local contractor was contacted within one days time to treat private property clones.

22 land owner visits took place during the 2011 season. 15 of these meetings stimulated control efforts, generated volunteer interest/hour match, secured outreach opportunities to a larger audience, and utilized DCIST knowledge and resources.



Phragmites Mapping Washington Island, 4/9-10

## **PRESENTATIONS**

### **Monthly DCIST Meetings**

### **2010**

- May 25<sup>th</sup>: Moonlight Bay, A Success Story of Phragmites Control, Baileys Harbor Town Hall
- June 15<sup>th</sup>: River Alliance of Wisconsin presents on Project RED, Riverine Early Detection, Aquatic Invasive Species, Forestville Town Hall
- July 15<sup>th</sup>: Contractor Meet and Greet, presentation by Carrie Webb on shoreline regulation and permitting

- August 26<sup>th</sup> : DCIST Mapping initiative kick-off, presentation by Paul Mahlberg on Eurasian Water Milfoil mapping project on Kangaroo Lake
- October 18<sup>th</sup>: *Geomyces destructans* (White-nose) addition to NR40 and the risk to Wisconsin cave dwelling bats, presentations by Bob Bultman and Rich Novy. Discussions on laying the framework for dealing with this invasive species politically and ecologically.
- November 15<sup>th</sup>: Discussing Bio-Controls, presentations by Brock Woods (purple loosestrife) and Wade Oehmichen (spotted knapweed)
- December 13<sup>th</sup>: Volunteer recognition and award ceremony and end of year social event.

## 2011

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- March 14<sup>th</sup>: DCIST 2011, an Overview of Plans. Held at Crossroads at Big Creek.
- April 18<sup>th</sup>: “Shorelines”. Held at Crossroads at Big Creek. Program description: UW-Milwaukee School of Freshwater Science professor Val Klump on large scale Great Lakes ecological issues; Carrie Webb (WDNR) on shoreline maintenance permitting; and AMBLE (avian botulism) volunteer monitoring opportunity “kick off” presentation by Jenny Chipault, USGS.
- May 16<sup>th</sup>: Citizen Lakes Monitoring Training, and existing AIS projects on Door County Lakes. Held at the Baileys Harbor Town Hall. Presentations by Paul Schumacher (Clark Lake) and Paul Mahlberg (Kangaroo Lake) on AIS monitoring and control projects on Door County lakes. Lakes monitoring training presented by AIS regional managers Danielle Sippel and Brenda Nordin.
- June 20<sup>th</sup>: Outdoor Recreationalist and Land Manager Prevention of Invasive Species Spread. Held at Crossroads at Big Creek. Presentation by Courtney LeClair.
- July: “Restoration Month”
  - July 21. Held at Baileys Harbor Town Hall. Nancy Aten (Restoration Ecologist, Landscapes of Place) presented on restoration activities in Milwaukee (Hank Aaron Trail, Menominee Valley) and Bayshore Blufflands (Private property and Door County Land Trust), as part of The Ridges Sanctuary Thursday night “Lake Lessons”.
  - July 28. Dean Volenberg (UW-Extension) and Melissa Curran (Stantec Consulting). Held at The Ridges Sanctuary. Presentation of chemical formulations, families, dilutions, application timing, and local and literature sources. Participants included local contractors, LTE’s from various natural resource management agencies, and volunteer stewards involved in control projects.
- August 22<sup>nd</sup>: Know Your Umbels. Held at Crossroads at Big Creek. A “hands on” meeting deciphering the differences between various blooming umbels in Door County and their sometimes hazardous look-alikes.
- September 26<sup>th</sup>: Invasive Earthworms. Held at Crossroads at Big Creek. Presentation by Bernie Williams (WDNR) on the threat of biodiversity loss to peak climax deciduous forests, and invasive vegetation establishment facilitated by Eurasian earthworms. Prevention actions highlighted were cleaning shoe treads and disposing of fishing bait in the trash.
- November 20<sup>th</sup>: DCIST Planning Meeting. Held at Bjorklunden. Presentation by Jane Whitney, head docent at Bjorklunden, on IS treatment planning and execution at Bjorklunden. Attendees included area land managers, volunteer stewards and regional coordinators. Discussed community interests, needs and possible DCIST resources.
- December 19<sup>th</sup>: 2011 Volunteer Awards and end of season celebration. Held at Crossroads at Big Creek. Brief presentation on DCIST history by Jamie Forest, former DCIST coordinator. 9 awardees, each of them leaders in nine landscapes of distinction throughout county.

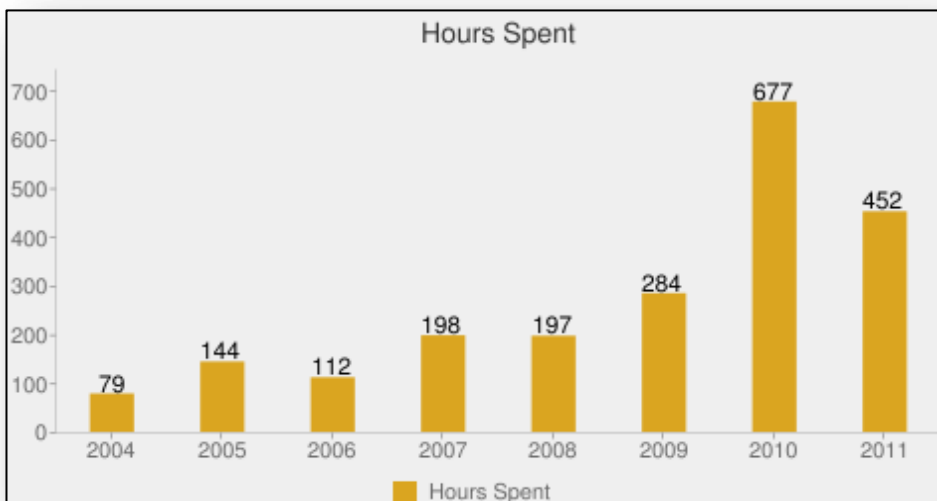
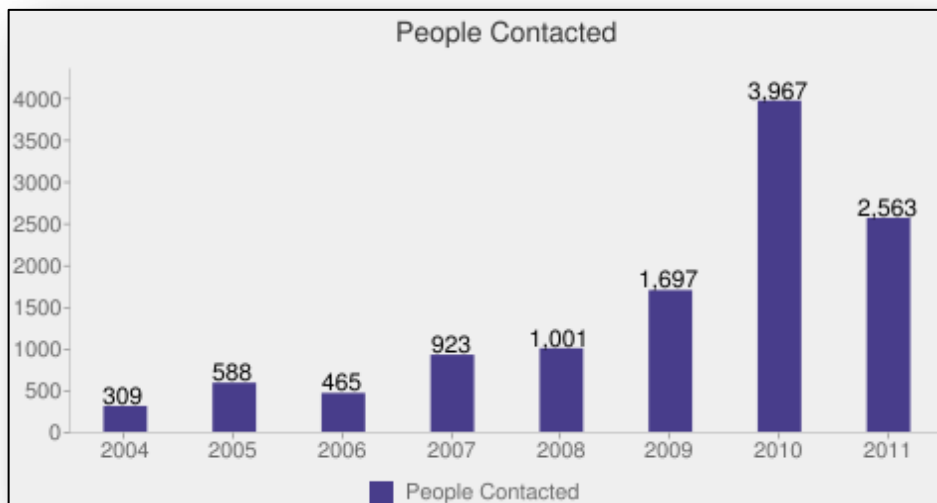
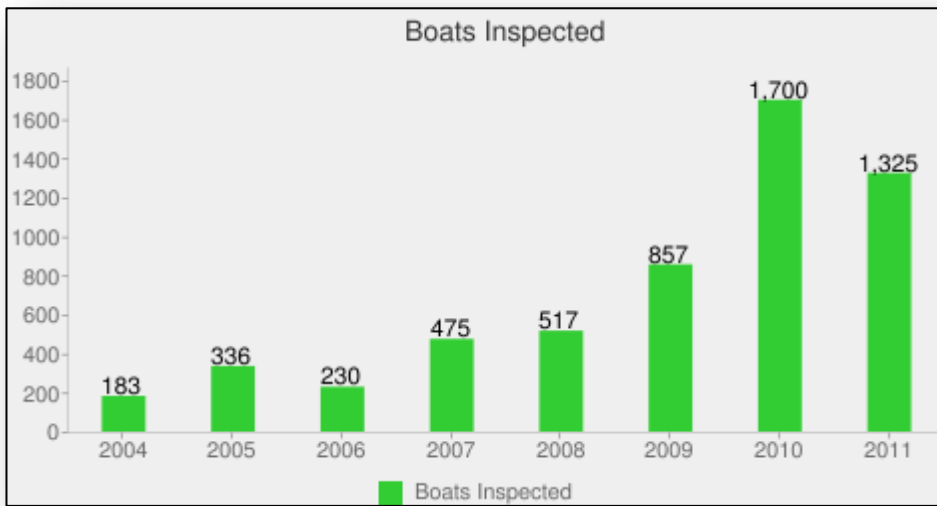


Invasive Earthworms Meeting, 9/26/11

## WATERCRAFT INSPECTION / Clean Boats, Clean Water (CBCW)

### Door County, summer 2010 Watercraft Inspections

Door County was able to hire a Limited Term Employee (LTE) to take on the responsibilities of watercraft inspections at many boat launches throughout the 2010 and 2011 summers. Below are graphs showing total number of boats inspected, people contacted, and hours spent towards watercraft inspections for Door County.



## AQUATIC INVASIVE INFORMATION AND DISTRIBUTION

Information on DCIST natural resource and invasive species identification are constantly distributed through contacts made through e-mail, phone calls, and at outreach events. The DCIST Coordinator participated in various public and professional events to communicate, network, and participate, educate the community and ourselves, and plan for future endeavors.



Jane Whitney, Bjorklund  
Phragmites control, 9/1

DCIST participated in a total of twenty outreach events in 2010. Some of these events included, but are not limited to: Booth's at The Festival of Nature, the Baileys Harbor 4<sup>th</sup> of July Celebration, Kangaroo Lake Association Meeting, Clark Lake Association Meeting, Gibraltar Parks, Ahnapee River Watershed Alliance Meeting, and more. There were also several presentations given and presence at many meetings throughout 2010 in Door County.

## ADDITIONAL GRANTS

A variety of funds were sought during the project timeline. Grant applications were submitted for the following grants, not all of the applications were selected for funding. The grants applied for include:

National Fish & Wildlife Foundation-

Sustain Our Lakes Community Grant

**United States Forest Service-**

**Non-Native Invasive Plant Species Control**

**Lakeshore Natural Resource Partnership- Detroit Island/Washington Island Phragmites Control**

**Wisconsin Coastal Management Grant (2) - Invasive Species Education/ Control**

\*Those listed in bold, or grants that were awarded

## VOLUNTEER HOURS and IN-KIND MATCH

Several in-kind donations were collected during the project including in-kind staff support, volunteer hours, and use of equipment.

Upon project completion over \$47,000 in In-kind SWCD staff support was donated to the project. Over \$23,000 in Volunteer hours were recorded, and over \$11,000 in donated equipment was used towards aquatic invasive species education, prevention, control, and planning in Door County Wisconsin.

## PARTNERSHIPS AND GRANT COLLABORATION

- DNR, Great Lakes Restoration Initiative (GLRI)

The DCIST coordinator was able to fulfill the need of the largest Phragmites control project to take place in Wisconsin with local stewards and volunteer interest. Volunteer efforts were used to map many of the exotic Phragmites populations within conservation opportunity areas (COA's) that were targeted for treatment under a Phragmites and Lyme Grass control GLRI. This enabled volunteers to maintain a good understanding of the area they are stewards for, or offered them an opportunity to explore another area of the County they had not been. Their time assisted the project coordinators by allowing them to more accurately allocate time and funds for control to take place. Many of the Phragmites mapping workshops were targeted for acquiring information for this project, but also went toward baseline inventorying to track the expansion of exotic Phragmites growth seasonally, or monitor the success of control treatments. This data is accessible and readily available for collaborators and private business contractors.

- UW-Extension, Great Lakes Early Detection Network (GLEDN)

Three invasive species workshops were held presenting the data sharing application and predictive map features of GLEDN, a database and communication device prepared to launch at the start of 2012. Purpose

development out of the Early Detection-Rapid Response principle, and utilized volunteer citizen scientists to identify and monitor the presence, absence and rates of establishment of three invasive species commonly found in Right of Ways.

- The Ridges Sanctuary, Baileys Harbor 6/27
- Arts and Nature Center, Washington Island 6/27
- LaSalle Park, Clay Banks 6/28

\*Due to the success of volunteer education and useful data collection through

Mapping, the coordinator suggests that DCIST might look into focusing their interest in early detection and mapping databases.

There are a variety of successful mapping databases used by land managers with volunteer interactive capabilities as well, like EDDmaps, MISIN, WIMS, and GLEDN. Due to the large amount of trained botanists and naturalist volunteers that exist in Door County, this would be a good way to employ local skills and empower those stewards.



Sawyer School Students, 6/7/11

- USGS

Wildlife biologist Jenny Chipault of USGS coordinated with DCIST outreach to acquire contacts for launching citizen science program “AMBLE” (avian botulism shoreline monitoring program). Joint workshops were held to educate volunteers to identify invasive species they might see on shoreline monitoring tasks, and how to report them to DCIST, along with AMBLE monitoring protocol.

- Washington Island, town hall 5/19
- Newport State Park, Ellison Bay 5/20
- Crossroads at Big Creek, Sturgeon Bay 5/21

- UW-Extension

DCIST partnered with UW-Extension through a variety of areas during the 2011 season. Our agricultural weed counterpart, Dean Volenberg of the Door UW-Extension office was a great help in connecting with the Master Gardeners program. With this network we were able to educate over 70 second grade students on the effects of invasive earthworms during a Master Gardner educational program. The extension agent lent his time and knowledge of chemical pesticide uses, mixing and application to collaborate on a restoration workshop. The coordinator and extension agent collaborated on an ongoing buckthorn control research project that was presented at the North Central Weed Science Society/Invasive Plant Association of Wisconsin/Midwest Invasive Plant Network conference in December 2011.