

# Bone Lake AIS Management

presented by Phil Foster, Karen Engelbretson, Bob Boyd

Wisconsin Lakes Convention March 18, 2009

**Bone Lake**  
**Polk County**



■ Towns and Villages  
■ Lakes, Rivers, Streams



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## Bone Lake

- 1,781 Acres
- Total shoreline: 12.5 miles
- Maximum depth: 43 feet
- Properties: appx. 450



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## Agenda

- AIS Management: How we got started
- AIS education
- Lake monitoring
- Prevention and contingency

Photo: Karen Engelbretson

## How we got started

Phil Foster

- **Formed an AIS Committee of 8 volunteers**
- **Set four goals**
  1. Education of lakeshore property owners
  2. Lake monitoring program
  3. Clean Boats Clean Waters (CBCW) boat inspection program
  4. Contingency planning

## How we got up to speed

- **We learned from others...**
  - Wisconsin DNR
  - Polk County LWRD
  - Wisconsin Association of Lakes (WAL)
  - Surrounding lakes' organizations
  - County-wide lakes group  
Polk County Ass'n of Lakes and Rivers (PCALR)

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## AIS Grants: Funding Is Important

### ■ 2006-2008 for AIS Education and Prevention

Est.	\$28k
Grant	\$14k (50%)
Spent	\$14k
Donated	\$15k (1900 volunteer hours)

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## AIS Grants: Funding is important

### • 2009-2011 for AIS Education and Prevention and Control

Prevention	\$30k
with \$17k volunteer time	
Control	\$52k
Grant	\$62k (75%)

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## AIS grants: What we learned

- DNR very helpful
- Don't be conservative on \$ estimates
- Track all your volunteer time
  
- Organization
  - Establish a committee vs. one or two individuals
  - Delegate responsibility and authority
  - Most property owners want to help protect their lake

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## AIS Education

Karen Engelbretson

- Increase awareness of AIS threats
  - Upgrade signage at public landings
  - AIS information sessions for lakeshore property owners
  - Custom handouts for resorts and visitors
  - Newsletter and website communications

## Upgrade signage at public landings

North Landing

**Clean your boat and equipment to prevent the spread of invasive species...**



**Before you leave a body of water:**

- Remove any visible mud, plants, fish or animals before transporting equipment.
- Drain water from boat, motor, bilge, live wells and bait containers before leaving the water access.
- Dispose of unwanted bait in the trash, not in the water.
- Clean and dry anything that comes into contact with water: boots, trailers, equipment, clothing, traps.
- Never release plants, fish or animals into a body of water unless they come out of that body of water.
- Wash your boat with hot water, go through a car wash, or dry your boat and equipment for 5 days before entering another lake.

**PLEASE DON'T POWERLOAD. Use your winch.**

**STOP AQUATIC HITCHHIKERS!**

**IT'S THE LAW!**

Effective May 2002, Section 20.715(9) Wis. Stats. prohibits launching a boat or placing a boat or trailer in navigable waters of a lake except plants or a notice is posted.

© Message from State Lake Management (2009)



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## Upgrade signage at public landings

North Landing

**HELP PREVENT THE SPREAD OF AQUATIC INVASIVE SPECIES**

<p><b>Curly Leaf Pondweed</b></p> 	<p><b>Excessive Water Hyacinth</b></p> 	<p><b>Purple Loosestrife</b></p> 	<p><b>Rusty Crayfish</b></p> 
<p><b>Spiny Water Flea</b></p> 	<p><b>Zebra Mussels</b></p> 	<p><b>Spiny Water Flea</b></p> 	<p><b>Spiny Water Flea</b></p> 

**STOP AQUATIC HITCHHIKERS!**

**IF YOU FIND AN AQUATIC INVASIVE PLANT OR ANIMAL, DO NOT LAUNCH OR REMOVE IT FROM THE WATER. REPORT IT TO THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES.**

**Thank you for helping prevent the spread of aquatic invasive species in Wisconsin's lakes.**

**Polk County Sheriff 715-485-8300 (non-emergency)  
EMERGENCY DIAL 911**



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## Upgrade signage at public landings



South Landing:  
One-sided sign

Signs at private landings were reviewed and updated to DNR standards and to include the new Polk County "Illegal to Transport" ordinance

### Donations

Kiosk design & construction: Chuck Adleman, Brian Riley, and Bone Lake Builders  
Sign content and design: Karen Engelbretson, KJE Design LLC

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## AIS Information Sessions

### June 2006

- Hand delivered flyers to lakeshore properties
- CBCW inspection demonstration
- Live plant samples, including EWM, for education
- 33 attendees, half signed up as CBCW volunteers



### June 2007

- Mailed announcement to lakeshore property owners
- Guest speaker from Loon Watch
- 62 attendees
- 28 new volunteers, 12 CBCW, 16 lake monitoring

*Those attending interested and engaged in AIS prevention*

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## Custom handout for resorts and visitors

*Designed for anglers and recreational boaters*

- Distributed to resorts for their guests and visitors
- Grouped with DNR and UWEx handouts at boat landing during CBCW inspections
- Stocked in boat landing kiosk information box

*Printed on waterproof paper for durability and longevity*



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## Newsletter and Website Communications

- Create new web site
  - Lake monitoring info
  - Detailed invasive species info
  - [www.bonlakewi.com](http://www.bonlakewi.com)
- Newsletter articles
  - Monitoring
  - AIS
  - Water quality
  - Volunteer recognition



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## Lake Monitoring

Bob Boyd

- Look for Aquatic Invasive Species
  - Eurasian Water Milfoil (EWM)
  - Zebra Mussels
  - Rusty Crayfish
- Track the spread of Curly Leaf Pondweed (CLP)
- Inventory Aquatic Plants

## Looking for aquatic invasive species

### ■ Team training

- Conduct training workshop based on protocol from WAL
  - Plant ID
    - Live plant samples
    - *Through the Looking Glass* book
- On-the-job training with Bob Boyd, standardized protocol
  - Lakeshore area assignments & monitoring teams
  - Using data collection forms
  - Collection techniques
- Tools for collecting and identifying plants
  - Custom rake
  - Binder with laminated color photos of plants common to Bone Lake

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## Looking for AIS

- Learning from live plant samples is essential to plant identification in the field



Photos: Karen Engelbretson

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## Looking for AIS

### Monitoring assignments

- Line of sight and depth
- GPS and Waypoint mapping



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## Track the Spread of Curly Leaf Pondweed



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## Inventory Native Plants

- Volunteers identify 36 different native plants
- Quantify native plants
- Refine our protocol



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Photo: Bob Korth

## Our Monitoring Protocol

- Bag and tag unidentifiable plants
- Bring to lake monitoring coordinator
- ID through Polk County LWRD biologists
- ID through WIDNR biologists



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## Some Statistics

■ 2006	12 Teams	26 Members
■ 2007	20 Teams	60 Members
■ 2008	20 Teams	50 Members

Plus four *Special Forces* teams

*Monitoring volunteers take samples in high risk areas.  
Over 350 samples taken.*

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Phil Foster

## Prevention & Contingency Programs

- Clean Boats Clean Waters (CBCW) inspection program
- AIS contingency control plans

### Clean Boats Clean Waters

- Overview and training
- Fishing tournaments
- Handouts
- 2009 inspections by high school students  
50% community service hours, 50% paid



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## AIS Contingency Plans

- **EWM Plan**
  - Completed, copies available
  - Includes rapid response protocol
  - EWM buoys ready to deploy
- **New Plans**
  - Purple Loosestrife plan, underway

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## Volunteer Recognition

- Appreciation luncheon
- Bone Lake appreciation T shirts
- Lake monitoring caps
- CBCW T shirts and caps
- Public recognition in newsletters and website



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**Credits:**

Produced by the Aquatic Invasive Species Committee of Bone Lake Management District, Polk County, WI, Phil Foster, Chair. Graphic design and production by Karen Engelbretson, KJE Design LLC, Stillwater, MN.

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