Aquatic Invasive Species in Little Silver, Beans & Big Hills Lakes, Waushara Co.

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Golden Sands RC&D
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Waushara County AIS surveys

All Waushara County public lakes surveyed in 2013.

Objectives:

Detect early populations of AIS
Map locations of these (GPS)
Involve interested lake residents
Work with residents to remove/control AIS
Create list of native plant species observed
Known Little Silver Lake AIS

• Banded mystery snail (*Viviparus georganus*) (2009-RC&D)
• Curly leaf pondweed (*Potamogeton crispus*) (2009-RC&D)
• Flowering Rush (*Butozus umbellatus*) (2013- RC&D)
Little Silver Lake – Waushara County AIS survey results
July 12th, 2013
Conducted by Kaycie Stushek & Paul Skawinski, Golden Sands RC&D
During the course of the survey, observed native aquatic plants were also recorded.

AIS & Aquatic Plant List (AIS highlighted in red and marked with an asterisk*)
*Banded mystery snail
Slender naiad
Muskgrass (Chara contraria)
Fries’ pondweed
White water lily
Sago pondweed
Broad-leaf cattail
*Curl-y leaf pondweed
*Flowering rush
Northern watermilfoil
Flat-stem pondweed
Common waterweed
Water smartweed
Broad-leaf arrowhead
Hardstem bulrush
Variable pondweed
Water stargrass
Common duckweed
Large duckweed
Horned pondweed
Water smartweed
Turion duckweed
Watermeal

Notes:
Flowering rush located in a small patch immediately east of the boat landing. Hand-removal is recommended for this population.
Curly-leaf pondweed is located across from the boat landing at the first floating dock, and continues into the small channel on the west side of the lake. A few other small patches were observed on the north and south sides of the lake. Mostly oligotrophic, sandy lake, with very few plants occurring on the east half of the lake.
Little Silver Lake
Known Beans Lake AIS

- Banded mystery snail (*Viviparus georganianus*) (2013-RC&D)
- Purple loosestrife (*Lythrum salicaria*) (2014)
Beans Lake – Waushara County AIS survey results
June 20th, 2013
Conducted by Paul Skawinski and Andy Teal, Golden Sands RC&D
During the course of the survey, observed native aquatic plants were also recorded.

AIS & Aquatic Plant List (AIS highlighted in red and marked with an asterisk*)
Common bladderwort
Northern watermilfoil
Variable pondweed
Illinois pondweed
Southern naiad
Slender naiad
Water smartweed
Lake sedge
Bright green spikerush
Striped white water lily
Hardstem bulrush
Fries’ pondweed
Flat-stem pondweed
Creeping bladderwort
Bullhead pond lily
Stiff pondweed
Floating-leaf pondweed
Common waterweed
Coontail
Sago pondweed
Needle spikerush
Native Phragmites
Aquatic moss
Muskgrass (1 species found: C. contraria)
Blue flag Iris
Broad-leaf cattail
Long-leaf pondweed
*Banded mystery snail

Notes:
Lake level is highly variable. This year, lake was close to the ordinary high water mark.
Known Big Hills Lake AIS

• Eurasian watermilfoil (*Myriophyllum spicatum*) (1979)
• Hybrid Eurasian/Northern watermilfoil (*Myriophyllum spicatum* x *sibiricum*) (2013)
• Banded mystery snail (*Viviparus georganus*) (2008)
• Chinese mystery snail (2013) – needs voucher
Big Hills Lake, Waushara County AIS survey results
July 16th, 2013
Conducted by Kaycie Stushek, Golden Sands RC&D
During the course of the survey, observed native aquatic plants were also recorded.

**AIS & Aquatic Plant List (AIS highlighted in red and marked with an asterisk*)**

Slender naiad
Illinois pondweed
Water celery
Muskgrass (1 species found – *Chara contraria*)
Variable pondweed
Southern naiad
Northern watermilfoil
Fries' pondweed
Floating leaf pondweed
Common waterweed
White-stemmed pondweed
Leafy pondweed
Flat stem pondweed
Sago pondweed

*Banded Mystery Snail
*Chinese mystery snail

Note: Our visual surveys focus on identification and mapping of aquatic invasive species. The native plant list is not intended to be a fully comprehensive list of native plant life in the lake.

**Notes:**
All milfoils found growing were northern watermilfoil, or milfoils that showed signs of a recent chemical treatment, leaving visual confirmation difficult. Spoke to landowner who pointed out treated areas. A possible hybrid Eurasian/northern EWM that showed signs of treatment was found in those locations. Banded mystery snails and Chinese mystery snails were abundant throughout the lake. There was also a large native snail population.
Eurasian Watermilfoil
*Myriophyllum spicatum*

- First found in WI in 1960s
- Currently known in 674 WI waters (April 2014)
- Forms dense mats - interferes with water recreation
- Can spread from small fragments
Curly-leaf Pondweed
*Potamogeton crispus*

- Accidentally introduced as aquarium plant (1880s)
- Fairly widespread – known in 538 water bodies (April 2014)
- Active from October-June in most lakes
- Can form dense mats, interfering with recreation and native plants
Banded Mystery Snail

*Viviparus georgianus*

- Introduced via aquarium dumping
- Brown horizontal bands on shell
- Up to 1.5” tall
Phragmites, Common Reed
*Phragmites australis* subsp. *australis*

- European ornamental grass
- Uncommon in central Wisconsin. Abundant near Lakes Michigan and Winnebago
- Forms dense colonies
- Roots exude chemicals harmful to other plants and fish
Japanese Knotweed
Fallopia japonica

- Imported from Japan as an ornamental plant
- Resembles bamboo, but unrelated
- Can grow upland. Most problematic in wetlands
Purple Loosestrife

Lythrum salicaria

- Imported from Europe as an ornamental plant
- Millions of seeds dispersed every year
- Discourages other plants from growing
Flowering Rush
(*Butomus umbellatus*)

- Basal, triangular leaves, usually twisted. Produces bulbils on the rhizome.
- Native to Eurasia
What Golden Sands RC&D can do

- Distribute maps and native plant lists from lake surveys
- Confirm suspected AIS and process voucher specimens
- AIS Monitoring / on-the-water Plant ID Training
- AIS removal training and assistance
- Host Clean Boats, Clean Waters workshops
- Provide educational materials on AIS
- Assist with grant application and permit development
- Coordinate purple loosestrife biological control projects
AIS Monitoring / Plant ID Training

Learn how to:

Identify AIS

Distinguish similar native species

Monitor for AIS in your lake
  - where to look
  - when to look
  - how to look

FREE
AIS Removal Training and Assistance

Species covered:

• Eurasian watermilfoil (manual removal)
• Curly-leaf pondweed (manual removal)
• Flowering rush (manual removal)
• Japanese knotweed (chemical removal)
• Phragmites (chemical removal)

Goal of self-sufficiency for future monitoring and removal
AIS Removal Training and Assistance

Japanese knotweed

FREE
AIS Removal Training and Assistance

Eurasian watermilfoil
Purple loosestrife biocontrol

We provide:
• free supplies
• rootstocks for pick-up
• beetles for pick-up
• coordination and instruction

FREE
Purple loosestrife biocontrol

Volunteers set up pools, pots (add soil), and nets; monitor water levels; and add/release beetles
Clean Boats, Clean Waters Workshops

We can:
• Provide training to volunteers / paid inspectors (we can hire)
• LTE assistance at landings
• Can enter inspection data
Monitoring is essential to prevention

- Get trained on identification of AIS and look-alike native species
- Keep an eye out for AIS while fishing, boating, snorkeling, etc.
- Know who to contact with questions or suspected AIS specimens
- Finding invasives early is crucial for inexpensive, easy management (eradication?)
Questions?

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