Invasive plant is a big problem for lakes and ponds

Brazilian Elodea in Lake County, IL

Leonard Dane
Water Quality Specialist II
Environmental Services
Overview

- What is Brazilian Elodea
- Identification
- What are similar species
- Where does it come from
- Why it is bad
- How does it get around
- Lake County’s experience
- What was/is being done
Identification

- Leaves
  - Finely toothed
  - Arranged in whorls of 4 – 6
  - 1 – 3 cm long and up to 5 mm wide
- Branches formed at double nodes
- Small flower has 3 white petals and yellow center
Similar Species

- **American Elodea**
  - Native
  - Leaves
    - Arranged in whorls of 3 (occasionally 4)
    - 6 – 15 mm long and 1.5 – 4 mm wide

- **Hydrilla**
  - Exotic
  - Toothed midrib
  - Leaves
    - Arranged in whorls of 5
Brazilian Elodea

Egeria densa

Hydrilla

Hydrilla verticillata

Elodea

Elodea canadensis

whorls of 4-6

whorls normally of 5

whorls of 3

teeth on the midrib

Image courtesy of www.thewildclassroom.com
Where does it come from?

- Native to South America
- Distributed in United States
  - As Anacharis
  - Aquarium/aquatic nurseries
- Spreading to Midwest lakes and streams
- Until 2008, only known in 17 counties in Midwest and Ontario
Why is it bad?

- Could be the next Eurasian Watermilfoil!!
- Very invasive
- Decline in water quality
- Restrict water movement
- Reduce native plants
- Interfere with navigational and recreational uses
How does it get around?

- Released from aquariums
- Hitch-hiker on water garden plants
- Birds
- Boats/trailers
- Moves down stream
- Reproduces by fragmentation
  - Only male flowers in U.S. = no seeds
  - Must have double node
The Lake County Experience

- Discovered during the summer of 2008
- In detention ponds in the Village of Libertyville
- Consulting firm (Integrated Lakes Management) was doing routine pond maintenance
- ILM reported it to the New Invaders Watch Program
- Identification was confirmed by the Illinois Natural History Survey
The Lake County Experience
On January 22, 2009 the LCHD-ES conducted a site visit

Found it actively growing under 8” of snow covered ice
The Lake County Experience

- Coordinated with various groups
  - Village of Libertyville
  - Illinois Department of Natural Resources
  - Lake County Forest Preserve District
  - Illinois/Indiana Sea Grant
  - Midwest Invasive Plant Network
  - Integrated Lakes Management
  - Lake County Health Department – Environmental Services
The Lake County Experience

- Drafted a press release
- Mailed letters and informational material to all residents in the area along with all of our lake contacts
The Lake County Experience

- Village of Libertyville is working with an applicator to treat the ponds
  - High dose Floridone
  - Monitored throughout summer
  - Conducted bump-up and spot treatments as needed
  - Continue treatment program through 2010
  - Check the pond in spring of 2011
The Lake County Experience

- In the summer of 2009 the LCHD-ES conducted a survey of ponds and area waterbodies
  - Found it still in the large pond
  - Not found in other lakes/ponds/streams
The Lake County Experience

What’s Next

➢ Continue Education
➢ Continue monitoring
➢ Support the Village
Questions?