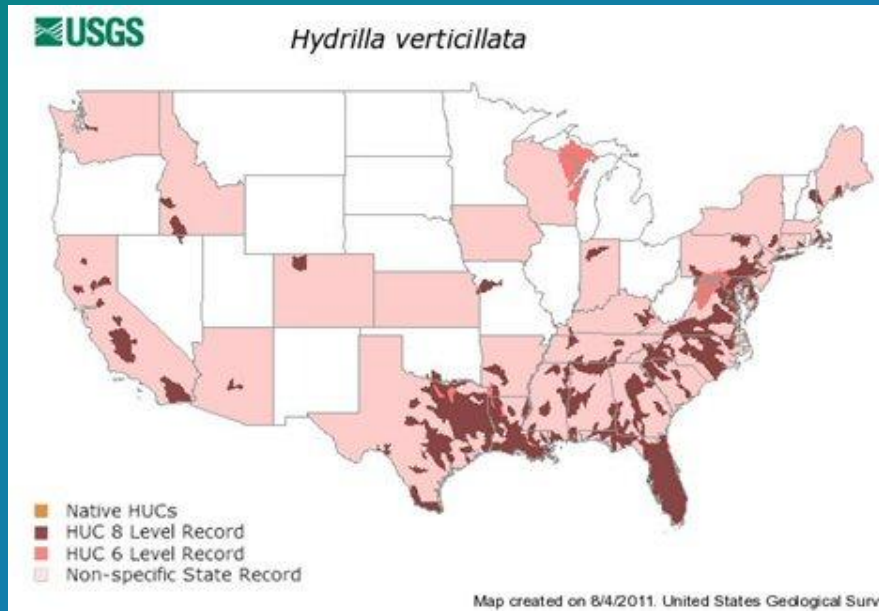


Hydrilla Early Detection Rapid Response Plan for Illinois



Kathleen Paap
Lake County Health Department

Why be worried? Hydrilla is not in Illinois yet.



Hydrilla verticillata

A “Most Wanted” Species



Rake with Hydrilla tubers
Photo by W.T. Haller
Center for Aquatic and Invasive Plants

- Federal Noxious Weed List
- Noxious weed and/or banned in at least 17 states
- Not currently regulated by Illinois

Important Species Characteristics

- Rapid growth
- Tolerates wide range of water quality and sediment composition
- Turions
- Tubers
- Vegetative spread



Why It's Important to Have a Plan NOW (or yesterday?!)

- Proximity of infestations
- Expense and difficulty of eradication and control
- Ecological impacts
- Recreational water use effects



Hydrilla Management Plan



- Statewide (though initial public outreach focus is on NE Illinois)
- Early Detection & Rapid Response
- Pools resources of public, nonprofit, and private sectors

Early Detection: *Hydrilla Hunt!*

- General public education and outreach
- Train targeted and “vested” public audiences (e.g., VLMP)
- Natural resource managers encouraged to participate
- Yields expanded monitoring and reporting
- Increased access to distribution information at regional and national levels



Hydrilla
Hydrilla verticillata
Photo by Vic Ramey
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Education and Outreach



Utilize existing outlets:

- Illinois EPA's Volunteer Lake Monitoring Program (VLMP)
- Illinois-Indiana Sea Grant
- Northeast Illinois Invasive Plant Partnership (NIIPP)
- River to River CWMA
- River Watch
- Illinois Lakes Management Association

Media



- Aggressive print, radio, and TV blitz planned
- Webpages on NIIPP website linked to partner organizations



Education and Outreach

Create *Hydrilla Hunt!* watch cards and posters targeted towards:

- Boaters
- Anglers
- Waterway visitors
- Water-related associations (e.g., sailboat clubs, homeowner associations, etc.)



Training Audiences



ID Sheets for More Advanced Monitors

- And providing ID information to YOU...

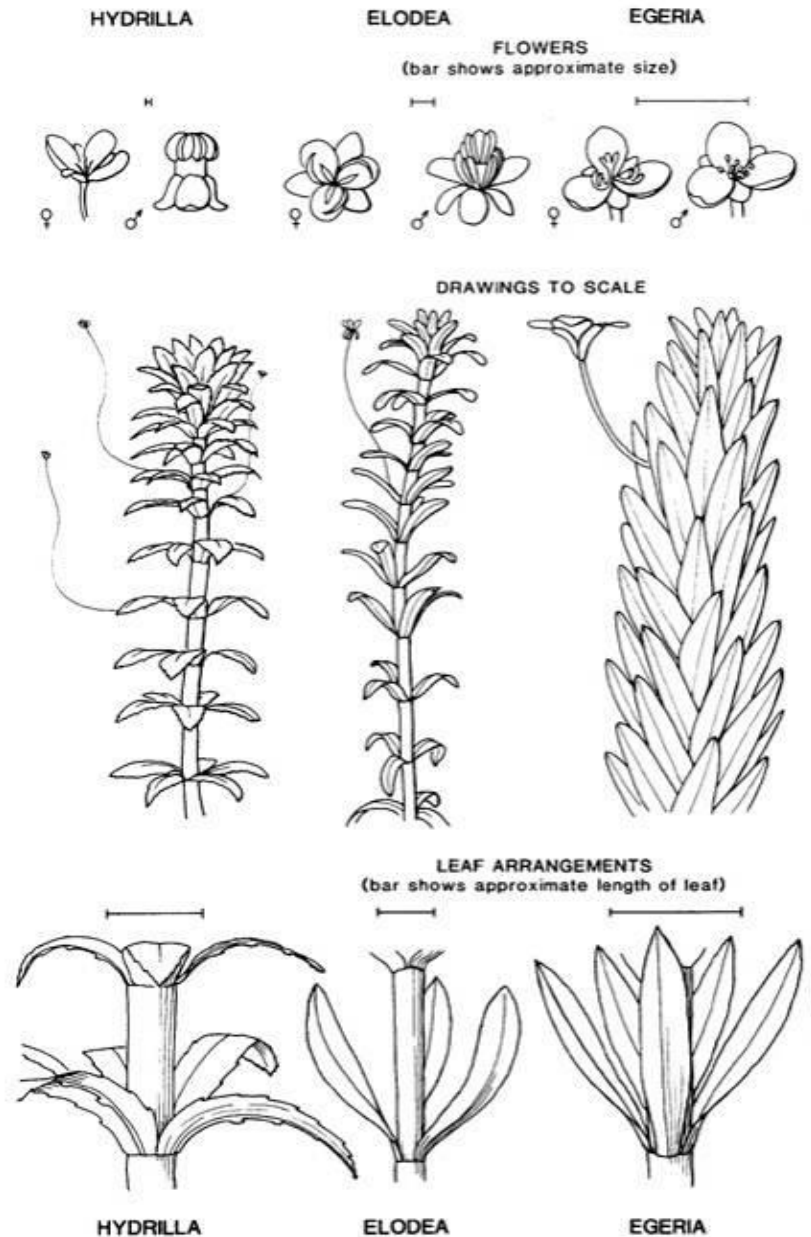


LOOK-ALIKES:

- **Hydrilla**; leaves in whorls of 3 - 8 with tiny spines along the leaf margins, the midrib of each leaf is often reddish, *Hydrilla* produces tubers (small potato-like structures).
- **Brazilian Waterweed**, *Egeria densa*; leaves longer, in whorls of 4 - 6 (8), bushier in appearance, without tubers.
- **Common Waterweed**, *Elodea canadensis*; leaves occur in whorls of 3 around the stem (or opposite), without tubers



Common Waterweed



Expanding Monitoring and Reporting

- Increased number of trained monitors
- Monitors already in an existing reporting system can utilize that system (e.g., New Invaders Watch)

The screenshot displays the 'New Invaders Watch Program' website. The page title is 'New Invaders Watch Program Early Detection and Rapid Response Network'. It features a navigation menu with links for 'About', 'Partners', 'Report an Invader', 'Target Species', 'Maps', 'Trainings & Activities', 'Training Materials', and 'Additional Resources'. The main content area is titled 'Target Species' and contains two columns of species lists: 'Target Species' and 'Spreading Target Species'. The 'Target Species' list includes: Baby's Breath - *Gypsophila* spp., Sericea Lespedeza, Chinese Lespedeza - *Lespedeza cuneata*, Giant Hogweed - *Heracleum mantegazzianum*, Flowering Rush - *Butomus umbellatus*, Hydrilla - *Hydrilla verticillata*, Brazilian Elodea - *Egeria densa*, Annual Stilt Grass, Japanese Grass - *Microstegium vimineum*, Giant Manna Glass - *Glyceria maxima*, Asian Longhorned Beetle - *Anoplophora glabripennis*, Chinese Yam, Air Potato - *Dioscorea oppositifolia*, Japanese Hops - *Humulus japonicus*, Mile-a-minute Weed - *Polygonum perfoliatum*, Kudzu - *Pueraria lobata*, Black Swallow-wort - *Cynanchum louiseae*, Pale Swallow-wort - *Cynanchum rossicum*, and Sawtooth Oak - *Quercus acutissima*. The 'Spreading Target Species' list includes: Spotted Knapweed - *Centaurea maculosa*, Leafy Spurge - *Euphorbia esula*, Japanese Knotweed, Japanese Bamboo - *Polygonum cuspidatum*, Silver Grass - *Miscanthus* spp., Oriental Bittersweet - *Celastrus orbiculatus*, Korean Pear, Bradford Pear, Callory Pear - *Pyrus calleryana*, and Emerald Ash Borer - *Agrilus planipennis*. A disclaimer at the bottom of the page states: 'Text and photos in these target species pages have been borrowed liberally from several government sources including the USDA (www.invasive.org), the US Forest Service, Michigan Depts of Agriculture & Natural Resources. Any errors here are our own.' The footer includes the logo for 'THE UNIVERSITY OF GEORGIA CENTER FOR INVASIVE SPECIES ECOSYSTEM HEALTH' and the text 'Developed by The University of Georgia - Center for Invasive Species and Ecosystem Health. Last updated on Monday, December 12, 2011 at 04:56 PM'. The browser's taskbar at the bottom shows several open applications, including 'Microsoft Excel - 532r', 'NIWPSKtanarrative...', 'NIW Photo Uploads...', 'New Invaders Watch...', and '1975503.pdf - Adobe...'.

Expanding Monitoring and Reporting



- General public, boaters, anglers, swimmers, etc. contact NIIPP via website
- Simplified initial reporting: the public emails photos (cell phone or camera)
- Team assesses photos; follows up with mailed-in samples and/or on-site visit

Increased Access to Distribution Information

Once verified, data will be entered into:

- New Invaders Watch database
- EDDMapS (Early Detection and Distribution Mapping System (a national repository for invasive species data housed at University of Georgia))

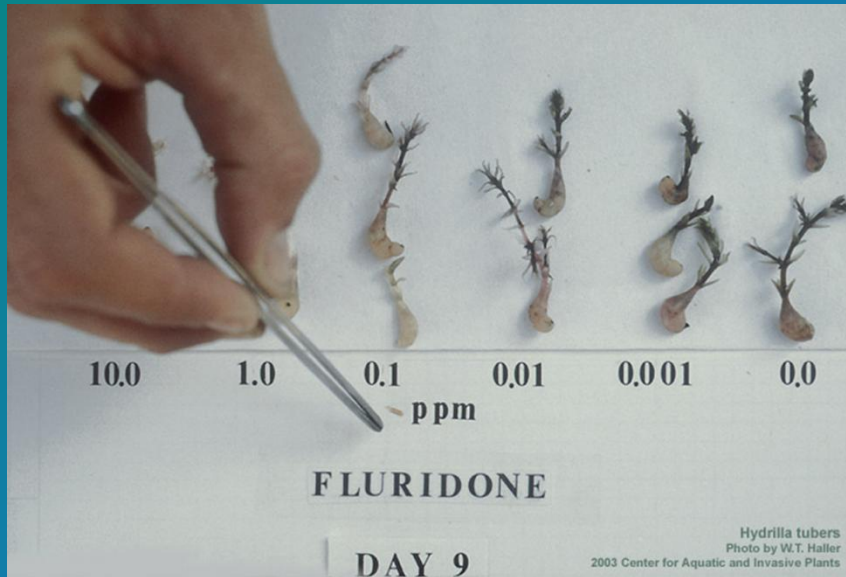


Rapid Response

- Convene Rapid Response Team
- Obtain any needed permits or permissions
- Increase capacity to respond to invasion (financially and legally)



Establish Response Team



- Memorandum Obligation Document (MOD) created among team members
- Establishes protocols and team members for conducting assessments
- Tiered level of response management/treatment
- Protocols and team for post-treatment monitoring also established

Obtain Permits and Permissions

- Currently exploring what authorities public agencies may have in the event of an infestation being discovered (*on both private and public properties*)



Increased Capacity



- Establishes an efficient network for communication and response coordination.
- Team member tasks clearly outlined in MOD
- Combined, multidisciplinary expertise
- Funds have been set aside for mechanical and/or chemical management

Current Partners

- **Chicago Botanic Garden** (*co-PI*)
- **Northeast Illinois Invasive Plant Partnership** (*co-PI*)
- **Lake County Health Department - Lakes Management Unit** (*co-PI*)
- Chicago Metropolitan Agency for Planning
- Illinois Department of Natural Resources
- Illinois Environmental Protection Agency
- Illinois-Indiana Sea Grant
- Illinois Wildlife Action Plan Invasive Species Campaign
- Integrated Lakes Management
- Lake County Forest Preserve District
- Loyola University
- U.S. Dept. of Agriculture - Animal and Plant Health Inspection Service



Thank you!

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