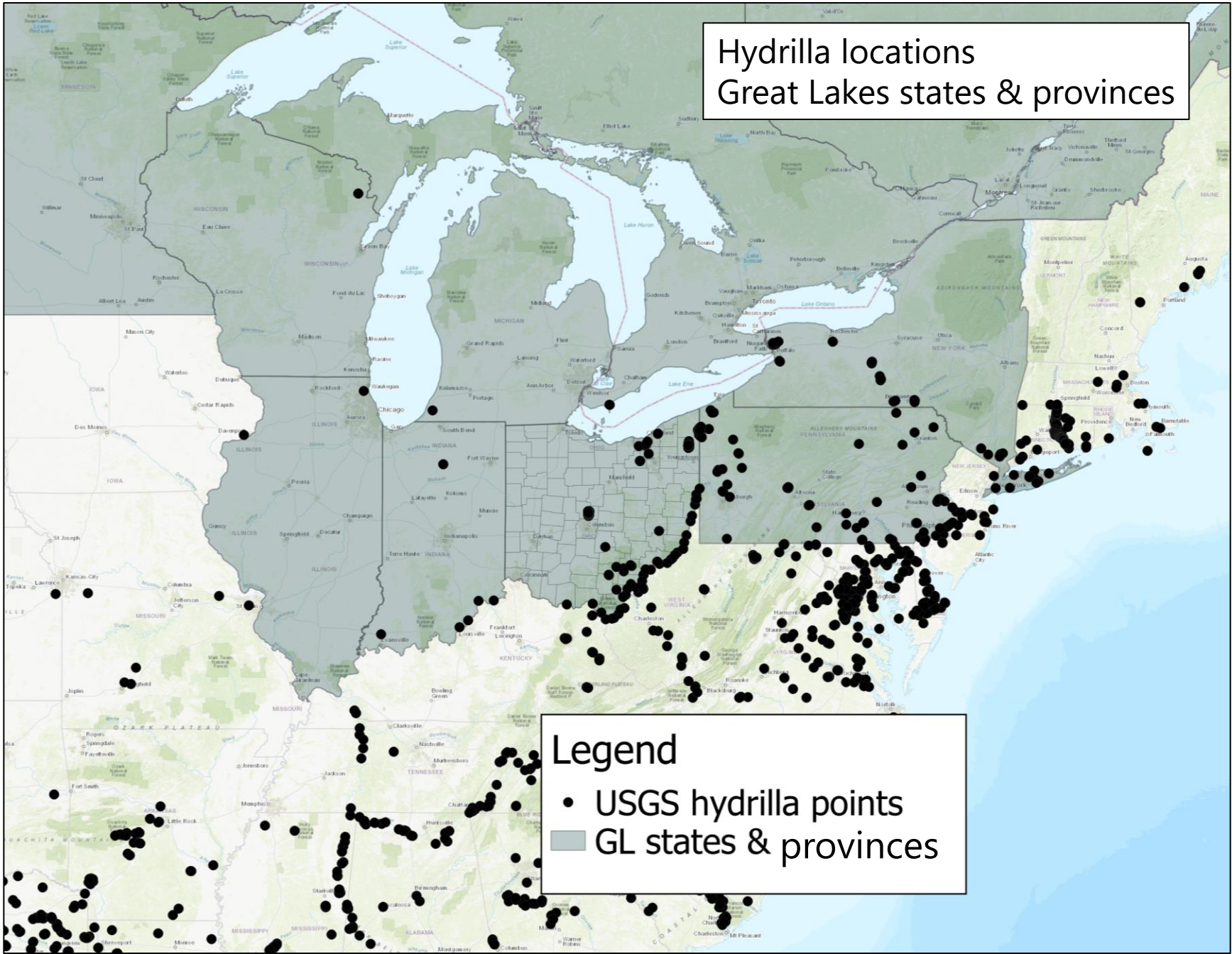




Aquatic Plant News
Mark Warman
Ohio Aquatic Invasive Species Committee
12/3/2024



Hydrilla locations Great Lakes states & provinces

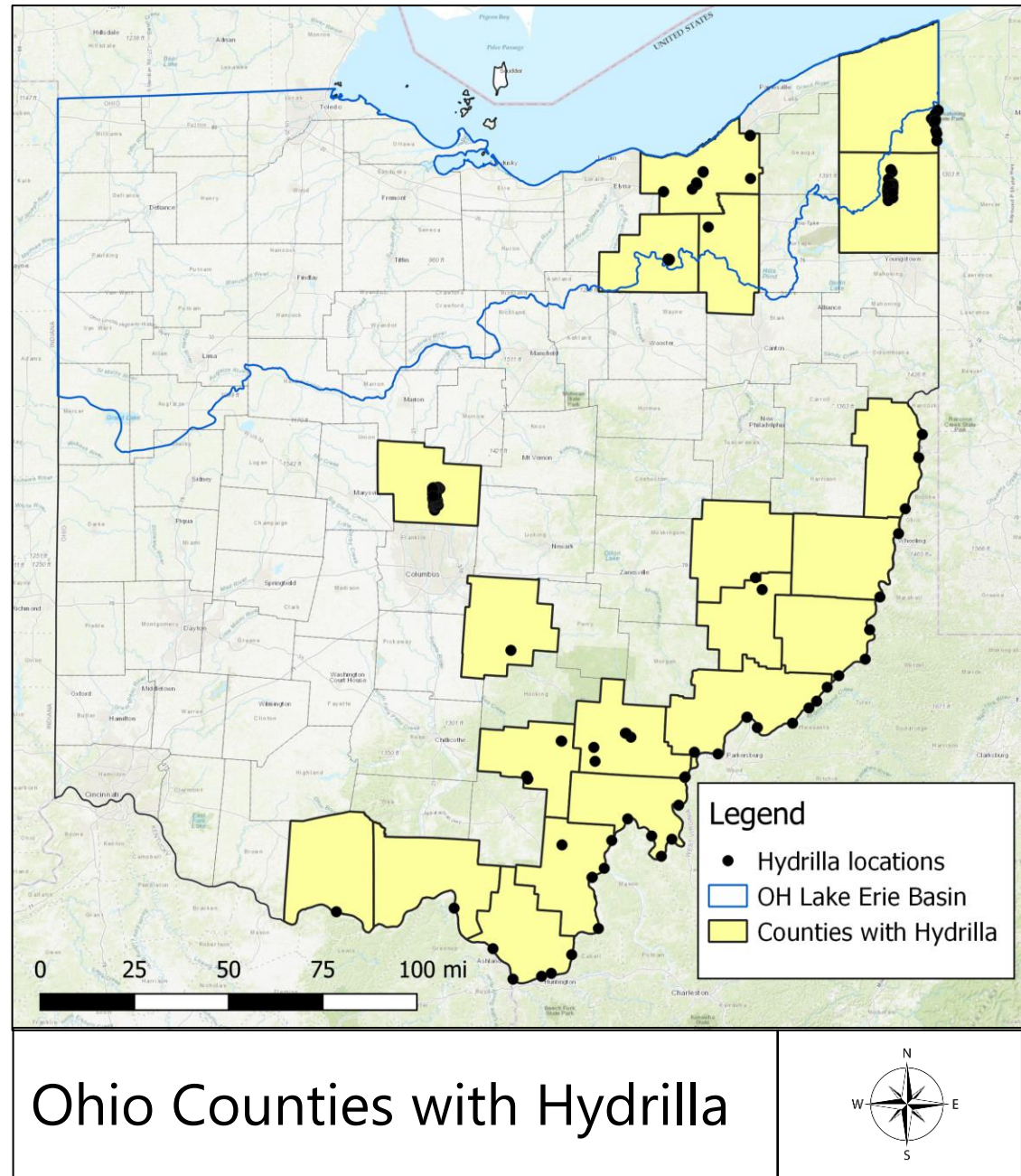


28 waterbodies

20 counties

10 state parks

Large public waterbodies
near Lake Erie drainage

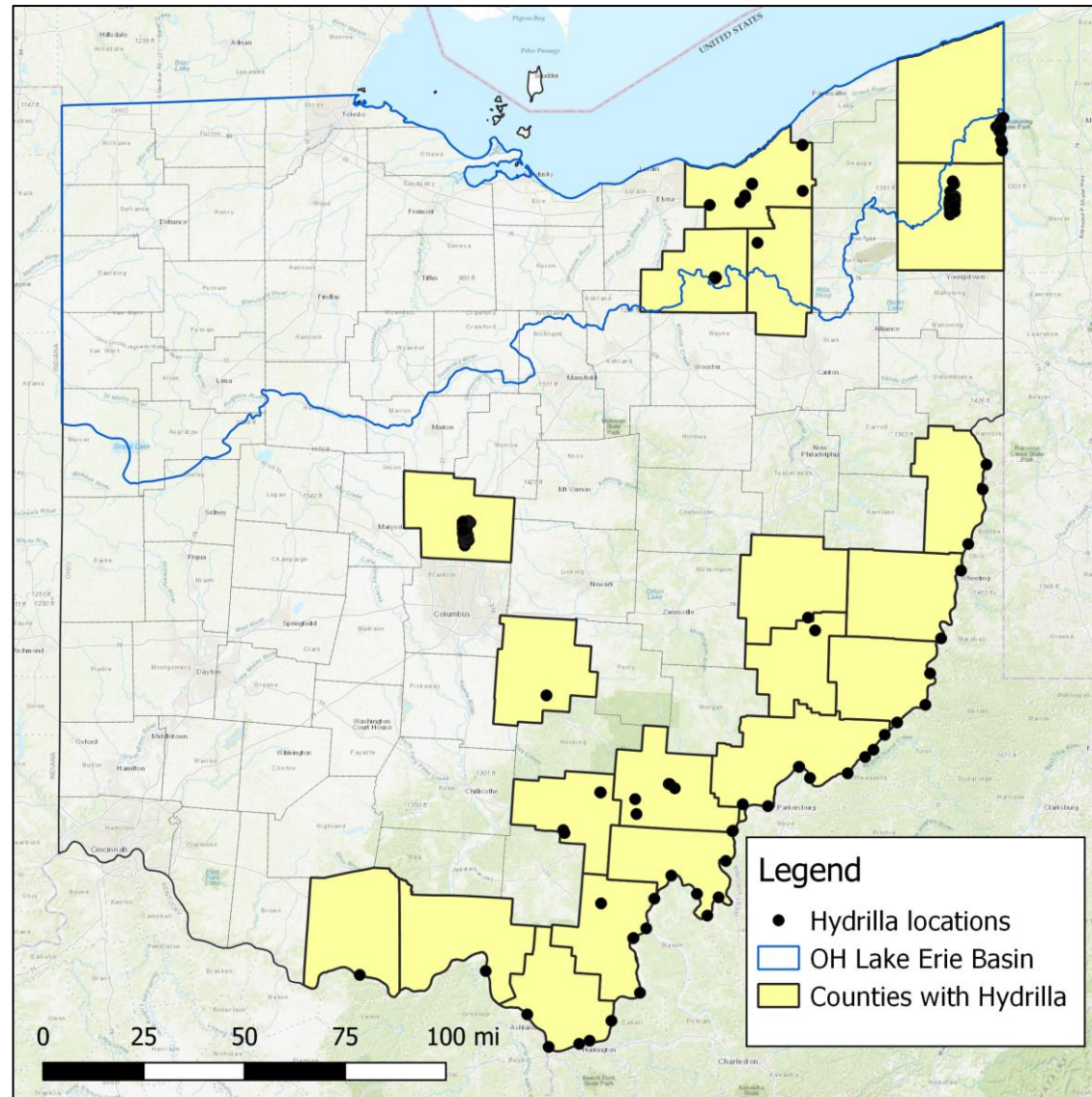


Since 2010, updated October 2024

Private ponds



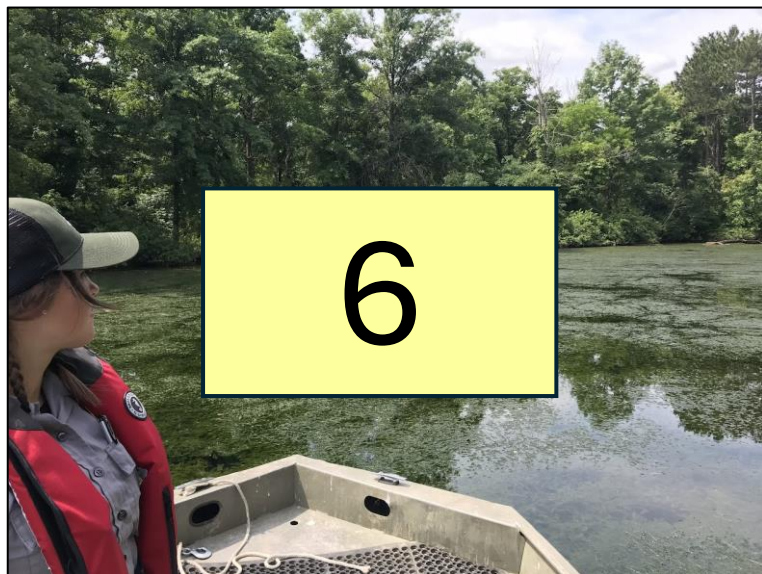
State parks



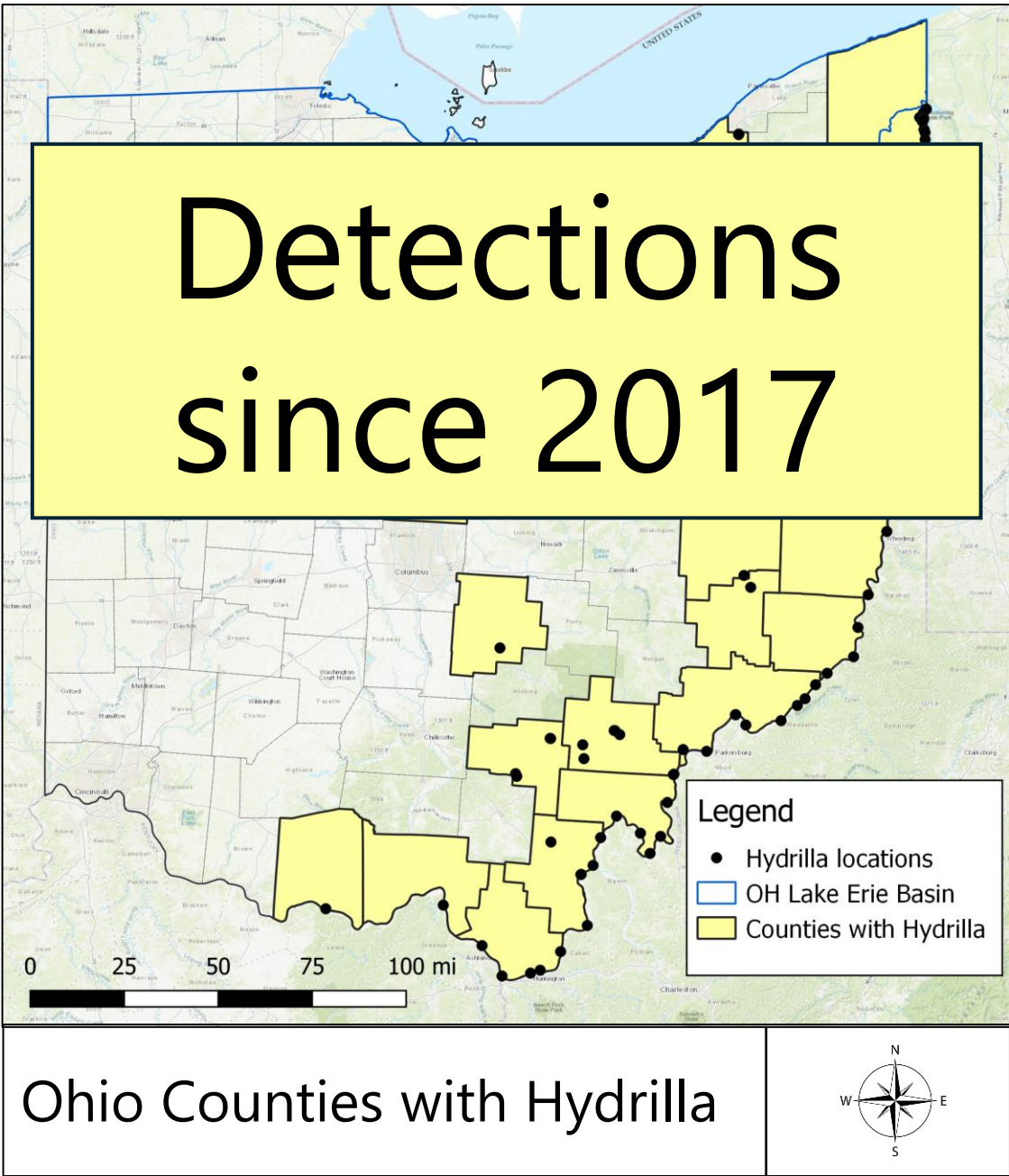
Ohio Counties with Hydrilla

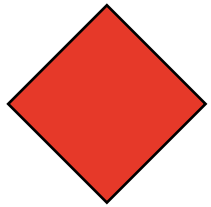
Since 2010, updated October 2024

Private ponds



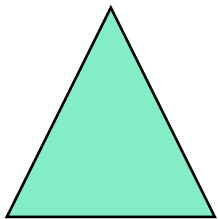
State parks



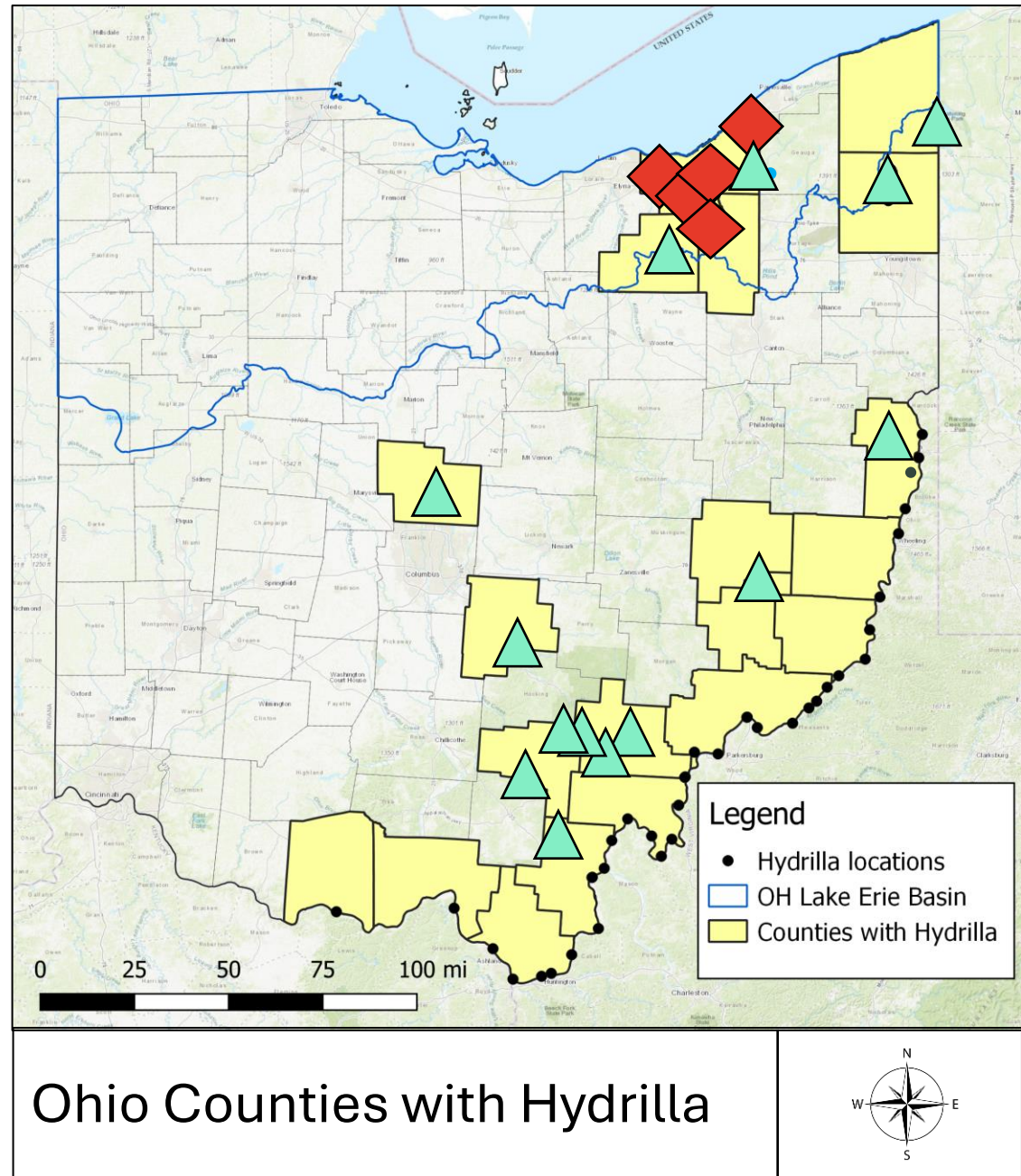


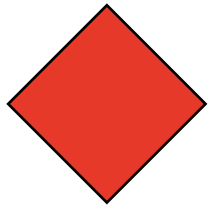
No longer detectable

8 years since detection
Tuber bank + veg. monitoring



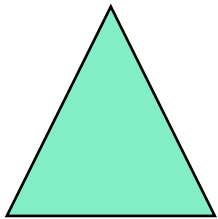
Under management



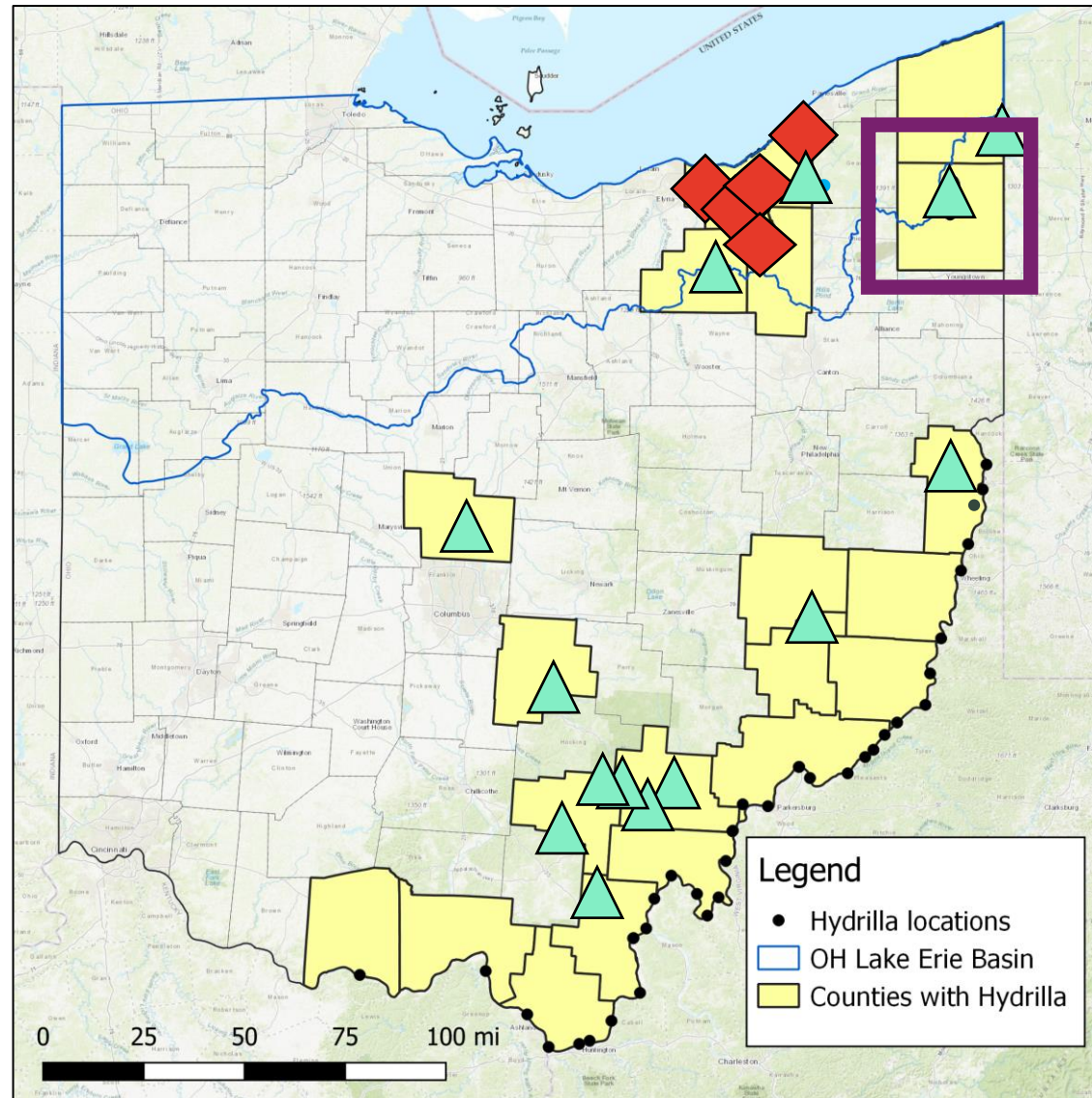


No longer detectable

8 years since detection
Tuber bank + veg. monitoring



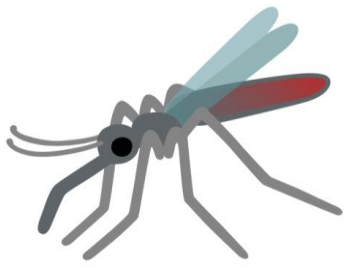
Under management



Mosquito Lake State Park

Ohio Counties with Hydrilla

Since 2010, updated October 2024



Lake, Trumbull Co. Ohio

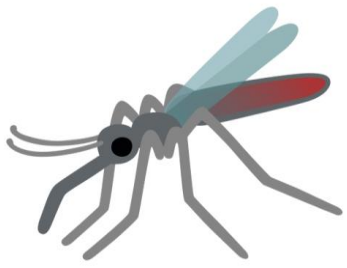
7,000 acres surface water

10 miles long

Drinking water for ~70,000

Hydrilla discovered in 2021





Lake, Trumbull Co. Ohio

7,000 acres surface water

10 miles long

Drinking water for ~70,000

Hydrilla discovered in 2021



Management

Fluridone management at
6 parts per billion (ppb) target

Year total of 90-125 ppb

2023 partial funding

Two years fully funded (2022, 2024)



Bleached hydrilla vegetation



Forced air applicator, Vortex TR Aquatic model

MORNING AT
MOSQUITO CREEK LAKE
FRIDAY AUGUST 2ND @ 8:30 AM

You're Invited

Join a group of community and regional leaders for a purposeful morning at the picturesque Mosquito Creek Lake!



Stakeholder meeting organized by County Tourism Bureau

LOCAL NEWS

Funding to remove invasive species in Mosquito Lake is approved

by: [Nadine Grimley](#)

Posted: Apr 10, 2024 / 06:09 PM EDT

Updated: Apr 10, 2024 / 06:09 PM EDT

Saturday, August 3, 2024

Battle Rages to Rid Mosquito Lake of Invasive Plant

CORTLAND, Ohio – Mark Warman, an aquatic invasive species expert, was inspecting Pymatuning Lake by helicopter one day in 2021.

Since he and his crew had some flight time remaining, they decided to swing over to Mosquito Lake and give it a look.

Visited 6 water garden supply stores

Myriophyllum rubricaula

Myriophyllum heterophyllum

Water ferns – *Marsilea* species

Pistia stratiotes (water lettuce)

Iris pseudacorus

American frogbit hitchhiker



M. rubricaula

Valkenburg et al. 2022

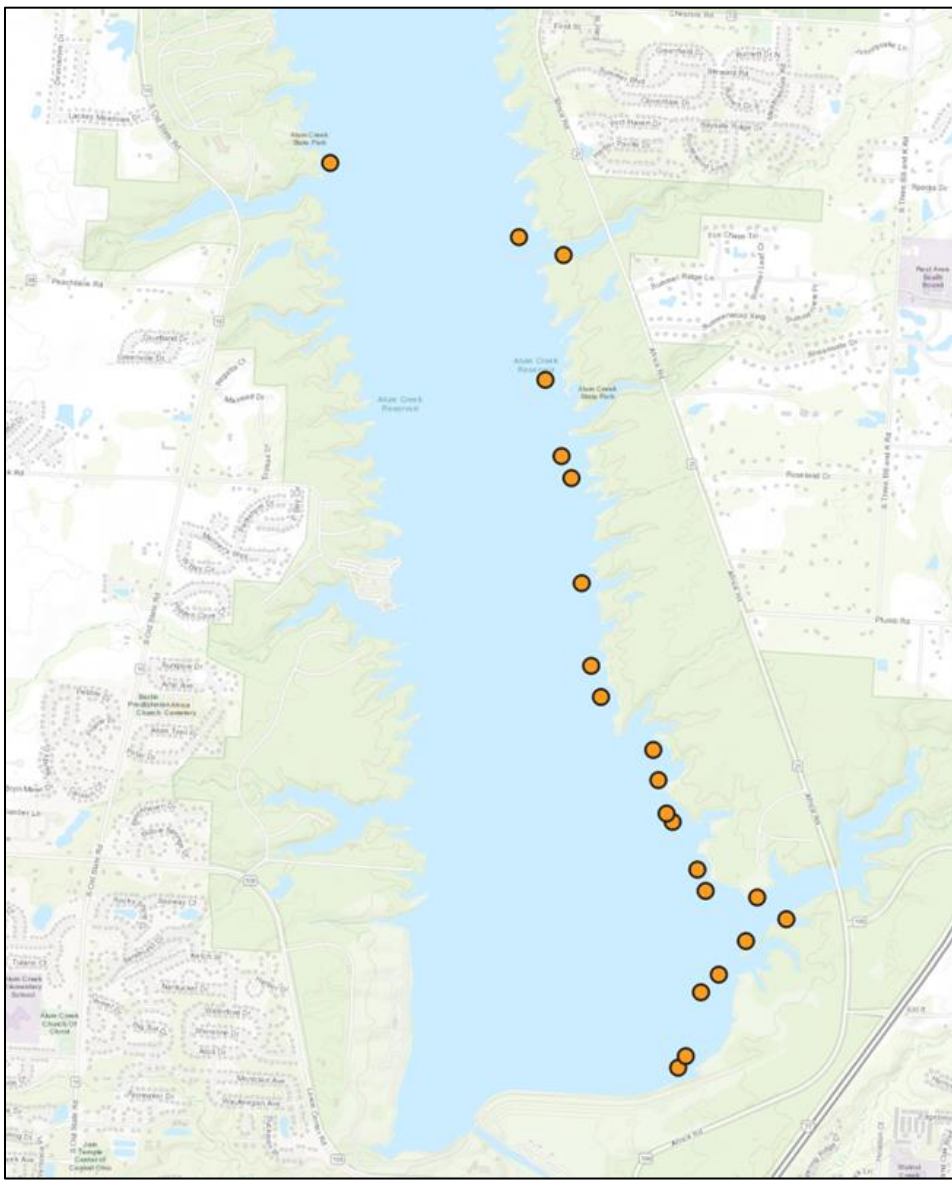


RIPPLE
REDUCE INVASIVE
PET & PLANT ESCAPES

TIPPERY LAB

Mystery Potamogeton identified
Potamogeton wrightii
Alum Creek Lake, 2021 - 2024





Left: one boat's observations of *P. wrightii* at Alum Creek Lake

Right: a patch reaches the water's surface

Could be an OIPC candidate for further research



Paper for more background on *Potamogeton wrightii* life history and introduction to North America

Tippery, N. P., & Warman, M. J. (2024). *Potamogeton wrightii* (Potamogetonaceae) naturalized in Ohio, U.S.A. *Journal of the Botanical Research Institute of Texas*, 18(1), 225–232. <https://doi.org/10.17348/jbrit.v18.i1.1351>

Emerging technologies and resources to keep an eye on

UAS monitoring for AIS – may soon have programs to help identify aquatic invasive plants using drone imagery. Think European frogbit and yellow floating heart. Plants at the surface or emergent that might have distinct colors and shapes to aid in machine learning ID. May also aid in herbicide application.

Genetic testing for aquatic plants can help ID tricky specimen and confirm organisms in trade. It is not perfect at differentiating between species. Still, if researchers are running aquatic plant data sets, Ohio should collect and contribute vouchers to learn more about AIS populations.

Great Lakes region has active **aquatic invasive plant work groups** (European Frogbit Collaborative is most active right now)

USGS new effort (2024) for
clearinghouse for invasive species.

May change in 2025



 Siren

A central hub for data and knowledge, driving
invasive species Early Detection and Rapid
Response (EDRR) through the four phases of
the National EDRR Framework: plan, detect,
report, respond.

Notable native find in '24

Sagittaria platyphylla

Delta arrowhead

Brady Lake, Portage Co.



Mark's list of least desirable AIS (plants) in Ohio

Hydrilla verticillata

Hydrocharis morsus-ranae (European frogbit)

Nymphoides peltata (yellow floating heart)

Egeria densa (Brazilian waterweed)

Butomus umbellatus (flowering rush)

Nitella obtusa (starry stonewort)

Stratiotes aliodes (water soldier)

Trapa natans (water chestnut)



Mark Warman
Emerging Contaminants
Warman.27@osu.edu

