

Pawtuckaway Lake

Aquatic Invasive Species Refresher

Georgia Bunnell

Exotic Species Program Coordinator

!!WARNING!!
INFESTED MILFOIL AREA
PLEASE
STAY AT LEAST 50 FEET
AWAY FROM FLOATING
MARKERS

PROP WASH AND
FISHING TACKLE WILL
BREAK UP PLANTS
AND SPREAD MILFOIL

www.pawtuckawaylake.com

About Me



Earned my Bachelors and Masters at UNH

Worked for the Lakes Lay Monitoring Program for 6 years

Now at NH Dept of Environmental Services

Overview

Status of Infestations

Milfoil in Pawtuckaway

Invasive Species Review

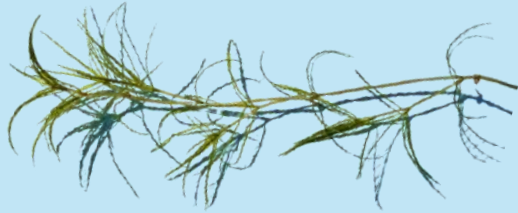
Weed Watcher Refresher

Questions

Status of Infestations in NH

Two new infestations in 2025:

- **Brittle naiad** in Belleau Lake, Wakefield



- **Spiny water flea** in Newfound Lake, Bristol



98 total infested waterbodies
135 individual infestations

Aquatic Invasive Species (AIS) Infestations in New Hampshire

Numbers correspond to [separate key](#) which lists waterbody name and town

Legend

AIS Infestations

Type

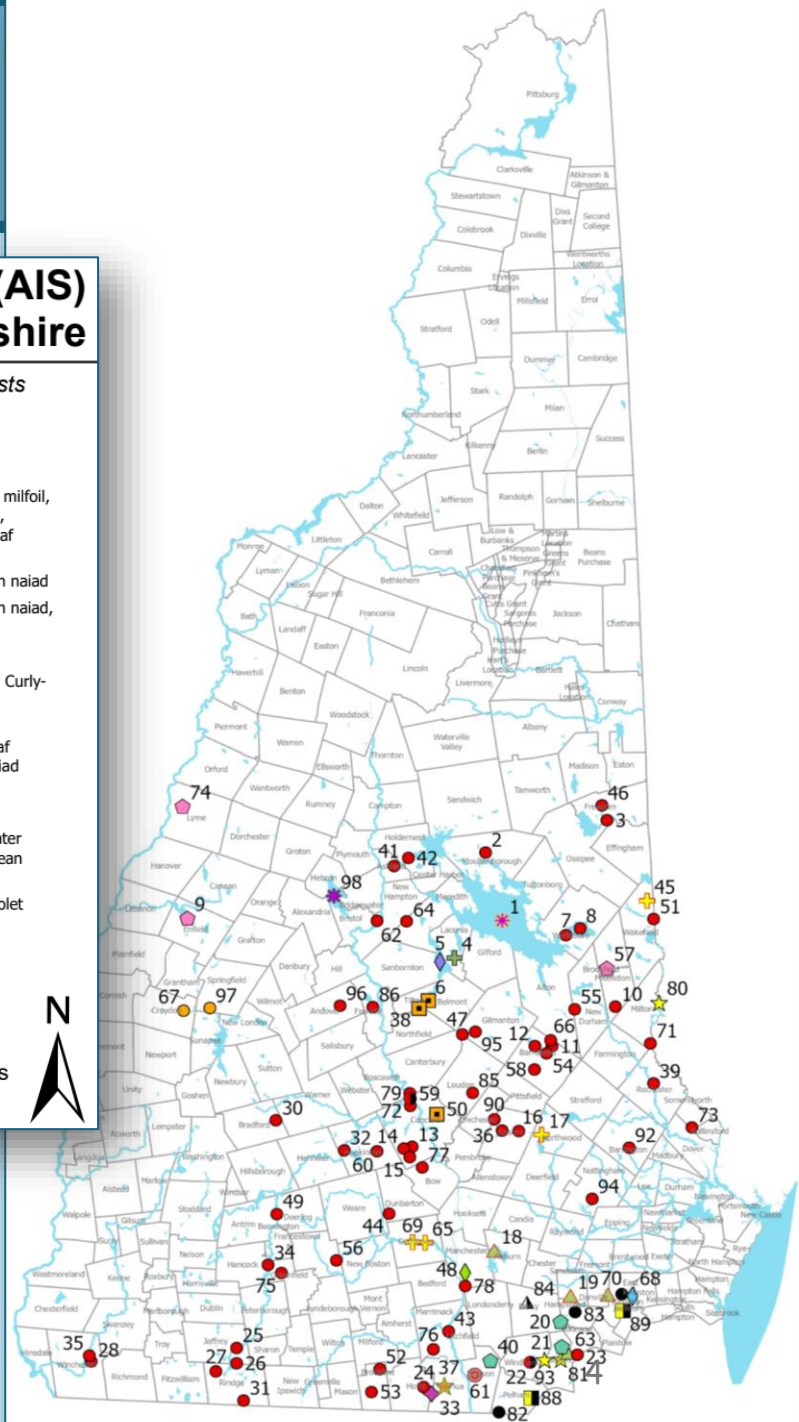
- Asian clam
- Asian clam, European naiad
- ◆ Brazilian elodea
- Curly-leaf pondweed
- ◆ Eurasian milfoil
- Eurasian milfoil, European naiad, Didymo, curly-leaf pondweed, Water chestnut
- ★ European naiad
- ▲ Fanwort
- ✳ Spiny water flea
- Variable milfoil
- ◆ Variable milfoil, Water violet, Spiny water flea
- Variable milfoil, Asian clam
- ▲ Variable milfoil, Asian clam, European naiad
- Variable milfoil, Curly-leaf pondweed
- ◆ Variable milfoil, Eurasian milfoil, Fanwort, Water chestnut, Curly-leaf pondweed
- ✳ Variable milfoil, European naiad, Waterwheel
- ▲ Variable milfoil, Fanwort
- Variable milfoil, Fanwort, Curly-leaf pondweed
- ★ Variable milfoil, Fanwort, Eurasian milfoil, Curly-leaf pondweed, European naiad
- ◆ Variable milfoil, Fanwort, European naiad
- ✳ Variable milfoil, Spiny water flea, Water violet, European naiad
- ✳ Variable milfoil, Water violet

□ Town_Boundaries

■ Major_Lakes

— Rivers

0 12.5 25 50 Miles



Infestations near Pawtuckaway



Variable milfoil



Asian clam



Asian clam, brittle naiad



Variable milfoil, fanwort, brittle naiad



Variable milfoil, brittle naiad



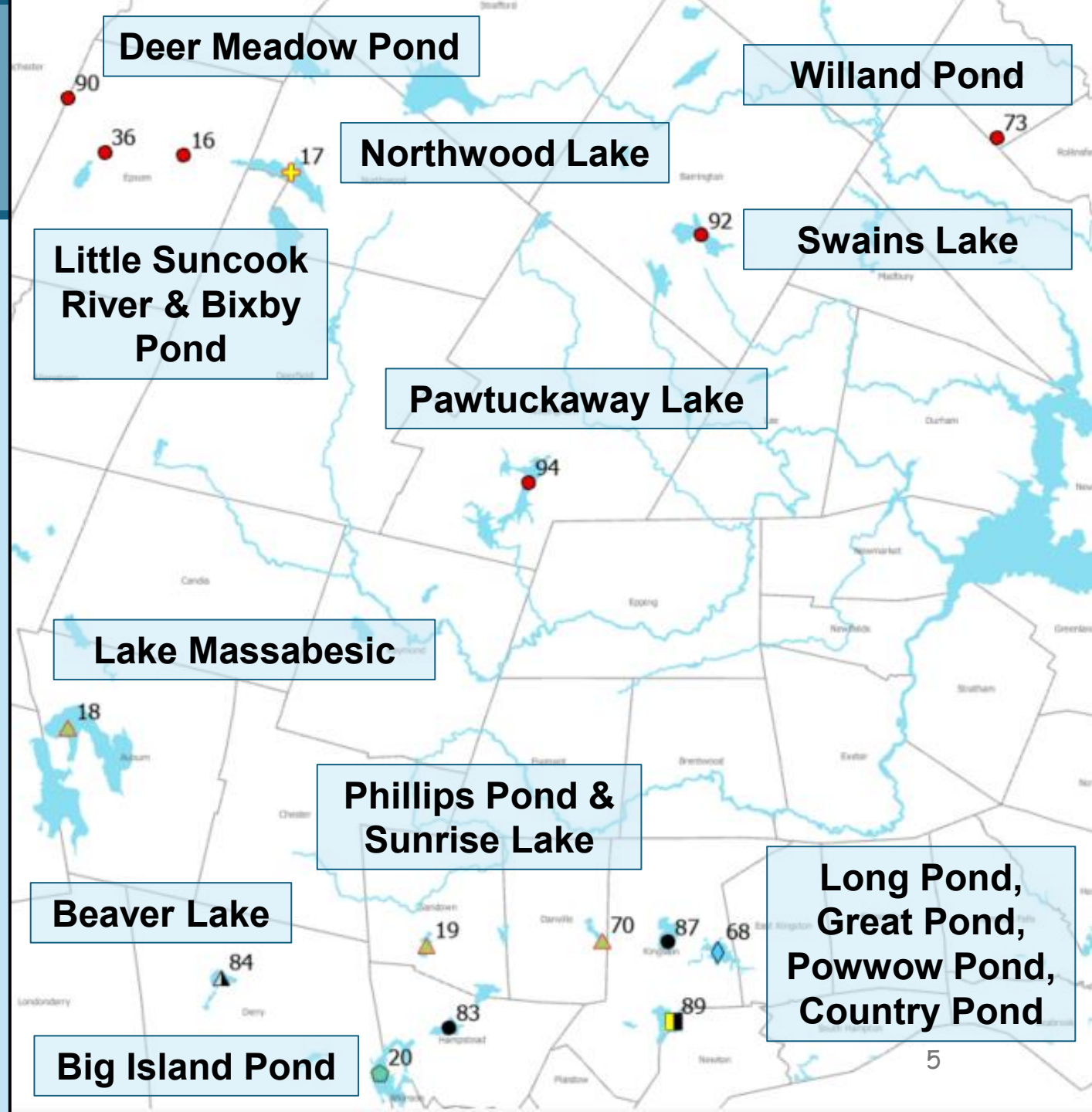
Variable milfoil, Asian clam, brittle naiad



Variable milfoil, brittle naiad, waterwheel

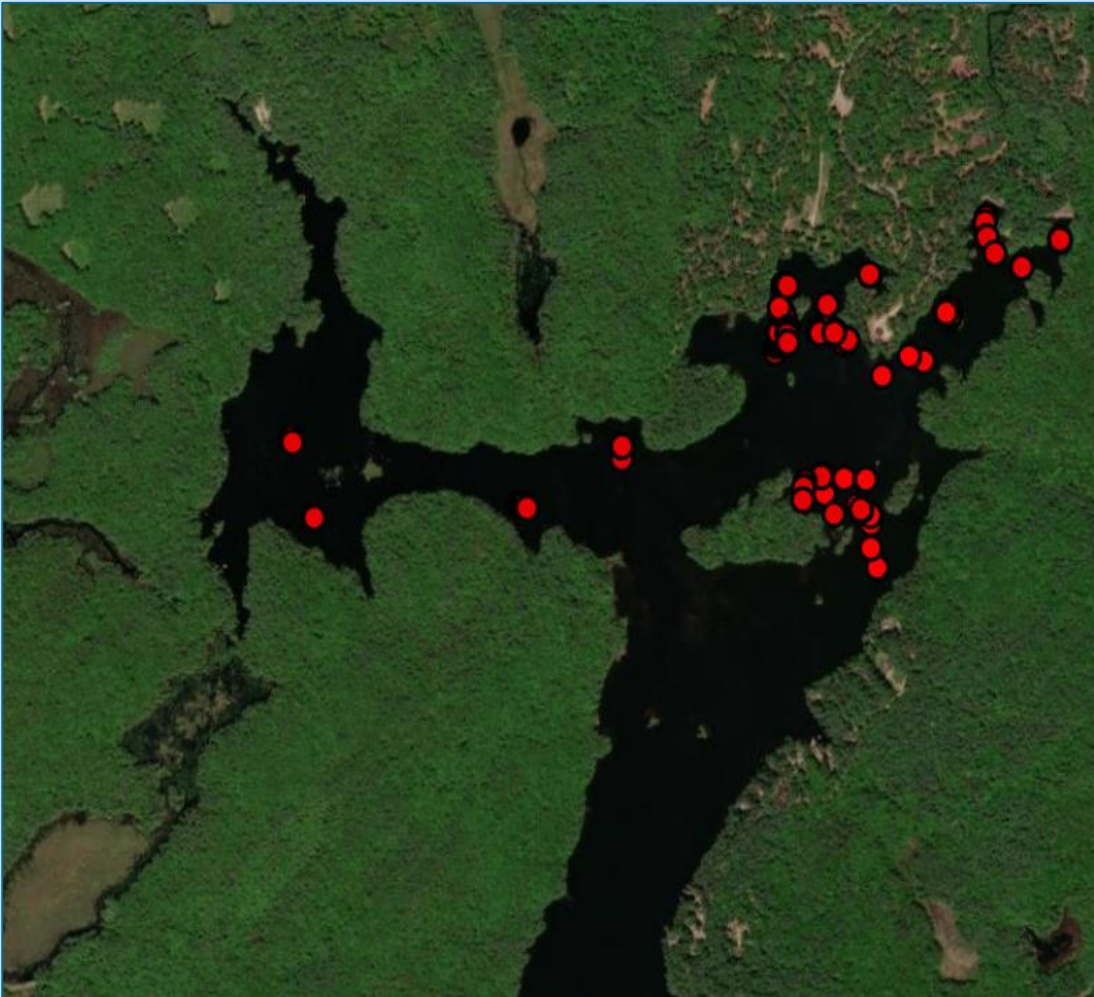


Variable milfoil, fanwort



Milfoil Infestation in Pawtuckaway in 2025

North End

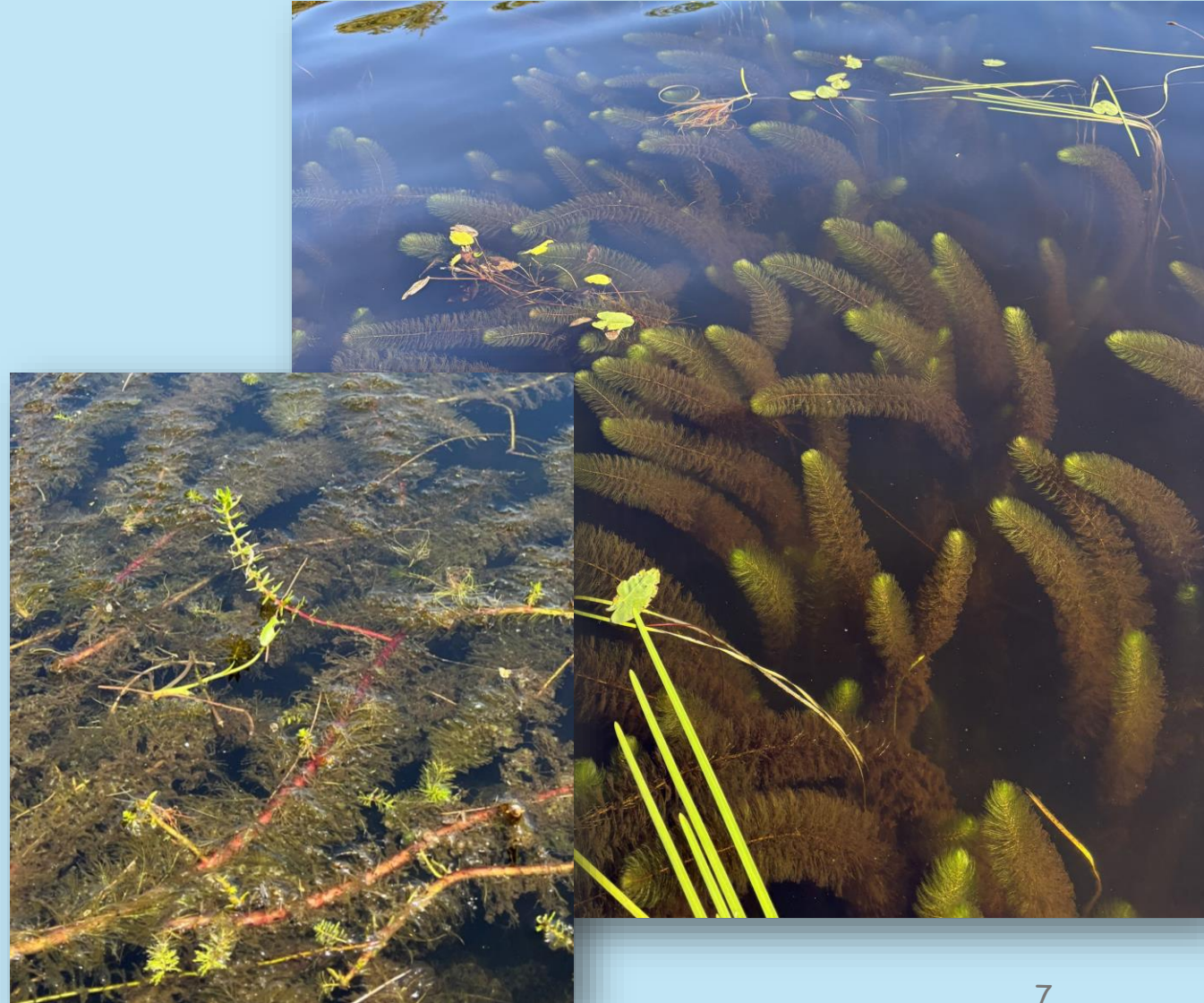


South End



Variable Milfoil

- Dense, feathery leaves whorled around a stem
- Can spread through fragmentation when broken up, such as by boat propellers
- Produces a spikey flower mid summer
- Grows much larger than native species
- Has been in NH since 1965



Variable Milfoil

Bladderwort



Coontail



Milfoil



Variable Milfoil

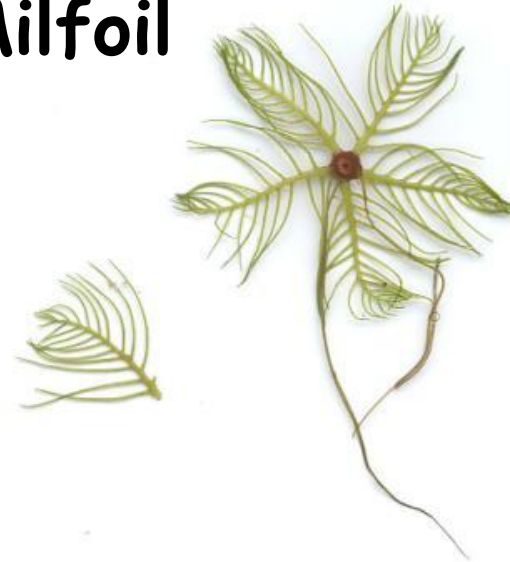
When in doubt, check the leaves!

Bladderwort



- Branching
- Small bladders

Milfoil



- Whorled around the stem
- Feather-like

Eurasian Milfoil

- Submerged
- Whorled leaves, but not as dense as variable
- Reddish color at the top
- Less common in our lakes as it prefers alkaline waters



Fanwort

- Submerged
- Branching leaves, with two leaves on opposite sides along stem
- More plastic-like than milfoil





Fanwort

Milfoil

Water Chestnut

- Emergent
- Floating rosette of leaves
- Can spread rapidly and cover entire water surface
- Produces a spiky fruit



Curly-leaf Pondweed

- Submerged
- Distinguishing characteristic is curly "lasagna noodle" leaves



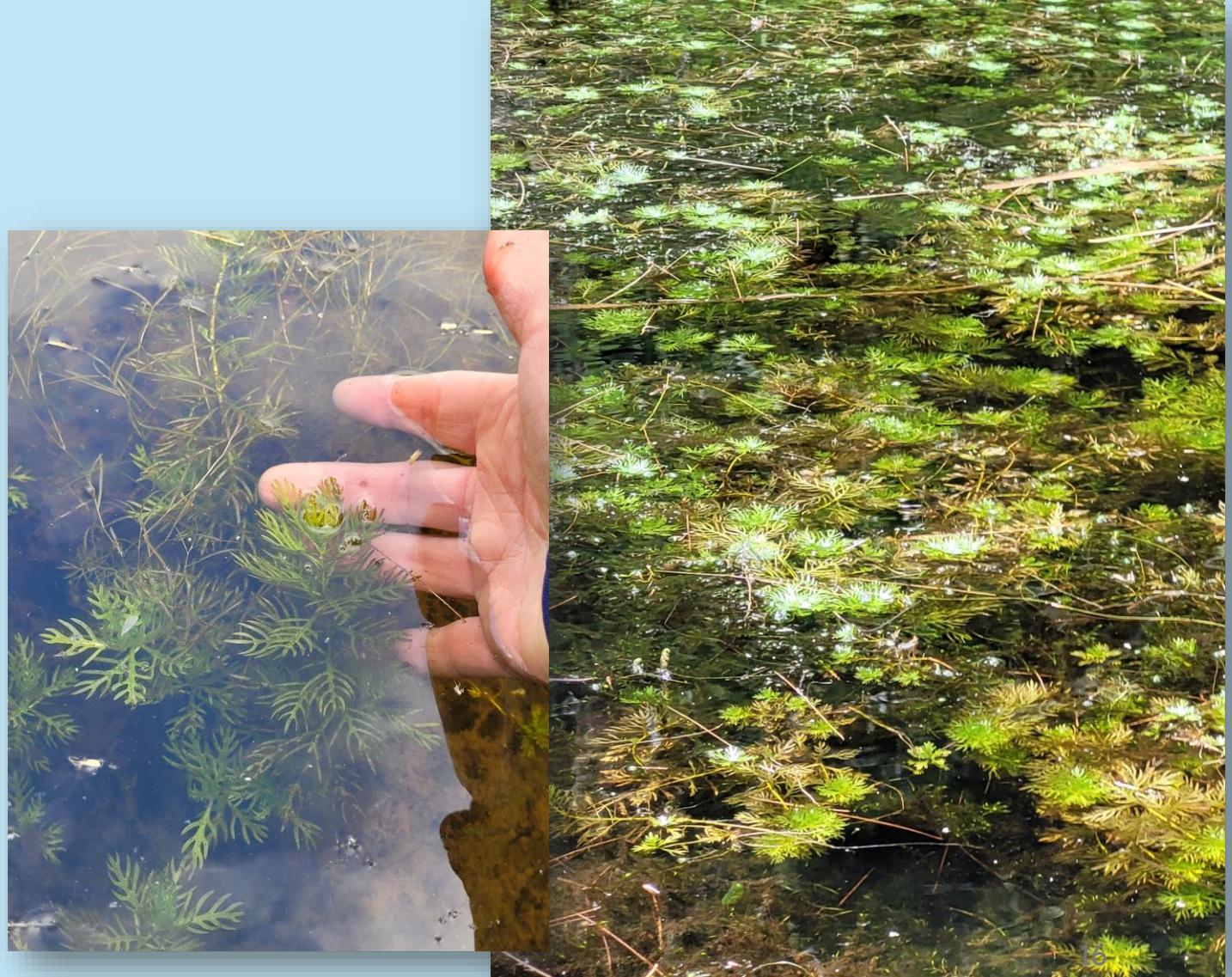
Brittle Naiad

- AKA European naiad or spiny naiad
- Submerged
- Found in shallow waters
- Can spread easily through fragmentation (hence the name)



Water Violet

- Submerged
- Relatively new in NH, first found in 2021
- Most likely from an aquarium
- Feather-like leaves in a rosette



Terrestrial Invasives - Phragmites



- Common reed
- Can be several feet tall
- Found on roadsides/shorelines



Terrestrial Invasives - Purple Loosestrife



Leslie J. Mehrhoff, University of Connecticut

5479699



National Park Service

- Wetland plant
- Purple flowers form in July and last into the fall
- One plant can produce up to 2.7 million seeds!

Hydrilla

- Submerged
- Not in NH...yet!
- Spreads very quickly, faster than milfoil
- Very difficult to get rid of once it's established



Exotic Critters



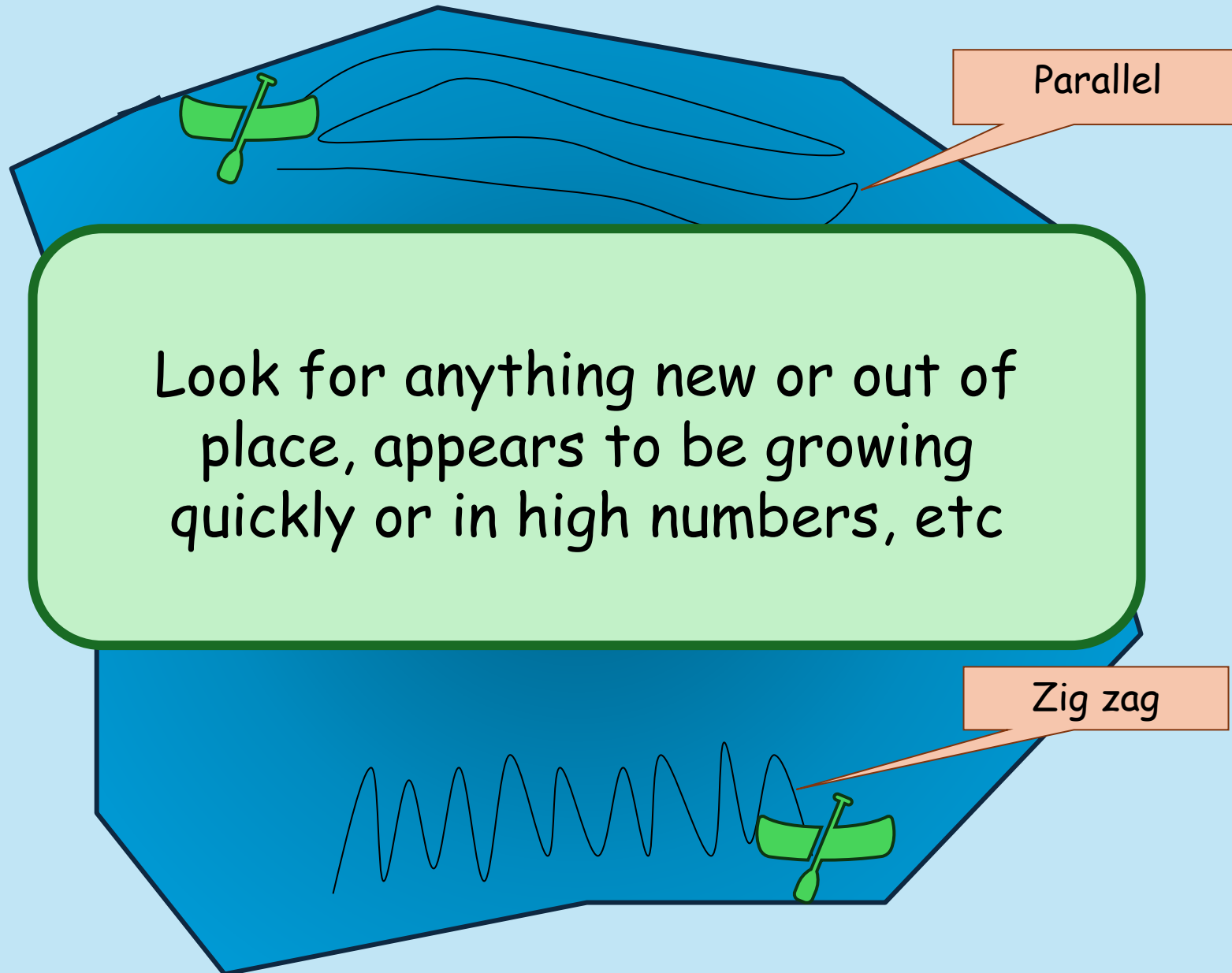
Asian clam

Chinese mystery snail



Spiny water flea

How to Survey Your Waterbody



Parallel

Look for anything new or out of place, appears to be growing quickly or in high numbers, etc

Zig zag

If You Find Something...

1. Mark it

- a. With a buoy
- b. With GPS
- c. Note where you are

2. Send me a photo or live sample

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29 Hazen Dr
Concord NH 03301

3. Use our new report form!



CLEAN.
DRAIN.
DRY.



Protect Our Lakes from
Aquatic Invasive Species

Early detection and
prevention is the best
way to stop the spread!



**STOP AQUATIC
HITCHHIKERS!**TM

Be A Good Steward.
Clean. Drain. Dry.

StopAquaticHitchhikers.org

A scenic landscape featuring a calm lake in the foreground with several loons swimming. The middle ground is filled with tall green reeds and grasses. In the background, a dense forest of evergreen trees covers a rolling hill under a bright blue sky with scattered white clouds.

Thank you! Any questions?

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