

Aquatic Plant Survey Education Session Notes

Objective:

To provide early detection of any influx of harmful invasive aquatic plants into Grindstone Lake through a State and County program of regular weed sampling and reporting.

Procedure:

The county advisor suggests:

1. The Grindstone Lake Association (GLA) divides the lake up into several zones, each containing at least one “hot spot” area where invasives would likely first appear.
2. Volunteers are trained, then assigned one of the areas for regular survey activity
3. Surveys of each area to be conducted once a month for June, July and August.
4. Each monthly survey should covering the entire zone with spot checks in an “S: pattern along the shore line.
5. At each stop, rake (or if snorkeling - dive and pick) a swath of weeds on each side of the boat or spot.
6. Identify the species of weeds retrieved and note location and approximate depth, species and date of the sample.
7. Send these observations to a data entry volunteer for entry into the State’s “SWIMS” system.
8. IF an invasive species is found, or suspected, bag the sample in a plastic ziplock bag with some water and bring it to the county weed control officer [sic] (currently Nicole shown holding up Fern pondweed - native) at the county courthouse in Hayward.
9. IF confirmed, then an action plan will be organized.



Equipment:

A sample kit will be provided by the county when the GLA enrollment in the program is accepted. Each volunteer should have the components of the kit. The GLA may need to acquire additional components to achieve this.

The kit will include at least:

- Double sided (tines on both sides) iron rake head attached to 20 to 30 feet of line.

Aquatic Plant Survey Education Session Notes

- Identification booklet
- Magnifying glass
- Clipboard and survey recording forms and marking implements.
- Plastic ziplock bags

Aquatic Plant Survey Education Session Notes

Identification Notes:

The following are notes from the county training session of the most common aquatic plants and invasive species for identification. It is not comprehensive of all the possible native species. If a plant retrieved does not match any of the invasives or common natives plants in these notes, it is not a concern, just mark as “other”.

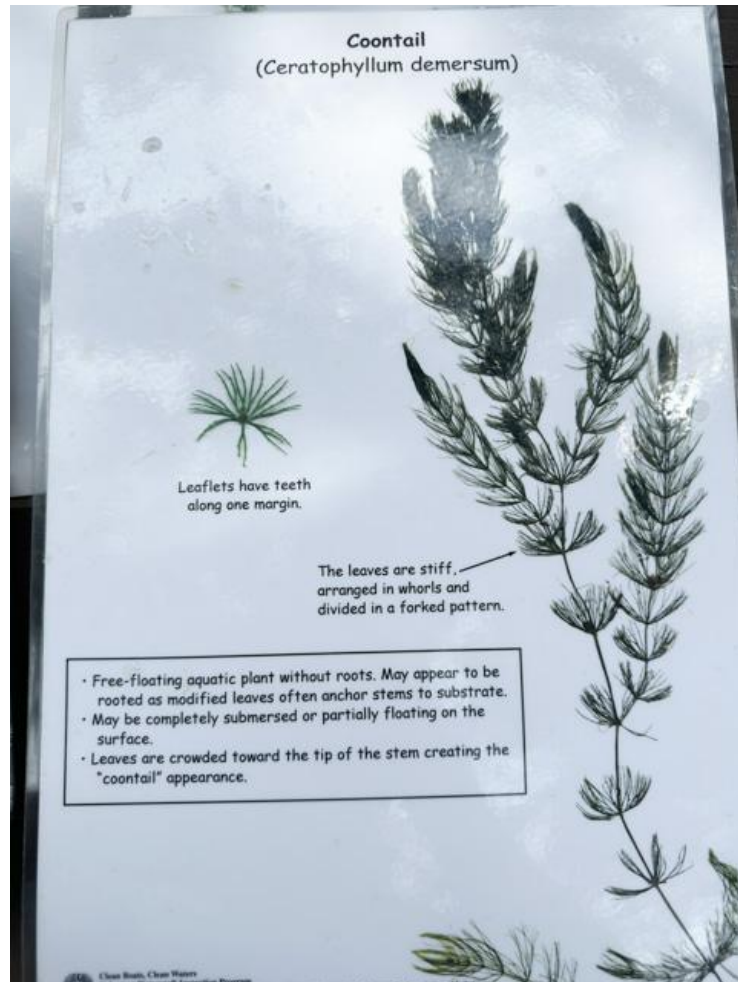
Common Bladderwort



- This is a native species, note the little green bladders amount the foliage. This is a free floating plant.
- Should be quite common

Aquatic Plant Survey Education Session Notes

Coontail



- Leaflets form in a cuplike fashion completely around the stem
- Tips taper off like a racoon tail
- Free Floating

Aquatic Plant Survey Education Session Notes

Common Waterweed - *Elodea*



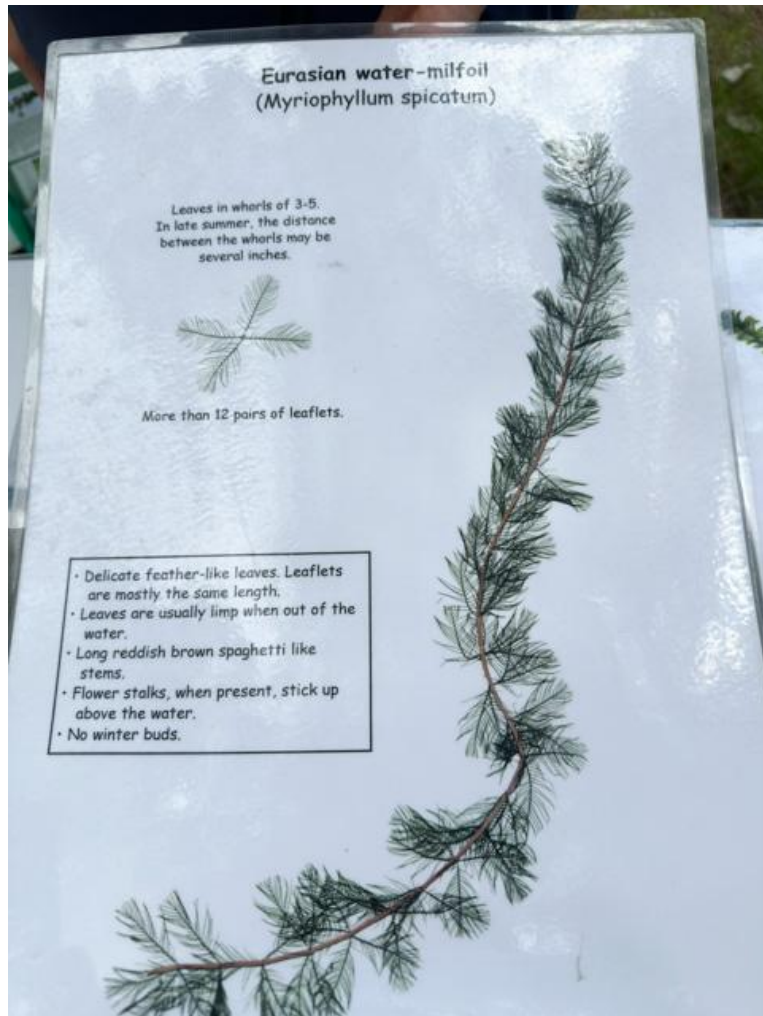
Smaller plant in shallow water.



Three leaves around the stem. Thicker leaves condense around the tops. Rooted

Aquatic Plant Survey Education Session Notes

Eurasian Water Milfoil - INVASIVE



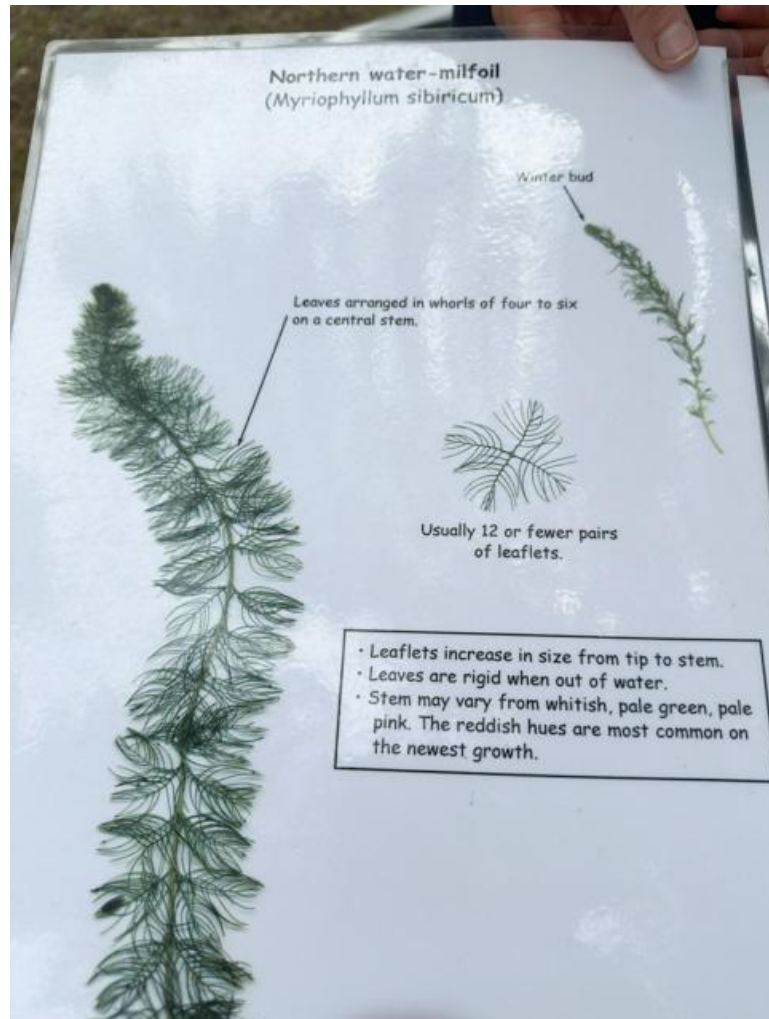
Red stem. Feather like leaves. Limp when held out of water



12 or more pairs of leaves - Thrives in mucky bottoms

Aquatic Plant Survey Education Session Notes

Northern Water Milfoil - NATIVE



Vibrant green. Fewer than 12 pairs of leaves. Green Bud at top of stem.



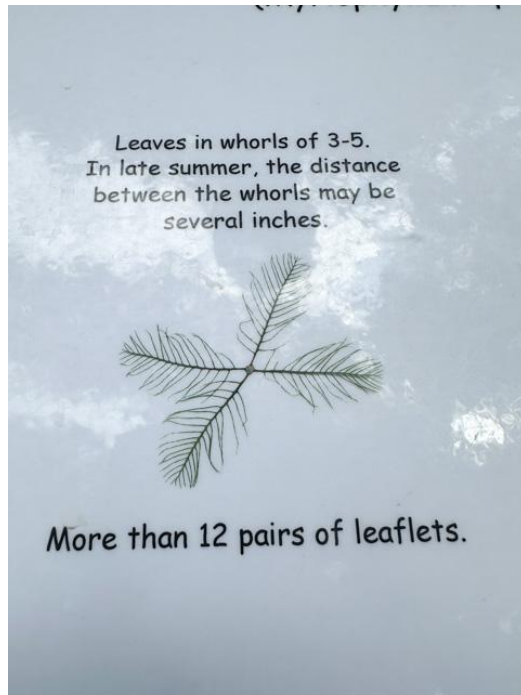
Green in color when out of water. Leaves hold shape when held up out of water

Aquatic Plant Survey Education Session Notes

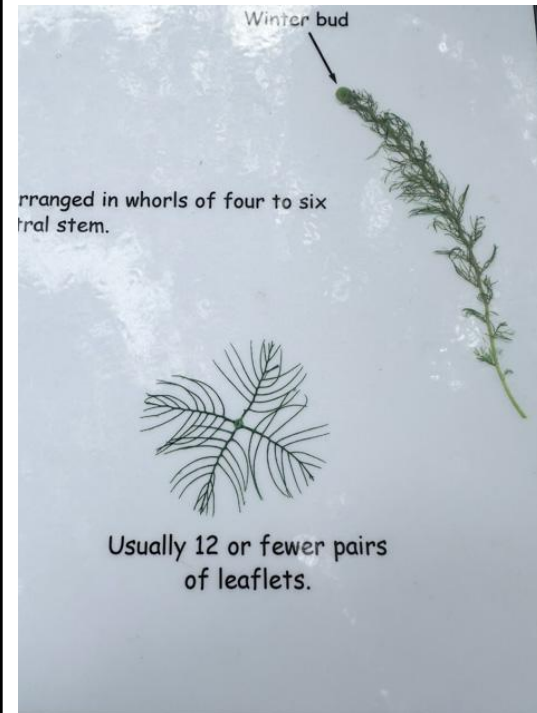
Comparison Eurasian vs. Northern Milfoil

These two plants are similar and can cohabitate. They can even hybridize - showing less than 12 pairs of leaves, but still be the harmful weed. Holding up out of water is perhaps the best test for identification, along with green bud vs red bud at top of the stem.

Eurasian Milfoil



Northern Milfoil



Aquatic Plant Survey Education Session Notes

Eurasian Milfoil



Red bud at top of stem

Northern Milfoil



Green bud at top of stem

Aquatic Plant Survey Education Session Notes

Eurasian Milfoil



12 or more pairs of leaves

Northern Milfoil



Fewer than 12 pairs of leaves

Aquatic Plant Survey Education Session Notes

Out of Water Test:



The left stem is Eurasian Milfoil and invasive. Note limp leaves when out of water, also duller, perhaps darker green. The right stem is Northern Milfoil and native. Note more vibrant green and how leaves hold their shape better when out of the water.

If in doubt, bag it in ziplock with water and bring it to Sawyer County.

Aquatic Plant Survey Education Session Notes

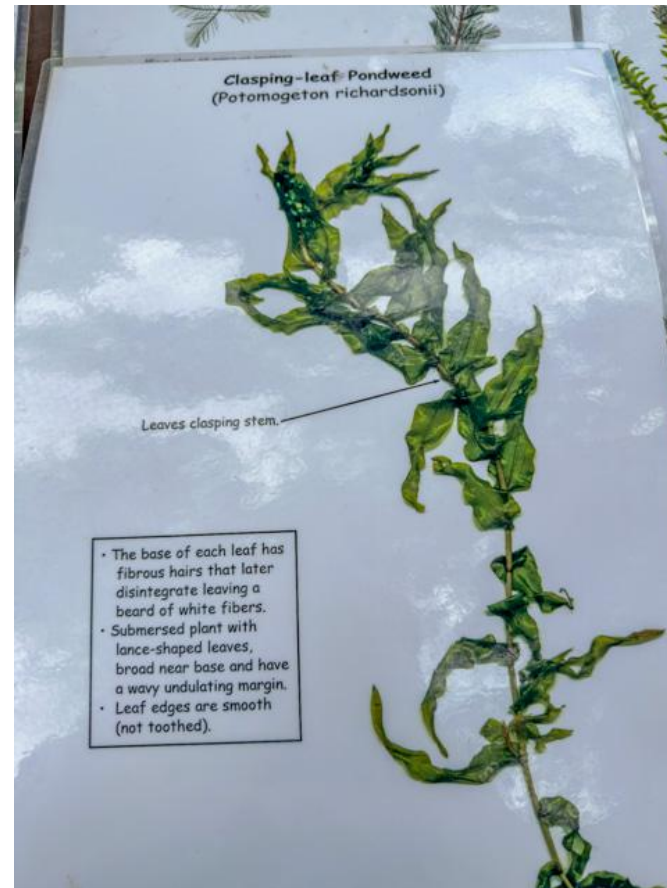
Pondweed Comparison - Curly Leaf - Invasive vs. Clasp Leaf - NATIVE

Curly Leaf Pondweed - INVASIVE



Leaves are blunt tipped and look like lasagna. Little teeth on the leaves. Color same as native. Grows during winter. Dies out in June starts up again in the fall.

Clasp Leaf Pondweed - NATIVE



Bottom of leaf clasped to stem. Leaf is pointed without teeth.

Aquatic Plant Survey Education Session Notes

<u>Curly Leaf Pondweed - INVASIVE</u>	<u>Clasping Leaf Pondweed - NATIVE</u>
A photograph of a curly-leaf pondweed plant (Potamogeton crispus) with a label pointing to a vegetative bud (turion). The label reads: "Curly-leaf Pondweed (Potamogeton crispus)" and "Vegetative buds ('turions') resemble small brown pine cones. Actual size 1-2 cm." The plant has green, curly leaves and a small, brown, cone-shaped bud. Has "turions" bud like free floating growths.	No turions