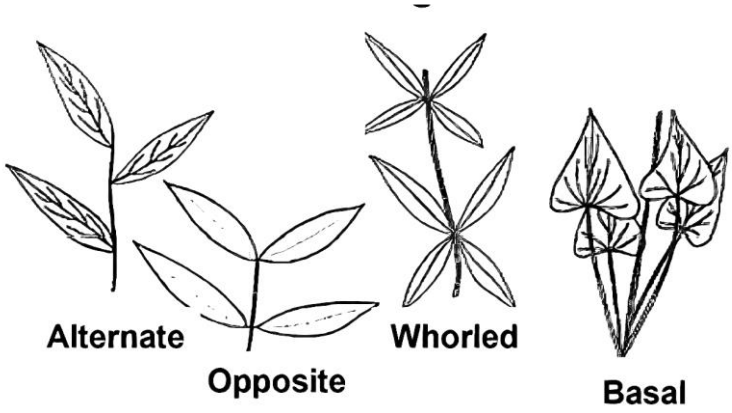
LOOK ALIKES

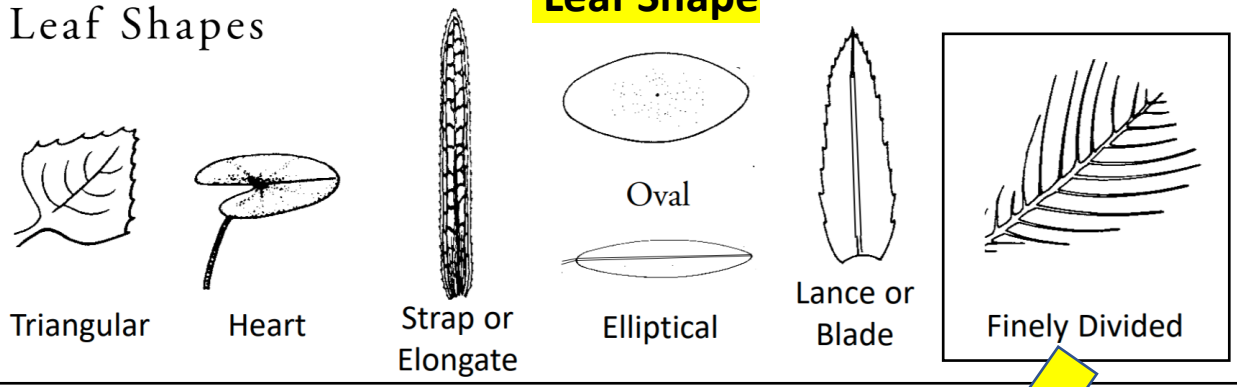
Native and Invasive Plants that Look Similar

Details to Note When Differentiating Look-Alike Plants

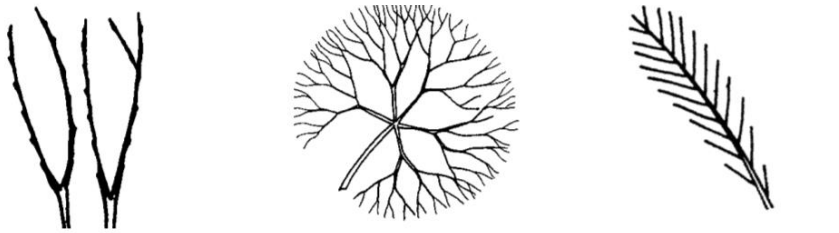
Leaf Arrangement – how the leaves are arranged on the stem



Leaf Shape



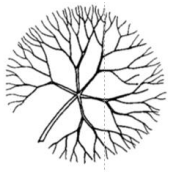
Finely-Divided Leaf Variations



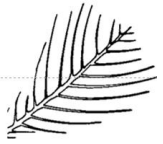
Quick Guide to Look-Alike Plants with a Cylindrical Bottle Brush Shape & Finely-Divided Leaves

Fork-Divided Leaves

Branch-Divided Leaves



Feather-Divided Leaves



Coontail

Water Marigold – leaves occur in whorls that are fan-shaped and attach directly to stem.

Fanwort – leaves occur in whorls that are fan-shaped and attach to stem via a short petiole – **Invasive.**

Bladders Present

- **Common Bladderwort** – alternating leaves with bladders along edges of leaves.
- **Purple Bladderwort** – whorls of leaves with bladders along tips of leaves.
- **Flat-Leaf Bladderwort** – alternating leaves with bladders only on leafless basal stem.

Native Milfoil – pairs of opposing leaves.

Invasive Milfoils

- **Variable Milfoil** – whorls of 4-6 leaves.
- **Eurasian Milfoil** - whorls of 4 leaves.

Plants with Finely-Divided Leaves
Invasive Variable Milfoil and Eurasian Milfoil vs Native Milfoil

Variable Milfoil - Invasive

Eurasian Milfoil - Invasive

- Variable milfoil has a **very stiff and thick reddish stem. and is more robust than the other milfoil species**.
- Leaves are **feather-divided in whorls of 4 -6**.
- **Most common Invasive species in NH and Maine.**

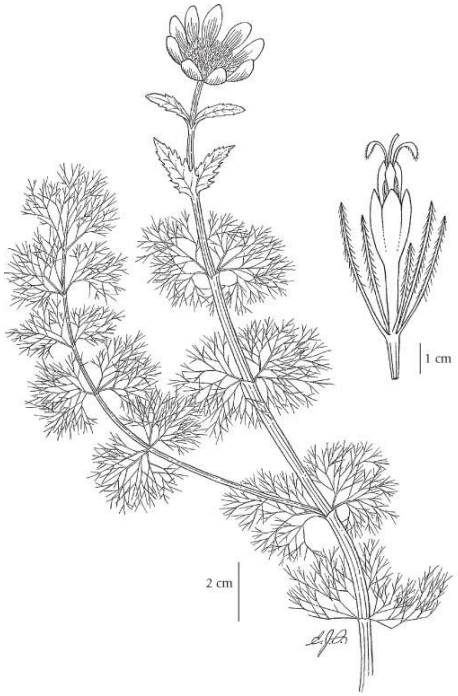
- The leaves are f**eather-divided** in **whorls of 4**.
- Green to reddish stem.

Native Water Milfoil

- Native milfoils have a thin red, brown, or green stem
- Leaves are **feather-divided in opposing pairs**.

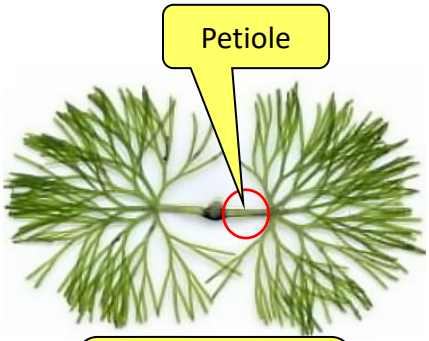
Milfoils can be distinguished from similar looking plants by their **feather-divided leaves**. Native milfoil can be distinguished from invasive forms by the number of leaves. Native milfoil has opposing pairs of leaves whereas invasive milfoils have whorls of 4 or more leaves.

Plants with Finely-Divided Leaves
Water Marigold vs Fanwort



Water Marigold

- Pairs of **Opposing Branch-Divided Leaves**.
- **<u>Leaves attach directly to stem – there is no petiole</u>**.



Leaves attach to stem via a short petiole

Fanwort - Invasive

- Pairs of **Opposing Branch-Divided Leaves**.
- **Leaves attach to stem via a short petiole**.

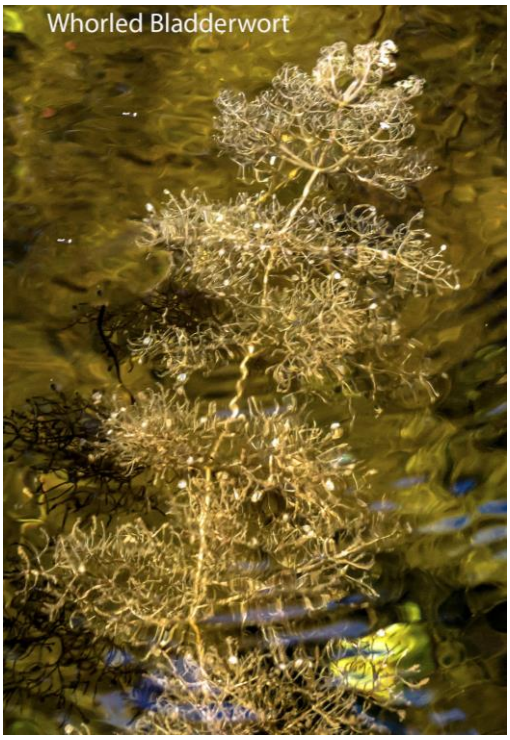
These plants look very similar – both have **opposing pairs of fan-shaped branch-divided leaves** and have a cyclindrical bottle-brush appearance in the water.

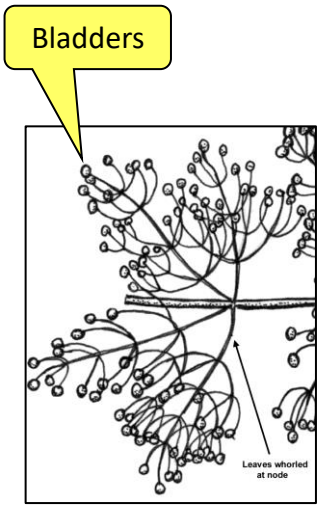
However, the leaves on **fanworts** attached to the stem **via a short petiole** whereas on **water marigolds** they attach **directly to** the stem.

Other Plants with Finely-Divided Leaves

Coontail

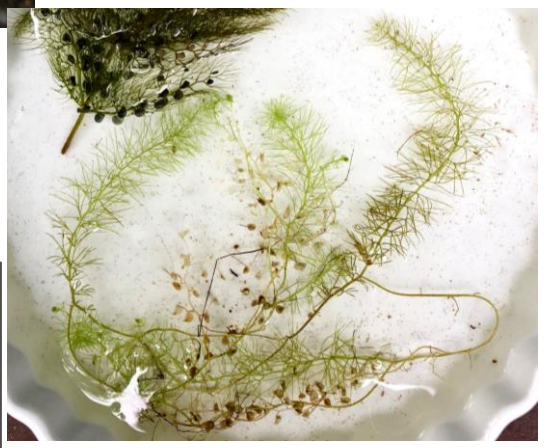
- At first glance this plant looks like water marigold, fanwort, of one of the milfoils – they all have a cylindrical bottle-brush appearance in the water. But this is the only plant in the group of plants with finely-divided leaves that have **whorls** of **fork-divided leaves.**
- The **leaves are also relatively stiff to the touch** and typically hold their shape and position when pulled from the water.
- This plant is not common in Conway Lake but is present in Wiley Brook Inlet





Bladderworts Native

- There are several species of **bladderworts** in Conway Lake
- Although they may look different from one another, all have **branch-divided leaves** and **small bladders** that can be found at the tips of leaves, or along the length of the leaf, or on the leafless bottom stem of the plant.



Thin-leaf Bladderwort

Plants with Whorls of Blade-Shape Leaves

Invasive Hydrilla & Brazilian Elodea vs. Common Elodea

Whorls of 4 or more blade-shaped leaves with toothed edge.

Hydrilla - Invasive

Whorls of 4 or more blade-shaped leaves

Brazilian Elodea - Invasive

Whorls of 3 blade-shaped leaves

Common Elodea aka Waterweed

- These plants can look very similar when looking into the lake, so reach in and snag a piece to check it in your boat.
- Common Elodea can be differentiated from Hydrilla and Brazilian elodea by the number of leaves in a whorl – it has whorls of 3 leaves (rarely 4) while Hydrilla and Brazilian elodea have whorls of 4 or more leaves.
- Hydrilla can be further differentiated from Brazilian elodea by the finely-toothed margins of the leaves.

Plants with Alternating Wavy Leaves
Invasive Curly-Leaf Pondweed
vs. Native Robbins Pondweed and Clasping-Leaf Pondweed

Alternating very slightly wavy leaves.

Robbins Pondweed

Alternating wavy leaves. Leaf base wraps around the stem

Clasping-Leaf Pondweed

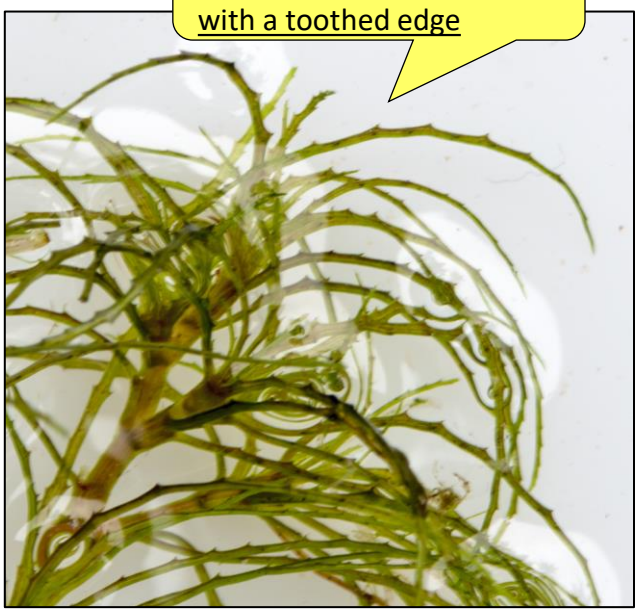
Alternating wavy leaves. Leaf base does <u>not</u> wrap around the stem

Curly-Leaf Pondweed - Invasive

- These plants are characterized by alternating leaves and can be distinguished from one another by the waviness of the leaves and whether the base of the leaf does or does not wrap around the stem.
- Robbins pondweed is present in Conway Lake and while clasping-leaf pondweed has not yet been spotted. It is, however, present in nearby ponds and lakes. Be on the lookout for plants with very wavy leaves – it could be clasping-leaf pondweed or the invasive curly-leaf pondweed.

Plants with Slender Leaves

Invasive Spiny Naiad Vs. Native Water Naiad & Spiral Pondweed



Invasive Spiny Naiad

- Spiny naiad leave are paired, sometimes appearing whorled, and usually bunched at leaf axils.
- Leaves are typically stiff, curled and pointed, and have spines along the margins that are visible to the naked eye, if not a hand lens. Leaves are about 1 mm wide and 0.5 to 3.5 cm long.
- **Look Alikes: This plant is similar to native waterweed and spiral pondweed.**

Native Water Naiad & Spiral Pondweed

- Narrow thread-like leaves originating in pairs or whorls (water naiad) or individually off the central stem (spiral pondweed)
- Look very similar to the invasive spiny naiad. The invasive species is distinguished by its thicker and broader leaves with serrated edges.

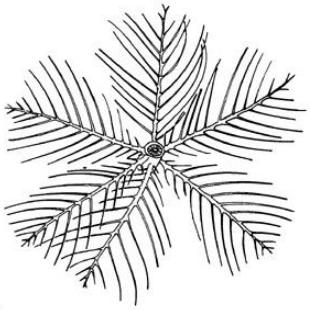
- These plants all have narrow thread like leaves with stems that can be green or purple.
- Spiral pondweed can be differentiated from water naiad and spiny naiad by its leaf arrangement and presence of small floating leaves. Individual leaves on spiral pondweed attach at single nodes – they are not arranged in pairs or whorls as they are on water naiad & spiny naiad
- Spiny naiad can be differentiated from water naiad by the finely serrated edges on its leaves and its stiff feel.

Comparison of Leaf Cross-Sections

Feather-Divided Leaves

Milfoil – Native

- Pairs of opposite feature-divided leaves



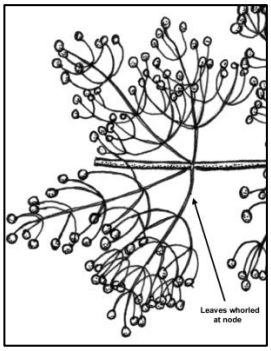
Variable Milfoil – Invasive

- leaves are feather-divided in whorls of 4 to 6

Eurasian Milfoil – Invasive

- The leaves of are feather-divided, in whorls of 4.

Branch-Divided Leaves



Bladderworts – Native

- Distinguished by presence of bladders.

Water Marigold – Native

- Two opposing leaves attached directly to the stem.

Fanwort – Invasive

- Two opposing leaves attached to the stem by a short petiole.

Water Crowfoot – Native

- Alternating branching divided leaves
- Not yet found in Conway Lake

Fork-Divided Leaves

Coontail – Native

- Fork-divided leaves arranged in whorls around the stem.

Whorls of Blade-Shaped Leaves

Waterweed – Native

- Whorls of three leaves (rarely 4).

Brazilian Elodia - Invasive

- Whorls of 4 or more leaves.

Hydrilla - Invasive

- Whorls of 4 or more leaves
- Finely-toothed leaf margins