

How to Identify Eurasian Water Milfoil from Similar Species

The purpose of this document is to illustrate the differences between Eurasian Water Milfoil (EWM), which is the target species for monitoring at the Jemseg Grand Lake Watershed Association (JGLWA). This guide is not a comprehensive list of all aquatic plants in New Brunswick or Grand Lake, and focuses solely on plants with a similar profile to EWM. This list is based off data from the [Atlantic Canada Conservation Data Center](#). For more information on the JGLWA's work with EWM and what to do if you locate EWM, visit [our Webpage](#).

Key Terms

A **whorl** is composed of **leaves** arranged around a stem

A **leaf** has several **leaflet pairs**

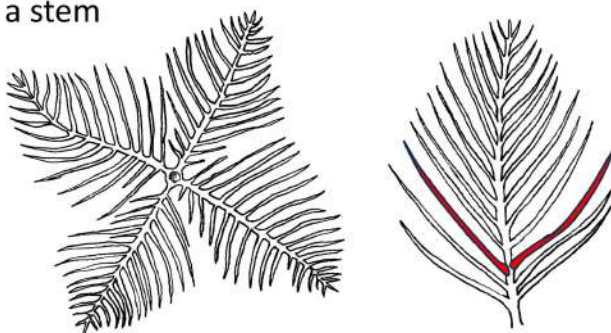
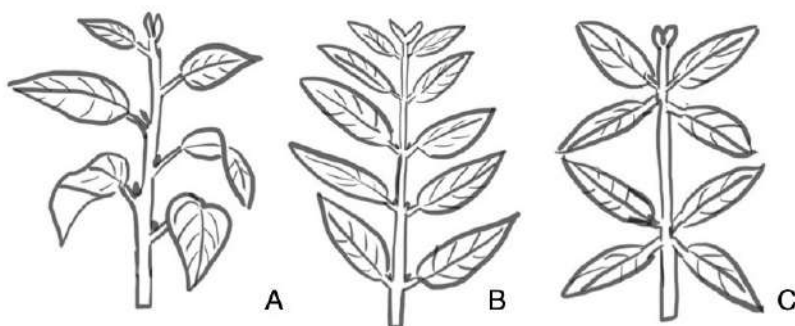


Figure 1. Whorls, Leaves, and Leaflets - [Snohomish County \(WA\) Government Website](#)



A: Alternate
B: Opposite
C: Whorled

Figure 2. Leaf Arrangement - [Libre Texts Biology](#)

Leaf Arrangement refers to the pattern in which leaves and other features grow in relation to each other. This guide focuses on whorled plants.

Branching pattern refers to where along a plant's stem branches tend to separate. Do note that unlike with Leaf Arrangement, plants can deviate from species-typical branching patterns.

Eurasian Water Milfoil (*Myriophyllum spicatum*)



Invasive species which are found in lakes (typically 1-3 meters deep, but up to 10m), and can form dense mats. Leaves arranged in whorls of 3-5 around stem (typically 4), 1-3cm apart, **and have 10-21 leaflet pairs, which has a higher upper limit than other similar species (this is why it is recommended to count a minimum of 12-18 to rule out other species)**. It can have reddish hues, and tends to branch near the surface, which can help differentiate it from Northern Water Milfoil, but is not a guaranteed indicator. It droops and falls flat when taken out of the water.

Figure 3. [Tony DeSantis on iNaturalist](#), 2007



Figure 4.
Flowers may be pale to red in color.
[Malisaspring on iNaturalist](#), 2021

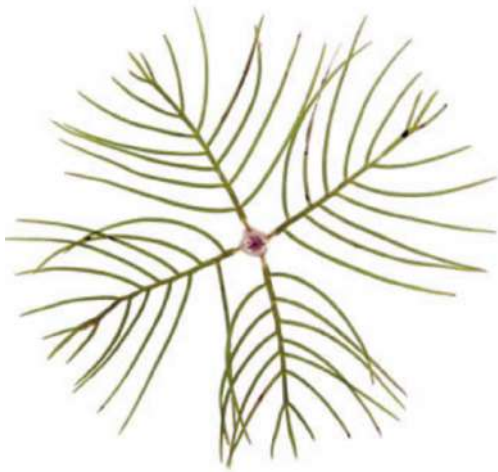


Figure 5. Whorls may be spaced far apart.
[Takovata on iNaturalist](#), 2021



Figure 6. Ends may appear reddish. Plants may be stringy or bushy like the one depicted. [Abv on iNaturalist](#), 2007

Northern Water Milfoil (*Myriophyllum sibiricum*)



Also known as Shortspike Water Milfoil or Siberian Water Milfoil. **Leaves remain stiff when removed from water (while EWM is floppy)**, and it will more likely have green or white stems. Leaves have **5-12 leaflets**. It can hybridize with EWM, leading to specimens with a mixture of traits.

Many Milfoil identification guides compare Northern Water Milfoil and EWM.

Figure 7. Leaf of Northern Water Milfoil. Retrieved from [Lake Owen Association](#), 2024



Figure 8. [Emacromayhem on iNaturalist](#), 2026



Figure 9. [Sharika Elahi on iNaturalist](#), 2020

Like other Milfoils, individuals are very diverse in appearance.

Alternate Flower Water Milfoil (*Myriophyllum alterniflorum*)

Grows submerged in soft water lakes. While it has similar colors, a minimum of 3 leaves per whorl, and can reach lengths similar to EWM, **the leaves of Alternate Flower Water Milfoil hardly exceed 2cm in length, giving it a thin profile, and it has up to 10 leaflets.**



Figure 10. [keevilm on iNaturalist](#), 2022

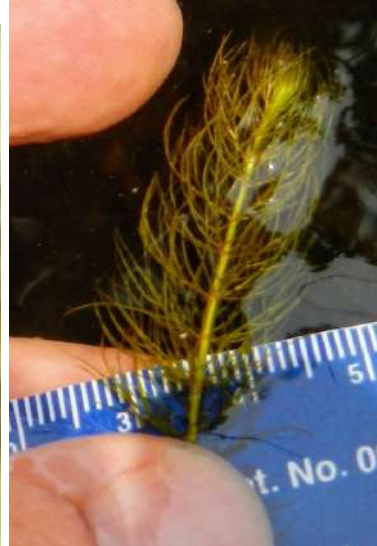


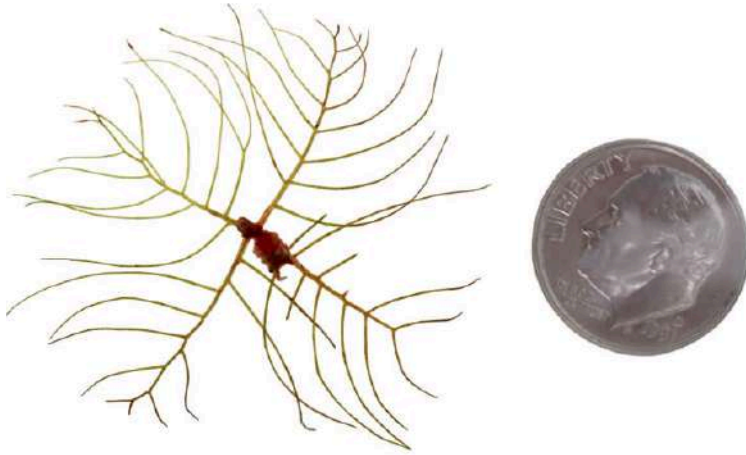
Figure 11. [vernerehl on iNaturalist](#), 2021



Figure 12. [vernerehl on iNaturalist](#), 2021

Farwell's Water Milfoil (*Myriophyllum farwellii*)

Occurs in wetlands in dense growth; shallow acidic water, and soft substrate. **It is less than a meter tall, and is generally entirely submerged.** Like EWM, it can have reddish stems, 3-5 leaves in a whorl, and will likely fall flat when taken out of the water. Leaves can be in any arrangement, and it will have **fewer than 14 leaflets**. They might have red fruits on their leaves.



The overall profile of the leaves may be wider than they are long, or circular in shape.

Figure 13. Peter M. Dziuk, 2015, accessed from [Minnesota Wildflowers](#)



Figure 14. Peter M. Dziuk, 2015, accessed from [Minnesota Wildflowers](#)

Figure 15. Peter M. Dziuk, 2015, accessed from [Minnesota Wildflowers](#)



Low Water Milfoil (*Myriophyllum humile*)

Low Water Milfoil occurs in wetlands and has several morphologies depending on water level. It grows in shallow water, **typically only able to reach a meter in length**, and might even be on the shore, provided it is wet. Like EWM, it can have reddish stems, and underwater leaves are feathery, but often look more scraggly, and have **12 or fewer leaflets**. They may have alternate, opposite, or whorled leaves.



Above water, it has non-segmented, fleshy leaves, and small red flowers.

Figure 16. By David Mazerolle accessed from [Species at Risk Nova Scotia](#)



Small fruits may be visible under the leaves.

Figure 17. [Ksliwoski on iNaturalist](#), 2026

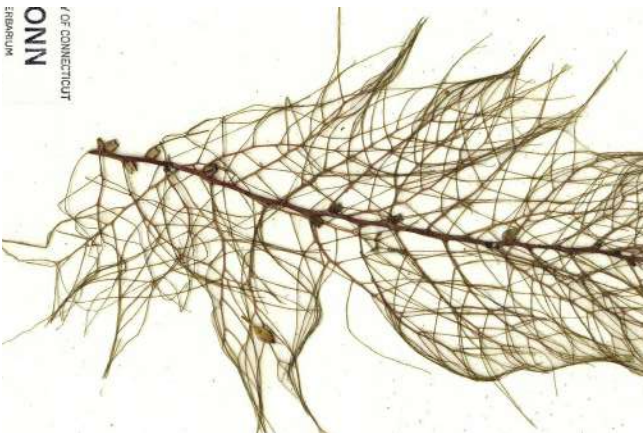


Figure 18. CONN Herbarium, accessed from [Go Botany](#).

Andean Water Milfoil (*Myriophyllum quitense*)

Occurs in lakes. submerged leaves are in whorls of 4-5 with **6-12 leaflets**. Plants remain stiff when removed from water. Thick leaves emerge with flowers.

As the name implies, this Milfoil is found primarily on the west side of South America and North America. However, it is also native to New Brunswick, though there is some debate as to how it got here.



Figure 19. [fern_friend on iNaturalist](#), 2025



Figure 20. [fern_friend on iNaturalist](#), 2025

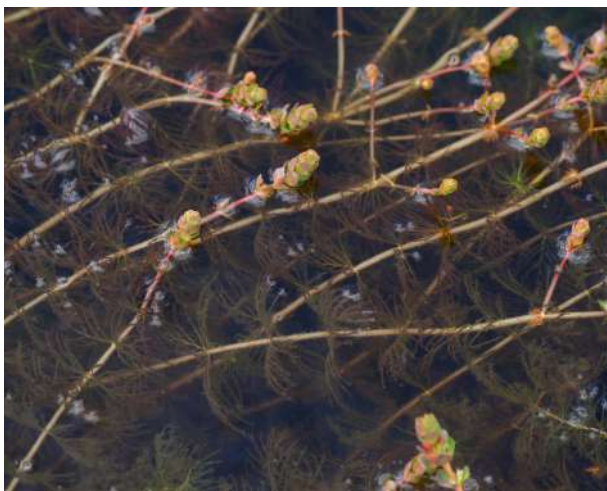


Figure 21. [ludwigia_badensis on iNaturalist](#) 2025



Figure 22. [Beto Espinoza on iNaturalist](#) 2021

Whorled Water Milfoil (*Myriophyllum verticillatum*)

Grows in lakes. Relatively thick stem, leaf size smaller toward top. Can be similar lengths and colors as EWM. **As it has 8-17 leaflets, counting alone may not be enough to distinguish it from EWM.** Looking for **pinnately lobed emergent leaves** (June to September) and/or **turions**, buds which appear near the end of the growing season EWM lacks, are the most reliable way to confirm a specimen is Whorled Water Milfoil, and not EWM.

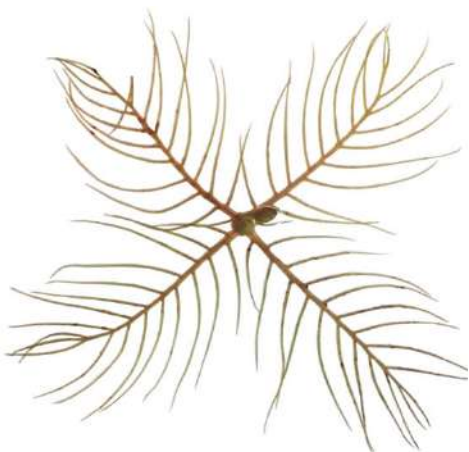


Figure 23. Katy Chayka, 2023, accessed from [Minnesota Wildflowers](#)

Figure 24. A turion you would not see on EWM. Katy Chayka, 2023, accessed from [Minnesota Wildflowers](#)



Figure 25. While flowers can look similar, there may be leaves that provide a hint. Peter M. Dzuik, 2019, accessed from [Minnesota Wildflowers](#)

Various-Leaved Water Milfoil (*Myriophyllum heterophyllum*)



Various-Leaved or Broadleaf Water Milfoil has reddish stems and red flowers like EWM, and as another milfoil, may be mistaken at a glance. These flowers might be accompanied by more traditionally-shaped, jagged leaves like the ones in the picture, or they might appear different (hence the name). With **4-11 leaflets, counting is the best** means of removing this Milfoil from the suspect list.

It is worth noting that whether this plant is considered native or invasive varies between regions and water bodies across Eastern North America. Always clean your equipment even when moving between bodies of water that are near each other.

Figure 26. Showing one of the ways emergent leaves may present. [Cramnaejvallieres on iNaturalist](#), 2024



Figure 27. Submerged leaf. [nbforager on iNaturalist](#), 2026

Figure 28. [abowron on iNaturalist](#), 2026

Slender Water Milfoil (*Myriophyllum tenellum*)

Slender Water Milfoil, while a Milfoil, **has leafless stems** and looks very little like EWM. It grows in soft water lakes.



Figure 29. A segment of Slender Water Milfoil by [getmemorybinos on iNaturalist](#), 2026

Bladderwort (*Utricularia macrorhiza*)

Bladderworts may superficially resemble Milfoils, but can be distinguished by their yellow flowers, angular leaf forking, and **bladders**; small round structures which suck in prey from the water column!



Figure 30. Common Bladderwort can resemble Milfoil from a distance... - [mattgorman on iNaturalist](#), 2022

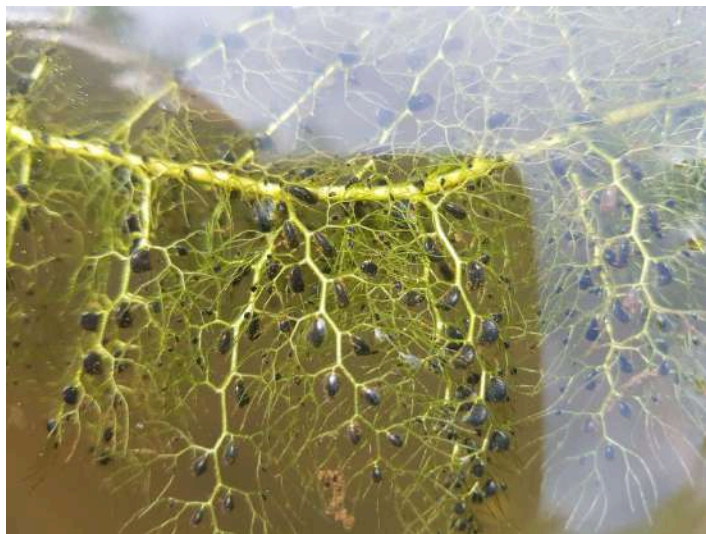


Figure 31. - [akr on iNaturalist](#) 2020 and Figure 32. [Timby on iNaturalist](#) 2019 show the bladders and stem shape of Common Bladderwort

Coontails (*Ceratophyllum* sp.)

Coontails, like Milfoils, are whorled. Some species of Coontails even have red flowers, which makes them resemble EWM from a distance. However, they are easy to identify from EWM when looking at the leaves, as **Coontail leaves are forked**.



Figure 33. Common Coontail with red flowers, which may be mistaken for EWM at a distance. - 2013 Peter M. Dziuk [Minnesota Wildflowers](#)



Figure 34. From a distance, this Prickly Coontail resembles a Milfoil - [Robert Curtis on iNaturalist](#) 2021

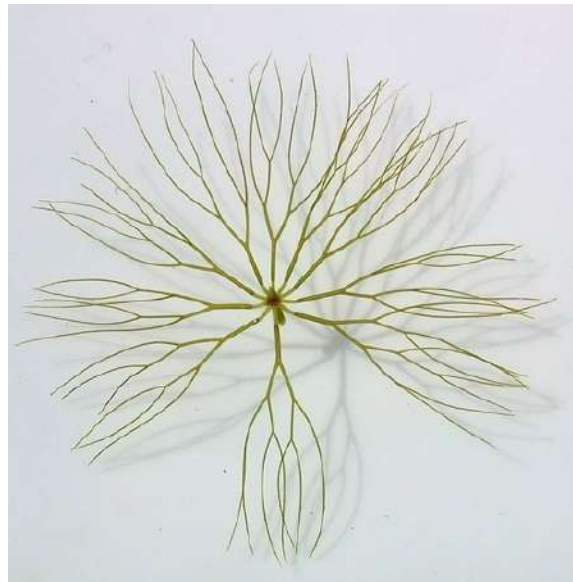


Figure 35. When looking at the leaves of the Prickly Coontail, they look nothing like Milfoil - [mhough on iNaturalist](#) 2019