

# European Frog-bit

*Hydrocharis morsus-ranae*



## What is it and Why is it a Problem?

European Frog-bit is a flowering aquatic plant that grows in thick mats, overcrowds native vegetation and reduces biodiversity. It blocks sunlight from reaching submerged plants and depletes dissolved oxygen in the water when it dies and decomposes. This reduces habitat quality for fish and other aquatic organisms who rely on dissolved oxygen to breathe. In addition, it clogs waterways and interferes with recreational activities such as swimming, fishing and boating.



## How Can it be Managed?

- Report sightings of any invasive species online through [EDDMapS Ontario](#), a web-based mapping system which also has an app, or through the [Invasive Species in Ontario](#) project on [iNaturalist.org](#).
- Learn how to identify it so you can avoid accidentally spreading it with your fishing gear and equipment. Inspect your boat, trailer and fishing gear before leaving a fishing spot and before heading to a new fishing spot to remove any mud and plant fragments. Refer to the [OMNRF's Boater's Action Plan](#) for more information on cleaning your boat and gear.
- Avoid boating near known European Frog-bit infestations and reduce your speed. Propellers can cut off pieces of the plant and spread them to new areas.
- If you are considering removing any invasive aquatic plants, ensure you follow [OMNRF's rules](#) regarding removal - the beds of most water bodies in Ontario are Crown Land.

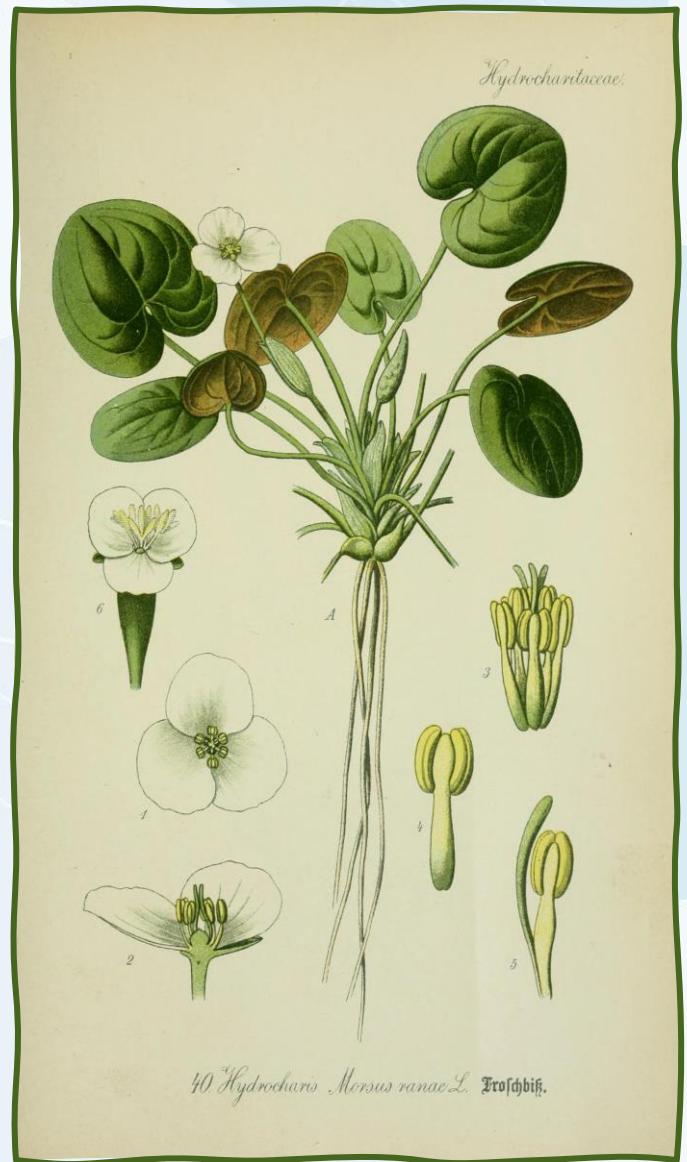


## What Does it Look Like?

- Can be free floating or can grow roots up to 50 cm long
- Flower is singular, white, up to 2 cm wide and has three round petals and a yellow centre
- Leaves are round to heart-shaped, leathery, purple-red underneath with a spongy coating covering the main stem, 2.5 - 5 cm wide and form a rosette up to 6 cm wide



- Do not buy, sell or plant European Frog-bit for water garden or pond use. European Frog-bit can look similar to native North American frog-bit (*Limnobium spongia*), Watershield (*Brasenia schreberi*), and White Water Lily (*Nymphaea odorata*) but European Frog-bit can be differentiated from these because it only has a spongy coating covering the main stem of the underside of the leaf, not the whole underside of the leaf like North American Frog-bit has. Its leaves also form a rosette whereas Watershield does not, and its leaves are not as round and large as White Water Lily leaves. You can refer to the [Grow me instead: Guide to Planting Native Plants in Southern Ontario](#) to determine what native aquatic plants to use instead of European Frog-bit. Oftentimes invasive aquatic plants end up reaching water bodies when people dispose of their unwanted aquarium or water garden plants. The correct way to dispose of unwanted aquatic plants is to donate them or throw them in the garbage. They can also be composted or mulched 30 m or more away from a watercourse on land.



## References

[Great Lakes Nonindigenous Species Information System](#), produced by the National Oceanic and Atmospheric Administration

[Grow Me Instead \(Southern Ontario\) Brochure](#), produced by the Ontario Invasive Plant Council

[Invasive Aquatic Plant Species: A Quick Reference Guide](#), produced by Ontario's Invading Species Awareness Program and Ontario Federation of Anglers and Hunters

[Ontario Invading Species Awareness Program](#), developed by the Ontario Ministry of Natural Resources and Forestry (MNRF), and the Ontario Federation of Anglers and Hunters (OFAH).