# Brazilian Elodea (*Egeria densa*)

### What Ontario is Doing

To prevent this unwanted invader from coming into the province, Ontario has regulated Brazilian Elodea as **prohibited** under the Invasive Species Act. For more information on the Invasive Species Act and Regulations visit <a href="https://www.ontario.ca/invasionON">www.ontario.ca/invasionON</a>.

### **Background**

Brazilian Elodea, also known as Brazilian Waterweed, is a submerged (under water) aquatic plant in the waterweed family. It can be found in a wide range of freshwater habitat types including wetlands, lakes, ponds and even slow-flowing streams. While it is usually rooted at depths of 1-2 m, it can be found in up to 6 m of water, and can also drift freely. Optimal temperatures for growth are 16-20°C, but it has also been shown to survive over winter under ice. In its introduced range this species displays vegetative reproduction only, meaning that small fragments break off to form new plants. Because of this, it can spread quickly. This species has become a popular aquarium and water garden plant, often sold under the alias "Anacharis".

### Range

The native range of Brazilian Elodea is in South America (central Minas Gerais region of Brazil, coast of Argentina and coast of Uruguay). However, owing to its popularity in the aquarium and water garden trade, it has been successfully introduced and translocated throughout parts of Europe, Asia, Central America, Mexico and Oceania, as well as in at least 34 American states. It is not yet documented in Ontario, but has established populations in the Great Lakes basin, including in Illinois, Indiana, New York, and Pennsylvania. It is also available for sale at aquarium and water garden stores.

# **Impacts of Brazilian Elodea**

Once introduced Brazilian Elodea can have significant impacts on aquatic ecosystems. It can rapidly form dense mats on the surface of the water that can restrict water movement, increase sedimentation, affect water quality and crowd out native plant species. Changes to water quality include lowered temperature and reduced oxygen concentrations, reduced nutrient availability while growing, as well as eutrophication (nutrient overloading) when the plant decomposes. Ecosystem impacts include smothering of native plant seeds through sedimentation, and changes to native fish populations through reduced habitat quality. Thick mats of Brazilian Elodea can also impede several recreational activities such as boating, fishing and swimming and can clog infrastructure and water supply intakes.

### **How to Identify**

- Often confused with Hydrilla, another invasive species in the US
- Could be confused with the native aquatic plant Canada Waterweed (Elodea canadensis)
- Plant grows submerged under water in depths ranging from 1-2 m up to 6 m
- Stems are thin (1-3 mm in diameter) upright, cylindrical, simple or branched and grow to the surface of the water forming dense mats
- Leaves are 1-3cm long, up to 5mm broad, and found in whorls of 4-8
- Leaves and stems are generally bright green and the short internodes give it a very leafy appearance
- Brazilian Elodea has small flowers with 3 white petals that stick out approximately 2 cm above the surface of the water once they open

#### What You Can Do

- Learn how to identify Brazilian Elodea and how to prevent the introduction or spread of this plant with your watercraft or fishing equipment.
- Never buy, plant or keep Brazilian Elodea in your aquarium or water garden. It is against the law to buy, sell, trade, possess or transport Brazilian Elodea.
- Never deposit unwanted aquarium or water garden plants into Ontario lakes or rivers. Dispose of them in the garbage or away from any body of water.
- Avoid infested areas and reduce your speed if travelling near Brazilian Elodea infestations. Your propeller can break off fragments and spread the pieces to new areas. New plants can grow from small fragments of the plant.
- Inspect your boat, trailer and equipment after each use, be sure to remove all plants, animals and mud before moving to a new water body.
- If you have any information about the illegal importing, distribution or sale of Brazilian Elodea, report it immediately to the MNRF TIPS line at 1-877-TIPS-MNR (847-7667) toll-free anytime. You can also call Crime Stoppers anonymously at 1-800-222-TIPS (8477).
- If you've seen Brazilian Elodea or other invasive species in the wild, please contact the toll free Invading Species Hotline at 1-800-563-7711, or visit <a href="EDDMapS Ontario website">EDDMapS Ontario website</a> to report a sighting.

#### Other Resources

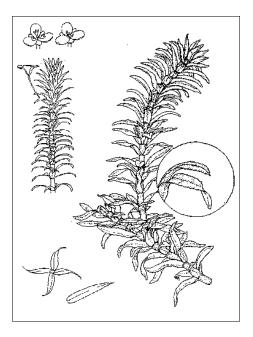
Ontario Ministry of Natural Resources and Forestry

Ontario Invasive Plant Council

**Invasive Species Centre** 

## **For More Information**

Contact the Invading Species hotline at 1-800-563-7711.



Brazilian Elodea - Illustration. With permission from IFAS, Center for Aquatic Plants, University of Florida.



Brazilian Elodea - Photo. With permission from IFAS, Center for Aquatic Plants, University of Florida.