Parrot Feather (Myriophyllum aquaticum)

What Ontario is Doing

To prevent this unwanted invader from coming into the province, Ontario has regulated Parrot Feather as **prohibited** under the Invasive Species Act. For more information on the Invasive Species Act and Regulations visit www.ontario.ca/invasionON.

Background

Parrot Feather is a warm-temperate to sub-tropical, perennial aquatic or semi-aquatic plant. It usually inhabits nutrient-rich, slow-flowing or stagnant waterbodies like lakes, slow moving streams, shallow wetlands, irrigation reservoirs or canals, edges of lands and ponds and backwaters. The species is generally found in shallow water with depths less than 100 cm, but can grow in moist soil and up to depths of 2 m. It is usually rooted to the substrate, but can also occur as a floating plant in nutrient enriched waters. Optimal temperatures for growth are generally reported to be in the 16–23° C range, but Parrot Feather also appears able to survive over winter under ice in some areas. 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. Parrot Feather is a popular aquarium and water garden plant, often sold under other common names including Brazilian water-milfoil, thread-of-life, and water-feather. It is considered one of the five most globally widespread and influential aquatic plants.

Range

Parrot Feather is native to the Amazon River basin in South America including Brazil, Bolivia, Ecuador, Peru, Argentina, Chile and Paraguay. However, owing largely to its popularity as aquarium plant, this species has now been successfully introduced and translocated in many locations outside its native range including parts of Europe, Africa, Asia and Oceania. It was introduced into North America in 1890 as an aquarium and water garden plant, and now exists in at least 38 American states. Established populations exist in Fraser Valley, British Columbia, but it is not currently present in the wild in Ontario. A single population in ponds in Midhurst was reported in 2006, but this was since eradicated. Isolated populations also occur in several Great Lakes states including Michigan, Illinois, Wisconsin, Ohio and Indiana. Parrot Feather is available for purchase in Ontario through the aquarium and water garden trades.

Impacts of Parrot Feather

Parrot Feather forms dense mats in the water, which can displace native species of plants, such as coontail, pondweeds and algae. This has a negative impact on biodiversity, and can affect habitat quality

for fish and also impact food sources for waterfowl. There is little information on the impacts of Parrot Feather on fish and wildlife directly, but dense mats also reduce the levels of dissolved oxygen in the water column, which can be harmful to fish populations. Dense mats of Parrot Feather can also clog waterways, increase flood duration and intensity and provide ideal habitat for mosquito eggs and larvae, which could increase mosquito borne diseases. These thick mats also can affect recreational activities such as swimming, boating and fishing. If introduced into the Great Lakes Parrot Feather would likely have a high impact and spread rapidly.

How to Identify

- Distinguishable by having both submerged (below water) and emergent (above water) vegetation.
- Typically grows in shallow water less than 100 cm deep, but can grow in up to 2 m of water
- Emergent stems can extend up to 30 cm above the water and resemble tiny fir trees
- Leaves are whorled and feather-like with 20 30 segments per leaf
- Submerged leaves are 1.5 3.5cm long and emerged leaves are 2 5cm long and are much greener than submerged leaves
- Flowers are small white spikes at the tips of emergent shoots
- Only female white flowers are known to occur in North America

What You Can Do

- Learn how to identify Parrot Feather and how to prevent the introduction or spread of this plant with your watercraft or fishing equipment.
- Never buy, plant or keep Parrot Feather in your aquarium or water garden. It is against the law to buy, sell, trade, possess or transport Parrot Feather.
- 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 Parrot Feather 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 Parrot Feather, 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 Parrot Feather or other invasive species in the wild, please contact the toll free Invading Species Hotline at 1-800-563-7711, or visit EDDMapS Ontario website to report a sighting.

Other Resources

Ontario.ca/invasivespecies

Ontario Invading Species Awareness Program

Ontario Invasive Plant Council

For More Information

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



Parrotfeather (Myriophyllum aquaticum) photo by Wasyl Bakowsky, Ontario Ministry of Natural Resources (MNR)