

Water Lettuce

(*Pistia stratiotes*)



Free floating mat of water lettuce.
Photo: IFAS Centre for Aquatic Plants, University of Florida, Gainesville, 1990

Water lettuce is a free-floating aquatic plant whose origins are uncertain. An explorer in 18th century Florida was the first person to record its presence in North America. Some experts believe it is native to the southeastern United States, while others believe it came from Africa, southern Asia or South America.

It was likely moved beyond its native range by ships carrying it in their ballast and by people using it in water gardens, aquariums and ponds. Water lettuce is a prohibited plant in Florida, Louisiana, Mississippi and Texas, and is considered a noxious weed in South Carolina and Delaware.

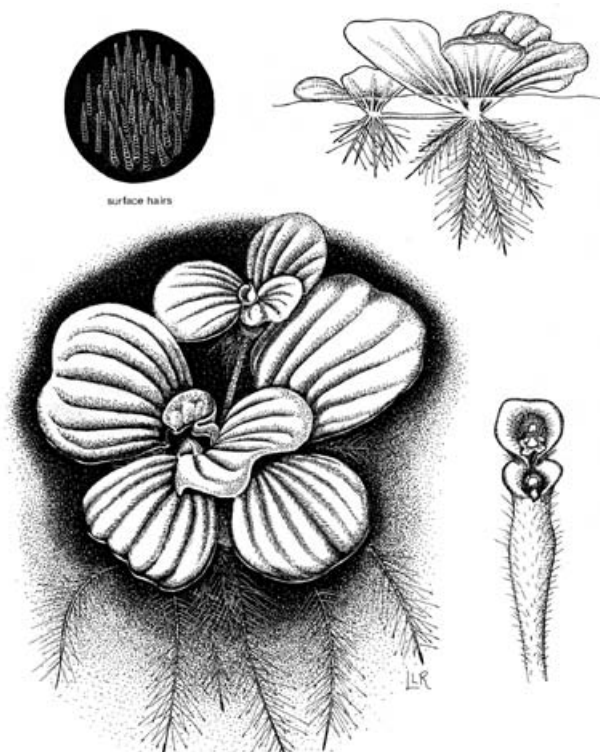
Water lettuce forms large, dense floating mats. The plant can adapt to life in ponds, lakes and quiet areas of rivers and streams, but cannot withstand salt water. While not usually able to tolerate cold temperatures, several populations of water lettuce have been observed in Ontario, and they may be successfully reproducing. Scientists are currently studying where water lettuce is growing in Ontario, whether it is able to survive Ontario's winters, and whether it is likely to spread.

Range

While biologists have different opinions about the origins of water lettuce, its native range is tropical or subtropical. In warm climates it is a perennial, but in temperate regions like southern Ontario it may survive as an annual. In Ontario it has been found in ponds connected to the Rideau Canal near Ottawa, and in the Welland Canal in the Niagara Region, Lake St. Clair and its tributaries, Bronte Creek in Oakville, and beaches east of Toronto.

Impacts of Water lettuce

- The plant forms thick mats that block sunlight and slow or prevent the growth of native aquatic plants.
- As the plant dies and decomposes, it removes oxygen from the water, which can disrupt fish communities.
- Dense mats of water lettuce can hinder swimmers and boaters, prevent other recreational uses of waterways, and restrict water flow in irrigation and flood control canals.



Water lettuce line drawing. Illustration: IFAS Centre for Aquatic Plants, University of Florida, Gainesville, 1990

How to Identify Water Lettuce

- The free-floating plant forms a rosette or group of leaves arranged in a circle that resembles an open head of lettuce.
- Thick, ridged leaves are two to 20 centimetres long and light green, with short, white hairs, rounded ends and no stems.
- Flowers are small and white to pale green.
- The plant produces a green berry that turns brown at maturity.
- Many feathery roots 50 to 80 centimetres long hang under the rosette of leaves.
- Large numbers of plants may be connected by underwater runners called stolons.

Other Resources:

www.invasivespeciescentre.ca
www.ontarioinvasiveplants.ca
ontario.ca/invasivespecies
www.invadingspecies.com

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For More Information:

Please contact the Invasive Species Hotline at 1-800-563-7711.



Water lettuce rosette. Photo: Graves Lovell, Alabama Department of Conservation and Natural Resources, Bugwood.org

What You Can Do

- Learn how to identify water lettuce and how to prevent accidentally spreading this plant with your watercraft.
- Avoid infested areas or reduce your speed when boating near water lettuce infestations.
- Inspect your boat, trailer and equipment after each use. Remove all plants, animals and mud before moving to a new waterbody.
- Avoid planting water lettuce in your aquarium or water garden. Aquarium hobbyists and water gardeners should only use native or non-invasive plants. Ask your retailer about plants that are not invasive.
- Never release unwanted aquarium plants or pets. Return or donate unwanted plants to a garden centre or pet store, or put them in the garbage.
- If you've seen water lettuce or another invasive species in the wild, please contact the toll-free Invasive Species Hotline at 1-800-563-7711, or visit www.invadingspecies.com to report a sighting.



Free floating leaves form a rosette. Photo: Heather Smith, OFAH