

Water Soldier

(*Stratiotes aloides*)

Water soldier is an invasive perennial aquatic plant that is native to Europe and northwest Asia. The only known wild populations in North America occur in Ontario, within the Trent Severn Waterway (near the Hamlet of Trent River, ON), and the Black River (near Sutton, ON). Prior to being regulated as a prohibited invasive species under Ontario's Invasive Species Act, water soldier was sold in Ontario for use as an ornamental plant in water gardens, the likely source of its introductions to Ontario.



Water soldier invading the Trent Severn Waterway. Photo: F. MacDonald, MNRF.

What Ontario is Doing

To prevent the further spread and introduction of this unwanted invader in the province, Ontario has regulated water soldier as a prohibited invasive species under the *Invasive Species Act*. For more information on the *Invasive Species Act* and Regulations visit www.ontario.ca/invasionON.

Impacts of Water Soldier

- Forms dense mats of floating vegetation.
- Crowds out native vegetation resulting in decreased plant biodiversity.
- Has the potential to alter surrounding water chemistry, which may harm phytoplankton and other aquatic organisms.
- Dense floating mats of water soldier can hinder recreational activities, such as boating, angling and swimming.
- Sharp serrated leaf edges can cut swimmers and individuals who handle water soldier plants. Caution should be taken whenever handling the plant.

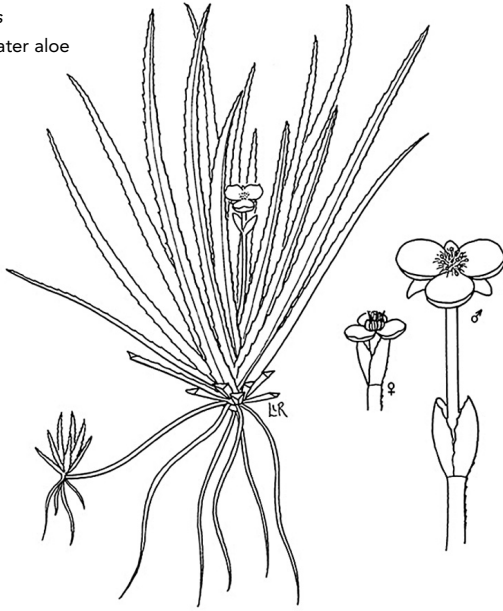
Since the water soldier populations in Ontario are the only known wild occurrences in North America, it is very important to prevent the plant's introduction and spread to new locations. The Ministry of Natural Resources and Forestry, with support from partners including the Ontario Federation of Anglers and Hunters, Trent University, conservation authorities, and Parks Canada is monitoring and tracking the spread of water soldier within Ontario waterbodies and undertaking a variety of control measures to prevent its spread to new locations.



Identifying water soldier. Photo: Wikipedia Commons.

ontario.ca/invasionON

Stratiotes aloides
Water soldier, Water aloe



Water soldier line drawing

Illustration courtesy of: IFAS Centre for Aquatic Plants, University of Florida, Gainesville, 1990.

How to Identify Water Soldier

Water soldier is similar in appearance to an aloe plant, spider plant or the top of a pineapple. Water soldier may be confused with other aquatic plants in Ontario, such as native bur-reeds, arrowheads or eel-grass. However, none of these plants have serrated leaf edges, which can be used to easily distinguish water soldier from these other aquatic plants.

Other identifying features and characteristics of this plant including the following:

- It is a submerged aquatic plant which becomes buoyant during the summer months. As the leaves mature, they become waterlogged and the plant sinks below the water's surface.
- Leaves are 40 cm long, sword-shaped, bright green, with sharp spines, and form a large rosette, or group of leaves arranged in a circle.
- Flowers, if present are white with three petals.
- Roots can be, but are not always, attached to the mud at the bottom.
- Plants can be found growing in depths of up to 5 metres.
- Mature water soldier plants produce offsets, which are similar to those produced by the household spider plant.

What Can I Do?

- Learn how to identify water soldier and how to prevent accidentally spreading the plant with your watercraft or fishing equipment. This is especially important if you are planning to do work or participate in recreational activities in infested areas of the Trent Severn Waterway or other areas that contain water soldier.
- Never buy or keep water soldier in your water garden or aquarium. It is against the law to import, possess, deposit, release, transport, breed/grow, buy, sell, lease or trade water soldier in Ontario.
- Avoid infested areas and reduce your speed when travelling near water soldier infestations. You must take all precautions to avoid spreading water soldier to new areas of a waterbody.
- Inspect your boat, trailer and equipment after each use. You must remove all water soldier, or parts of these plants and dispose of them in the garbage or away from any body of water before transporting your boat over land.
- 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.
- If you have any information about the illegal importing, distribution or sale of water soldier, report it immediately to the MNRF TIPS line at 1-800-222-TIPS-MNR (847-7667) toll free anytime. You can also call Crime Stoppers anonymously at 1-800-222-TIPS (8477).
- If you've seen water soldier or other invasive species in the wild, please contact the toll free Invading Species Hotline at 1-800-563-7711, or visit the EDDMapS Ontario website to report a sighting.



MNRF staff monitoring for water soldier. Photo: F. MacDonald, MNRF.

Other Resources

- Ontario Ministry of Natural Resources and Forestry
- Ontario Invasive Plant Council
- Invasive Species Centre

For More Information, please

contact the Invading Species Hotline at 1-800-563-7711.

Cette publication est également disponible en français.