

# Water Soldier

(*Stratiotes aloides*)

Water soldier is an invasive perennial aquatic plant that is native to Europe and northwest Asia. The only known wild population in North America was found in the Trent River in 2008, near the Hamlet of Trent River, Ontario. Water soldier is used as an ornamental plant in water gardens, the likely source of its introduction to the Trent River.



Water soldier invading the Trent-Severn Waterway

Photo: F. MacDonald, MNR.

## 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 population in the Trent River is the only one in North America, it is very important to prevent the plant's introduction and spread to new locations. The Ministry of Natural Resources, with support from partnering agencies including the Ontario Federation of Anglers and Hunters, Lower Trent Conservation, Ministry of the Environment and Parks

Canada is monitoring and tracking the spread of water soldier within this water body and undertaking a variety of control measures to prevent its spread to new locations.

## How to Identify Water Soldier

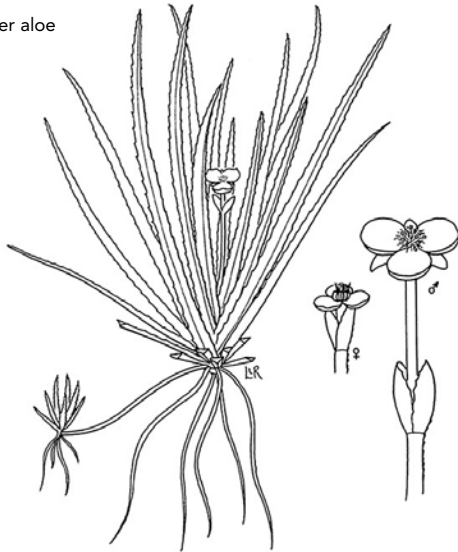


Identifying water soldier  
Photo: Wikipedia Commons.

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 has serrated leaf edges, which can be used to easily distinguish water soldier from these other aquatic plants.

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*Stratiotes aloides*  
Water soldier, Water aloe



Water soldier line drawing

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

Other identifying features and characteristics of this plant include 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.
- Flowering has not been observed in Ontario plants. However, if present, flowers are white with three petals, developing into 1 to 3.5 cm long fleshy berries – each containing up to 24 seeds.
- 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. Offsets look like smaller versions of the adult plant.

## What Can I Do?

- Learn how to identify water soldier and how to prevent accidentally spreading the plant with your watercraft.
- Avoid infested areas or reduce your speed when traveling by water soldier infestations. Boat wake can dislodge plants and offsets and allow them to spread to new areas.
- Inspect your boat, trailer, and equipment after each use. Remove all plants, animals, and mud before moving to a new waterbody.
- Avoid planting water soldier in your water garden or aquarium. Water gardeners should only use native or non-invasive plants, and are encouraged to ask garden centers for plants that are not invasive.
- Report sightings to the Invading Species hotline 1-800-563-7711 or visit [www.invadingspecies.com](http://www.invadingspecies.com).



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

## Other Resources

[ontario.ca/invasivespecies](http://ontario.ca/invasivespecies)  
[invadingspecies.com](http://invadingspecies.com)  
[ontarioinvasiveplants.ca](http://ontarioinvasiveplants.ca)

## For More Information, please

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

Cette publication est également disponible en français.