## Water soldier (Stratiotes aloides) **Eradication Efforts in Ontario**

## **IDENTIFICATION AND BIOLOGY**

- Water soldier is an invasive aquatic perennial plant of the *Hydrocharitacaea* family
- Leaves can reach up to 40 cm long, are sword-shaped, bright green, have sharp spines, and form a large 'rosette' or group of leaves arranged in a circle
  - Similar in appearance to an aloe plant, spider plant, or top of a pineapple
- It forms dense mats of floating and submerged vegetation and hinders recreational activities, injures swimmers with its sharp edge, and outcompetes and causes thick mats which hurts native biodiversity
- Prefers slow moving waters rather than fast moving waters, shallow waters, or waters that fluctuate in level
  - It is often found in back bays and along shorelines
  - It can be lightly anchored in soft muddy sediments
- Reproduces quickly through offsets and turions
  - It does not have viable seed (no sexual reproduction)



## WATER SOLDIER INTEGRATED MANAGEMENT PLAN

Since water soldier was first discovered in Ontario in 2008, the Water Soldier Working Group has been monitoring and managing populations in the Trent-Severn Waterway, the Black River, Red Horse Lake, and private ponds across Ontario. They created the Water Soldier Integrated Management Plan to:

- (1) Prevent the introduction and spread of water soldier to new locations in Ontario;
- (2) Implement early detection and rapid response actions to locate and eradicate new water soldier populations in Ontario:
- 3) Eradicate established water soldier populations from public waters in Ontario; and
- 4) Work with the private sector to identify and eradicate water soldier from private waters in Ontario.

## **HOW YOU CAN HELP**

- Use the 'Clean Drain Dry' method. Since 2022, it is mandatory in Ontario under the <u>Invasive Species Act</u> for aquatic species to be removed from trailers, equipment, and boats (including kayaks and canoes) before
- Dispose of water solider on land at least 30m away from any water body.
- Visit the Ontario Invasive Species Awareness Program <u>website</u> to learn more about water soldier.
- Learn more about the Water Soldier Working Group's monitoring projects.
- Read the Invasive Species Centre's <u>'Water Soldier Factsheet'</u>.
- Report invasive species sightings to the <u>Invading Species Hotline</u>, <u>EDDMapS website</u>, or the EDDMapS App.
- Utilize grant opportunities offered by the <u>Invasive Species Centre</u> and <u>Fisheries and Oceans Canada</u>.
- Read journal articles about water soldier research from Trent University: (Coghlan, Shafer, & Freeland, 2021), (Chabot, Dillon, Ahmed, & Shemrock, 2018), & (Scriver, Marinich, Wilson, & Freeland, 2015).



