

Water Soldier (Stratiotes aloides)

aka Water Pineapple, Crab's Claw

SK Provincial Designation: None*

Overview:

Water soldier is a perennial aquatic plant native to Europe and Asia. It is typically submerged and becomes buoyant in the summer months. It was first discovered in North America in 2008, in the Trent Severn Waterway near the hamlet of Trent River, ON. This is currently the only known wild population of water soldier in North America. As it is often used in water gardens or aquariums and continues to be sold for this purpose, it is suspected that the infestation started from water garden material being improperly discarded into the river.

Water soldier thrives both within and along the edges of lakes and rivers, and can grow in depths of up to five metres. Its dense, floating masses take over aquatic ecosystems and alter water chemistry, harming aquatic outcompeting organisms, native aquatic plants and creating favorable conditions for other invasive species such as zebra mussels and Eurasian water-milfoil. Large masses of plants can create problems for boaters and anglers, and their sharp, serrated leaves can cut and injure swimmers.

*While this plant is not currently regulated in Saskatchewan, it is considered invasive and should be managed as such.

Identification:

Water soldier becomes buoyant in the summer with the leaves just above the surface and will typically become submerged again in the fall. The plant's



PHOTOS: Velela, Wikipedia.org

roots are sometimes, but not always, attached to the lake bottom. The plant reproduces similar to a spider plant, by producing offsets that can easily detach and take root in new areas.

Leaves: Lance-shaped leaves are thick and rigid above water, thin and flaccid when submerged. Submerged leaves are brittle, breaking easily when handled. Leaves are 40 to 60 centimetres long and form into a rosette. The leaves resemble an aloe plant or the top of a pineapple, except with serrated edges. The edges are extremely sharp and can cut skin; take precautions when handling this plant.

Flowers and Seeds: Flowers are white with three petals and a yellow center; they develop into 1 to 3.5 centimetre-long berries that each contain up to 24 seeds. Flowering has not been observed to date in the Ontario infestation.

Prevention:

Do not purchase or grow water soldier or other invasive plants in water gardens or aquariums. If removing this plant, ensure it is disposed of properly to prevent introduction into the wild. Avoid moving watercraft through infested areas and reduce speed when infestations are near; plant offsets can detach and be spread by wave action. Inspect your boat, trailer and equipment and remove all plants and mud before moving to a new water body.

Control:

Depending on the size of the infestation, manual removal alone may be difficult because it is highly labour-intensive, all plant parts must be removed and the serrated edges are extremely sharp. Manual removal in combination with an approved pesticide, applied by a licensed applicator, may prove beneficial.

Sources:

Water Soldier (Stratiotes aloides). Ontario Ministry of Natural Resources. www.ontario.ca/invasivespecies

Campbell, John. "Water Soldier the Newest Recruit in Army of Invasive Species". 2009. communitypress.ca

Mathieu, Emily. "Newest Pest Can Cut You". 2009. www.thestar.com





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Native Plant Society of Saskatchewan