Sagittaria platyphylla

System: Terrestrial

<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Phylum</th>
<th>Class</th>
<th>Order</th>
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<tr>
<td>Plantae</td>
<td>Magnoliophyta</td>
<td>Liliopsida</td>
<td>Alismatales</td>
<td>Alismataceae</td>
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</tbody>
</table>

Common name: sagittaria (English), elliptic-leaved arrowhead (English)

Synonym: Sagittaria graminea var. platyphylla Engelm
Sagittaria mohrii J.G. Sm.

Similar species: Alisma, Sagittaria graminea

Summary: Sagittaria platyphylla is a rhizomatous aquatic plant which can thrive in many aquatic habitats. It forms extensive infestations in shallow waterways, where it can seriously restrict water flow, increase sedimentation and aggravate flooding. Infestations of Sagittaria platyphylla can also displace native plants in wetland areas.

Species Description

Sagittaria platyphylla is an rhizomatous aquatic plant that can reach heights up to 150cm (EFloras.org, UNDATED). The Auckland Regional Council (2002) reports that, "S. platyphylla has fleshy rhizomes that are usually submerged below the water surface, while leaves are held above the surface by rigid stems. There are two kinds of leaves: emergent leaves that are linear to ovate, tapering abruptly to a point with stems that are triangular in cross-section and winged towards the base; and submerged leaves that are strap-shaped. The white or sometimes pink flowers are found in clusters of three-flowered whorls at the end of the flower stem." EFloras.org (UNDATED) reports that, "The Inflorescences are racemes of 3-9 whorls. Flowers can be 1.8cm in diameter and the sepals can be spreading to recurved. Fruiting heads are 0.7-1.2cm in diameter."

Uses

Parsons and Cuthbertson (1992) state that S. platyphylla has been cultivated as an ornamental and this has aided spread.

Habitat Description

The Auckland Regional Council (2002) reports that, "S. platyphylla grows in static or slow-moving fresh water such as drains, streams and pond margins, up to a depth of 45cm." FNZAS (UNDATED) classifies S. platyphylla as a swamp plant. "In Australia, S. platyphylla has become increasingly more common in irrigation supply channels, drains, shallow creeks and wetlands" (Parsons and Cuthbertson, 1992).
Reproduction
The Auckland Regional Council (2002) states that, "S. platyphylla spreads locally by its creeping root system, and to other areas via seed carried in water, by machinery, wildlife and humans. New infestations can also form via rhizome fragments transported by ditch cleaning machinery and spoil." Parsons and Cuthbertson (1992) state that S. platyphylla can spread from seed, and displaced rhizomes and tubers. Entire plants can break free and float to new locations.

General Impacts
The Wellington Department of Conservation (2002) states that, "S. platyphylla forms extensive infestations in shallow waterways, where it can seriously restrict water flow, increase sedimentation, and aggravate flooding. Infestations of this plant can also displace native plants in wetland areas."

Management Info
Physical: The Auckland Regional Council (2002) reports that, "Small infestations can be cleared by hand or machinery but all the roots, rhizomes and tubers must be removed and plant material disposed of carefully."

Pathway
Parsons and Cuthbertson (1992) state that S. platyphylla has been cultivated as an ornamental and this has aided spread.


Compiler: National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG) with support from the Terrestrial and Freshwater Biodiversity Information System (TFBIS) Programme (Copyright statement)

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Publication date: 2006-11-29

ALIEN RANGE
[5] AUSTRALIA
[3] NEW ZEALAND
[1] GEORGIA

BIBLIOGRAPHY
18 references found for Sagittaria platyphylla

Management information

Summary: This report is the first stage in a three-stage development of a Border Control Programme for aquatic plants that have the potential to become ecological weeds in New Zealand.


Summary: This report is the second stage in the development of a Border Control Programme for aquatic plants that have the potential to become ecological weeds in New Zealand. Importers and traders in aquatic plants were surveyed to identify the plant species known or likely to be present in New Zealand. The Aquatic Plant Weed Risk Assessment Model was used to help assess the level of risk posed by these species. The report presents evidence of the various entry pathways and considers the impact that new invasive aquatic weed species may have on vulnerable native aquatic species and communities.


Royal New Zealand Institute of Horticulture (RNZIH), 2005. Sagittaria Sagittaria platyphylla


Wellington Department of Conservation, 2002. Have you seen these aquatic plants? Sagittaria platyphylla . Department of Conservation, P. O. Box 5086, Wellington.

General information


FNZAS (Federation of New Zealand Aquarium Societies), Undated Sagittaria platyphylla.


Freshwater Biodata Information System New Zealand (FBIS), 2005

Summary: The Freshwater Biodata Information System (FBIS) contains fish, algae, aquatic plant and invertebrate data and metadata gathered from New Zealand’s freshwater streams, rivers and lakes. FBIS provides different ways to search for biota: choose a predefined search from a list of common searches; use the map view to draw a box on a map and search for biota; or create your own search for maximum search flexibility. FBIS is offered as a nationally available resource for the New Zealand public, institutions and companies who need access to a well-maintained long-term data repository.


Global Biodiversity Information Facility (GBIF), 2010. Species: Sagittaria platyphylla


ITIS (Integrated Taxonomic Information System), 2005. Online Database Sagittaria platyphylla


