

#### **Government of South Australia**

Adelaide and Mount Lofty Ranges Natural Resources Management Board

# Weed identification note

Water Hyacinth (Eichhornia crassipes)



## **Overview**

Water Hyacinth is a perennial free-floating water weed that originates from the upper reaches of the Amazon River in South America. It was first introduced into Queensland and New South Wales in the 1890s as an ornamental pond specimen due to its striking flowers. Once it escapes the confines of the garden pond and enters local waterways, this species causes severe impacts.

As the world's worst aquatic weed, Water Hyacinth is declared in South Australia under the *Natural Resources Management Act 2004.* If found, it must be reported to your nearest NRM office, plants must be destroyed and ongoing control measures undertaken. Movement or sale of plants is not permitted.

## **Description**

Water Hyacinth is free-floating upright plant with a black, branching fibrous root system.

The leaves are in a stemless cluster above the water, and are thick and dark green with a waxy glossy feel. They are rounded in shape, up to 5cm in diameter and have bladder-like stalks which keep the plant buoyant.

Flowering usually commences in late spring or early summer and continues until the aerial growth dies off with lower temperatures towards winter. The flowers are produced in a cluster about 5–8cm in diameter at the end of an erect stem.

They are pale bluish-purple or lilac-coloured with a yellow centre.

Water Hyacinth can reproduce both vegetatively or by seed.

Plants produce three-celled seed heads containing many minute, ribbed seeds which can remain viable for up to 15 years.

Seed germinates in spring with vegetative growth usually occurring in the warmer months of the year.



Images: Forest and Kim Starr

#### Impacts

The rapid growth of Water Hyacinth leads to the formation of dense mats across water surfaces. These mats impact water quality by reducing sunlight and air exchange from water.

Water lost through normal water surface evaporation is increased by up to 4 times due to the high rate of transpiration through the leaves of this plant.

The rotting plants remove oxygen from the water, causing pollution and stagnation. This can result in the death of fish, crustaceans and other aquatic organisms.

The large mats also create a haven for mosquitos to breed in which increases the chances of spreading mosquito-borne diseases.

Water Hyacinth infestations can severely impact boating and swimming activities.

Dense infestations restrict water flows in rivers and irrigation channels, interfere with irrigation equipment and have been known to cause structural damage to bridges.

## Distribution

Water Hyacinth infestations have been found in all tropical and subtropical continents in the world.

At times, infestations have been found in all mainland states in Australia. Persistent infestations still occur in parts of Queensland, New South Wales and the Northern Territory.

In South Australia infestations occurred in 1937 between Ramco Lagoon and Murray Bridge and again near Ramco in 1955. Both infestations were eradicated and since then only a small number of garden pond infestations have been found annually in metropolitan Adelaide.

These infestations have largely stemmed from illegal backyard or market trading.

#### Invasiveness

Water Hyacinth is known to be one of the world's worst aquatic weeds. It now dominates waterways in over 50 countries worldwide particularly in warmer climates but has also become troublesome in temperate climates.

Areas at risk include still or slow moving fresh water creeks, rivers, lakes and wetlands.

If introduced to any of these areas, Water Hyacinth may quickly cover their surface as infestations can double in size every 5 days in warm weather.



## **Hygiene practices**

The main means of spread of Water Hyacinth is by humans either deliberately or accidentally.

Many infestations occurred as a result of people releasing plants to beautify an area. Other infestations have been a result of people disposing of plants by dumping them into a water body or by the movement of contaminated boats or fishing equipment from infested areas to non-infested areas.

Unwanted aquatic plants should never be dumped into any water bodies; instead they need to be disposed of appropriately.

All boats, boat trailers and fishing equipment should be thoroughly cleaned of all plant material after each use.

## What is being done

South Australia has listed Water Hyacinth as a state alert weed with the aim of preventing it from establishing within the state. All infestations found are to be treated with the aim of eradication.

In Queensland and New South Wales, up to four different insect species that attack Water Hyacinth have been introduced for biological control of established infestations.

Some of these biocontrols have had a significant impact in reducing the size and vigour of water hyacinth infestations.

## What to do

In the Adelaide and Mount Lofty Ranges area, all Water Hyacinth plants found should be reported as soon as possible to the Adelaide and Mount Lofty Ranges Natural Resources Management Board.

If you are unsure about identifying Water Hyacinth, contact Board staff who will visit your property to identify plants, provide advice and they can also organise appropriate control or removal of plants.

#### Please contact your local Board office for further information, advice and assistance in controlling Water Hyacinth

## Adelaide and Mount Lofty Ranges Natural Resources Management Board contacts

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