Aquatic Wetland Plants

Aquatic plants are one of the most important parts of a constructed wetland. They reduce nutrients, heavy metals and sediments in the water, control erosion and reduce water velocity. Aquatic plants provide a home for many fauna species and enhance the City's landscapes.

Top The erosive energy of open water is reduced by rushes at a wetland's shoreline.
Photo: City of Salisbury

Above When planted at the entrance to a wetland, Sedge (Cyperacea species) act as an effective filter.
Photo: Matthew Wright-Simon

Aquatic plants provide food and shelter for a variety of fauna. Floating and emergent plants also shade and cool the water, preventing the growth of potentially dangerous microalgal blooms.

Aquatic plants can be divided into four groups:

- microalgae - microscopic plants that live in the water or that coat underwater surfaces in the wetlands
- submergent macrophytes - forests of larger underwater plants that occur in wetland ponds and which include algaes and flowering plants
- emergent macrophytes - flowering plants rooted in the sediment that come up through the water into the air above such as reeds, rushes and sedges
- floating macrophytes - flowering plants floating on the surface of the water such as duckweed and water fern.

All of these aquatic plants occur naturally in wetlands.

Wetlands are dynamic places and the ever-changing conditions mean that sometimes one type of plant may dominate over the others.

After winter, when the deeper water warms up, blooms of submergent algae such as Green Guts can occur. These short-lived plants are excellent nutrient scavengers, cleaning the water very effectively. As the water becomes increasingly shallow in late spring, rafts of this tangled green algae can float on the surface.

Wetlands are also a haven for weeds. Introduced plants from gardens and roadside plantings are washed into wetlands with stormwater and are trapped by the reedbeds. With a plentiful supply of water and nutrients, such plants can be quick to establish themselves.

Some native species are also considered to be weeds. Cumbungi (or Bulrush) and the Common Reed can dominate a small wetland, clogging up the waterway and stopping the flow of water. Where these plants become established in a constructed wetland they are frequently managed by harvesting.

In general, the aquatic plants in a constructed wetland are managed in as natural a manner as possible. The slopes of the wetlands are designed to provide a range of water depths and allow colonisation by different species. Bands of dense sedges planted across the entry to the wetland act as filters that prevent seeds of the reeds and rushes from entering and colonising the deeper areas.

Learn more

For more information on related topics, see the other fact sheets in the Wetlands series. You may also like to visit the following website for more information:

Aquatic plants
www.abulk.com.au/awn/wetland_plants.html

Top Common Reed (Phragmites australis) not only slows water flow so that pollutants can settle out, it also provides nesting habitat for waterbirds.
Photo: Luke Simon

Above Nardoo (Marsilea sp.) is found in many of the wetlands. It was an important food source for many Aboriginal people.
Photo: Luke Simon

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