

South East of South Australia

WETLAND PLANTS

IDENTIFICATION GUIDE



Government of South Australia

South East Natural Resources
Management Board



Wetlands are areas of our land that are permanent or temporary covered with water. The South East South Australian region contains many thousands of individual wetlands, about 6% of the regional land.

The region supports a wide variety of wetlands plants, which can be broadly grouped, according to their characteristics, into fringing, transition and open water plants.

Wetlands are important to the survival of many species of birds, frogs, fish, insects, mammals and reptiles that live and breed in or around them. They are also important to humans for aesthetic and cultural values as well as for recreation.

An undisturbed and diversified natural ecosystem will contain a great number of organisms and features, all working together to create a balance and, over time, will remain stable. In wetlands as in any other natural ecosystem everything is connected to everything else and everything is recycled. Types of soils present and moisture available will determine what plant species grow. Plant species will then determine what animal species can be found.

Maintaining and restoring wetlands in our local area can help maintain and restore some biodiversity that is essential to the ongoing health of our environment. In doing so, we may increase numbers of creatures that are beneficial to us. Perhaps this could save us considerable costs (less chemicals) and possible environmental damage in future. And best of all, nature is doing this free of charge!

It is much easier to look after what we have got now, than it is to try to fix it up later!



How to use this guide

Wetland plants tend to grow in loose zones around a wetland. Where a plant grows in a wetland is determined by the amount of inundation it can tolerate and the availability of light.

The typical zones found in a wetland are the fringing zone, the transition zone and the open water zone.

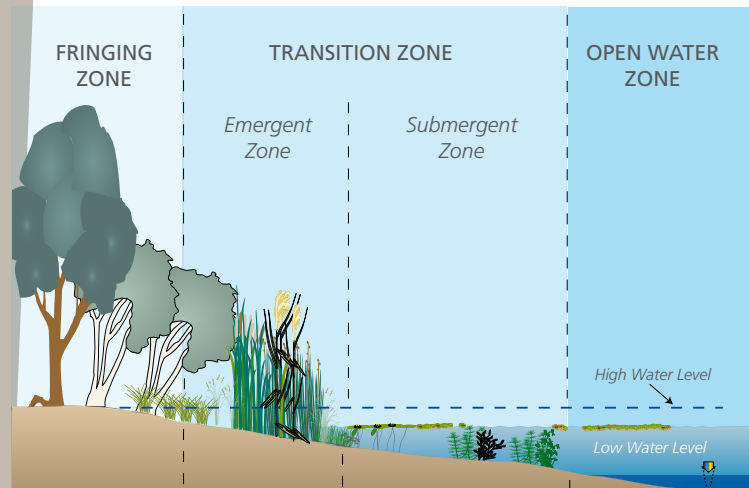
Plants in this guide are loosely grouped into these three zones. Of course in many wetlands, particularly the semipermanent and temporary types, these zones move quite a bit. As the wetland fills with water or water evaporates over time so the actual edge of the wetland may also fluctuate. In response to this plants may colonise an area when it meets their requirements and then die off when it doesn't.

When using this guide to identify a plant first figure out what zone it is growing in. Remember that most of the rushes, sedges and grasses will be in the transition zone and that only those plants that are fully submerged or have some floating parts will be found in the open water zone.

If you don't find the plant you are looking for flick through the other sections.

Each plant is listed alphabetically by its common name with its scientific, or Latin, name italicised in brackets. The brief description that accompanies each photograph contains information about what the plant looks like such as its height or shape. The calendar bar at the bottom tells you when the plant flowers or when you can expect to see flower or seed heads (for those plants with obscure flowers).

Please remember that this guide does not cover the wide diversity of wetland plants and for more information consult one of the many other guides (eg. Neville Bonney's book) available.



KNOBBY CLUB SEDGE (*Ficinia nodosa*)

A perennial sedge (to 1.5m), known for its clubbed flower spikes. Often found as a tussock but can spread along rhizomes forming thickets, with seeds eaten by birds. Grows in damp, sandy soil.

Flower: Yellow/cream flowers at 5-25mm wide, found as a clump near summit of stems.

Conservation Status: Common

Flowering: All year

J F M A M J J A S O N D

TREE EVERLASTING / TREE DAISY

(*Ozothamnus ferrugineus*)



Erect shrub to small tree (2-6m) with open crown and grey/brown bark. Leaves have margins turned under (up to 7cm long), are green above, pale green below. Found in moist soil from coast to inland.

Flower: Buds yellow/green. Flowers are white in broad round topped clusters.

Conservation Status: Uncommon

Flowering: October to February

J F M A M J J A S O N D

AUSTRALIAN SALT GRASS (*Distichlis distichophylla*)

Low growing sprawling grass with erect stems to 20cm high, with a horizontal and narrow leaf structure. Leaves are smooth and rather stiff (25-50mm long). Grows in salt marshes and provides food for Orange-bellied Parrot.

Flower: Compact, flat head with overlapping green/straw colour spikelets on main spike (25mm long).

Conservation Status: Common

Flowering: December to April

J F M A M J J A S O N D

BARE TWIGRUSH (*Baumea juncea*)

Waxy, blue-green stems stiffly upright (20-100cm high, 1-2mm diameter). A perennial with long rhizome. Tolerates brackish conditions near coastal marshes but common in shallow ephemeral water bodies.

Flower: Flowering head a reddish brown spikelet.

Conservation Status: Common

Flowering: September to April

J F M A M J J A S O N D

CREeping BROOKWEED (*Samolus repens*)

A small creeping perennial with many branches found in wet/waterlogged areas or high tide marks of coastal areas. Leaves are thick and leathery and <1cm across.

Flower: White to pink, appear singly where the leaf joins the stem or several branch out together.

Conservation Status: Common

Flowering: October to February

J F M A M J J A S O N D

PITHY OR SWAMP SWORD SEDGE(*Lepidosperma longitudinale*)

Stiff flat stem (<15mm) bulge noticeably on both sides growing to 2m tall. Can form extensive stands in shallow water. Important for reed dwelling birds.

Flower: 2-3 Flowers in spikelets along branches

Conservation Status: Rare

Flowering: September to February

J F M A M J J A S O N D

SILKY TEA-TREE (*Leptospermum lanigerum*)

Tall narrow shrub to small tree 2-5m growing in peat swamps near coast and inland. Leaves often silvery grey covered with silky hairs. Fruit covered with fine hairs. Provides critical habitat for small mammals.

Flower: Five petalled white flower

Conservation Status: Rare

Flowering: September to January

J F M A M J J A S O N D

SWAMP PAPER BARK (*Melaleuca squarrosa*)

A medium to tall (2 - 4m) erect shrub found on fringes of swamps. Has opposite leaves and yellow bottlebrush like flowers. Grows as a tall thicket sometimes with dark/black papery or corky bark.

Flower: Yellow bottlebrush flowers to 4cm long, often scented

Conservation Status: Rare

Flowering: September to February but flowers seen into May

J F M A M J J A S O N D

SWAMP WEED (*Selliera radicans*)

A prostrate creeping broadleaf perennial herb forming matted patches and rooting at the nodes. Found in both estuaries and freshwater areas. Can remain submerged for several months.

Flower: White/purple when water levels drop

Conservation Status: Common

Flowering: January to March

J F M A M J J A S O N D

TALL SAW-SEDGE (*Gahnia clarkei*)

The tallest *Gahnia* in SE (>2m), growing as an erect tussock with drooping flower spike much higher than tussock. Broad bright green leaves, extremely sharp. Grows in waterlogged areas and is an important food source for butterflies.

Flower: Flowers often drooping (pendulous) on an erect stem.

Conservation Status: Rare

Flowering: All year

J F M A M J J A S O N D

BEADED GLASSWORT (*Sarcocornia quinqueflora*)

A reddish, low spreading shrub common in estuaries, saltmarshes and other saline areas. Succulent and segmented leaves (sometimes green depending on the season). Important food source for Orange-bellied Parrot.

Flower: Green on a narrow fruiting spike to 5mm wide when maturing.

Conservation Status: Common

Flowering: November to May

J F M A M J J A S O N D

CHAFFY SAW SEDGE (*Gahnia filum*)

Large tussock with rigid smooth stems to >1.0m growing in waterlogged areas. Leaves are smooth to touch on edges. Brown flower spike does not protrude above tussock. Provides habitat for frogs, mammals and birds. Very similar to *Gahnia trifida* (coarse to touch on the blade) which is also common in the region.

Flower: Inconspicuous flower

Conservation Status: Common

Flowering: Spring into Summer

J F M A M J J A S O N D

COMMON SPIKE-SEDGE (*Eleocharis acuta*)

A low growing single stemmed sedge to 0.6m. Forms tufts along rhizomes sometimes forming dense stands. Prefers fresh water wetlands, and provides habitat for frogs, small birds and mammals.

Flower: Brown spikelets at the tip of stems (10-30mm long)

Conservation Status: Common

Flowering: September to May

J F M A M J J A S O N D

FINE TWIGRUSH (*Baumea arthropphylla*)

An emergent aquatic sedge to 1m mostly forming extensive dense stands, found in shallow fresh water. Leaves are a short sheath surrounding the stem (red to straw in colour). Drought tolerant and provides good protection to fish, frogs and waterbirds.

Flower: Reddish, erect flower spikes 55mm long

Conservation Status: Common

Flowering: September to February

J F M A M J J A S O N D

HOLLOW SEDGE (*Carex tereticaulis*)

A dense tufted sedge with grassy-olive, round, hollow and smooth stems to >1m high. Leaves are up to 4mm wide. Requires moist soil and inundation for up to 3 months. Provides habitat for secretive wetland birds.

Flower: Narrow, pale yellow to brown dense spikes up to 10cm long.

Conservation Status: Common especially in red gum country

Flowering: Flowers any time, mostly spring.

J F M A M J J A S O N D

PALE RUSH (*Juncus pallidus*)

A strong clumped tubular sedge to >1.5m growing in or near water, consisting of many stems. Continuous pith. Leaves are inconspicuous scales at base of stem. Used for nesting and food.

Flower: Flower heads in branched clusters

Conservation Status: Common

Flowering: October to January

J F M A M J J A S O N D

RUNNING MARSH FLOWER (*Villarsia reniformis*)

A tufted aquatic plant with floating, kidney-shaped leaves and numerous yellow flowers. The erect thick textured kidney shaped leaves have dark pits/pores underneath. Common in shallow waterbodies.

Flower: Yellow, 3-4cm in diameter on branched stems.

Conservation Status: Common

Flowering: September to November

J F M A M J J A S O N D

SALTWATER PAPER BARK (*Melaleuca balmaturorum*)

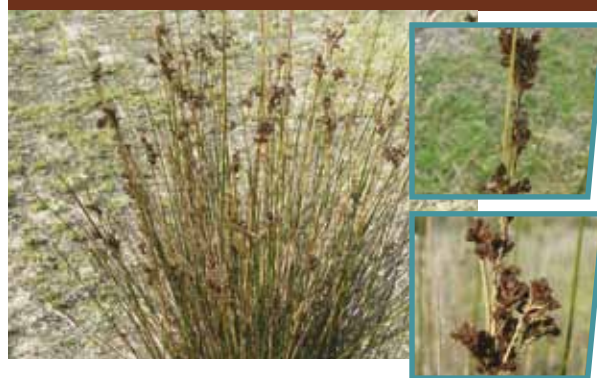
A tall shrub to small tree with distinctive paperbark trunk. Grows in poorly drained brackish to saline water. Provides nesting habitat for birds.

Flower: Creamy white and clustered on ends of each stem

Conservation Status: Common

Flowering: Spring

J F M A M J J A S O N D

SEA RUSH (*Juncus kraussii*)

A perennial tussock with cylindrical but pointy stems ranging from 30-120cm long each with 1-3 leaves. Continuous pith. Grows in brackish to saline wetlands and is used for nesting.

Flower: Flowers clustered together at the ends of stems on several small branches.

Conservation Status: Common

Flowering: All year

J F M A M J J A S O N D

SWAMP CRASSULA (*Crassula helmsii*)

Delicate branched herb up to 12cm long or floating to 25cm (green/brown). Forms dense carpets in shallow water, but grows in any wet soil near standing water. Leaves bright green and arranged in opposite pairs. Eaten by waterbirds.

Flower: Symmetrical white flowers

Conservation Status: Common

Flowering: August to November

J F M A M J J A S O N D

COMMON REED (*Phragmites australis*)

Tall bamboo like plant (1-4m high) with grey/green alternate leaves 20-70cm long. Often found in clumps to dense stands in deep, permanent water. Flower heads are fluffy with a drooping habit. Important food and shelter source for animals.

Flower: White/purple branched spikelets up to 40cm long

Conservation Status: Common

Flowering: January to April

J F M A M J J A S O N D

FLOATING PONDWEED (*Potamogeton tricarlinatus*)

Emergent perennial aquatic plant preferring slightly moving, shallow water. Creeping rhizome and sparsely branched stems to <3m long. Foliage bears an emergent and submerged types.

Flower: Dense spike <5cm long

Conservation Status: Common

Flowering: September to April

J F M A M J J A S O N D

HYSSOP LOOSESTRIFE (*Lythrum hyssopifolia*)

Also called Lesser Loosestrife. A variable annual weakly erect plant (creeping) with alternate leaves and mauve flowers. Leaves 10mm long and <5mm wide. Found during wet seasons or near damp areas. Transition to open water sections once wetland dries back.

Flower: Small blue/mauve/pink flowers

Conservation Status: Common

Flowering: October to February

J F M A M J J A S O N D

RIVER BUTTERCUP (*Ranunculus species*)

A freshwater perennial herb with submerged and emergent leaves very similar to Small River Buttercup and similar. Leaves deeply divided, sometimes on creeping stems <80cm. Bright and shiny yellow flowers. Also found in damp mud.

Flower: Usually shiny yellow flowers

Conservation Status: Uncommon/Rare

Flowering: September to February

J F M A M J J A S O N D

WATER BUTTONS (*Cotula coronopifolia*)

Succulent masses of showy yellow button-like flowers. Creeping semi-aquatic herb growing to <50cm high and 1m wide in brackish to very saline, shallow water. Large dense floating mass on surface. Divided oblong leaves (2-5cm long). Provides habitat shelter.

Flower: Yellow, flat button-like flowers, 10mm wide

Conservation Status: Common

Flowering: September to May

J F M A M J J A S O N D

WATER-RIBBONS (*Triglochin procerum*)

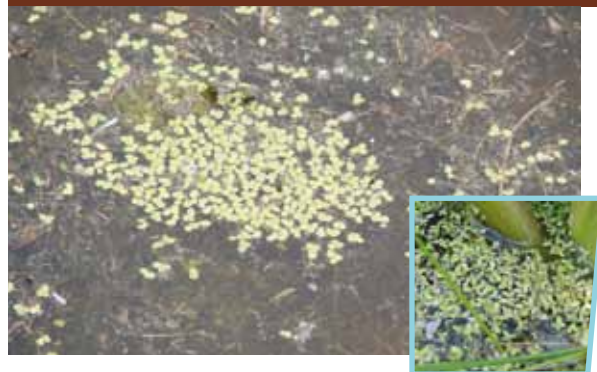
Tufted semi-emergent plant with broad ribbon-like long leaves (3cm wide) and dense flower spike. Roots end in elongated tubers. Likes fresh water less than 2m deep. Used by waterfowl for nesting.

Flower: Forms a dense spike

Conservation Status: Rare

Flowering: September to May

J F M A M J J A S O N D

COMMON DUCKWEED (*Lemna disperma*)

Fairly flat floating plant with small leaves standing at the base of a single root. Bulge in profile with 3-5 veins. Common on still, fresh water. High nutrient plant eaten by birds.

Flower: Tiny barely visible white flowers

Conservation Status: Common

Flowering: Spring

J F M A M J J A S O N D

STONEWORT (*Chara*)

A submerged plant growing to 1m long (with emergent tips) in deep lakes and wetlands. The branches are whorled around the main stem and pale green in colour. Plant gives off a musk odour. Provides spawning area for native fish and invertebrates.

Flower: No true flowers but both male and female reproductive organs.

Conservation Status: Common

Flowering: Reproduce in spring

J F M A M J J A S O N D

The SE NRM Board plays an active role in the management of the region's soil, pest plants and animals, water, ecosystems, coast and marine environments. It is also about individuals, communities and industries caring for their own environment - finding a social, economic and environmental balance now and into the long term future.

Natural Resources Management projects are currently being undertaken all over the South East region, so keep exploring and visiting the website to find out what's happening in your local area.



References and Further Reading



nrmFLORA at: <http://se.nrmspace.com.au/nrmFLORA/> gives you a unique database of plants native to the South East. It is searchable by either plant name, use, or geographic suitability, and provides both full colour pictures and detailed descriptions of each plant, their characteristics and uses.

Flora of South Australia (<http://www.flora.sa.gov.au/>)

Flora of Victoria (<http://www.floravictoria.com.au/>)

Planting Wetlands and Dams - A Practical Guide to Wetland Design, Construction and Propagation, Romanowski, N. (Landlinks Press, 2009)

Tangible benefits of native vegetation - Restoring the balance and saving a dollar, Crouch, C. (Wimmera CMA, 2005)

Waterplants in Australia - A Field Guide, GR Sainty & SW Jacobs (Sainty & Associates, 2003)

Wetland habitats - A Practical Guide to Restoration and Management, Romanowski, N. (CSIRO PUBLISHING, 2010)

What South East Native Plant is that? Neville Bonney (2010)

Acknowledgements:

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The people and organisations who contributed photographs used in this booklet. The majority of photographs are copyright of Bryan Haywood and Steve Clarke.

The wetland diagram has been adapted from Herpich, M. and Butcher, R. All wetlands great and small: A guide to the wetland diversity of the South East. DENR Mount Gambier.

Disclaimer

This publication may be of assistance to you to identify common wetland plants in the South East. While all due care has been taken in compiling this information, contributors to this publication we do not guarantee that the publication is without flaw and therefore disclaim all liability for any errors or omissions, loss, damage or consequence which may arise from any information given in this publication.

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