

THE VALUE OF FLEURIEU SWAMPS



Fleurieu Peninsula Swamps are water-dependent ecosystems that support a diversity of aquatic plants and animals. They are characterised by having permanently waterlogged soil.

The Fleurieu Peninsula Swamps were once narrow wetlands established along watercourses from the top of the catchment to the coast. These swamp watercourses are now broken up due to agricultural development, leaving isolated fragments of swamps which are becoming increasingly rare.

There are many types of Fleurieu Peninsula Swamp, and all are important. Each swamp has its own mix of soil type, water cycles, wetting and drying pattern, landform and vegetation, all influenced by the underlying rock and soil types. Swamps usually have dense vegetation at varying heights in different parts of the swamp, providing a range of habitat types for wildlife.

A disappearing treasure

We need our vanishing swamps now more than ever. Keeping swamps in good condition is important for many reasons.

Natural water filters

Swamps and their plants act as a natural filter to trap sediments and nutrients and break down pollutants from fertilisers and pesticides. This improves the quality of water that flows downstream, runs into other watercourses or recharges into groundwater.

Year-round water

Like giant sponges, swamps respond to varying climatic conditions by normalising water levels in their surrounding environments. For instance, swamps control the effects of floods by absorbing and slowly releasing rainfall and runoff over time. This same action can help maintain stream flows during dry periods. Many Fleurieu Peninsula Swamps exist where natural springs reach the surface and discharge water.

A refuge for threatened species

Although rare themselves, Fleurieu Peninsula Swamps are home to many vulnerable plants and animals. Several threatened species are found in Fleurieu Peninsula Swamps because they are swamp specialists. Others, including the endangered Southern Mount Lofty Ranges Emu-wren, use these remaining fragments of habitat as a last refuge. This wren relies on the structure of the swamp vegetation for foraging and nesting.

Of the approximately 170 native plant species that grow in Fleurieu Peninsula Swamps, almost half are either rare or threatened at the national, state or regional level. These plants are so rare that they could be faced with extinction if we do not manage our swamps well.

Our unique natural landscapes

Sadly, nearly all of our valuable Fleurieu Peninsula Swamps have been altered through clearance, grazing or weed invasion (often all three). Most are in a degraded condition and vulnerable to further damage.

Swamps add tourism value to the Fleurieu Peninsula by contributing to the visual diversity of the landscape. A managed swamp will help ensure the livelihood of its many beautiful inhabitants, as well as enhance that of local communities.

Animals and plants rely
on healthy swamps to thrive





Native Swamp Rats build tunnel-like runways in the dense mat of ground layer plants and sedges at the swamp edge and live in shallow burrows.



Sedge-skipper Butterflies lay their eggs on Cutting Grass. The larvae eat the leaves at night and shelter during the day in curls of leaf blade constructed by the caterpillar.



Southern Mount Lofty Ranges Emu-wrens catch insects and build their nest amongst the dense vegetation.



Southern Pygmy Perch hide amongst the dense aquatic vegetation. These small fish feed on water bugs.



The sleek Yellow-bellied Water Skink swiftly chases tiny invertebrates amongst the ground litter at the swamp edges.



The praying mantis uses camouflage as it waits to snare prey in its grasping, spiky forelegs.

A home for many

A swamp teems with life of all kinds. This variety of life is called biodiversity.

Swamp biodiversity depends on well-managed swamps to maintain habitat for swamp plants and animals at both

a local and catchment level, providing benefits beyond individual swamps. The birds and bats that live in swamps can be particularly useful in controlling insect pests in nearby cropping or pasture land, improving the overall health of agricultural properties.

We need our vanishing swamps now more than ever. Almost half of all swamp plants are either rare or threatened.



Left: Grazing and farmland can threaten swamps

Right: Swamp health is a critical factor in maintaining valuable biodiversity, including the Bibrons Toadlet



All Fleurieu Peninsula Swamps are protected by both state and federal legislation.

Swamps in danger

Some swamp management practices are inappropriate because they may damage the biodiversity and sustainability of swamps. Check with all the relevant authorities before engaging in modification of a swamp in any way.

This includes:

- new draining systems and changes in water extraction
- slashing/mowing of native vegetation
- heavy grazing pressure
- draining and water extraction that alters hydrological processes and water quality
- inappropriate weed control.

Protect and retain your swamp

All Fleurieu Peninsula Swamps are protected by both state and federal legislation. This can affect how you as a land manager manage your swamp.

Removing native vegetation, slashing, burning, and changes to grazing regimes are management actions that all require appropriate approvals from the Native Vegetation Council.

Landholders can protect their healthy swamps with a Wildlife Sanctuary or a Heritage Agreement. For further information, visit www.environment.sa.gov.au/Conservation/Native_vegetation.

Areas with nationally recognised endangered habitats (such as the Fleurieu Peninsula Swamps) or individual species are protected under the *Environment Protection and Biodiversity Conservation Act 1999*. For further information, visit www.ea.gov.au/epbc/about/index.html.

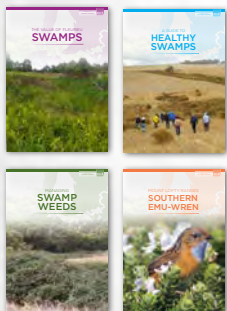
In relation to Fleurieu Peninsula Swamps, the *Natural Resources Management Act 2004* is legislation which:

- influences water use and drainage/watercourse management influences practices that affect the long term sustainability of land and soil
- sets out obligations for weed management and feral animal control.

For further information, visit www.aflnrnm.sa.gov.au or www.samdbnrm.sa.gov.au.

The protection of wildlife and their habitats is governed by the *National Parks and Wildlife Act 1972* and the *Native Vegetation Act 1991*. For further information, visit www.environment.sa.gov.au.

The factsheet series



For further information

Adelaide and Mt Lofty Ranges Natural Resources Management Board Willunga Regional Office
5 Aldinga Road Phone 08 8550 3400
Willunga SA 5172 www.aflnrnm.sa.gov.au

Mt Lofty Ranges Southern Emu-wren and Fleurieu Peninsula Swamps Recovery Program
Conservation Council of South Australia
Level 1, 157 Franklin Street Phone 08 8223 5155
Adelaide SA 5000 www.conservation.sa.gov.au

Goolwa to Wellington Local Action Planning Association Inc. Strathalbyn Natural Resource Centre
6 Catherine Street Phone 08 8536 5612
PO Box 674 www.gwlap.org.au
Strathalbyn SA 5255

South Australian Murray Darling Basin Natural Resources Management Board Murray Bridge Head Office
Mannum Road Phone 08 8532 9100
PO Box 2343 www.samdbnrm.sa.gov.au
Murray Bridge SA 5253

Photos by Kirstin Abley, Mark Bachmann, Michael Hammer, Tom Hands and others, provided courtesy of the Goolwa-Wellington Local Action Planning Association Inc. and Conservation Council SA. Sedge-skipper Butterfly photo by Lindsay Hunt provided courtesy of the Butterfly Conservation Society SA Inc.

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