

Wetlands

of south-western Queensland

Bluebush swamps



Swamp dominated
by northern bluebush,
near Birdsville
(R. Jaensch, Wetlands
International)

Landform and water regime

Bluebush swamps occur in basins, flats and channels and typically are only tens or hundreds of metres wide. Soils are deep-cracking clays and the ground often is hummocky with potholes. Water supply usually is from local runoff and minor creeks, in some instances from larger rivers (if the swamp is on a floodplain). Inundation is temporary and most bluebush swamps are dry for many months or years. Water depth is usually less than 1.0 m. Water in bluebush swamps normally is fresh (non-saline) and turbid.

Typical vegetation

This wetland type is characterised by sparse to open shrubland of northern (Queensland) bluebush *Chenopodium auricomum*. The bluebush shrubs may be up to 1.5 m high.

Associated wetland types

- Shrubby floodplain watercourses.
- Gibber and inter-dunal claypan aggregations.
- Forb meadows on floodplains.
- Lignum swamps.

Distribution in south-western Queensland

This wetland type is not widespread in south-western Queensland, occurring mainly in the Channel Country and Mitchell Grass Downs biogeographic regions where it is uncommon.

Prominent examples of this type

- Most bluebush swamps are small in size and no major aggregations are known in south-western Queensland.

Occurrence in protected areas

This wetland type occurs in only five national parks in south-western Queensland, notably Diamantina and Lochern National Parks.

Principal conservation values

- Support fauna that favour briefly inundated, open shrubland on deep-cracking clay. Otherwise the conservation values are not fully known.

Characteristic plant species

Plants commonly associated with bluebush:

Trees and shrubs:

coolibah *Eucalyptus coolabah*
river cooba *Acacia stenophylla*
lignum *Muehlenbeckia florulenta*
nitre goosefoot *Chenopodium nitrariaceum*
saltbush *Atriplex* spp.

Grasses, sedges and forbs:

sesbania pea *Sesbania campylocarpa*
budda pea *Aeschynomene indica*
pepper grass *Panicum laevinode*
Mitchell grass *Astrebula* spp.
channel millet *Echinochloa turnerana*
rat's tail couch *Sporobolus mitchellii*

Wetlands of south-western Queensland

Bluebush swamps *cont...*



Nitre goosefoot
(R. Jaensch, Wetlands International)

sedges *Cyperus* spp.
annual verbine *Psoralea cinerea*
joyweed *Alternanthera* spp.
common nardoo *Marsilea drummondii*

Characteristic waterbird species

grey teal *Anas gracilis*
pink-eared duck *Malacorhynchus membranaceus*
white-faced heron *Ardea novaehollandiae*
white-necked heron *Ardea pacifica*
Australian white ibis *Threskiornis molucca*
straw-necked ibis *Threskiornis spinicollis*
brolga *Grus rubicunda*
black-tailed native-hen *Gallinula ventralis*
common greenshank *Tringa nebularia*
sharp-tailed sandpiper *Calidris acuminata*
black-winged stilt *Himantopus himantopus*
red-necked avocet *Recurvirostra novaehollandiae*
red-kneed dotterel *Erythronyx cinctus*

Other fauna

Some fishes may occur where swamps are flooded by rivers. Several species of frogs, such as *Cyclorana platycephala*, probably occur. There is no information on invertebrates.

Threats to the conservation values

- Reduced inundation which may eliminate some wetland processes, reduce habitat diversity and prevent reproduction of wetland plants and animals.
- Excessive grazing of cattle on bluebush shrubs, especially during drought.

Management responses required

- Community-wide consultation and education to prevent/minimise new water extraction/diversion schemes both upstream and on-site.
- Manage grazing in bluebush swamps to ensure long-term viability of shrubland.
- Establish and implement voluntary conservation agreements between landholders and government to increase the area of representative examples under protection.

Gaps in knowledge

This wetland type is not well known in south-western Queensland. There is little published information. Knowledge of hydrology, ecological processes and occurrence of wetland species (frogs, invertebrates) is inadequate.

For further information, contact:

Environmental Protection Agency, 160 Ann Street, Brisbane (Tel: 07-3227-8186), or regional offices of the Queensland Parks and Wildlife Service in Toowoomba and Rockhampton.