

Endangered Ecological Community of Swamp Oak

This community is found on the coastal floodplains of New South Wales.

It has a dense to sparse tree layer in which swamp oak is the dominant species northwards from Bermagui.

Other trees including lilly pilly, cheese trees and paperbarks may be present as subordinate species and are found most frequently in stands of the community northwards from Gosford.

Tree diversity decreases with latitude. The understorey is characterised by frequent occurrences of vines, a sparse cover of shrubs, and a continuous groundcover of forbs, sedges, grasses and leaf litter. The composition of the ground stratum varies depending on levels of salinity in the groundwater.

Threats

- Clearing for urban and rural development and the subsequent impacts from fragmentation along with flood mitigation and drainage works.
- Grazing and trampling by stock and feral pests.



The Green & Golden Bell Frog

(*Litoria aurea*)

Description

A relatively large, stout frog, ranging in size from approximately 45 mm to 100 mm.

Habitat & Ecology

- Inhabits marshes, dams and stream-sides.
- Optimum habitat includes water-bodies that are unshaded, free of predatory fish and have a grassy area nearby.
- The species is active by day and usually breeds in summer when conditions are warm and wet.
- Males call while floating in water and females produce a raft of eggs that initially float before settling to the bottom.
- Tadpoles feed on algae and other plant-matter; adults eat mainly insects, but also other frogs.
- Preyed upon by various wading birds and snakes.

Threats

- Predation by exotic fish and feral animals.
- Alteration of drainage patterns and stormwater runoff.
- A fungal pathogen known as Chytrid Fungus.
- Herbicides and other weed-control measures.
- Loss of suitable breeding habitat through alteration by infilling and destruction of wetlands.

Endangered Ecological Community of Coastal Saltmarsh

Coastal Saltmarsh occurs in the intertidal zone on the shores of estuaries and lagoons that are permanently or intermittently open to the sea. It is frequently found as a zone on the landward side of mangrove stands.

Occasionally mangroves are scattered through the saltmarsh. Tall reeds may also occur, as well as salt pans.

Species composition varies with elevation and latitude, with Saltmarshes in southern NSW being generally more species-rich than further north.

Threats

- Infilling for development along with modification of tidal flows as a consequence of artificial structures being erected.
- Alteration of salinity and increasing nutrient levels resulting from the discharge of stormwater into saltmarshes.
- Weed invasion, particularly by *Juncus acutus*.
- Physical damage from human disturbance, domestic and feral animals.
- Dumping of rubbish and pollution from oil or chemical spills from shipping or road accidents; catchment runoff of nutrients and agricultural chemicals.



Fauna List

Frogs

Green & Golden Bell frog
Eastern Dwarf Tree Frog
Verreaux's Tree frog
Striped Marsh Frog
Common Eastern Froglet

Mammals

Yellow-bellied Glider
Grey-headed Flying Fox
White-striped Freetail Bat

Birds

A total of 47 species including:-

Pied Oystercatcher
Tawny Grassbird
Sulphur Crested Cockatoo
Eastern Curlew
Superb Fairy Wren
Fig Bird
Australian King Parrot
Barking Owl
Common Koel

Black-winged Stilt (photographed below)



Land for Wildlife

The aim of 'Land for Wildlife' is to help landowners conserve and manage wildlife and contribute to the conservation of the plants and animals on their property.

Friends of St Joseph's

The 'Friends' is a voluntary group of Josephite Associate members and supporters that assist in the environmental enhancement of the bushland and garden improvements of the Centre.

Acknowledgements

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- Commonwealth Government's Community Coastcare
- Hunter - Central Rivers Catchment Management Authority

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- Community Environment Network
- Pigmy Possum Ecological Consulting Pty Ltd
- Gecko Environmental Management

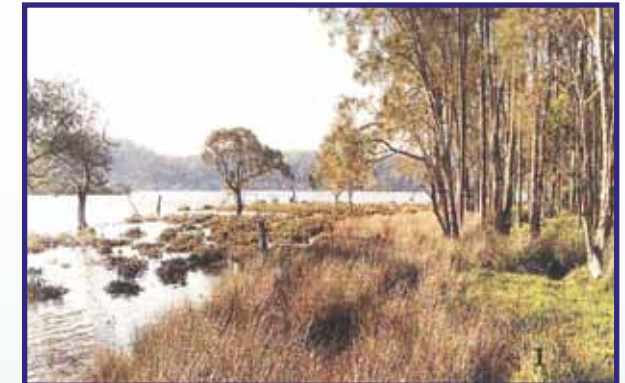
Flora & Fauna Information:

- NSW National Parks Website

Photography:

- Photos 1,2,4,5 & 6 - Frank Kennedy
- Photo 3 - Southern Cross University

St Joseph's Spirituality & Education Centre Kincumber South



The St Joseph's Centre Project protects:-

- Endangered Ecological Communities of Saltmarsh and Swamp Oak Forest
- The Endangered 'Green & Golden Bell Frog'.
- Is a 'Land for Wildlife' Site.

A Call to Ecological Conversion

'Unfortunately, if we scan the regions of our planet, we immediately see that humanity has disappointed God's expectations.

We must therefore encourage and support the 'ecological conversion' which in recent decades has made humanity more sensitive to the catastrophe to which it has been heading.'

Pope John Paul - General Audience 2001