

MALLEE

What does it look like?

Mallee is a general term that refers to Eucalypt species that are multi-stemmed, grow from an underground rootstock (lignotuber) and thrive in harsh conditions. They often have a flattened canopy, which in windswept coastal areas of Australia can be stunted or angled.

In the South East, Mallee comprises a group of typically robust multi-stemmed, spreading eucalypts which range from 0.5-10 m high, depending on the species and growing conditions. Most species have smooth bark which is shed in strips, but a few species have thick, rough bark. Those familiar to the South East are:

Widespread:

- Coastal White Mallee (*Eucalyptus diversifolia*)
- Ridge-fruited Mallee (*Eucalyptus incrassata*)

Common:

- Narrow-leaf Red Mallee (*Eucalyptus leptophylla*)

Restricted:

- White Mallee (*Eucalyptus dumosa*)
- Broad-leaved Box (*Eucalyptus behriana*)
- Peppermint Box (*Eucalyptus odorata*)

The best way of identifying these trees is by looking at the number and shape of the fruits (nuts).

The plants found in the understorey vary in different situations depending on rainfall, topographic location and are heavily influenced by fire history. Understorey may be hummock grasses/spinifex, chenopods (Bluebush, Ruby Salt Bush) or tussock grasses

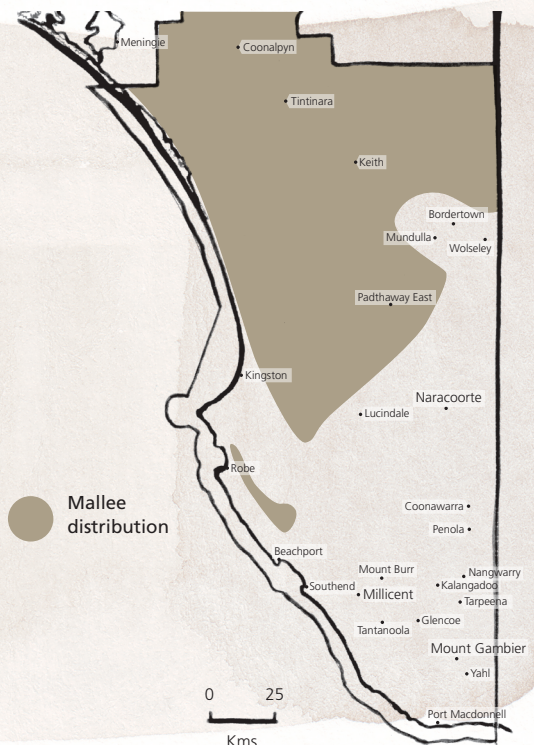


and broombush, particularly in the Upper South East, or scrubby heath in the mid South East.

Where is it found?

In the Upper South East, Mallee is the dominant vegetation community and extends (east to west) from the Victorian border across to the Coorong. Ngarkat and Mt Boothby Conservation Parks are typical examples.

It is associated with infertile sandy soils and extends south through the mid South East as far as Lucindale where it grows on the sandy dunes and ridges. Coastal Mallee can be found in strips along the Coorong, and on the coast between Kingston and Beachport.



Boronia coerulescens - Blue Boronia



Little Pygmy Possums weigh only 7 grams and need hollows to nest in

Importance

The Mallee regions have some of the largest intact areas of vegetation and are therefore very important for biodiversity. When in flower, they provide important feeding habitat for many of the region's honeyeaters and some of the woodland birds.

The Mallee that occurs further south in our regions is some of the wettest mallee in the country enabling it to support the most southern population of Malleefowl.

Other species that can be found in the Mallee woodland include

Plants

- Hairy-pod Wattle *Acacia glandulicarpa*
- Jumping Jack Wattle *Acacia enterocarpa*
- Lowan Phebalium *Phebalium lowanense*
- Metallic Sun-orchid *Thelymitra epipactoides*
- Scarlet Mintbush *Prostanthera aspalathoides*
- Silver Daisy-bush *Olearia pannosa ssp. pannosa*



Photo: Oisin Sweeney
Acacia enterocarpa
Jumping Jack Wattle

Mammals

- Little Pygmy-possum *Cercartetus lepidus*
- Silky Mouse *Pseudomys apodemoides*
- Western Pygmy Possum *Cercartetus concinnus*

Reptiles & frogs

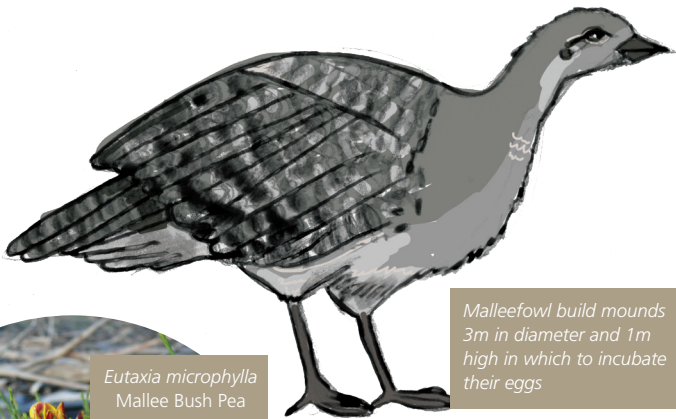
- Mallee Dragon *Ctenophorus fordii*
- Mallee Tree-dragon *Amphibolurus norrisi*
- Painted Dragon *Ctenophorus pictus*
- Painted Frog *Neobatrachus pictus*
- Master's Snake *Drysdalia mastersii*

Birds

- Malleefowl *Leipoa ocellata*
- Purple-gaped Honeyeater *Lichenostomus cratitius*
- Spiny-cheeked Honeyeater *Acanthagenys rufogularis*

Invertebrates

- Large Bronze Azure *Ogyris idmo halmaturia*



Malleefowl build mounds 3m in diameter and 1m high in which to incubate their eggs



Eutaxia microphylla
Mallee Bush Pea



Photos: Peter Tucker
Dillwynia hispida
Red Parrot Pea

Threats

Disconnected remnants: some stands of Mallee are highly fragmented restricting safe passage for wildlife.

Grazing pressure: Overgrazing, notably by rabbits and goats, has modified Mallee by reducing plant health, preventing natural regeneration, and altering habitat. Grazing by hard hooved animals also has a negative impact on soil structure and can create blow-outs in the sandy areas.

Weed invasion: weeds out-compete native plants, preventing natural regeneration.

Bushfire: high intensity and frequent bushfires create conditions favourable to weed and rabbit invasion and increase the potential loss of small plant and animal populations.

Restoration Action

Maintaining larger remnants or protecting less common Mallee types is of fundamental importance. Any areas of Mallee with native plants existing underneath are of highest priority but small isolated patches of Mallee in paddocks should not be dismissed; they are important stepping-stones for wildlife to move across cleared landscapes.

Link remnants

Where possible, revegetate to connect remnant Mallee and control clearance of remnant vegetation.

Controlled grazing

Management of livestock is an important part of protecting mallee. Removal of grazing will assist and encourage natural regeneration. Once grazing pressure has been removed, a focus on the control of pasture grasses and weeds may be necessary. Feral animals such as goats and deer can also cause a lot of damage. Advice is available on vermin control strategies.

Weed control

Active management of weeds will allow more native plants to flourish. Introduced grasses and pasture species such as African Love grass and Perennial Veldt grass are frequently encountered in Mallee.

Controlled burn

Fire plays an important role in Mallee landscapes however reducing the occurrence of destructive bushfires with mosaic burning techniques will assist with the conservation of these landscapes, especially if followed up by weed control. Obtaining permits can be a lengthy process, although having a written site plan can help. Maintaining some areas of long-unburnt vegetation is very important for conservation of Mallee birds.

Farmers have shown that conserving biodiversity and native vegetation on their farms supports sustainable agriculture.

Further Advice

Contact Limestone Coast Landscape Board on (08) 8735 1204 to supply a list of regional revegetation contractors, consultants and specialists to advise on your project.

Painted Frogs (also known as the Mallee Spade Foot) are a burrowing frog, emerging after heavy rains to breed.

