Vegetation Community Profile

Mallee Box (*Eucalyptus porosa*) + Drooping Sheoak (*Allocasuarina verticillata*) + Dryland Tea-tree (*Melaleuca lanceolata*) Low Woodland (AP0020PE)

Within the Hills and Fleurieu Landscape region, there are no remnant patches other than highly altered stands on road reserves. Because there are no reference sites, the pre-European composition of this community can only be surmised as containing species typical of grassy woodlands that occur in this area. The shrub understorey would likely have been relatively sparse with the greatest plant diversity found in the ground layer of herbs, tussocks and grasses.

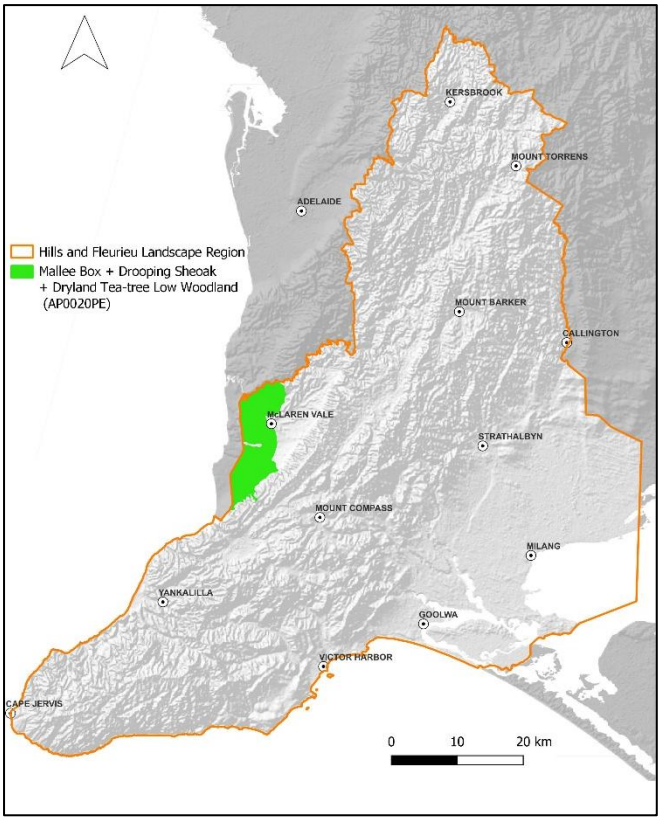

Figure 1: Pre-European mapping of Mallee Box (*Eucalyptus porosa*) + Drooping Sheoak (*Allocasuarina verticillata*) + Dryland Tea-tree (*Melaleuca lanceolata*) Low Woodland community within Hills and Fleurieu Landscape region

Distribution within the Hills and Fleurieu

The pre-European distribution of Mallee Box (*Eucalyptus porosa*) + Drooping Sheoak (*Allocasuarina verticillata*) + Dryland Tea-tree (*Melaleuca lanceolata*) Low Woodland has been mapped on the hill slopes extending from the Onkaparinga Gorge in the north to Sellicks Hill in the south, and west of McLaren Vale and Willunga. Approximately 7,600 ha has been mapped as having occurred prior to pre-European settlement. This community has not been mapped in the Department for Environment and Water's extant mapping (Data SA 2025).

Mallee Box (*Eucalyptus porosa*) Low Woodland in gully over dense shrubs: sub-coastal locality northern extent of Hills and Fleurieu region (Source T Croft).

Landform and aspect

Gentle slopes and foot slopes at the base of the Willunga escarpment grading to outwash plains at the western margins. Elevation ranges from approximately 150 m above sea level, descending westwards to approximately 40 m above sea level at the Hills and Fleurieu regional boundary.

Soil types

Soils within this community are primarily hard silty loams to silty clay loams overlying clay subsoils, often calcareous at depth.

Rainfall

Approximately 500 mm to 620 mm per annum.

Revegetation

This vegetation community reflects the landscapes and ecosystems that existed at the time of European colonisation. First Nations peoples have cared for these lands for thousands of years, maintaining deep connections to Country through knowledge, culture, and stewardship. This guide supports efforts to understand, protect and restore native vegetation in a way that respects those enduring relationships.

Vegetation structural layers

Tree Layer

Mallee Box (*Eucalyptus porosa*), typically with Dryland Teatree (*Melaleuca lanceolata*) and Drooping Sheoak (*Allocasuarina verticillata*) form the overstorey canopy, with a combined cover of approximately 10% - 30%. Golden Wattle (*Acacia pycnantha*) is likely to have been widely present as a small tree.

Shrub Layer

In general, the shrub layer of this Mallee Box community is likely to have supported widely spaced shrubs including Sweet Bursaria (*Bursaria spinosa* ssp. *spinosa*).

Groundcover Layer

The ground layer is likely to have comprised a well-developed cover of herbs and grasses (Boomsma and Lewis 1980).

Caring for Country and native vegetation

This vegetation community reflects the landscapes and ecosystems that existed at time of European colonisation. First Nations peoples have cared for these lands for thousands of years, maintaining deep connections to Country through knowledge, culture, and stewardship. This guide supports efforts to understand and restore native vegetation in a way that respects those enduring relationships.

Reference

Data SA (2025). Native Vegetation Floristic Areas – NVIS – Statewide. *Government of South Australia*. https://data.sa.gov.au/data/dataset/native-vegetation-floristic-areas-nvis-statewide. Accessed April 2025

Acknowledgment

We gratefully acknowledge the valuable work and research of the staff and volunteers of the South Australian Seed Conservation Centre and Botanic Gardens of South Australia. The information available on their public websites 'Seeds of South Australia' and affiliated 'www.syzygium.xyz' has been widely referenced for the germination and propagation content of the Vegetation Community species lists.

Landscapes Hills and Fleurieu thank Sonia Croft and Tim Croft for their input in developing these pre-European vegetation community profiles, maps and species lists.

Preferred way to cite this information

Croft, S & Croft, T (2025). Vegetation Community Profile: Mallee Box (*Eucalyptus porosa*) + Drooping Sheoak (*Allocasuarina verticillata*) + Dryland Tea-tree (*Melaleuca lanceolata*) Low Woodland (AP0020PE). *Hills and Fleurieu Landscape Board*.

When citing multiple profiles:

Croft, S & Croft, T (2025). Pre-European Vegetation Community Profiles for the Hills and Fleurieu Landscape region. *Hills and Fleurieu Landscape Board*.

Mallee Box (*Eucalyptus porosa*) + Drooping Sheoak (*Allocasuarina verticillata*) + Dryland Tea-tree (*Melaleuca lanceolata*) Low Woodland (AP0020PE)

Scientific Name	Common Name	Nursery Availability*	Propagation Method**	Seed Treatment***	Seed Propagation Difficulty****	Pollination	Links to further Information
OVERSTOREY TREES (combined cover 20 - 50%)							
Allocasuarina verticillata	Drooping Sheoak	Y	S, C	CS		Wind	https://revegetation.org.au/?project=allocasuarina-verticillata
Eucalyptus porosa	Mallee Box	Y	S	N		Insects (Native Bees, Honey bees, Hoverflies, Wasps, Butterflies, Moths, Beetles, flies)	https://syzygium.xyz/saplants/Myrtaceae/Eucalyptus/Eucalyptus_porosa.html
Melaleuca lanceolata	Dryland Tea-tree	Y	S, C	N		Insect (Bees, Butterflies)	https://syzygium.xyz/saplants/Myrtaceae/Melaleuca/Melaleuca_lanceolata.html
UNDERSTOREY TREES (combined cover 2 - 10%)							
Acacia pycnantha	Golden Wattle	Y	S	HW, Sc		Insect (Native Bees, Honey Bees, Hoverflies, Butterflies, Moths, Beetles Flies), Birds (include Honeyeaters and Thornbills)	https://www.publish.csiro.au/BT/BT9880519
Myoporum insulare	Common Boobialla	Y	S, C	N		Insect	https://aussiegreenthumb.com/boobialla-myoporum-insulare/
Pittosporum angustifolium	Native Apricot	Y	S	So		Insect	https://aussiegreenthumb.com/gumbi-gumbi-pittosporum-angustifolium/
MEDIUM AND TALL SHRUBS (combined cover 5 - 30%)							
Acacia acinacea	Wreath Wattle	Y	S	HW, Sc		Insect (Bees, Butterflies) Bird	https://portenvironmentcentre.org.au/wp-content/uploads/2024/08/2023-Acacia-acinacea-Gold-Dust-Wattle.pdf
Acacia ligulata	Umbrella Bush	Y	S	HW, Sc		Insect (Bees, Butterflies)	https://portenvironmentcentre.org.au/wp-content/uploads/2024/08/2023-Acacia-ligulata-Umbrella-Wattle.pdf
Enchylaena tomentosa var. tomentosa	Ruby Saltbush	Y	S, C	N, Fr, Sm		Wind	Enchylaena tomentosa - Australian Native Plants Society (Australia)

Mallee Box (*Eucalyptus porosa*) + Drooping Sheoak (*Allocasuarina verticillata*) + Dryland Tea-tree (*Melaleuca lanceolata*) Low Woodland (AP0020PE)

Scientific Name	Common Name	Nursery Availability*	Propagation Method**	Seed Treatment***	Seed Propagation Difficulty****	Pollination	Links to further Information
Maireana brevifolia	Short-leaf Bluebush	Y	S	N		Wind	https://syzygium.xyz/saplants/Amaranthaceae/Maireana/Maireana_brevifolia.html
Rhagodia parabolica	Mealy Saltbush	Y	S	N		Wind	Microsoft Word - Rhagodia parabolica Fragrant Saltbush.docx
LOW SHRUBS (cover < 1%)							
Styphelia humifusa	Cranberry Heath	N	C	N	D	Bird, Insect (Wasps, Moths, Beetles)	https://syzygium.xyz/saplants/Ericaceae/Styphelia/Styphelia_exarrhena.html
SEDGE/ TUSSOCKS (combined cover 2 - 10%)							
Dianella revoluta var. revoluta	Black-anther Flax-lily	Y	S, D	N		Insect (native bees)	https://syzygium.xyz/saplants/Asphodelaceae/Dianella/Dianella_revoluta_var._revoluta.html
Lomandra densiflora	Soft Tussock Mat-Rush	Y	S, D, C	HW	D	Insect (Bees, Butterflies, Beetles)	https://syzygium.xyz/saplants/Asparagaceae/Lomandra/Lomandra_densiflora.html
Lomandra effusa	Scented Mat-rush	Y	S, D	N		Insect (Bees, Butterflies, Beetles)	https://syzygium.xyz/saplants/Asparagaceae/Lomandra/Lomandra_effusa.html
TWINER/ SCRAMBLER (cover < 1%)							
Convolvulus angustissimus	Australian Bindweed	Y	S	HW, Sc		Insect (Bees)	https://syzygium.xyz/saplants/Convolvulaceae/Convolvulus/Convolvulus_angustissimus_ssp._angustissimus.html
FERN (cover 1 - 10%)							
Cheilanthes austrotenuifolia	Annual Rock-fern	Y	D			Wind	https://syzygium.xyz/saplants/Pteridaceae/Cheilanthes/Cheilanthes_austrotenuifolia.html
HERBS (combined cover 5 - 15%)							
Arthropodium strictum	Common Vanilla-lily	Y	S, D	Sm, St		Insect (Native bees, Hoverflies, Butterflies)	https://aussiegreenthumb.com/chocolate-lily-arthropodium-strictum/
Caesia calliantha	Blue Grass-lily	Y	S	CS		Insect	https://syzygium.xyz/saplants/Asphodelaceae/Caesia/Caesia_calliantha.html
Goodenia albiflora	White Goodenia	Y	S, C			Insect (Bees, Butterflies)	Microsoft Word - Goodenia albiflora White Goodenia.docx

Mallee Box (*Eucalyptus porosa*) + Drooping Sheoak (*Allocasuarina verticillata*) + Dryland Tea-tree (*Melaleuca lanceolata*) Low Woodland (AP0020PE)

Scientific Name	Common Name	Nursery Availability*	Propagation Method**	Seed Treatment***	Seed Propagation Difficulty****	Pollination	Links to further Information
Goodenia pinnatifida	Cut-leaf Goodenia	Y	S, C		D	Insect	Goodenia pinnatifida
Lotus australis	Australian trefoil	Y	S	HW, Sc		Insect (Bees)	https://www.greeningaustralia.org.au/wp-content/uploads/2017/11/FACT-SHEET_Lotus_australis.pdf
Pterostylis nana	Dwarf Greenhood	N					Pterostylis nana
Ptilotus spathulatus	Pussy-tails	Y	S, C, D	N, Sm		Insect (Moths, Wasps, Butterflies)	https://syzygium.xyz/saplants/Amaranthaceae/Ptilotus/Ptilotus_spathulatus.html
Teucrium racemosum	Grey Germander	Y	S, C	N		Insect	https://treeproject.org.au/seedlings/grey-germander/
Vittadinia blackii	Narrow-leaf New Holland Daisy	Y	S	N		Insect	Vittadinia blackii
Vittadinia cuneata var.	Fuzzy New Holland Daisy	Y	S	N		Insect	Vittadinia cuneata var. cuneata
Wahlenbergia luteola	Yellow-wash Bluebell	N	S			Insect	Wahlenbergia luteola
GRASSES (combined cover 10 - 30%)							
Aristida behriana	Brush Wire-grass	Y	S	N		Wind	Aristida behriana
Austrostipa flavescens	Coast Spear-grass	Y	S	N		Wind	Austrostipa flavescens
Enneapogon nigricans	Black-head Grass	Y	S	N		Wind	Welcome to the NGRG's Native Grasses Propagation Page.
Rytidosperma caespitosum	Wallaby-grass	Y	S	N		Wind	Rytidosperma caespitosum
Themeda triandra	Kangaroo Grass	Y	S	N		Wind	Themeda triandra
MISTLETOE							
Amyema miquelii	Box Mistletoe	N	S	N		Birds	Mistletoe-Propagation-Manual.pdf

If cells are blank, no information was readily available at the time of writing.

*** Nursery Availability**

N = No

Y =Yes

**** Propagation Method**

C = Cuttings

D= Division

S= Seedlings

***Seed Treatment Code	Treatment name	Procedure
CS	Cold Storage	Stored at 3 to 5 degrees Celsius.
Fr	Flesh Removal	Removal of fruit from seed coat
HW	Hot Water	Water just off the boil poured over the seed and allowed to stand for 8 - 24 hours
N	None	
Sc	Scarify	Mechanical abrasion of seed coat e.g. lightly scratch with sandpaper
Sm	Smoke	Soaking seeds in smoke water
So	Soak	Seed placed in rainwater for 24 hours
St	Stratify	Seed placed in freezer for 2 weeks

******Seed Propagation Difficulty**

D= Difficult