

# Vegetation Community Profile

## Coast Daisy-bush (*Olearia axillaris*) + Coast Beard-heath (*Leucopogon parviflorus*) Shrubland (AP0024PE)

This community dominates the coastal dunes in the Hills and Fleurieu region. Coastal Daisy Bush (*Olearia axillaris*) is widespread and the most prominent shrub on coastal dunes, growing up to 2 m tall. The understorey contains a mix of shrubs, scrambling vines, tussocks and herbs, many of which are largely confined to the relatively harsh environment of coastal dunes. Generally, the ground layer comprises a high percentage of sand and/or shell grit. Tall trees are absent. Where Sheoak (*Allocasuarina verticillata*) occurs on hind dunes (in the Normanville region), this is described as a separate community.

the 1,300 ha mapped as being present before European settlement, 770 ha (60%) has been mapped in the Department for Environment and Water's extant mapping layer (Data SA 2025).



Coastal Daisy Bush (*Olearia axillaris*) and Coast Beard-heath (*Leucopogon parviflorus*) on sand dunes at Goolwa (Source: T Croft 2024)

### Landform and aspect

Coastal dunes, of varying aspects.

### Soil types

White sand.

### Rainfall

Approximately 450 mm to 550 mm annual rainfall.

### Revegetation

A table of plant species likely to have occurred in this community is provided at the end of this document. Please note that the list includes species likely to occur across the plant community's entire range within the Hills and Fleurieu Landscape region. There may be other plant species that occurred on your property with a more restricted distribution. A native plant nurseries list can be found on the Landscapes Hills and Fleurieu website.

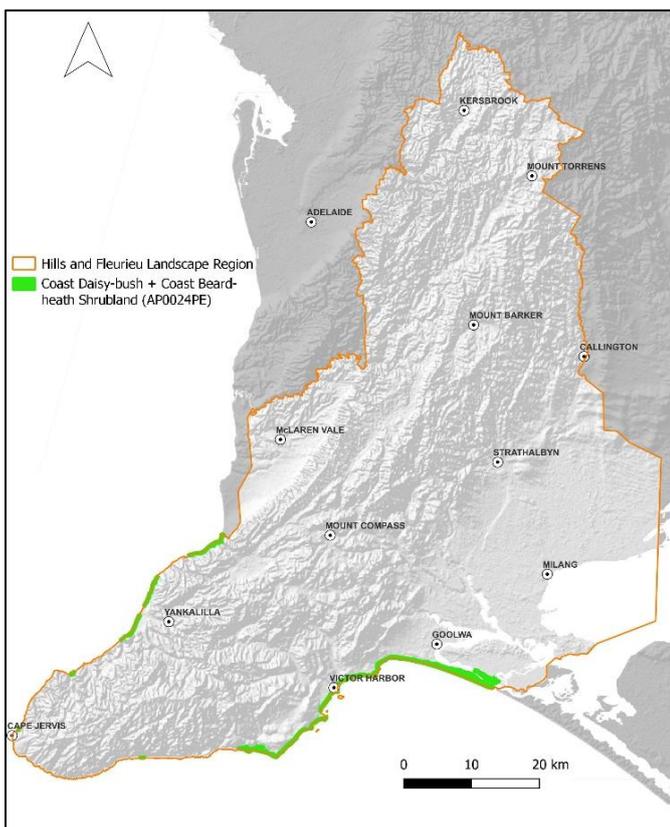


Figure 1: Pre-European mapping of *Olearia axillaris* + *Leucopogon parviflorus* Shrubland within Hills and Fleurieu Landscape region

### Distribution within the Hills and Fleurieu

This community is confined to coastal dunes. In the Hills and Fleurieu Region, coastal dunes largely occur from Normanville to the northern boundary of the region, and from Newland Head to the Coorong. Of

## Vegetation structural layers

### Small Tree Layer

Trees are either absent or a minor component of this community. If present, small trees will occupy < 5% of the area and likely to include Common Boobialla (*Myoporum insulare*) and Coast Cherry (*Exocarpos syrticola*). Both of these species may be present as densely branched shrubs or as small trees with a single main trunk.

### Shrub Layer

Shrubs up to 2 m tall form the dominant overstorey canopy, with the combined cover of shrubs generally varying from 10% to 50%, depending on position within the dune/interdune complex (Brandle 2002). Typically, shrub cover will be greater than 30%. A relatively high diversity of shrubs may occur with Coastal Daisy Bush (*Olearia axillaris*) dominant, but with Coast Beard-heath (*Leucopogon parviflorus*) and Coastal Wattle (*Acacia longifolia* ssp. *sophorae*) widespread and common. Smaller widespread shrubs include Sea-berry Saltbush (*Rhagodia candolleana*) and Thyme Riceflower (*Pimelea serpyllifolia* ssp. *serpyllifolia*). The large sprawling shrubs Bower Spinach (*Tetragonia implexicoma*) and Coastal Climbing Lignum (*Muehlenbeckia gunnii*) are commonly present.

### Groundcover Layer

The mat plant, Muntries (*Kunzea pomifera*) often dominates the groundcover, with Pigface (*Carpobrotus rossii*) also widespread and abundant. Where Muntries are sparse, however, there may naturally be a high cover of sand and/or shell grit. The sedges Knobby Club-rush (*Ficinia nodosa*) and Short-stem Flax-lily (*Dianella brevicaulis*) are also prominent. With the exception of Rolling Spinifex (*Spinifex hirsutus*) which occurs on or near the foredunes, grasses are relatively sparse. Similarly, herbs are of relatively low diversity and cover, but Austral Stork's-bill (*Pelargonium australe*), Coast Swainson-pea (*Swainsona lessertiifolia*) and Variable Groundsel (*Senecio pinnatifolius*) are typically present.

## Caring for Country and native vegetation

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.

### 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.szygium.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

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When citing multiple profiles:

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## Coast Daisy-bush (*Olearia axillaris*) + Coast Beard-heath (*Leucopogon parviflorus*) Shrubland (AP0024PE)

Scientific Name	Common Name	Nursery Availability*	Propagation Method**	Seed Treatment***	Seed Propagation Difficulty****	Pollination	Links to further information
<b>MEDIUM AND TALL SHRUBS (combined cover 30 - 50%)</b>							
<i>Acacia longifolia</i> ssp. <i>sophorae</i>	Coastal Wattle	Y	S	HW, Sc		Insect	<a href="#">VicFlora: Acacia longifolia subsp. sophorae</a>
<i>Exocarpos syrticola</i>	Coast Cherry	N	S		D	Insect	<a href="#">Search</a>
<i>Leucopogon parviflorus</i>	Coast Beard-heath	Y	C, S	Sm, GA	D	Insect inc. Bees	<a href="#">Leucopogon parviflorus</a>
<i>Myoporum insulare</i>	Common Boobialla	Y	S, C	N		Insect	<a href="https://aussiegreenthumb.com/boobialla-myoporum-insulare/">https://aussiegreenthumb.com/boobialla-myoporum-insulare/</a>
<i>Olearia axillaris</i>	Coast Daisy-bush	Y	S, C	N		Insect	<a href="https://aussiegreenthumb.com/olearia-axillaris-growing-guide/">https://aussiegreenthumb.com/olearia-axillaris-growing-guide/</a>
<i>Rhagodia candolleana</i> ssp. <i>candolleana</i>	Sea-berry Saltbush	Y	S, C	N		Wind	<a href="https://treeproject.org.au/seedlings/seaberry-saltbush/">https://treeproject.org.au/seedlings/seaberry-saltbush/</a>
<i>Senecio odoratus</i> (southern Fleurieu only)	Scented Groundsel	Y	C	N		Insect	<a href="https://syzygium.xyz/saplants/Asteraceae/Senecio/Senecio_odoratus.html">https://syzygium.xyz/saplants/Asteraceae/Senecio/Senecio_odoratus.html</a>
<b>LOW SHRUBS (combined cover 5 - 10%)</b>							
<i>Pimelea serpyllifolia</i> ssp. <i>serpyllifolia</i>	Thyme Riceflower	N	C		D	Insect	<a href="#">Pimelea serpyllifolia ssp. serpyllifolia</a> ; <a href="#">Search</a>
<i>Senecio pinnatifolius</i> group	Variable Groundsel	Y	S			Insect	<a href="https://syzygium.xyz/saplants/Asteraceae/Senecio/Senecio_pinnatifolius_var._pinnatifolius.html">https://syzygium.xyz/saplants/Asteraceae/Senecio/Senecio_pinnatifolius_var._pinnatifolius.html</a>
<i>Threlkeldia diffusa</i>	Coast Bonefruit	Y	S	Sm, So		Insect	<a href="#">ggcn001_web_vfinal.pdf</a>
<b>MAT PLANTS (combined cover 5 - 20%)</b>							
<i>Carpobrotus rossii</i>	Native Pigface	Y	S, C	N		Insect	<a href="#">Carpobrotus rossii</a>
<i>Kunzea pomifera</i>	Muntries	Y	S, C	N		Insect	<a href="https://aussiegreenthumb.com/muntries-kunzea-pomifera/">https://aussiegreenthumb.com/muntries-kunzea-pomifera/</a>
<b>SEDGE/ TUSsocks (combined cover 5 - 10%)</b>							
<i>Dianella brevicaulis</i>	Short-stem Flax-lily	Y	S, D	HW		Insect	<a href="#">Search</a>
<i>Ficinia nodosa</i>	Knobby Club-rush	Y	C, S	Sm		Wind	<a href="#">Knobby Club-sedge, Club-rush (previously known as Isolepis nodosa)   TreeProject</a>
<i>Lepidosperma gladiatum</i>	Coast Sword-sedge	Y	S, D	N		Wind	<a href="#">VicFlora: Lepidosperma gladiatum</a>
<b>TWINER/SCRAMBLERS (combined cover 5 - 10%)</b>							
<i>Clematis microphylla</i>	Old Man's Beard	Y	S, C	Sm		Insect	<a href="#">FACT-SHEET Clematis-microphylla.pdf</a>
<i>Muehlenbeckia gunnii</i>	Coastal Climbing Lignum	N	C	N		Insect	<a href="#">Muehlenbeckia gunnii</a>
<i>Tetragonia implexicoma</i>	Bower Spinach	N	S, C	So		Insect	<a href="#">ggcn001_web_vfinal.pdf</a>

Scientific Name	Common Name	Nursery Availability*	Propagation Method**	Seed Treatment***	Seed Propagation Difficulty****	Pollination	Links to further information
<b>HERBS (combined cover 1 - 5%)</b>							
<i>Crassula decumbens</i> var. <i>decumbens</i>	Spreading Crassula	N	S	N			<a href="#">Crassula decumbens</a> var. <i>decumbens</i>
<i>Daucus glochidiatus</i>	Native Carrot	Y	S	N		Insect	<a href="#">Daucus glochidiatus</a>
<i>Pelargonium australe</i>	Austral Stork's-bill	Y	S, C	HW, Sc		Insect	<a href="https://treeproject.org.au/seedlings/austral-storks-bill/">https://treeproject.org.au/seedlings/austral-storks-bill/</a>
<i>Sonchus hydrophilus</i>	Native Sow-thistle	Y	S			Insect	<a href="#">Sonchus hydrophilus</a>
<i>Swainsona lessertiifolia</i>	Coast Swainson-pea	N	S	HW, Sc		Insect	<a href="#">Swainsona lessertiifolia</a>
<b>GRASSES (combined cover &lt; 5%)</b>							
<i>Poa poiiformis</i> var. <i>poiiformis</i>	Coast Tussock-grass	Y	S	N		Wind	<a href="https://friendsofglenthorne.org.au/wp-content/uploads/Native_Grass_Propagation.pdf">https://friendsofglenthorne.org.au/wp-content/uploads/Native_Grass_Propagation.pdf</a>
<i>Spinifex hirsutus</i>	Rolling Spinifex	N	S	N		Wind	<a href="https://syzygium.xyz/saplants/Poaceae/Spinifex/Spinifex_hirsutus.html">https://syzygium.xyz/saplants/Poaceae/Spinifex/Spinifex_hirsutus.html</a>

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

<b>***Seed Treatment Code</b>	<b>Treatment name</b>	<b>Procedure</b>
GA	Gibberelic Acid	
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

**\*\*\*Seed Propagation Difficulty**

D = Difficult