Department of Sustainability and Environment

A field guide to **Coastal Moonah Woodland** in Victoria

Arthur Rylah Institute

A Victorian Government initiative

Victoria The Place To Be

A field guide to Coastal Moonah Woodland in Victoria
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Front cover photo: Moonah (*Melaleuca lanceolata* subsp. *lanceolata*) by Claire Moxham

CARING FOR OUR COUNTRY

Purpose

This field guide provides information on the identification, ecology and management of Coastal Moonah Woodland (CMW) for use by land managers and naturalists. Although it is most relevant to the Mornington and Bellarine Peninsulas, the information in this guide may also be applicable to CMW remnants throughout Victoria. The guide is divided into three sections. Part 1 describes CMW and addresses general issues surrounding its ecology and management. Part 2 contains descriptions of plant species that are considered characteristic of CMW. Part 3 provides references and links to sources of further information.

This field guide is the product of a research study (2002-2006) funded by the Natural Heritage Trust, the Port Phillip and Westernport Catchment Management Authority, the Victorian Department of Sustainability and Environment, and the Australian Government's Caring for our Country scheme. Many people and organisations have contributed to this study and the information that is presented in this guide. The authors would particularly like to acknowledge Parks Victoria, Mornington Peninsula Shire Council and Barwon Coast Committee of Management. Thanks also to Henry Walshaw of Biodiversity and Ecosystem Services Division, DSE for producing the maps of Coastal Moonah Woodland.

Photographic credits: Bev Wood, Gidja Walker, Imelda Douglas, Steve Sinclair, Mike Duncan, Claire Moxham, David Cheal, Oberon Carter, Nick Clemann, Lindy Lumsden, Sue Longmore.

Contents

What is Coastal Moonah Woodland?

The plant community Coastal Moonah Woodland (CMW) is listed as threatened under the *Flora and Fauna Guarantee Act 1988.* CMW commonly occurs on calcareous dune systems in coastal Victoria.

Much of the community has been cleared or highly fragmented, leaving remnants that have been degraded by weed invasion and recreational pressures. The vegetation community is in a demonstrable state of decline, which is likely to result in extinction (SAC 1988). Currently it covers less than 10% of its original distribution in the state.

Mature examples of the community have Moonah (*Melaleuca lanceolata* subsp. *lanceolata*) trees, which are often twisted by the wind into fascinating shapes, as the structural dominant species. Other species can co-dominate the canopy, and as a result the community varies structurally from low forest through to shrubland.

Photo credit: Gidja Walker & Imelda Douglas

Photo credit: Claire Moxham

Structural variation in Coastal Moonah Woodland

The vegetation structure and species composition of Coastal Moonah Woodland vary in relation to the landscape position (e.g. dune crest or swale), exposure to coastal influences, and disturbance history (see photos below). Although the name of the community suggests that Moonah is the dominant canopy component of the community this is misleading as Coast Wirilda, Coast Tea-tree and Coast Beard-heath can also be dominant or co-dominant. The community name suggests that structurally it is woodland, however, the community generally forms a low open-forest (Specht & Specht 1999) and it also may be considered an open or closed shrubland, woodland, open woodland and open-forest (DSE 2002) depending on its location in the landscape and exposure to coastal influences.

Sheltered moist conditions

Open understorey

Tea-tree co-dominant

Multi-branched Moonah

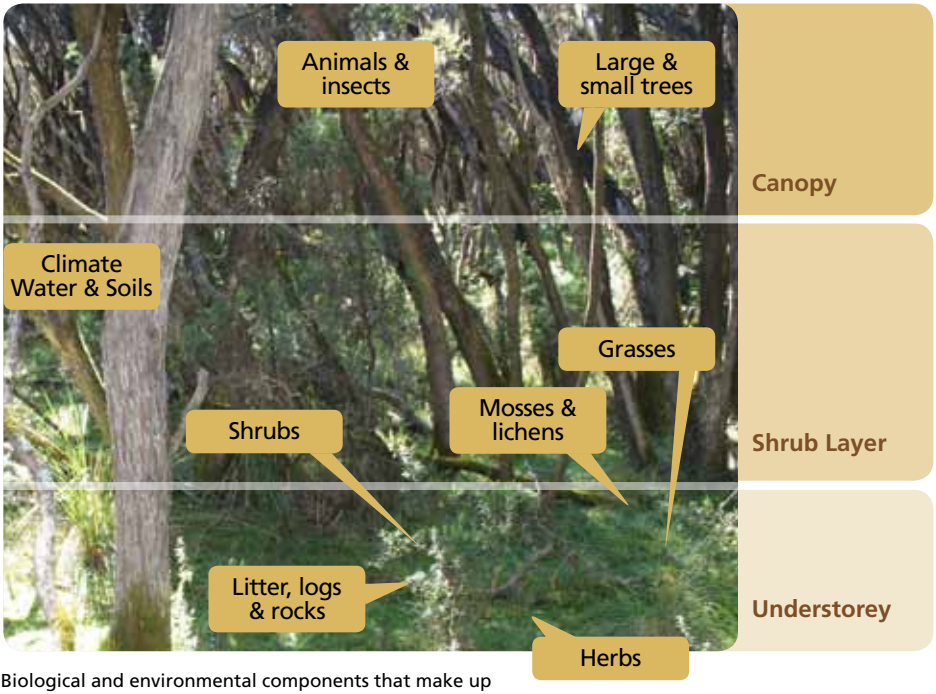
Photo credits: Claire Moxham

A plant community can be defined as a group of plants found growing together in a shared environment. Plant communities represent a narrower unit of floristic, life form and ecological characteristics that are repeated over a landscape (DNRE 2002; Oates & Taranto 2001; Woodgate *et al.* 1991).

Coastal Moonah Woodland is a plant community that occurs predominantly in the Ecological Vegetation Class Coastal Alkaline Scrub (EVC 858).

For a detailed description of Coastal Moonah Woodland please see the following documents in the reference section:

- Flora and Fauna Guarantee Action Statement #141 Coastal Moonah Woodland.
- Defining the Floristic Community Coastal Moonah Woodland in the Gippsland Plain Bioregion
- A journey through Coastal Moonah Woodland in Victoria



Biological and environmental components that make up the plant community Coastal Moonah Woodland.

Photo credit: Claire Moxham

Why is Coastal Moonah Woodland important?

Coastal plants and animals provide a variety of services and are important for maintaining healthy coastal environments. Coastal Moonah Woodland mainly occurs on the more stable hind dunes. The community is important in stabilising these dune systems, preventing erosion, particularly in a time of climate and sea level variability.

Coastal Moonah Woodland provides habitat and food for many native animals. Small bats forage on the woodland floor and in the canopy for food, whilst echidnas hunt for ants. The Fiddler Beetle feeds on the nectar of the Moonah flower. Ringtail Possums build nests in the trees. Birds eat the insects, native ants disperse seeds and various wasps, bees and flies pollinate orchids.

Some of the functions that Coastal Moonah Woodland provides include:

- Dune stabilization
- Clean air
- Water table stabilization
- Nutrient cycling and soil development
- Buffering from weather extremes
- Habitat to beneficial insects that control pests
- Habitat for plants and animals
- Aesthetic and nature experiences

Intact Coastal Moonah Woodland at Point Nepan

Disturbed Coastal Moonah Woodland

Photo credits: Claire Moxham

Threatened Plants and Animals occurring in CMW

There are many threatened plants and animals living in remnants of CMW. These species fall under either state or national legislation acts or advisory lists:

(1) The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act 1999).

(2) Australian Rare or Threatened species (AROTS).

(3) The Flora and Fauna Guarantee Act 1988 (FFG Act 1988) is the main Victorian legislation for the conservation of threatened species and communities, including the management of potentially threatening processes. Species and communities that are listed as Threatened under Schedule 2 of the Act are required to have an Action Statement, akin to a brief management plan, produced for each species or community listed in the Act.

(4) Threatened Species Advisory Lists (VROTS) – are compiled by the Department of Sustainability and Environment and are based on technical information and advice from a range of experts and reviewed periodically.

(5) Regionally significant - species and communities considered rare, uncommon, depleted, or naturally restricted across Victoria and within the subject bioregion.

Threatened plant species that occur in or close to CMW stands that are listed in the FFG Act (1988). *Denotes species that are also nationally listed under the EPBC Act (1999).

Common Name	**Scientific Name**
Scented Spider-orchid	*Caladenia fragrantissma*
Late Helmet-orchid	*Corybas* sp. aff. *diemenicus (coastal)*
Coast Helmet-orchid	*Corybas despectans*
*Swamp Greenhood	*Pterostylis tenuissima*
Small Sickle Greenhood	*Pterostylis lustra*
*Leafy Greenhood	*Pterostylis cucullata*
Coastal Leek-orchid	*Prasophyllum litorale*
Rare Bitter-bush	*Adriana quadripartita (glabrous form)*
Bellarine Yellow-gum	*Eucalyptus leucoxylon* subsp. *bellarinensis*

Southern Forest Bat *(Vespadelus regulus)*
Photo credit: Lindy Lumsden

On the Mornington Peninsula, fourteen native and five exotic mammals, seven bat species, eight lizards, four snakes, numerous birds and many insects that live in or around CMW remnants have been documented.

Regionally significant species that might occur in CMW include:

Mammals

Long-nosed Bandicoot *(Perameles nasuta)*

Southern Forest Bat *(Vespadelus regulus)*

Black Wallaby *(Wallabia bicolour)*

Reptiles

Tree Dragon *(Amphibolurus muricatus)*

White's Skink *(Liopholis whitii)*

Southern Grass Skink *(Pseudemoia entrecasteauxii)*

White-footed Dunnart *(Sminthopsis leucopus)* FFG & EPBC listed

Leafy Greenhood *(Pterostylis cucullata)*
Photo credit: Mike Duncan

White's Skink *(Liopholis whitii)*
Photo credit: Nick Clemann

Insects that inhabit Coastal Moonah Woodland
Photo credit: Bev Wood

Where does Coastal Moonah Woodland occur?

Remnants of CMW occur in central southern Victoria in the Gippsland and Otway Plains bioregions and mainly on the Mornington and Bellarine Peninsulas. Stands also occur in the Bridgewater and Glenelg Plain Bioregions in the south west of the state. Scattered remnants also exist in small pockets along coastal calcarenite dunes.

On the Mornington Peninsula (Figure 1), remnants of CMW are scattered along the coast west of Cape Schanck with an outlier on Phillip Island. The largest remnant on the peninsula occurs in the Point Nepean National Park. Coastal Moonah Woodland, most of which is significantly degraded, occupies less than 9% of its original extent on the Mornington Peninsula.

Before European settlement CMW may have dominated coastal and near-coastal environments, on the Bellarine Peninsula (Figure 2), reaching approximately 5 km inland in some areas (Moxham and Turner 2009). Most likely it occurred as a large continuous band, beginning at Swan Island and extending to Barwon Heads, then occurring as scattered stands along the Surf Coast. Today remnants are scattered along the Surf Coast and the Bellarine Peninsula. The main stands on public land are 'The Narrows' in Queenscliff, Point Lonsdale Golf Club and at 54 Acres and Saratoga Parks (both in Barwon Heads). Small remnants also occur at Aireys Inlet, Anglesea, Breamlea, Indented Head, Jan-Juc, Point Addis and Torquay. The community mainly occurs on calcareous dunes, although a few sites are on peaty soils adjacent to watercourses and salt marshes. Confusingly, it is also important to note that two characteristic plant species in this community, Coast Wirilda and Coast Tea-tree do not naturally occur throughout the south western region of the state (see documents reference section; also page 7).

In the south west of Victoria (Figure 3) remnants are scattered throughout the hind dune system from the South Australian border through to Portland, with one small isolated stand at Warrnambool.

Coastal Moonah Woodland is a plant community that occurs predominantly in the Ecological Vegetation Class Coastal Alkaline Scrub (EVC 858) (Figures 1-3).

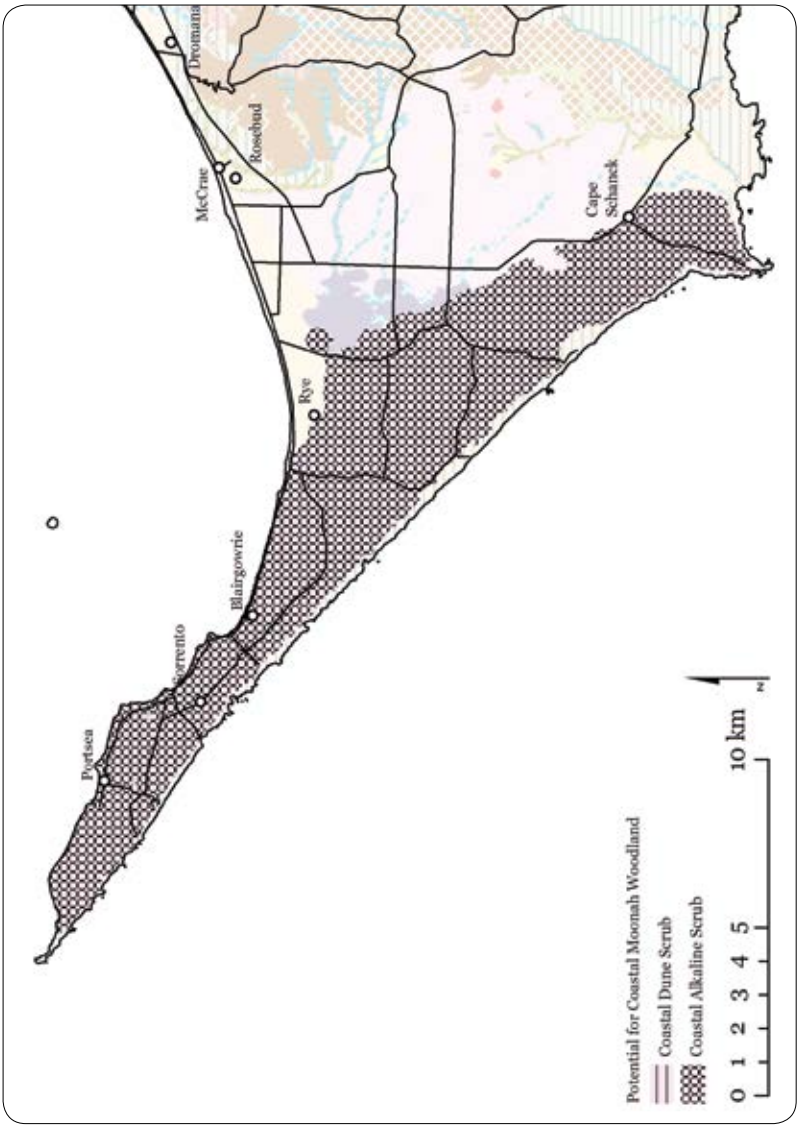


Figure 1. The modelled distribution of Ecological Vegetation Classes on the southern Mornington Peninsula, before the 1750s. Coastal Moonah Woodland is a plant community that occurs predominantly in the Ecological Vegetation Class Coastal Alkaline Scrub (EVC 858). (produced by Henry Walshaw)

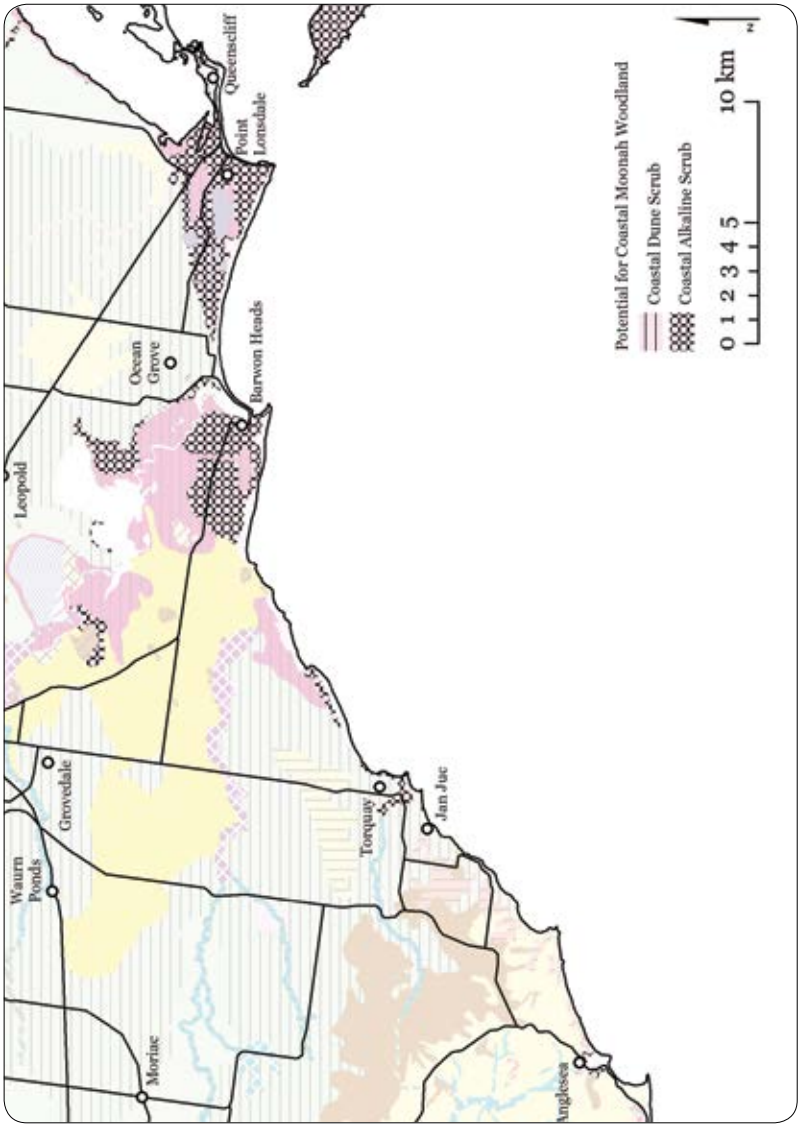


Figure 2. The modelled distribution of Ecological Vegetation Classes on the southern Bellarine Peninsula and Surf Coast, before the 1750s. Coastal Moonah Woodland is a plant community that occurs predominantly in the Ecological Vegetation Class Coastal Alkaline Scrub (EVC 858). (produced by Henry Walshaw)

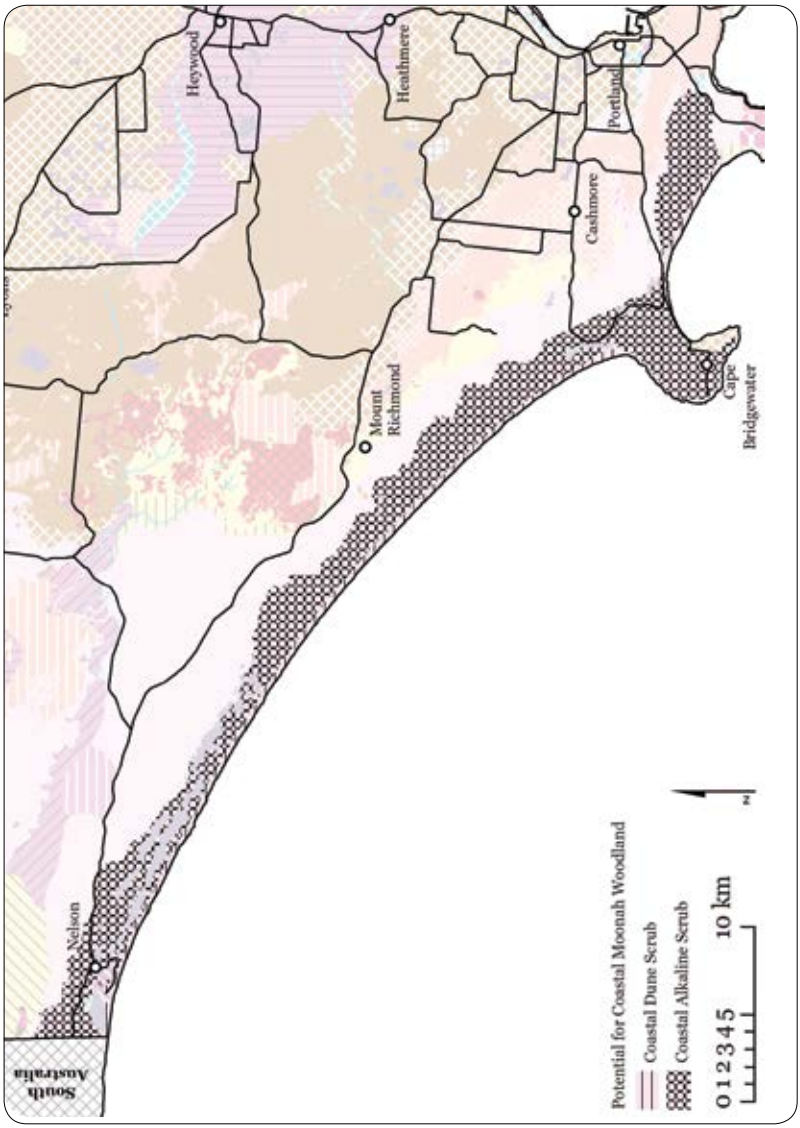


Figure 3. The modelled distribution of Ecological Vegetation Classes in south-west Victoria before the 1750s. Coastal Moonah Woodland is a plant community that occurs predominantly in the Ecological Vegetation Class Coastal Alkaline Scrub (EVC 858). (produced by Henry Walshaw).

Conservation and Management of CMW

The 3Rs of vegetation management Retention, Restoration, Revegetation

1. *Retention* – reserve areas of native vegetation
2. *Restoration* – undertake management actions (e.g. fencing) that allow native vegetation to regenerate. Protecting the remnant from human disturbances such as trampling, rubbish dumping, and unplanned tracks. Undertake weed control activities.
3. *Revegetation* – if planting or seeding is required ensure minimal disturbance occurs and that local indigenous seed/plant stock is used. Ensure that the correct plant species are used and that adequate spacing of plants is undertaken (i.e. remember to take into account the size of the adult plant).

Remnants are likely to require different management actions. A long-term management plan for each remnant, with actions in stages is a good starting point. Remember results will not happen overnight. Target small areas of native vegetation in good condition first then work out from them. Native plants and weeds will require different management depending on the plants' life cycle. Some plants, including weeds, store seed in the soil (the soil seed bank). When disturbance to the soil occurs this can trigger the seed to germinate.

A key factor to improving the quality of native vegetation is minimising disturbances, particularly to the soil.

Restoring Coastal Moonah Woodland at the Narrows (Queenscliff) through Bellarine Catchment Network's community involvement program
Photo credits: Sue Longmore

Weeds

Weeds are one of the main factors causing degradation of CMW. The small size of remnants, their isolation from one another and their proximity to roads and gardens creates a management challenge. Different weeds will require different control methods. It is important to undertake weed control activities before they flower and set seed and to keep soil disturbance to a minimum.

Common invasive weeds include:

Woody weeds

Myrtle-leaf Milkwort *(Polygala myrtifolia)*

Italian Buckthorn *(Rhamnus alaternus)*

Boneseed *(Chrysanthemoides monilifera)*

Mirror-bush *(Coprosma repens)*

Herbaceous weeds

Bridal Creeper *(Asparagus asparagoides)*

Common Sow-thistle *(Sonchus oleraceus)*

Bladder Campion *(Silene vulgaris)*

Cape Ivy *(Delairea odorata)*

Exotic grasses

Fescue *(Vulpia* spp.*)* and Hair Grass *(Aira* spp.*)*

Panic and Annual Veldt-grass *(Ehrharta erecta & E. longiflora)*

Fern Grass *(Catapodium rigidum)*

Hare's Tail *(Lagurus ovatus)*

Coastal Moonah Woodland in good condition has a diverse native ground layer of mosses, herbs and grasses. Due to the risk posed to this ground layer, herbicide as a primary control method should be handled with caution, and by someone who can identify the native species compared with the weeds. Steaming plants during wet conditions may control grasses such as Panic Veldt-grass and other herbaceous weeds. Slashing with a whipper snipper prior to seed set can be effective for annual grasses.

Bridal Creeper *(Asparagus asparagoides)*
Photo credit: Claire Moxham

Dense ground layer of Bridal Creeper *(Asparagus asparagoides)*
Photo credit: Claire Moxham

For woody weeds such as Myrtle-leaf Milkwort and Mirror-bush it is recommended that adults are cut at ground level (and painted if required), with the rootstock left in place to minimise soil disturbance. Ideally foliage should be removed from the site although this is not always possible and foliage that contains seed heads may disperse seed while being transported. When plant material is piled into heaps it can reduce light to native plants restricting growth or killing them. Therefore it is recommended that plant material is removed.

Native animals may be using woody weeds for nesting sites and food thus removal of woody species should be undertaken in sections with the native shrub layer replaced to provide this habitat and food source.

Always consult appropriate weed control methodology and resources before undertaking control activities.

Fire

Coastal Moonah Woodland responds to various disturbances for regeneration and does not rely on fire to regenerate. In fact the continual use of fire will alter ecological dynamics and the structure of the community. Thus the use of fire, as a management tool should be considered with clear management objectives.

Dense ground layer of Myrtle-leaf Milkwort *(Polygala myrtifolia)*
Photo credit: Claire Moxham

Part 2: Plant Descriptions

Plants that are considered characteristic of CMW are described in this section. There are many other plants that occur in this community not included in this guide. Plants that are characteristic of CMW may also be found in other plant communities.

The scientific name, common name, plant family, status/significance, life form structure (or growth habit) and description are provided. The plants are ordered according to growth habit (life form) and then listed alphabetically by scientific names.

Plants that characterise Coastal Moonah Woodland

The presence of three or more of the following native plants, usually within a hectare, is diagnostic of CMW:

Herbs Broad-leafed Early Nancy *(Wurmbea latifolia)*
Shade Pellitory *(Parietaria debilis)*

Shrubs Thyme Rice-flower *(Pimelea serpyllifolia* subsp. *serpyllifolia)*

Trees Coast Wirilda *(Acacia uncifolia)*
Moonah *(Melaleuca lanceolata* subsp. *lanceolata)*

Other useful characteristic plants include:

Herbs Small-leaved Clematis *(Clematis microphylla)*
Austral Carrot *(Daucus glochidiatus)*
Kidney-weed *(Dichondra repens)*
Coast Swainson-pea *(Swainsona lessertiifolia)*

Shrubs Coast Beard-heath *(Leucopogon parviflorus)*
Rare Bitter-bush *(Adriana quadripartite)*

Trees Coast Tea-tree *(Leptospermum laevigatum)*

Plants that frequently occur in adjoining communities and within CMW include:

Grasses Spear Grass *(Austrostipa flavescens)*
Common Tussock Grass *(Poa labillardierei)*

Shrubs Sea Box *(Alyxia buxifolia)*
Seaberry Saltbush *(Rhagodia candolleana)*
Bower Spinach *(Tetragonia implexicoma)*

Trees Drooping She-oak *(Allocasuarina verticillata)*

Small Trees

Scientific name: *Acacia uncifolia*
Common name: Coast Wirilda
Family: Mimosaceae
Life form: Shrub or Small Tree
Status: VROT- rare

A perennial tall shrub or small tree to 8 m. The leaves of this wattle are narrow, slightly curved point at tip, blue green to 200 mm long. The yellow ball-like flowers are arranged along the stem and flower sporadically throughout the year, peaking from October to January. It has a flat thin fruit pod to 150 mm encasing the seeds.

Note: Coast Wirilda is a host plant for Wire-leaf Mistletoe *(Amyema preisii)*

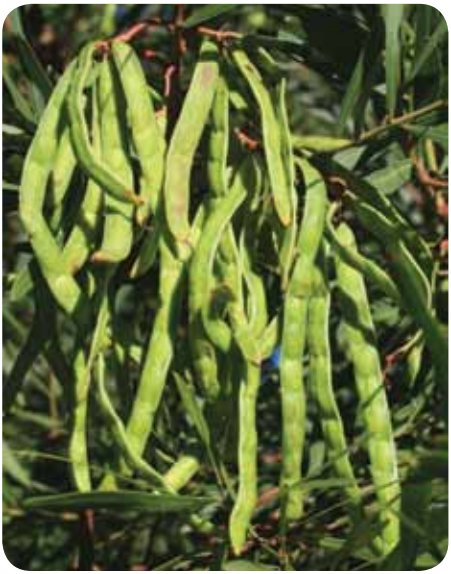


Photo credits: Bev Wood

Scientific name:
Allocasuarina verticillata
Common name: Drooping She-oak
Family: Casuariaceae
Life form: Small Tree

A small tree to 10 m tall with drooping grey-green branchlets and woody cones. Male and female flowers occur on separate plants. Flowering occurs throughout the year.

Photo credit: Bev Wood

Photo credits: Claire Moxham

Scientific name:
Leptospermum laevigatum
Common name: Coast Tea-tree
Family: Myrtaceae
Life form: Shrub to Small Tree

A perennial tall shrub or small tree to 8 m, with fibrous bark and stiff, flat, dull, slightly smelly, green leaves to 30 mm long, alternately arranged along the stem. The white stalk-less flowers occur in pairs; flowering from August to November. Woody fruit capsules to 8 mm wide. The small seed is released each season and thus not retained long.

Photo credit: Claire Moxham

Photo credit: Bev Wood

Scientific name: *Leucopogon parviflorus*
Common name: Coast Beard-heath
Family: Epacridaceae
Life form: Shrub to Small Tree

A perennial shrub to small tree to 5 m, with finely fissured dark brown bark. Stems have alternately ordered small stiff hairless leaves to 30 mm, a little blue green on underneath. The white tubular flowers can have a trace of maroon and flowers appear from July to November. It has fleshy white round fruit.

Photo credit: Bev Wood

Photo credits: David Cheal

Scientific name: *Melaleuca lanceolata* subsp. *lanceolata*
Common name: Moonah
Family: Myrtaceae
Life form: Shrub or Small Tree

A perennial rough-barked shrub or small tree to 10 m, with grey-green (dull green) lanceolate (linear) hairless leaves to 15 mm long with a pointed tip, which are ordered alternately along branches. The white to cream flowers form dense bottlebrush clusters at the end of branches. Flowering occurs from October to March peaking in December and January. The woody fruit capsules have a five-pointed crown, enclosing small seeds. Extremely long-lived plant.

Photo credits: Claire Moxham

Photo credit: Bev Wood

Photo credit: Bev Wood

Shrubs

Scientific name: *Adriana quadripartite* (two forms)
Common name: Rare Bitter-bush and Coast Bitter-bush
Family: Euphorbiaceae
Life form: Shrub
Status: FFG listed, VROT (vulnerable & endangered)

A perennial shrub to 3 m, with broad leaves arranged in opposite pairs along the stem. The yellow-green male and female flowers occur on separate plants; the female has a red tinge in the leaf axis whereas the male is spherical at ends of the stems. Flowering occurs from October to December. It has green round fruit capsules.

There are two forms, the endangered Rare Bitter-bush (Adriana quadripartita) glabrous form which has hairless leaves and the vulnerable Coast Bitter-bush (Adriana quadripartita) pubescent form which has hairs on underside of leaves.

Photo credits: Bev Wood

Photo credit: Gidja Walker

Scientific name: *Pimelea serpyllifolia* subsp. *serpyllifolia*
Common name: Thyme Rice-flower
Family: Thymelaeaceae
Life form: Shrub

A compact perennial shrub to 1.5 m tall, with crowded overlapping hairless small blue green leaves to 7 mm long. The yellow to yellow-green flowers occur on the branch tips, flowering from June to November.

Photo credit: Claire Moxham

Photo credit: Steve Sinclair

Photo credit: Bev Wood

Photo credit: Steve Sinclair

Scientific name: *Rhagodia candolleana*
Common name: Seaberry Saltbush
Family: Chenopodiaceae
Life form: Shrub

A perennial sprawling scrambling shrub to 2 m, with semi-succulent, dark green leaves that are broader near the base and often with a pale green underside. Separate male and female plants with small white flowers that occur from December to April, followed by small flat dark red berries.

Photo credit: Gidja Walker

Photo credit: Claire Moxham

Herbs

Scientific name: *Daucus glochidiatus*
Common name: Austral Carrot
Family: Apiaceae
Life form: Herb

An annual 'carrot like' herb to 500 mm, the hairy divided leaves arise from a basal rosette and continue along erect stems. The white flowers often with pink or red petals flower from August to November. The fruit occurs as a spiny ribbed capsule that is covered sometimes in red tipped stiff hairs.

Photo credit: Bev Wood

Photo credit: Gidja Walker

Scientific name: *Dichondra repens*
Common name: Kidney-weed
Family: Convolvulaceae
Life form: Herb

A perennial mat-forming, prostrate creeping herb, with kidney-shaped hairless leaves. The small white flowers (with green sepals) occur from September to December. It has a small hairy fruit.

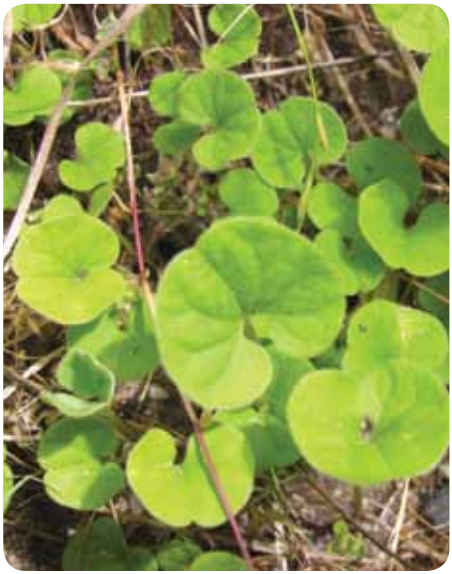


Photo credit: Bev Wood

Scientific name: *Parietaria debilis*
Common name: Shade Pellitory
Family: Urticaceae
Life form: Herb

An annual herb to 300 mm tall, thin flat light green leaves to 30 mm long, small hairy greenish flowers hanging from leaf axis, August to December.

Photo credit: Gidja Walker and Imelda Douglas

Scientific name: *Swainsona lessertiifolia*
Common name: Coast Swainson-pea
Family: Fabaceae
Life form: Herb
Status: regional significance

A perennial sprawling herb to 500 mm tall, with divided leaves. The purple pea flowers often with a white centre are clustered at the end of a slender stem, and occur from August to January.

Photo credits: Bev Wood

Scientific name: *Wurmbea latifolia*
Common name: Broad-leafed Early Nancy
Family: Liliaceae
Life form: Herb

A small perennial herb, usually separate male and female plants. The honey-scented white star like flowers are often purple at the flower base. Flowering occurs from July to October. The plant is dormant over summer and re-shoots after autumn rains from a bulbous rootstock.

Photo credits: Steve Sinclair

Climbers

Scientific name: *Clematis microphylla* var. *microphylla*
Common name: Small-leaved Clematis (Old Man's Beard)
Family: Ranunculaceae
Life form: Climber

A perennial climber, with dense pale green divided leaves, stalked leaflets. It has separate male and female white to cream starry flowers, from June to November. The seeds occur in clusters at the end of flower stalks and in long white plumes, hence the name 'Old Man's Beard'.

Photo credit: Steve Sinclair

Photo credits: Bev Wood

Scientific name: *Tetragonia implexicoma*
Common name: Bower Spinach
Family: Aizoaceae,
Life form: Scrambling shrub or Climber

A perennial prostrate scrambling climber, with thick bight green spade shaped leaves to 80 mm long. The small scented pale yellow flowers occur on long stems, between September and December. The reddish fruit ripen to black.

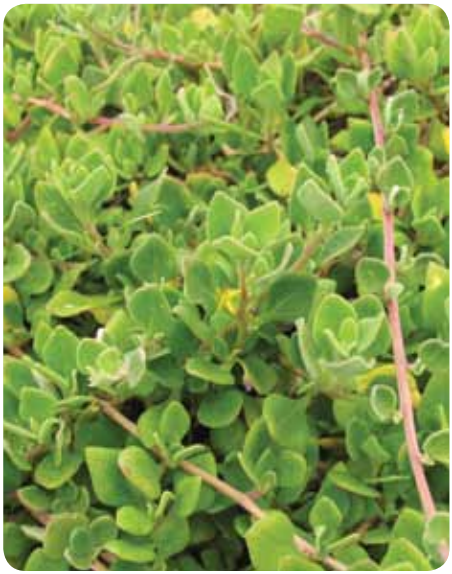
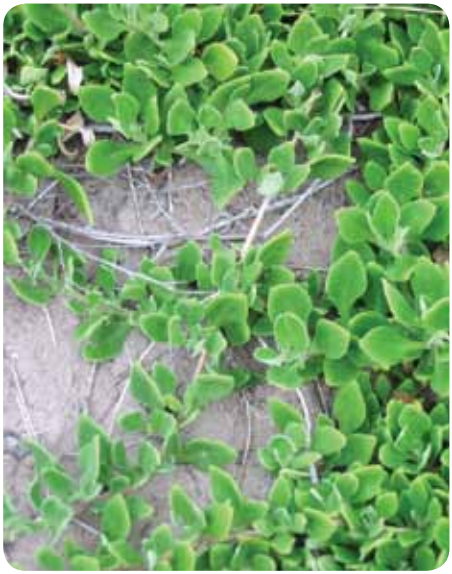


Photo credit: Claire Moxham

Photo credit: Bev Wood



Grasses

Scientific name: *Austrostipa flavescens*
Common name: Spear Grass
Family: Poaceae
Life form: Grass

A tufted perennial grass with long-awned seeds. Flowering from October to December.

Photo credit: Bev Wood

Scientific name: *Poa labillardierei*
Common name: Common Tussock Grass
Family: Poaceae
Life form: Grass

A highly variable perennial large tussock grass to 1.2 m tall, with slender, sometimes rough leaves, flowering from October to February.

Photo credit: Bev Wood

Photo credit: Claire Moxham

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Further reading on CMW

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Moxham C., Sinclair S., Walker G. and Douglas I. (2009) The vegetation of the Nepean Peninsula, Victoria – an historical perspective. *Cunninghamia*. 11(1): 27-47.

Photo credit: Claire Moxham

Further information

Organisation	Website
Community groups	
Southern Peninsula indigenous flora and fauna association (SPIFFA)	www.iffa.org.au/spiffa
Bellarine Catchment Network	http://corangamite.landcarevic.net.au
Field Naturalists Club of Victoria	www.vicnet.net.au/~fncv
Victorian Environmental Friends Network	http://home.vicnet.net.au/~friends/index.html
Victorian National Parks Association	www.vnpa.org.au
Australian Native Orchid Society (Victorian Branch)	www.anosvic.org.au
Government Agencies	
Mornington Peninsula Shire Council	www.mornpen.vic.gov.au
Department of Sustainability and Environment	www.dse.vic.gov.au
Department of Primary Industries	www.new.dpi.vic.gov.au
Parks Victoria	www.parkweb.vic.gov.au
Port Phillip and Westernport Catchment Management Authority	www.ppwcma.vic.gov.au
Corangmite Catchment Management Authority	www.ccma.vic.gov.au
Glenelg Hopkins Catchment Management Authority	www.glenelg-hopkins.vic.gov.au
West Gippsland Catchment Management Authority	www.wgcma.vic.gov.au
Caring for Our Country	www.nrm.gov.au/publications/factsheets/cfoc-general.html
Arthur Rylah Institute for Environmental Research	www.dse.vic.gov.au/ari
The Barwon Coast Committee of Management	www.barwoncoast.com.au
Greening Australia	www.greeningaustralia.org.au
Royal Botanic Gardens Melbourne	www.rbg.vic.gov.au
Land for Wildlife	www.dpi.vic.gov.au/dse/nrenpa.nsf/LinkView/34933B99F789EF0E4A25677800115944BA15AEEDADB3CA6C4A2567D600824A6C

Organisation	Website
Ecological Vegetation Classes (EVCs)	
EVC Benchmarks	www.dse.vic.gov.au
EVC Group Mapping	www.dse.vic.gov.au
Vegetation Quality Assessment Manual	www.dse.vic.gov.au
Mapping	
Land Channel Map (Land Victoria)	http://services.land.vic.gov.au/maps/imf/interactive.jsp
Interactive Victorian DSE Maps	www.dse.vic.gov.au
Framework / Legislative Documents:	
Flora and Fauna Guarantee Act 1988- Action Statements	www.dse.vic.gov.au
EPBC Act 1999	www.deh.gov.au/epbc/
Planning Schemes Online	www.dse.vic.gov.au/planningschemes/
VCAT: Victorian Local Governments	www.vcat.vic.gov.au
Victorian Civil and Administrative Tribunal Decisions (Planning & Environment List)	www.austlii.edu.au/au/cases/vic/VCAT/
WebLaw (Environmental Law)	www.weblaw.edu.au
Weeds	
Native vegetation management	www.dse.vic.gov.au
Weed Information	www.weedinfo.com.au/
Weeds Australia	www.weeds.org.au/
National list of naturalised invasive and potentially invasive garden plants	www.wwf.org.au/publications/ListInvasivePlants

Notes

www.dse.vic.gov.au