

### EVC/Bioregion Benchmark for Vegetation Quality Assessment

Otway Ranges bioregion

EVC 3: Damp Sands Herb-rich Woodland

##### Description:

A low, grassy or bracken-dominated eucalypt forest or open woodland to 15 m tall with a large shrub layer and ground layer rich in herbs, grasses, and orchids. Occurs mainly on flat or undulating areas on moderately fertile, relatively well-drained, deep sandy or loamy topsoils over heavier subsoils (duplex soils).

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  70 cm | **#/ha**  15 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 20% | Eucalyptus obliqua  Eucalyptus globulus Eucalyptus ovata | Messmate Stringybark  Southern Blue-gum Swamp Gum |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form** | **#Spp** | **%Cover** | **LF code** |
| Immature Canopy Tree |  | 5% | IT |
| Understorey Tree or Large Shrub | 1 | 5% | T |
| Medium Shrub | 9 | 30% | MS |
| Prostrate Shrub | 1 | 1% | PS |
| Large Herb | 3 | 5% | LH |
| Medium Herb | 6 | 15% | MH |
| Small or Prostrate Herb | 2 | 5% | SH |
| Large Tufted Graminoid | 2 | 5% | LTG |
| Large Non-tufted Graminoid | 1 | 5% | LNG |
| Medium to Small Tufted Graminoid | 4 | 15% | MTG |
| Medium to Tiny Non-tufted Graminoid | 1 | 1% | MNG |
| Ground Fern | 2 | 5% | GF |
| Scrambler or Climber | 1 | 5% | SC |
| Bryophytes/Lichens | na | 10% | BL |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 3: Damp Sands Herb-rich Woodland - Otway Ranges bioregion | |
|  | **LF Code Species typical of at least part of EVC range Common Name**  T Olearia argophylla Musk Daisy-bush  MS Goodenia ovata Hop Goodenia  MS Pultenaea daphnoides Large-leaf Bush-pea  MS Acacia verticillata Prickly Moses  MS Ozothamnus ferrugineus Tree Everlasting  PS Bossiaea prostrata Creeping Bossiaea  PS Acrotriche serrulata Honey-pots  LH Senecio odoratus var. odoratus Scented Groundsel  LH Epilobium billardierianum Variable Willow-herb  LH Chrysocephalum semipapposum Clustered Everlasting  MH Viola hederacea sensu Willis (1972) Ivy-leaf Violet  MH Gonocarpus tetragynus Common Raspwort  MH Acaena novae-zelandiae Bidgee-widgee  SH Oxalis corniculata s.l. Yellow Wood-sorrel  SH Dichondra repens Kidney-weed  SH Hydrocotyle sibthorpioides Shining Pennywort  LTG Lomandra longifolia Spiny-headed Mat-rush  LTG Lepidosperma elatius Tall Sword-sedge  LNG Tetrarrhena juncea Forest Wire-grass  MTG Lepidosperma laterale Variable Sword-sedge  MTG Stylidium graminifolium s.l. Grass Trigger-plant  MTG Poa sieberiana Grey Tussock-grass  MTG Dianella revoluta s.l. Black-anther Flax-lily  MNG Microlaena stipoides var. stipoides Weeping Grass  GF Pteridium esculentum Austral Bracken  GF Adiantum aethiopicum Common Maidenhair  GF Polystichum proliferum Mother Shield-fern  SC Cassytha melantha Coarse Dodder-laurel  SC Clematis aristata Mountain Clematis  SC Billardiera scandens Common Apple-berry  **Recruitment:**  Continuous  **Organic Litter:**  40 % cover  **Logs:**  15 m/0.1 ha.  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  LH Cirsium vulgare Spear Thistle high high  MH Hypochoeris radicata Cat's Ear high low  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 8: Wet Heathland

##### Description:

A low, generally treeless heathland although sometimes emergent eucalypts may be present. Occurs on lower slopes, flats or depressions, which are infertile and subjected to prolonged water logging. Understorey is often dominated by a range of sedges, grasses and shrubs.

|  |  |  |  |
| --- | --- | --- | --- |
| **Life Forms: Life form** | **#Spp** | **%Cover** | **LF code** |
| Medium Shrub | 5 | 55% | MS |
| Small Shrub | 3 | 5% | SS |
| Large Herb | 1 | 1% | LH |
| Medium Herb | 2 | 20% | MH |
| Large Tufted Graminoid | 2 | 10% | LTG |
| Medium to Small Tufted Graminoid | 1 | 10% | MTG |
| Medium to Tiny Non-tufted Graminoid | 2 | 20% | MNG |
| Ground Fern | 2 | 10% | GF |
| Scrambler or Climber | 1 | 1% | SC |
| Bryophytes/Lichens | na | 20% | BL |

|  |  |  |
| --- | --- | --- |
| **LF Code**  MS | **Species typical of at least part of EVC range**  Leptospermum continentale | **Common Name**  Prickly Tea-tree |
| MS | Melaleuca squarrosa | Scented Paperbark |
| MS | Sprengelia incarnata | Pink Swamp-heath |
| MS | Epacris impressa | Common Heath |
| SS | Epacris lanuginosa | Woolly-style Heath |
| SS | Bauera rubioides | Wiry Bauera |
| SS | Tetratheca ciliata | Pink-bells |
| MH | Selaginella uliginosa | Swamp Selaginella |
| MH | Gonocarpus tetragynus | Common Raspwort |
| LTG | Xanthorrhoea australis | Austral Grass-tree |
| LTG | Gahnia sieberiana | Red-fruit Saw-sedge |
| MNG | Empodisma minus | Spreading Rope-rush |
| GF | Lindsaea linearis | Screw Fern |
| SC | Cassytha glabella | Slender Dodder-laurel |

##### Recruitment:

Episodic/Fire. Desirable period between disturbances is 30 years.

##### Organic Litter:

20% cover

##### Weediness:

There are no consistent weeds in this EVC.

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 8: Wet Heathland - Otway Ranges bioregion | |
|  | Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 10: Estuarine Wetland

##### Description:

Grows on anaerobic peat-rich muds on the edges of estuarine waterbodies such as creeks, rivers and lagoons with intermediate salinity conditions. Vegetation is determined by fluctuating salinity, which varies in time from occasionally fresh to brackish or occasionally saline according to river flood and marine tide events. Dominated by graminoids and halophytic herbs and often fringed by a tall scrub layer of Woolly Tea-tree Leptospermum lanigerum at the landward edge.

|  |  |  |  |
| --- | --- | --- | --- |
| **Life Forms: Life form** | **#Spp** | **%Cover** | **LF code** |
| Medium Shrub | 1 | 10% | MS |
| Large Herb | 3 | 10% | LH |
| Medium Herb | 4 | 10% | MH |
| Small or Prostrate Herb | 4 | 15% | SH |
| Large Tufted Graminoid | 1 | 10% | LNG |
| Large Non-tufted Graminoid | 1 | 25% | LNG |
| Medium to Small Tufted Graminoid | 2 | 10% | MTG |
| Medium to Tiny Non-tufted Graminoid | 1 | 1% | MNG |
| Scrambler or Climber | 1 | 5% | SC |
| **Total understorey projective foliage cover** |  | **90%** |  |

|  |  |  |
| --- | --- | --- |
| **LF Code**  MS | **Species typical of at least part of EVC range**  Leptospermum lanigerum | **Common Name**  Woolly Tea-tree |
| MS | Melaleuca squarrosa | Scented Paperbark |
| LH | Persicaria decipiens | Slender Knotweed |
| MH | Samolus repens | Creeping Brookweed |
| MH | Lobelia anceps | Angled Lobelia |
| SH | Selliera radicans | Shiny Swamp-mat |
| SH | Crassula helmsii | Swamp Crassula |
| SH | Mimulus repens | Creeping Monkey-flower |
| SH | Leptinella reptans s.l. | Creeping Cotula |
| LTG | Poa labillardierei | Common Tussock-grass |
| LNG | Phragmites australis | Common Reed |
| MNG | Triglochin striatum | Streaked Arrowgrass |
| SC | Calystegia sepium | Large Bindweed |

##### Recruitment:

Episodic/Flood: desirable period of disturbance is every five years

##### Organic Litter:

10% cover

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Weediness: LF Code** | **Typical Weed Species** | **Common Name** | **Invasive** | **Impact** |
| LH  LH LH MH MH MH MH MTG MNG | Aster subulatus  Plantago lanceolata Rumex crispus Ranunculus repens Lotus uliginosus Cotula coronopifolia Atriplex prostrata Agrostis stolonifera Polypogon viridis | Aster-weed  Ribwort Curled Dock  Creeping Buttercup Greater Bird's-foot Trefoil Water Buttons  Hastate Orache Creeping Bent Water Bent | high  high high high high high high high high | low  low low high low high high high high |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 10: Estuarine Wetland - Otway Ranges bioregion | |
|  | Published by the Victorian Government Department of Sustainability and Environment May 2008  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be  directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

**[www.dse.vic.gov.au](http://www.dse.vic.gov.au/)**



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 16: Lowland Forest

##### Description:

Open forest to 25 m tall characterised by the diversity of species and lifeforms in each stratum. Includes a variety of heathy understorey shrubs. It grows on a wide variety of geology and soils.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  70 cm | **#/ha**  20 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 20% | Eucalyptus baxteri s.l.  Eucalyptus obliqua | Brown Stringybark  Messmate Stringybark |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form** | **#Spp** | **%Cover** | **LF code** |
| Immature Canopy Tree |  | 5% | IT |
| Understorey Tree or Large Shrub | 1 | 10% | T |
| Medium Shrub | 8 | 45% | MS |
| Small Shrub | 3 | 5% | SS |
| Prostrate Shrub | 1 | 1% | PS |
| Medium Herb | 3 | 5% | MH |
| Large Tufted Graminoid | 2 | 5% | LTG |
| Large Non-tufted Graminoid | 1 | 15% | LNG |
| Medium to Small Tufted Graminoid | 1 | 1% | MTG |
| Medium to Tiny Non-tufted Graminoid | 1 | 5% | MNG |
| Ground Fern | 2 | 10% | GF |
| Scrambler or Climber | 1 | 1% | SC |
| Bryophytes/Lichens | na | 10% | BL |

|  |  |  |
| --- | --- | --- |
| **LF Code**  T | **Species typical of at least part of EVC range**  Notelaea ligustrina | **Common Name**  Privet Mock-olive |
| MS | Leptospermum continentale | Prickly Tea-tree |
| MS | Epacris impressa | Common Heath |
| MS | Goodenia ovata | Hop Goodenia |
| MS | Pultenaea daphnoides | Large-leaf Bush-pea |
| SS | Amperea xiphoclada var. xiphoclada | Broom Spurge |
| SS | Bauera rubioides | Wiry Bauera |
| SS | Tetratheca ciliata | Pink-bells |
| SS | Olearia erubescens | Moth Daisy-bush |
| MH | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| MH | Gonocarpus tetragynus | Common Raspwort |
| MH | Drosera peltata ssp. peltata | Pale Sundew |
| LTG | Gahnia sieberiana | Red-fruit Saw-sedge |
| LTG | Xanthorrhoea australis | Austral Grass-tree |
| LTG | Lomandra longifolia | Spiny-headed Mat-rush |
| LTG | Lepidosperma elatius | Tall Sword-sedge |
| LNG | Tetrarrhena juncea | Forest Wire-grass |
| MNG | Empodisma minus | Spreading Rope-rush |
| GF | Pteridium esculentum | Austral Bracken |
| GF | Lindsaea linearis | Screw Fern |
| SC | Cassytha pubescens s.s. | Downy Dodder-laurel |
| SC | Billardiera scandens | Common Apple-berry |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 16: Lowland Forest - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  40 % cover  **Logs:**  20 m/0.1 ha.  **Weediness:**  There are no consistent weeds in this EVC.  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 18: Riparian Forest

##### Description:

A tall forest to 30 m tall along river banks and associated alluvial terraces with occasional occurrences in the heads of gullies leading into creeks and rivers. Soils are fertile alluvium, regularly inundated and permanently moist. Dominated by tall eucalypts, but also has an open to sparse secondary tree layer of wattles and scattered dense patches of shrubs, ferns, grasses and herbs.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  80 cm | **#/ha**  20 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 40% | Eucalyptus viminalis | Manna Gum |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form**  Immature Canopy Tree | **#Spp** | **%Cover**  5% | **LF code**  IT |
| Understorey Tree or Large Shrub | 4 | 30% | T |
| Medium Shrub | 4 | 20% | MS |
| Large Herb | 2 | 5% | LH |
| Medium Herb | 3 | 5% | MH |
| Large Tufted Graminoid | 2 | 5% | LTG |
| Large Non-tufted Graminoid | 1 | 5% | LNG |
| Ground Fern | 4 | 25% | GF |
| Tree Fern | 2 | 10% | TRF |
| Epiphyte | 3 | 5% | EP |
| Scrambler or Climber | 2 | 1% | SC |
| Bryophytes/Lichens | na | 20% | BL |

|  |  |  |
| --- | --- | --- |
| **LF Code**  T | **Species typical of at least part of EVC range**  Olearia argophylla | **Common Name**  Musk Daisy-bush |
| T | Acacia melanoxylon | Blackwood |
| T | Pomaderris aspera | Hazel Pomaderris |
| MS | Coprosma quadrifida | Prickly Currant-bush |
| MS | Hedycarya angustifolia | Austral Mulberry |
| MS | Pimelea axiflora | Bootlace Bush |
| LH | Urtica incisa | Scrub Nettle |
| MH | Australina pusilla ssp. muelleri | Shade Nettle |
| MH | Sambucus gaudichaudiana | White Elderberry |
| MH | Stellaria flaccida | Forest Starwort |
| LTG | Carex appressa | Tall Sedge |
| LTG | Lepidosperma elatius | Tall Sword-sedge |
| LNG | Tetrarrhena juncea | Forest Wire-grass |
| GF | Polystichum proliferum | Mother Shield-fern |
| GF | Asplenium bulbiferum ssp. gracillimum | Mother Spleenwort |
| GF | Histiopteris incisa | Bat's Wing Fern |
| GF | Grammitis billardierei | Common Finger-fern |
| TRF | Dicksonia antarctica | Soft Tree-fern |
| TRF | Cyathea australis | Rough Tree-fern |
| EP | Microsorum pustulatum ssp. pustulatum | Kangaroo Fern |
| EP | Rumohra adiantiformis | Leathery Shield-fern |
| EP | Hymenophyllum cupressiforme | Common Filmy Fern |
| SC | Clematis aristata | Mountain Clematis |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 18: Riparian Forest - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  50 % cover  **Logs:**  30 m/0.1 ha.  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  MS Rubus fruticosus spp. agg. Blackberry high high  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 21: Shrubby Dry Forest

##### Description:

Occurs on a range of geologies on exposed aspects such as ridge-lines and medium to steep upper slopes, often in high rainfall areas and on shallow infertile soils. The overstorey is a low, open forest to 25 m tall characterised by the diversity and variability of the eucalypts. The understorey often lacks a secondary tree layer but contains a well-developed medium to low shrub layer. The ground layer is often very sparse with tussock-forming graminoids being the dominant life form.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  60 cm | **#/ha**  20 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 30% | Eucalyptus obliqua  Eucalyptus globulus Eucalyptus aromaphloia | Messmate Stringybark  Southern Blue-gum Scentbark |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form**  Immature Canopy Tree | **#Spp** | **%Cover**  5% | **LF code**  IT |
| Medium Shrub | 7 | 40% | MS |
| Small Shrub | 2 | 5% | SS |
| Medium Herb | 5 | 10% | MH |
| Small or Prostrate Herb | 2 | 5% | SH |
| Large Tufted Graminoid | 1 | 5% | LTG |
| Large Non-tufted Graminoid | 2 | 10% | LNG |
| Medium to Small Tufted Graminoid | 5 | 15% | MTG |
| Medium to Tiny Non-tufted Graminoid | 1 | 1% | MNG |
| Bryophytes/Lichens | na | 10% | BL |
| **Total understorey projective foliage cover** |  | **80%** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **LF Code**  MS |  | **Species typical of at least part of EVC range**  Pultenaea daphnoides | **Common Name**  Large-leaf Bush-pea |
| MS |  | Epacris impressa | Common Heath |
| MS |  | Acacia mucronata ssp. longifolia | Narrow-leaf Wattle |
| MS |  | Acacia verticillata | Prickly Moses |
| SS | k | Olearia speciosa | Netted Daisy-bush |
| SS |  | Pimelea humilis | Common Rice-flower |
| PS |  | Acrotriche serrulata | Honey-pots |
| MH |  | Gonocarpus tetragynus | Common Raspwort |
| MH |  | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| MH |  | Drosera peltata ssp. auriculata | Tall Sundew |
| MH |  | Helichrysum scorpioides | Button Everlasting |
| SH |  | Goodenia lanata | Trailing Goodenia |
| LTG |  | Lomandra longifolia | Spiny-headed Mat-rush |
| LNG |  | Tetrarrhena juncea | Forest Wire-grass |
| LNG |  | Gahnia radula | Thatch Saw-sedge |
| MTG |  | Joycea pallida | Silvertop Wallaby-grass |
| MTG |  | Poa sieberiana | Grey Tussock-grass |
| MTG |  | Lomandra filiformis | Wattle Mat-rush |
| MTG |  | Lomandra multiflora ssp. multiflora | Many-flowered Mat-rush |
| MNG |  | Tetrarrhena distichophylla | Hairy Rice-grass |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 21: Shrubby Dry Forest - Otway Ranges bioregion | |
|  | **Recruitment:**  Episodic/Fire. Desirable period between disturbances is 20 years.  **Organic Litter:**  20 % cover  **Logs:**  20 m/0.1 ha.  **Weediness:**  There are no consistent weeds in this EVC.  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 22: Grassy Dry Forest

##### Description:

Occurs on a variety of gradients and altitudes and on a range of geologies. The overstorey is dominated by a low to medium height forest of eucalypts to 20 m tall, sometimes resembling an open woodland. The understorey usually consists of a sparse shrub layer of medium height and a ground layer dominated by a high diversity of drought-tolerant grasses and herbs.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  60 cm | **#/ha**  20 / ha |

##### Tree Canopy Cover:

**%cover Character Species Common Name**

30% r Eucalyptus globulus ssp. globulus Southern Blue-gum

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form** | **#Spp** | **%Cover** | **LF code** |
| Immature Canopy Tree |  | 5% | IT |
| Understorey Tree or Large Shrub | 1 | 5% | T |
| Medium Shrub | 5 | 5% | MS |
| Prostrate Shrub | 2 | 5% | PS |
| Large Herb | 2 | 5% | LH |
| Medium Herb | 4 | 5% | MH |
| Large Tufted Graminoid | 2 | 10% | LTG |
| Medium to Small Tufted Graminoid | 9 | 30% | MTG |
| Medium to Tiny Non-tufted Graminoid | 1 | 5% | MNG |
| Scrambler or Climber | 1 | 1% | SC |
| Bryophytes/Lichens | na | 10% | BL |
| Soil Crust | na | 10% | S/C |
| **Total understorey projective foliage cover** |  | **80%** |  |

|  |  |  |
| --- | --- | --- |
| **LF Code**  T | **Species typical of at least part of EVC range**  Acacia mearnsii | **Common Name**  Black Wattle |
| MS | Acacia verticillata | Prickly Moses |
| MS | Coprosma quadrifida | Prickly Currant-bush |
| MS | Indigofera australis | Austral Indigo |
| PS | Bossiaea prostrata | Creeping Bossiaea |
| PS | Astroloma humifusum | Cranberry Heath |
| LH | Senecio glomeratus | Annual Fireweed |
| LH | Wahlenbergia gracilis s.l. | Sprawling Bluebell |
| MH | Acaena ovina | Australian Sheep's Burr |
| MH | Hypericum gramineum | Small St John's Wort |
| MH | Plantago varia | Variable Plantain |
| MH | Gonocarpus tetragynus | Common Raspwort |
| LTG | Austrostipa rudis | Veined Spear-grass |
| LTG | Deyeuxia quadriseta | Reed Bent-grass |
| MTG | Austrodanthonia pilosa | Velvet Wallaby-grass |
| MTG | Lomandra filiformis | Wattle Mat-rush |
| MTG | Dianella revoluta s.s. | Black-anther Flax-lily |
| MNG | Microlaena stipoides var. stipoides | Weeping Grass |
| SC | Billardiera scandens | Common Apple-berry |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 22: Grassy Dry Forest - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  20 % cover  **Logs:**  20 m/0.1 ha.  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  MS Chrysanthemoides monilifera Boneseed high high LH Centaurium tenuiflorum Slender Centaury high low MTG Briza minor Lesser Quaking-grass high low MTG Anthoxanthum odoratum Sweet Vernal-grass high high  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 23: Herb-rich Foothill Forest

##### Description:

Occurs on relatively fertile, moderately well-drained soils on an extremely wide range of geological types and in areas of moderate to high rainfall. Occupies easterly and southerly aspects mainly on lower slopes and in gullies. A medium to tall open forest or woodland to 25 m tall with a small tree layer over a sparse to dense shrub layer. A high cover and diversity of herbs and grasses in the ground layer characterise this EVC.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  70 cm | **#/ha**  20 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 40% | Eucalyptus obliqua  Eucalyptus cypellocarpa Eucalyptus globulus  Eucalyptus radiata s.l. | Messmate Stringybark  Mountain Grey-gum Southern Blue-gum  Narrow-leaf Peppermint |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form** | **#Spp** | **%Cover** | **LF code** |
| Immature Canopy Tree |  | 5% | IT |
| Understorey Tree or Large Shrub | 1 | 5% | T |
| Medium Shrub | 7 | 30% | MS |
| Large Herb | 3 | 5% | LH |
| Medium Herb | 7 | 20% | MH |
| Small or Prostrate Herb | 2 | 5% | SH |
| Large Tufted Graminoid | 1 | 10% | LTG |
| Large Non-tufted Graminoid | 1 | 5% | LNG |
| Medium to Small Tufted Graminoid | 2 | 10% | MTG |
| Medium to Tiny Non-tufted Graminoid | 2 | 5% | MNG |
| Ground Fern | 2 | 10% | GF |
| Scrambler or Climber | 1 | 1% | SC |
| Bryophytes/Lichens | na | 20% | BL |

|  |  |  |  |
| --- | --- | --- | --- |
| **LF Code**  T |  | **Species typical of at least part of EVC range**  Acacia melanoxylon | **Common Name**  Blackwood |
| MS |  | Ozothamnus ferrugineus | Tree Everlasting |
| MS |  | Acacia verticillata | Prickly Moses |
| MS |  | Olearia lirata | Snowy Daisy-bush |
| MS |  | Goodenia ovata | Hop Goodenia |
| SS | k | Olearia speciosa | Netted Daisy-bush |
| LH |  | Wahlenbergia gracilis s.l. | Sprawling Bluebell |
| LH |  | Senecio pinnatifolius | Variable Groundsel |
| MH |  | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| MH |  | Geranium solanderi s.l. | Austral Cranesbill |
| MH |  | Stellaria pungens | Prickly Starwort |
| SH |  | Oxalis corniculata s.l. | Yellow Wood-sorrel |
| SH |  | Lobelia pedunculata s.l. | Matted Pratia |
| LTG |  | Poa labillardierei | Common Tussock-grass |
| LNG |  | Tetrarrhena juncea | Forest Wire-grass |
| MTG |  | Poa sieberiana | Grey Tussock-grass |
| MTG |  | Dichelachne sciurea spp. agg. | Short-hair Plume-grass |
| MNG |  | Poa tenera | Slender Tussock-grass |
| MNG |  | Microlaena stipoides var. stipoides | Weeping Grass |
| GF |  | Pteridium esculentum | Austral Bracken |
| SC |  | Clematis aristata | Mountain Clematis |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 23: Herb-rich Foothill Forest - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  40 % cover  **Logs:**  20 m/0.1 ha.  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  MS Rubus fruticosus spp. agg. Blackberry high high  LH Hypericum androsaemum Tutsan high high  MH Hypochoeris radicata Cat's Ear high low MNG Holcus lanatus Yorkshire Fog high high  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 30: Wet Forest

##### Description:

Grows on fertile, well-drained loamy soils on a range of geologies and elevation levels. It is largely restricted to protected sites in gullies and on southern aspects of hills and mountains where rainfall is high and cloud cover at ground level is frequent. Characterised by a tall eucalypt overstorey to 30 m tall with scattered understorey trees over a tall broad-leaved shrubby understorey and a moist, shaded, fern-rich ground layer that is usually dominated by tree-ferns.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  90 cm | **#/ha**  20 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 40% | Eucalyptus regnans | Mountain Ash |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form**  Immature Canopy Tree | **#Spp** | **%Cover**  5% | **LF code**  IT |
| Understorey Tree or Large Shrub | 4 | 25% | T |
| Medium Shrub | 4 | 20% | MS |
| Large Herb | 1 | 1% | LH |
| Medium Herb | 1 | 5% | MH |
| Large Tufted Graminoid | 1 | 5% | LTG |
| Large Non-tufted Graminoid | 1 | 10% | LNG |
| Ground Fern | 3 | 20% | GF |
| Tree Fern | 2 | 20% | TRF |
| Epiphyte | 2 | 1% | EP |
| Scrambler or Climber | 1 | 1% | SC |
| Bryophytes/Lichens | na | 20% | BL |

|  |  |  |
| --- | --- | --- |
| **LF Code**  T | **Species typical of at least part of EVC range**  Pomaderris aspera | **Common Name**  Hazel Pomaderris |
| T | Olearia argophylla | Musk Daisy-bush |
| T | Acacia melanoxylon | Blackwood |
| MS | Coprosma quadrifida | Prickly Currant-bush |
| MS | Pimelea axiflora | Bootlace Bush |
| MS | Hedycarya angustifolia | Austral Mulberry |
| MH | Stellaria flaccida | Forest Starwort |
| LTG | Lepidosperma elatius | Tall Sword-sedge |
| LNG | Tetrarrhena juncea | Forest Wire-grass |
| GF | Polystichum proliferum | Mother Shield-fern |
| GF | Blechnum wattsii | Hard Water-fern |
| GF | Grammitis billardierei | Common Finger-fern |
| GF | Ctenopteris heterophylla | Gipsy Fern |
| TRF | Dicksonia antarctica | Soft Tree-fern |
| TRF | Cyathea australis | Rough Tree-fern |
| EP | Microsorum pustulatum ssp. pustulatum | Kangaroo Fern |
| EP | Hymenophyllum cupressiforme | Common Filmy Fern |
| EP | Rumohra adiantiformis | Leathery Shield-fern |
| SC | Clematis aristata | Mountain Clematis |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 30: Wet Forest - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous.  **Organic Litter:**  50 % cover  **Logs:**  30 m/0.1 ha.  **Weediness:**  There are no consistent weeds in this EVC.  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 31: Cool Temperate Rainforest

##### Description:

Closed non-eucalypt forest to 25 m tall. Occurs in high rainfall areas protected from fire within Wet Forest. The understorey characterised by tree ferns and a rich epiphytic flora. The ground layer is dominated by a diversity of ground ferns.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species** | **DBH(cm)** | **#/ha** |
| Nothofagus cunninghamii Acacia melanoxylon | 70 cm | 20 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 50% | Nothofagus cunninghamii  Acacia melanoxylon | Myrtle Beech  Blackwood |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form**  Immature Canopy Tree | **#Spp** | **%Cover**  5% | **LF code**  IT |
| Understorey Tree or Large Shrub | 2 | 20% | T |
| Medium Shrub | 3 | 10% | MS |
| Medium Herb | 2 | 1% | MH |
| Ground Fern | 7 | 40% | GF |
| Tree Fern | 2 | 30% | TRF |
| Epiphyte | 6 | 5% | EP |
| Scrambler or Climber | 1 | 1% | SC |
| Bryophytes/Lichens | na | 20% | BL |

|  |  |  |
| --- | --- | --- |
| **LF Code**  T | **Species typical of at least part of EVC range**  Olearia argophylla | **Common Name**  Musk Daisy-bush |
| T | Pittosporum bicolor | Banyalla |
| MS | Hedycarya angustifolia | Austral Mulberry |
| MS | Coprosma quadrifida | Prickly Currant-bush |
| LH | Urtica incisa | Scrub Nettle |
| MH | Australina pusilla ssp. muelleri | Shade Nettle |
| LTG | Carex appressa | Tall Sedge |
| MNG | Uncinia tenella | Delicate Hook-sedge |
| GF | Blechnum wattsii | Hard Water-fern |
| GF | Grammitis billardierei | Common Finger-fern |
| GF | Polystichum proliferum | Mother Shield-fern |
| GF | Asplenium bulbiferum ssp. gracillimum | Mother Spleenwort |
| TRF | Dicksonia antarctica | Soft Tree-fern |
| TRF | Cyathea australis | Rough Tree-fern |
| EP | Microsorum pustulatum ssp. pustulatum | Kangaroo Fern |
| EP | Rumohra adiantiformis | Leathery Shield-fern |
| EP | Hymenophyllum australe | Austral Filmy Fern |
| EP | Crepidomanes venosum | Veined Bristle-fern |
| SC | Clematis aristata | Mountain Clematis |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 31: Cool Temperate Rainforest - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  50 % cover  **Logs:**  20 m/0.1 ha.  **Weediness:**  There are no consistent weeds in this EVC.  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 45: Shrubby Foothill Forest

##### Description:

Occurs on ridges and exposed aspects on moderately fertile soils and at a range of elevations. The overstorey is a medium eucalypt forest to 25 m tall over an understorey characterised by a distinctive middle stratum dominated by a diversity of narrow-leaved shrubs and a paucity of ferns, graminoids and herbs in the ground stratum.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  70 cm | **#/ha**  20 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 40% | Eucalyptus obliqua  Eucalyptus cypellocarpa | Messmate Stringybark  Mountain Grey-gum |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form**  Immature Canopy Tree | **#Spp** | **%Cover**  5% | **LF code**  IT |
| Medium Shrub | 7 | 40% | MS |
| Small Shrub | 2 | 10% | SS |
| Medium Herb | 4 | 5% | MH |
| Large Tufted Graminoid | 1 | 5% | LTG |
| Large Non-tufted Graminoid | 1 | 10% | LNG |
| Medium to Small Tufted Graminoid | 3 | 5% | MTG |
| Ground Fern | 1 | 5% | GF |
| Scrambler or Climber | 2 | 5% | SC |
| Bryophytes/Lichens | na | 10% | BL |
| **Total understorey projective foliage cover** |  | **75%** |  |

|  |  |  |
| --- | --- | --- |
| **LF Code**  MS | **Species typical of at least part of EVC range**  Goodenia ovata | **Common Name**  Hop Goodenia |
| MS | Olearia lirata | Snowy Daisy-bush |
| MS | Acacia verticillata | Prickly Moses |
| MS | Coprosma quadrifida | Prickly Currant-bush |
| MH | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| MH | Gonocarpus tetragynus | Common Raspwort |
| MH | Geranium potentilloides | Cinquefoil Cranesbill |
| LTG | Lepidosperma elatius | Tall Sword-sedge |
| LNG | Tetrarrhena juncea | Forest Wire-grass |
| MTG | Osteocarpum acropterum var. deminutum | Spiny-headed Mat-rush |
| GF | Pteridium esculentum | Austral Bracken |
| SC | Clematis aristata | Mountain Clematis |
| SC | Billardiera scandens | Common Apple-berry |

**Recruitment:**

Episodic/Fire. Desirable period between disturbances is 30 years.

##### Organic Litter:

40 % cover

##### Logs:

20 m/0.1 ha.

##### Weediness:

There are no consistent weeds in this EVC.

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 45: Shrubby Foothill Forest - Otway Ranges bioregion | |
|  | Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 48: Heathy Woodland

##### Description:

Spans a variety of geologies but is generally associated with nutrient-poor soils including deep uniform sands (aeolian or outwash) and Tertiary sand/clay which has been altered to form quartzite gravel. Eucalypt-dominated low woodland to 10 m tall lacking a secondary tree layer and generally supporting a diverse array of narrow or ericoid-leaved shrubs except where frequent fire has reduced this to a dense cover of bracken. Geophytes and annuals can be quite common but the ground cover is normally fairly sparse.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  60 cm | **#/ha**  15 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 15% | Eucalyptus obliqua  Eucalyptus baxteri s.l. | Messmate Stringybark  Brown Stringybark |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form**  Immature Canopy Tree | **#Spp** | **%Cover**  5% | **LF code**  IT |
| Medium Shrub | 10 | 40% | MS |
| Small Shrub | 6 | 15% | SS |
| Prostrate Shrub | 2 | 5% | PS |
| Medium Herb | 4 | 5% | MH |
| Small or Prostrate Herb | 2 | 5% | SH |
| Large Tufted Graminoid | 2 | 5% | LTG |
| Large Non-tufted Graminoid | 1 | 5% | LNG |
| Medium to Small Tufted Graminoid | 3 | 10% | MTG |
| Medium to Tiny Non-tufted Graminoid | 2 | 5% | MNG |
| Ground Fern | 1 | 1% | GF |
| Scrambler or Climber | 2 | 1% | SC |
| Bryophytes/Lichens | na | 10% | BL |
| Soil Crust | na | 10% | S/C |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 48: Heathy Woodland - Otway Ranges bioregion | |
|  | **LF Code Species typical of at least part of EVC range Common Name**  MS Banksia marginata Silver Banksia  MS Epacris impressa Common Heath  MS Persoonia juniperina Prickly Geebung  MS Leptospermum continentale Prickly Tea-tree  SS Tetratheca ciliata Pink-bells  SS Amperea xiphoclada var. xiphoclada Broom Spurge  SS Dillwynia glaberrima Smooth Parrot-pea  SS Isopogon ceratophyllus Horny Cone-bush  PS Acrotriche serrulata Honey-pots  PS Xanthosia pusilla spp. agg. Heath Xanthosia  PS Xanthosia dissecta s.l. Cut-leaf Xanthosia  MH Gonocarpus tetragynus Common Raspwort  MH Drosera peltata ssp. peltata Pale Sundew  SH Goodenia lanata Trailing Goodenia  LTG Xanthorrhoea australis Austral Grass-tree  LTG Lomandra longifolia Spiny-headed Mat-rush  LNG Gahnia radula Thatch Saw-sedge  MTG Stylidium graminifolium s.l. Grass Trigger-plant  MTG Patersonia fragilis Short Purple-flag  MNG Tetrarrhena distichophylla Hairy Rice-grass  MNG Empodisma minus Spreading Rope-rush  GF Pteridium esculentum Austral Bracken  SC Cassytha pubescens s.s. Downy Dodder-laurel  SC Cassytha glabella Slender Dodder-laurel  **Recruitment:**  Episodic/Fire. Desirable period between disturbances is 20 years.  **Organic Litter:**  40 % cover  **Logs:**  15 m/0.1 ha.  **Weediness:**  There are no consistent weeds in this EVC.  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



EVC/Bioregion Benchmark for Vegetation Quality Assessment

Otway Ranges bioregion

EVC 53: Swamp Scrub

###### Description:

Closed scrub to 8 m tall at low elevations on alluvial deposits along streams or on poorly drained sites with high nutrient and water availability. Soils vary from organic loams to fine silts and peats which are inundated during the wetter months of the year and is dominated by Woolly Tea-tree Leptospermun lanigerum which often form a dense impenetrable thicket, out- competing other species. Emergent trees (eg. Swamp Gum Eucalyptus ovata) may sometimes be present. Where light penetrates to ground level, a moss/lichen/liverwort herbaceous ground cover is often present.

###### Canopy Cover:

|  |  |  |
| --- | --- | --- |
| %cover | Character Species | Common Name |
| 60% | Leptospermum lanigerum  Melaleuca squarrosa Acacia melanoxylon | Woolly Tea-tree  Scented Paperbark Blackwood |

|  |  |  |  |
| --- | --- | --- | --- |
| Understorey: Life form | #Spp | %Cover | LF code |
| Medium Shrub | 2 | 10% | MS |
| Large Herb | 3 | 10% | LH |
| Medium Herb | 7 | 20% | MH |
| Small or Prostrate Herb | 1 | 5% | SH |
| Large Tufted Graminoid | 2 | 5% | LTG |
| Large Non-tufted Graminoid | 3 | 15% | LNG |
| Medium to Small Tufted Graminoid | 3 | 10% | MTG |
| Medium to Tiny Non-tufted Graminoid | 1 | 5% | MNG |
| Scrambler or Climber | 1 | 1% | SC |
| Bryophytes/Lichens | na | 20% | BL |

|  |  |  |
| --- | --- | --- |
| LF Code  MS | Species typical of at least part of EVC range  Coprosma quadrifida | Common Name  Prickly Currant-bush |
| MS | Leptospermum continentale | Prickly Tea-tree |
| LH | Lycopus australis | Australian Gipsywort |
| LH | Lythrum salicaria | Purple Loosestrife |
| LH | Persicaria praetermissa | Spotted Knotweed |
| MH | Hydrocotyle pterocarpa | Wing Pennywort |
| MH | Stellaria angustifolia | Swamp Starwort |
| MH | Lobelia anceps | Angled Lobelia |
| SH | Crassula helmsii | Swamp Crassula |
| LTG | Juncus procerus | Tall Rush |
| LTG | Juncus gregiflorus | Green Rush |
| LNG | Phragmites australis | Common Reed |
| LNG | Gahnia radula | Thatch Saw-sedge |
| LNG | Schoenoplectus tabernaemontani | River Club-sedge |
| LNG | Baumea rubiginosa s.l. | Soft Twig-rush |
| MTG | Triglochin procerum s.l. | Water Ribbons |
| MNG | Eleocharis acuta | Common Spike-sedge |
| GF | Blechnum cartilagineum | Gristle Fern |
| SC | Calystegia sepium | Large Bindweed |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 53: Swamp Scrub - Otway Ranges bioregion | |
|  | Recruitment:  Continuous  Organic Litter:  40 % cover  Weediness:  LF Code Typical Weed Species Common Name Invasive Impact  LNG Holcus lanatus Yorkshire Fog high high  Published by the Victorian Government Department of Sustainability and Environment November 2007  © The State of Victoria Department of Sustainability and Environment 2007  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[www.dse.vic.gov.au](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 83: Swampy Riparian Woodland

##### Description:

Woodland to 15 m tall generally occupying low energy streams of the foothills and plains. The lower strata are variously locally dominated by a range of large and medium shrub species on the stream levees in combination with large tussock grasses and sedges in the ground layer.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  70 cm | **#/ha**  10 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 10% | Eucalyptus ovata | Swamp Gum |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form** | **#Spp** | **%Cover** | **LF code** |
| Immature Canopy Tree |  | 5% | IT |
| Understorey Tree or Large Shrub | 2 | 10% | T |
| Medium Shrub | 3 | 10% | MS |
| Large Herb | 3 | 5% | LH |
| Medium Herb | 9 | 15% | MH |
| Small or Prostrate Herb | 4 | 5% | SH |
| Large Tufted Graminoid | 5 | 25% | LTG |
| Large Non-tufted Graminoid | 1 | 5% | LNG |
| Medium to Small Tufted Graminoid | 8 | 20% | MTG |
| Medium to Tiny Non-tufted Graminoid | 2 | 5% | MNG |
| Ground Fern | 1 | 1% | GF |
| Scrambler or Climber | 2 | 5% | SC |
| Bryophytes/Lichens | na | 20% | BL |

|  |  |  |  |
| --- | --- | --- | --- |
| **LF Code**  T |  | **Species typical of at least part of EVC range**  Acacia melanoxylon | **Common Name**  Blackwood |
| T |  | Acacia mearnsii | Black Wattle |
| MS |  | Acacia verticillata ssp. verticillata | Prickly Moses |
| MS |  | Leptospermum lanigerum | Woolly Tea-tree |
| MS |  | Ozothamnus rosmarinifolius | Rosemary Everlasting |
| LH |  | Senecio minimus | Shrubby Fireweed |
| LH |  | Persicaria praetermissa | Spotted Knotweed |
| MH |  | Acaena novae-zelandiae | Bidgee-widgee |
| SH |  | Leptinella reptans s.l. | Creeping Cotula |
| SH |  | Hydrocotyle sibthorpioides | Shining Pennywort |
| SH | R r | Lobelia beaugleholei | Showy Lobelia |
| LTG |  | Juncus procerus | Tall Rush |
| LTG |  | Cyperus lucidus | Leafy Flat-sedge |
| LTG |  | Juncus pallidus | Pale Rush |
| LTG |  | Poa labillardierei | Common Tussock-grass |
| MTG |  | Juncus planifolius | Broad-leaf Rush |
| MTG |  | Juncus pauciflorus | Loose-flower Rush |
| MTG |  | Triglochin procerum s.l. | Water Ribbons |
| MNG |  | Hemarthria uncinata var. uncinata | Mat Grass |
| MNG |  | Triglochin striatum | Streaked Arrowgrass |
| MNG |  | Empodisma minus | Spreading Rope-rush |
| GF |  | Pteridium esculentum | Austral Bracken |
| TRF |  | Cyathea australis | Rough Tree-fern |
| SC |  | Calystegia sepium | Large Bindweed |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 83: Swampy Riparian Woodland - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  20 % cover  **Logs:**  20 m/0.1 ha.  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  MS Rubus sp. aff. armeniacus Blackberry high high LH Sonchus asper s.l. Rough Sow-thistle high low  LH Cirsium vulgare Spear Thistle high high  LH Plantago lanceolata Ribwort high low  LH Parentucellia viscosa Yellow Bartsia high low  MH Lotus suaveolens Hairy Bird's-foot Trefoil high high  MH Hypochoeris radicata Cat's Ear high low  MH Acetosella vulgaris Sheep Sorrel high low MH Leontodon taraxacoides ssp. taraxacoides Hairy Hawkbit high low MH Anagallis arvensis Pimpernel high low SH Trifolium repens var. repens White Clover high high LNG Holcus lanatus Yorkshire Fog high high MTG Anthoxanthum odoratum Sweet Vernal-grass high high MTG Lolium perenne Perennial Rye-grass high low  MTG Juncus articulatus Jointed Rush high high MTG Bromus hordeaceus ssp. hordeaceus Soft Brome high low  MNG Vulpia spp. Fescue high low  Published by the Victorian Government Department of Sustainability and Environment December 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be  directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

**[www.dse.vic.gov.au](http://www.dse.vic.gov.au/)**



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 128: Grassy Forest

##### Description:

Low growing forest to 20 m tall with an understorey of small and medium shrubs and a rich diversity of herbs. Large shrubs and understorey trees may also be conspicuous. Often grows in areas transitional between drier box stringybark forests and taller herb-rich forests typical of more favourable environments.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  70 cm | **#/ha**  20 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 30% | Eucalyptus obliqua  Eucalyptus radiata s.l. | Messmate Stringybark  Narrow-leaf Peppermint |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form**  Immature Canopy Tree | **#Spp** | **%Cover**  5% | **LF code**  IT |
| Understorey Tree or Large Shrub | 2 | 10% | T |
| Medium Shrub | 3 | 10% | MS |
| Small Shrub | 4 | 5% | SS |
| Prostrate Shrub | 2 | 1% | PS |
| Large Herb | 3 | 5% | LH |
| Medium Herb | 10 | 15% | MH |
| Large Tufted Graminoid | 1 | 5% | LTG |
| Medium to Small Tufted Graminoid | 9 | 30% | MTG |
| Scrambler or Climber | 2 | 1% | SC |
| Bryophytes/Lichens | na | 10% | BL |
| **Total understorey projective foliage cover** |  | **80%** |  |

|  |  |  |
| --- | --- | --- |
| **LF Code**  MS | **Species typical of at least part of EVC range**  Epacris impressa | **Common Name**  Common Heath |
| MS | Daviesia leptophylla | Narrow-leaf Bitter-pea |
| MS | Pultenaea gunnii | Golden Bush-pea |
| SS | Hovea heterophylla | Common Hovea |
| SS | Dillwynia cinerascens s.l. | Grey Parrot-pea |
| SS | Leucopogon virgatus | Common Beard-heath |
| SS | Tetratheca ciliata | Pink-bells |
| PS | Acrotriche serrulata | Honey-pots |
| PS | Platylobium formosum | Handsome Flat-pea |
| LH | Senecio tenuiflorus | Slender Fireweed |
| LH | Senecio glomeratus | Annual Fireweed |
| LH | Wahlenbergia gymnoclada | Naked Bluebell |
| MH | Helichrysum scorpioides | Button Everlasting |
| MH | Poranthera microphylla | Small Poranthera |
| MH | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| MH | Gonocarpus tetragynus | Common Raspwort |
| SH | Opercularia varia | Variable Stinkweed |
| MTG | Poa sieberiana | Grey Tussock-grass |
| MTG | Lomandra filiformis | Wattle Mat-rush |
| MTG | Dichelachne sciurea spp. agg. | Short-hair Plume-grass |
| MTG | Stylidium graminifolium s.l. | Grass Trigger-plant |
| GF | Pteridium esculentum | Austral Bracken |
| SC | Hardenbergia violacea | Purple Coral-pea |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 128: Grassy Forest - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  20 % cover  **Logs:**  20 m/0.1 ha.  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  T Pinus radiata Radiata Pine low high MH Hypochoeris radicata Cat's Ear high low MTG Anthoxanthum odoratum Sweet Vernal-grass high high MTG Agrostis capillaris s.l. Brown-top Bent high high  Published by the Victorian Government Department of Sustainability and Environment April 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 161: Coastal Headland Scrub

##### Description:

Wind-pruned scrub or shrubland to 2 m tall with emergent eucalypts on steep, rocky coastal headlands often associated with cliffs exposed to the stresses of extreme salt-laden winds and salt spray from the south-west. Occurs on shallow sands along rocky sections of the coast.

|  |  |  |  |
| --- | --- | --- | --- |
| **Life forms: Life form** | **#Spp** | **%Cover** | **LF code** |
| Medium Shrub | 9 | 50% | MS |
| Large Herb | 6 | 10% | LH |
| Medium Herb | 8 | 20% | MH |
| Small or Prostrate Herb | 3 | 5% | SH |
| Large Tufted Graminoid | 2 | 1% | LTG |
| Large Non-tufted Graminoid | 2 | 5% | LNG |
| Medium to Small Tufted Graminoid | 6 | 10% | MTG |
| Medium to Tiny Non-tufted Graminoid | 3 | 5% | MNG |
| Scrambler or Climber | 2 | 5% | SC |
| Bryophytes/Lichens | na | 10% | BL |

|  |  |  |  |
| --- | --- | --- | --- |
| **LF Code**  MS |  | **Species typical of at least part of EVC range**  Allocasuarina verticillata | **Common Name**  Drooping Sheoak |
| MS |  | Myoporum insulare | Common Boobialla |
| MS |  | Leucopogon parviflorus | Coast Beard-heath |
| MS |  | Ozothamnus ferrugineus | Tree Everlasting |
| SS | k | Olearia speciosa | Netted Daisy-bush |
| LH |  | Senecio odoratus var. odoratus | Scented Groundsel |
| LH |  | Epilobium billardierianum | Variable Willow-herb |
| MH |  | Lobelia anceps | Angled Lobelia |
| MH |  | Acaena novae-zelandiae | Bidgee-widgee |
| MH |  | Pseudognaphalium luteoalbum | Jersey Cudweed |
| SH |  | Oxalis exilis | Shady Wood-sorrel |
| SH |  | Dichondra repens | Kidney-weed |
| SH |  | Oxalis corniculata s.l. | Yellow Wood-sorrel |
| LTG |  | Juncus pallidus | Pale Rush |
| LNG |  | Tetrarrhena juncea | Forest Wire-grass |
| MTG |  | Poa poiformis | Coast Tussock-grass |
| MTG |  | Stylidium graminifolium s.l. | Grass Trigger-plant |
| MNG |  | Microlaena stipoides var. stipoides | Weeping Grass |
| MNG |  | Ficinia nodosa | Knobby Club-sedge |
| SC |  | Tetragonia implexicoma | Bower Spinach |
| SC |  | Clematis aristata | Mountain Clematis |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 161: Coastal Headland Scrub - Otway Ranges bioregion | |
|  | **Recruitment:**  Episodic/Fire. Desirable period between disturbances is 30 years.  **Organic Litter:**  40 % cover  **Logs:**  5 m/0.1 ha. (Note: large log class does not apply)  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  MS Rubus fruticosus spp. agg. Blackberry high high LH Sonchus oleraceus Common Sow-thistle high low LH Centaurium tenuiflorum Slender Centaury high low MH Lotus uliginosus Greater Bird's-foot Trefoil high low MH Plantago coronopus Buck's-horn Plantain high low MH Hypochoeris radicata Cat's Ear high low MH Lotus suaveolens Hairy Bird's-foot Trefoil high low  MH Anagallis arvensis Pimpernel high low  LNG Holcus lanatus Yorkshire Fog high high MNG Agrostis capillaris s.l. Brown-top Bent high high  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 163: Coastal Tussock Grassland

##### Description:

A tussock grassland that may contain emergent shrubs. Occurs on exposed coastal cliffs and bluffs. Soils are saline and the strong salt-laden winds preclude tree growth.

|  |  |  |  |
| --- | --- | --- | --- |
| **Life Forms: Life form** | **#Spp** | **%Cover** | **LF code** |
| Medium Shrub | 3 | 10% | MS |
| Small Shrub | 1 | 5% | SS |
| Large Herb | 1 | 10% | LH |
| Medium Herb | 3 | 10% | MH |
| Small or Prostrate Herb | 2 | 5% | SH |
| Large Tufted Graminoid | 3 | 10% | LTG |
| Large Non-tufted Graminoid | 1 | 5% | LNG |
| Medium to Small Tufted Graminoid | 4 | 20% | MTG |
| Medium to Tiny Non-tufted Graminoid | 2 | 10% | MNG |
| Bryophytes/Lichens | na | 10% | BL |
| **Total understorey projective foliage cover** |  | **90%** |  |

|  |  |  |
| --- | --- | --- |
| **LF Code**  MS | **Species typical of at least part of EVC range**  Leucopogon parviflorus | **Common Name**  Coast Beard-heath |
| MS | Correa alba | White Correa |
| LH | Epilobium billardierianum ssp. billardierianum | Smooth Willow-herb |
| MH | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| MH | Samolus repens | Creeping Brookweed |
| MH | Asperula conferta | Common Woodruff |
| MH | Sarcocornia quinqueflora | Beaded Glasswort |
| SH | Selliera radicans | Shiny Swamp-mat |
| SH | Mimulus repens | Creeping Monkey-flower |
| SH | Leptinella reptans s.l. | Creeping Cotula |
| LTG | Austrostipa stipoides | Prickly Spear-grass |
| LTG | Dichelachne crinita | Long-hair Plume-grass |
| MTG | Isolepis cernua | Nodding Club-sedge |
| MTG | Poa poiformis | Coast Tussock-grass |
| MTG | Lachnagrostis filiformis | Common Blown-grass |
| MTG | Dianella brevicaulis | Coast Flax-lily |
| MNG | Distichlis distichophylla | Australian Salt-grass |
| MNG | Triglochin striatum | Streaked Arrowgrass |
| MNG | Ficinia nodosa | Knobby Club-sedge |

##### Recruitment:

Continuous

##### Organic Litter:

20% Cover

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 163: Coastal Tussock Grassland - Otway Ranges bioregion | |
|  | **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  MS Rubus sp. aff. armeniacus Blackberry high high LH Sonchus oleraceus Common Sow-thistle high low  LH Plantago lanceolata Ribwort high low  LH Sonchus asper s.l. Rough Sow-thistle high low  LH Centaurium tenuiflorum Slender Centaury high low  MH Lotus suaveolens Hairy Bird's-foot Trefoil high low  MH Plantago coronopus Buck's-horn Plantain high low  MH Anagallis arvensis Pimpernel high low MH Leontodon taraxacoides ssp. taraxacoides Hairy Hawkbit high low LTG Ammophila arenaria Marram Grass high high  LNG Holcus lanatus Yorkshire Fog high high  MTG Polypogon monspeliensis Annual Beard-grass high low  Published by the Victorian Government Department of Sustainability and Environment December 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be  directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

**[www.dse.vic.gov.au](http://www.dse.vic.gov.au/)**



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 165: Damp Heath Scrub

##### Description:

Scrub or shrubland to 5 m tall on flat to gently sloping terrain subject to seasonal waterlogging. Dominated by a dense shrub layer and numerous graminoids on generally sandy soils.

|  |  |  |  |
| --- | --- | --- | --- |
| **Life forms: Life form** | **#Spp** | **%Cover** | **LF code** |
| Medium Shrub | 9 | 50% | MS |
| Small Shrub | 5 | 15% | SS |
| Prostrate Shrub | 2 | 5% | PS |
| Medium Herb | 2 | 5% | MH |
| Large Tufted Graminoid | 3 | 10% | LTG |
| Large Non-tufted Graminoid | 1 | 5% | LNG |
| Medium to Tiny Non-tufted Graminoid | 2 | 5% | MNG |
| Ground Fern | 3 | 10% | GF |
| Bryophytes/Lichens | na | 20% | BL |
| Soil Crust | na | 10% | S/C |

|  |  |  |
| --- | --- | --- |
| **LF Code**  MS | **Species typical of at least part of EVC range**  Banksia marginata | **Common Name**  Silver Banksia |
| MS | Epacris impressa | Common Heath |
| MS | Leptospermum continentale | Prickly Tea-tree |
| MS | Pultenaea daphnoides | Large-leaf Bush-pea |
| SS | Olearia erubescens | Moth Daisy-bush |
| SS | Olearia myrsinoides | Silky Daisy-bush |
| SS | Tetratheca ciliata | Pink-bells |
| SS | Bauera rubioides | Wiry Bauera |
| PS | Bossiaea prostrata | Creeping Bossiaea |
| PS | Acrotriche serrulata | Honey-pots |
| MH | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| MH | Gonocarpus tetragynus | Common Raspwort |
| LTG | Lomandra longifolia | Spiny-headed Mat-rush |
| LTG | Xanthorrhoea australis | Austral Grass-tree |
| LTG | Gahnia sieberiana | Red-fruit Saw-sedge |
| LNG | Tetrarrhena juncea | Forest Wire-grass |
| MNG | Tetrarrhena distichophylla | Hairy Rice-grass |
| MNG | Empodisma minus | Spreading Rope-rush |
| GF | Pteridium esculentum | Austral Bracken |
| GF | Lindsaea linearis | Screw Fern |
| GF | Gleichenia dicarpa | Pouched Coral-fern |
| SC | Cassytha pubescens s.s. | Downy Dodder-laurel |

##### Recruitment:

Episodic/Fire. Desirable period between disturbances is 20 years.

##### Organic Litter:

40 % cover

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Weediness: LF Code** | **Typical Weed Species** | **Common Name** | **Invasive** | **Impact** |
| MS  LH MH MH MH LNG LNG | Rubus fruticosus spp. agg.  Centaurium tenuiflorum Prunella vulgaris  Lotus uliginosus Hypochoeris radicata  Pennisetum clandestinum Holcus lanatus | Blackberry  Slender Centaury Self-heal  Greater Bird's-foot Trefoil Cat's Ear  Kikuyu Yorkshire Fog | high  high high high high high high | high  low low low low high high |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 165: Damp Heath Scrub - Otway Ranges bioregion | |
|  | Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



EVC/Bioregion Benchmark for Vegetation Quality Assessment

Otway Ranges bioregion

EVC 175: Grassy Woodland

###### Description:

A variable open eucalypt woodland to 15 m tall or occasionally Sheoak woodland to 10 m tall over a diverse ground layer of grasses and herbs. The shrub component is usually sparse. It occurs on sites with moderate fertility on gentle slopes or undulating hills on a range of geologies.

|  |  |  |
| --- | --- | --- |
| Large trees: |  | |
| Species | DBH(cm) | #/ha |
| Eucalyptus spp.  Allocasuarina spp. | 70 cm  40 cm | 15 / ha |

###### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| %cover | Character Species | Common Name |
| 15% | Eucalyptus radiata s.l. | Narrow-leaf Peppermint |
|  | Allocasuarina verticillata | Drooping Sheoak |

|  |  |  |  |
| --- | --- | --- | --- |
| Understorey: Life form | #Spp | %Cover | LF code |
| Immature Canopy Tree |  | 5% | IT |
| Understorey Tree or Large Shrub | 2 | 10% | T |
| Medium Shrub | 6 | 20% | MS |
| Small Shrub | 2 | 5% | SS |
| Prostrate Shrub | 2 | 1% | PS |
| Large Herb | 3 | 5% | LH |
| Medium Herb | 8 | 15% | MH |
| Small or Prostrate Herb | 3 | 5% | SH |
| Large Tufted Graminoid | 3 | 10% | LTG |
| Large Non-tufted Graminoid | 1 | 5% | LNG |
| Medium to Small Tufted Graminoid | 10 | 20% | MTG |
| Medium to Tiny Non-tufted Graminoid | 2 | 10% | MNG |
| Ground Fern | 1 | 5% | GF |
| Scrambler or Climber | 2 | 5% | SC |
| Bryophytes/Lichens | na | 10% | BL |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 175: Grassy Woodland - Otway Ranges bioregion | |
|  | LF Code Species typical of at least part of EVC range Common Name  T Acacia mearnsii Black Wattle  T Allocasuarina littoralis Black Sheoak  MS Leptospermum continentale Prickly Tea-tree  MS Epacris impressa Common Heath  MS Cassinia aculeata Common Cassinia  SS Pimelea humilis Common Rice-flower  SS Hibbertia riparia Erect Guinea-flower  PS Bossiaea prostrata Creeping Bossiaea  PS Astroloma humifusum Cranberry Heath  PS Acrotriche serrulata Honey-pots  LH Pterostylis longifolia s.l. Tall Greenhood  MH Gonocarpus tetragynus Common Raspwort  MH Drosera peltata ssp. auriculata Tall Sundew  SH Dichondra repens Kidney-weed  SH Opercularia varia Variable Stinkweed  SH Drosera whittakeri ssp. aberrans Scented Sundew  LTG Deyeuxia quadriseta Reed Bent-grass  LTG Xanthorrhoea minor ssp. lutea Small Grass-tree  LNG Gahnia radula Thatch Saw-sedge  MTG Lomandra filiformis Wattle Mat-rush  MTG Themeda triandra Kangaroo Grass  MTG Poa sieberiana Grey Tussock-grass  MTG Lepidosperma laterale Variable Sword-sedge  MNG Microlaena stipoides var. stipoides Weeping Grass  GF Pteridium esculentum Austral Bracken  SC Comesperma volubile Love Creeper  SC Billardiera scandens Common Apple-berry  Recruitment:  Continuous  Organic Litter:  20 % cover  Logs:  15 m/0.1 ha.  Weediness:  LF Code Typical Weed Species Common Name Invasive Impact  T Pinus radiata Radiata Pine high high T Pittosporum undulatum Sweet Pittosporum high high MS Chrysanthemoides monilifera Boneseed high high  MH Hypochoeris radicata Cat's Ear high low MTG Anthoxanthum odoratum Sweet Vernal-grass high high  MTG Briza maxima Large Quaking-grass high low  Published by the Victorian Government Department of Sustainability and Environment November 2007  © The State of Victoria Department of Sustainability and Environment 2007  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[www.dse.vic.gov.au](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 198: Sedgy Riparian Woodland

##### Description:

Eucalypt forest or woodland to 15 m tall with sedge-dominated understorey. Occurs on flats along low gradient creeks and drainage lines subject to seasonal inundation and waterlogging in moderately fertile habitats.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  70 cm | **#/ha**  15 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 20% | Eucalyptus ovata  Eucalyptus obliqua | Swamp Gum  Messmate Stringybark |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form** | **#Spp** | **%Cover** | **LF code** |
| Immature Canopy Tree |  | 5% | IT |
| Understorey Tree or Large Shrub | 1 | 10% | T |
| Medium Shrub | 5 | 20% | MS |
| Medium Herb | 6 | 10% | MH |
| Small or Prostrate Herb | 3 | 5% | SH |
| Large Tufted Graminoid | 3 | 25% | LTG |
| Large Non-tufted Graminoid | 2 | 15% | LNG |
| Medium to Small Tufted Graminoid | 3 | 10% | MTG |
| Medium to Tiny Non-tufted Graminoid | 2 | 10% | MNG |
| Ground Fern | 2 | 10% | GF |
| Bryophytes/Lichens | na | 10% | BL |

|  |  |  |
| --- | --- | --- |
| **LF Code**  MS | **Species typical of at least part of EVC range**  Leptospermum continentale | **Common Name**  Prickly Tea-tree |
| MS | Acacia verticillata ssp. verticillata | Prickly Moses |
| MS | Melaleuca squarrosa | Scented Paperbark |
| MS | Coprosma quadrifida | Prickly Currant-bush |
| MH | Gonocarpus tetragynus | Common Raspwort |
| MH | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| MH | Hydrocotyle hirta | Hairy Pennywort |
| SH | Oxalis exilis | Shady Wood-sorrel |
| SH | Lobelia pedunculata s.l. | Matted Pratia |
| LTG | Lepidosperma laterale var. majus | Variable Sword-sedge |
| LTG | Gahnia sieberiana | Red-fruit Saw-sedge |
| LTG | Carex appressa | Tall Sedge |
| LNG | Gahnia radula | Thatch Saw-sedge |
| LNG | Tetrarrhena juncea | Forest Wire-grass |
| MTG | Dianella tasmanica | Tasman Flax-lily |
| MTG | Juncus planifolius | Broad-leaf Rush |
| MNG | Poa tenera | Slender Tussock-grass |
| MNG | Tetrarrhena distichophylla | Hairy Rice-grass |
| GF | Pteridium esculentum | Austral Bracken |
| GF | Blechnum nudum | Fishbone Water-fern |
| GF | Blechnum minus | Soft Water-fern |
| EP | Amyema pendula | Drooping Mistletoe |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 198: Sedgy Riparian Woodland - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  30 % cover  **Logs:**  20 m/0.1 ha.  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  MH Hypochoeris radicata Cat's Ear high low LNG Holcus lanatus Yorkshire Fog high high  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 201: Shrubby Wet Forest

##### Description:

Tall eucalypt forest to 30 m tall with scattered understorey trees over a tall broad-leaved shrubby understorey and a moist, shaded, fern-rich ground layer that is usually dominated by tree-ferns. Herbs may also be abundant where light penetrates the ground layer. Largely restricted to western and northern aspects and ridgelines in areas of higher rainfall in the Otway Ranges.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species**  Eucalyptus spp. | **DBH(cm)**  90 cm | **#/ha**  20 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 40% | Eucalyptus obliqua  Eucalyptus cypellocarpa | Messmate Stringybark  Mountain Grey Gum |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form**  Immature Canopy Tree | **#Spp** | **%Cover**  5% | **LF code**  IT |
| Understorey Tree or Large Shrub | 4 | 30% | T |
| Medium Shrub | 6 | 20% | MS |
| Large Herb | 2 | 1% | LH |
| Medium Herb | 4 | 5% | MH |
| Small or Prostrate Herb | 1 | 1% | SH |
| Large Tufted Graminoid | 1 | 5% | LTG |
| Large Non-tufted Graminoid | 1 | 10% | LNG |
| Medium to Small Tufted Graminoid | 1 | 1% | MTG |
| Ground Fern | 3 | 15% | GF |
| Tree Fern | 2 | 10% | TRF |
| Scrambler or Climber | 2 | 5% | SC |
| Bryophytes/Lichens | na | 20% | BL |

|  |  |  |
| --- | --- | --- |
| **LF Code**  T | **Species typical of at least part of EVC range**  Pomaderris aspera | **Common Name**  Hazel Pomaderris |
| T | Olearia argophylla | Musk Daisy-bush |
| T | Acacia melanoxylon | Blackwood |
| MS | Coprosma quadrifida | Prickly Currant-bush |
| MS | Olearia lirata | Snowy Daisy-bush |
| MS | Goodenia ovata | Hop Goodenia |
| MS | Hedycarya angustifolia | Austral Mulberry |
| LH | Mentha laxiflora | Forest Mint |
| LH | Senecio linearifolius | Fireweed Groundsel |
| MH | Acaena novae-zelandiae | Bidgee-widgee |
| MH | Stellaria flaccida | Forest Starwort |
| MH | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| SH | Oxalis corniculata s.l. | Yellow Wood-sorrel |
| LTG | Lepidosperma elatius | Tall Sword-sedge |
| LNG | Tetrarrhena juncea | Forest Wire-grass |
| GF | Pteridium esculentum | Austral Bracken |
| GF | Polystichum proliferum | Mother Shield-fern |
| TRF | Cyathea australis | Rough Tree-fern |
| TRF | Dicksonia antarctica | Soft Tree-fern |
| SC | Clematis aristata | Mountain Clematis |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 201: Shrubby Wet Forest - Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  50 % cover  **Logs:**  30 m/0.1 ha.  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  LH Hypericum androsaemum Tutsan high high  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 233: Wet Sands Thicket

##### Description:

Dense, impenetrable heathy scrub to 5 m tall with occasional emergent eucalypts. Occurs on Tertiary outwash geology on deep sandy grey loams to sands.

|  |  |  |  |
| --- | --- | --- | --- |
| **Life forms: Life form** | **#Spp** | **%Cover** | **LF code** |
| Medium Shrub | 5 | 50% | MS |
| Small Shrub | 2 | 5% | SS |
| Prostrate Shrub | 1 | 5% | PS |
| Large Tufted Graminoid | 2 | 5% | LTG |
| Large Non-tufted Graminoid | 1 | 25% | LNG |
| Ground Fern | 2 | 5% | GF |
| Tree Fern | 1 | 1% | TRF |
| Bryophytes/Lichens | na | 20% | BL |

|  |  |  |  |
| --- | --- | --- | --- |
| **LF Code**  MS |  | **Species typical of at least part of EVC range**  Bossiaea cinerea | **Common Name**  Showy Bossiaea |
| MS | r | Monotoca glauca | Currant-wood |
| MS |  | Leptospermum continentale | Prickly Tea-tree |
| MS |  | Melaleuca squarrosa | Scented Paperbark |
| SS |  | Boronia muelleri | Forest Boronia |
| SS |  | Bauera rubioides | Wiry Bauera |
| SS |  | Amperea xiphoclada var. xiphoclada | Broom Spurge |
| LTG |  | Gahnia sieberiana | Red-fruit Saw-sedge |
| LNG |  | Tetrarrhena juncea | Forest Wire-grass |
| GF |  | Pteridium esculentum | Austral Bracken |
| TRF |  | Dicksonia antarctica | Soft Tree-fern |

##### Recruitment:

Episodic/Fire. Desirable period between disturbances is 30 years.

##### Organic Litter:

40 % cover

##### Weediness:

There are no consistent weeds in this EVC.

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 233: Wet Sands Thicket - Otway Ranges bioregion | |
|  | Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 863: Floodplain Reedbed

##### Description:

A closed to open grassland to 2–3 m tall, dominated by Common Reed. Small aquatic and semi-aquatic species occur amongst the reeds. It occurs on swamps on river plains, especially the lower reaches of the floodplain. Soils are Quaternary stream alluvium with floodplain and low level terrace deposits consisting of silt, clay and peat. Swamp Paperbark frequently fringes the margins of these reed beds.

|  |  |  |  |
| --- | --- | --- | --- |
| **Life Forms: Life form** | **#Spp** | **%Cover** | **LF code** |
| Medium Shrub | 1 | 5% | MS |
| Large Herb | 2 | 10% | LH |
| Medium Herb | 2 | 5% | MH |
| Small or Prostrate Herb | 2 | 5% | SH |
| Medium to Small Tufted Graminoid | 1 | 5% | MTG |
| Large Non-tufted Graminoid | 2 | 30% | LNG |
| Scrambler or Climber | 1 | 1% | SC |
| **Total understorey projective foliage cover** |  | **60%** |  |

|  |  |  |
| --- | --- | --- |
| **LF Code**  MS | **Species typical of at least part of EVC range**  Solanum aviculare | **Common Name**  Kangaroo Apple |
| MH | Myriophyllum crispatum | Upright Water-milfoil |
| LH | Lycopus australis | Australian Gipsywort |
| LH | Urtica incisa | Scrub Nettle |
| SH | Mimulus repens | Creeping Monkey-flower |
| LNG | Phragmites australis | Common Reed |
| MTG | Triglochin procerum s.l. | Water Ribbons |
| SC | Calystegia sepium | Large Bindweed |

##### Recruitment:

Episodic/Flood. Desirable period between disturbances is 5 years.

##### Organic Litter:

10% cover

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Weediness:** |  | | | |
| **LF Code** | **Typical Weed Species** | **Common Name** | **Invasive** | **Impact** |
| LH  MH | Aster subulatus  Cotula coronopifolia | Aster-weed  Water Buttons | high  high | low  high |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 863: Floodplain Reedbed – Otway Ranges bioregion | |
|  | Published by the Victorian Government Department of Sustainability and Environment December 2005  © The State of Victoria Department of Sustainability and Environment 2005  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be  directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

**[www.dse.vic.gov.au](http://www.dse.vic.gov.au/)**



**EVC/Bioregion Benchmark for Vegetation Quality Assessment**

Otway Ranges bioregion

EVC 894: Scoria Cone Woodland

##### Description:

Eucalypt woodland to 15 m tall or non-eucalypt woodland to 10 m tall over a grassy to bracken-dominated understorey with a range of herbs. Occurs on the slopes of freely-draining scoria cones and spatter areas of more coarse boulder-forming flow sources. Soils are fertile but often skeletal.

|  |  |  |
| --- | --- | --- |
| **Large trees:** |  | |
| **Species** | **DBH(cm)** | **#/ha** |
| Eucalyptus spp.  Allocasuarina spp. | 70 cm  50 cm | 15 / ha |

##### Tree Canopy Cover:

|  |  |  |
| --- | --- | --- |
| **%cover** | **Character Species** | **Common Name** |
| 15% | Eucalyptus viminalis  Allocasuarina verticillata | Manna Gum  Drooping Sheoak |

|  |  |  |  |
| --- | --- | --- | --- |
| **Understorey: Life form** | **#Spp** | **%Cover** | **LF code** |
| Immature Canopy Tree |  | 5% | IT |
| Understorey Tree or Large Shrub | 1 | 5% | T |
| Medium Shrub | 2 | 10% | MS |
| Large Herb | 3 | 5% | LH |
| Medium Herb | 6 | 10% | MH |
| Small or Prostrate Herb | 3 | 5% | SH |
| Large Tufted Graminoid | 1 | 15% | LTG |
| Medium to Small Tufted Graminoid | 4 | 15% | MTG |
| Medium to Tiny Non-tufted Graminoid | 1 | 5% | MNG |
| Ground Fern | 2 | 20% | GF |
| Bryophytes/Lichens | na | 10% | BL |
| Soil Crust | na | 10% | S/C |

|  |  |  |
| --- | --- | --- |
| **LF Code**  T | **Species typical of at least part of EVC range**  Acacia melanoxylon | **Common Name**  Blackwood |
| MS | Bursaria spinosa | Sweet Bursaria |
| LH | Senecio pinnatifolius | Variable Groundsel |
| LH | Rumex brownii | Wiry Dock |
| LH | Senecio quadridentatus | Cotton Fireweed |
| MH | Acaena novae-zelandiae | Bidgee-widgee |
| MH | Geranium potentilloides | Cinquefoil Cranesbill |
| MH | Acaena echinata | Sheep’s Burr |
| MH | Viola hederacea sensu Willis (1972) | Ivy-leaf Violet |
| SH | Dichondra repens | Kidney-weed |
| SH | Oxalis exilis | Shady Wood-sorrel |
| LTG | Poa labillardierei | Common Tussock-grass |
| MTG | Lomandra filiformis | Wattle Mat-rush |
| MTG | Dianella revoluta s.l. | Black-anther Flax-lily |
| MTG | Carex breviculmis | Short-stem Sedge |
| MTG | Austrodanthonia pilosa | Velvet Wallaby-grass |
| MNG | Microlaena stipoides var. stipoides | Weeping Grass |
| GF | Pteridium esculentum | Austral Bracken |

Ecological Vegetation Class bioregion benchmark

|  |  |
| --- | --- |
| EVC 894: Scoria Cone Woodland – Otway Ranges bioregion | |
|  | **Recruitment:**  Continuous  **Organic Litter:**  20 % cover  **Logs:**  10 m/0.1 ha  **Weediness:**  **LF Code Typical Weed Species Common Name Invasive Impact**  MS Lycium ferocissimum African Box-thorn high high MH Hypochoeris radicata Cat's Ear high low MTG Briza maxima Large Quaking-grass high low  MTG Romulea rosea Onion Grass high low  MTG Holcus lanatus Yorkshire Fog high high  Published by the Victorian Government Department of Sustainability and Environment May 2004  © The State of Victoria Department of Sustainability and Environment 2004  This publication is copyright. Reproduction and the making available of this material for personal, in-house or non-commercial purposes is authorised, on condition that:   * the copyright owner is acknowledged; * no official connection is claimed; * the material is made available without charge or at cost; and * the material is not subject to inaccurate, misleading or derogatory treatment.   Requests for permission to reproduce or communicate this material in any way not permitted by this licence (or by the fair dealing provisions of the Copyright Act 1968) should be directed to the Nominated Officer, Copyright, 8 Nicholson Street, East Melbourne, Victoria, 3002.  For more information contact: Customer Service Centre, 136 186  This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication. |

[**www.dse.vic.gov.au**](http://www.dse.vic.gov.au/)