# EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

### EVC 2: Coast Banksia Woodland

#### **Description:**

Restricted to near coastal localities on secondary or tertiary dunes behind Coastal Dune Scrub. Usually dominated by a woodland overstorey of Coast Banksia *Banksia integrifolia* to 15 m tall over a medium shrub layer. The understorey consists of a number of herbs and sedges, including scramblers.

Large trees: Species Banksia spp. Eucalyptus spp. Tree Canopy Co		<b>DBH(cm)</b> 50 cm 70 cm	<b>#/ha</b> 10 / ha	a	
<b>%cover</b> 15%	Character Species Banksia integrifolia			Common Coast Banks	
1570	Eucalyptus viminalis ssp. pryor	iana			ed Manna Gum
Life Forms:					
Life form		#Sp	р	%Cover	LF code
Immature Canop	by Tree	-	-	5%	IT
Medium Shrub		3		40%	MS
Small Shrub		1		1%	SS
Large Herb		2		1%	LH
Medium Herb Small or Prostrat	a Harb	3 2		15% 10%	MH SH
Large Tufted Gra		2		10%	LTG
5	Tufted Graminoid	1		5%	MTG
	Non-tufted Graminoid	1		10%	MNG
Ground Fern		1		10%	GF
Scrambler or Clir	nber	2		10%	SC
Bryophytes/Liche	ens	na		20%	BL
MS         Z           MS         Z           LH         Z           LH         Z           MH         Z           MH         Z           MH         Z           SH         Z           GF         Z           SC         C	Species typical of at least Leucopogon parviflorus Rhagodia candolleana ssp. cando Leptospermum laevigatum Senecio minimus Haloragis brownii Sambucus gaudichaudiana Viola hederacea sensu Willis (19) Lobelia anceps Sarcocornia quinqueflora Hydrocotyle sibthorpioides Dichondra repens Pteridium esculentum Galium australe Clematis microphylla	olleana	inge	Coas Seab Coas Shru Swar Whit Ivy-le Angle Bead Shini Kidne Austr Tang	t Beard-heath erry Saltbush t Tea-tree bby Fireweed mp Raspwort e Elderberry eaf Violet ed Lobelia led Glasswort ng Pennywort ey-weed ral Bracken gled Bedstraw il-leaved Clematis



#### **Recruitment:**

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

#### **Organic Litter:**

40 % cover

#### Logs:

10 m/0.1 ha.

#### Weediness:

LF Code LH MH

**Typical Weed Species** Cirsium vulgare Hypochoeris radicata

Common Name Spear Thistle Cat's Ear

Invasive high high

Impact high low

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain 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.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 15 / ha		
Tree Canopy Co	over:				
<b>%cover</b> 15%	Character Species Eucalyptus viminalis ssp. pryor	iana		<b>Common</b> Rough-bark	Name ed Manna Gum
Understorey:					
Life form		#Sp	р	%Cover	LF code
Immature Canor	by Tree		-	5%	IT
	e or Large Shrub	1		5%	Т
Medium Shrub		5		25%	MS
Small Shrub		3		5%	SS
Prostrate Shrub		1		1%	PS
Large Herb		2		5%	LH
Medium Herb		8		15%	MH
Small or Prostra		5		10%	SH
Large Tufted Gr		2		10%	LTG
Large Non-tufte		1		1%	LNG
Medium to Smal	l Tufted Graminoid	4		10%	MTG
,	Non-tufted Graminoid	2		10%	MNG
Ground Fern		1		15%	GF
Bryophytes/Lich	ens	na		10%	BL



### EVC 3: Damp Sands Herb-rich Woodland - Gippsland Plain bioregion

LF Code T T MS MS MS	<b>Species typical of at least part of EVC range</b> Acacia mearnsii Acacia melanoxylon Epacris impressa Leptospermum continentale Banksia marginata	<b>Common Name</b> Black Wattle Blackwood Common Heath Prickly Tea-tree Silver Banksia
MS	Leptospermum myrsinoides	Heath Tea-tree
SS	Leucopogon virgatus Dillwynia glaberrima	Common Beard-heath Smooth Parrot-pea
SS	Amperea xiphoclada var. xiphoclada	Broom Spurge
PS	Astroloma humifusum	Cranberry Heath
MH	Gonocarpus tetragynus	Common Raspwort
MH	Drosera peltata ssp. auriculata	Tall Sundew
MH	Viola hederacea sensu Willis (1972)	Ivy-leaf Violet
MH	Geranium solanderi s.l.	Austral Cranesbill
SH	Hydrocotyle laxiflora	Stinking Pennywort
SH	Opercularia varia	Variable Stinkweed
SH	Dichondra repens	Kidney-weed
SH	Poranthera microphylla	Small Poranthera
LTG	Lomandra longifolia	Spiny-headed Mat-rush
LTG	Austrostipa mollis	Supple Spear-grass
LNG	Tetrarrhena juncea	Forest Wire-grass
MTG	Lepidosperma concavum	Sandhill Sword-sedge
MTG	Dianella revoluta s.l.	Black-anther Flax-lily
MTG	Lomandra filiformis	Wattle-headed Mat-rush
MTG	Poa sieberiana	Grey Tussock-grass
MNG	<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass
GF	Pteridium esculentum	Austral Bracken

#### **Recruitment:**

Continuous

#### **Organic Litter:**

40 % cover

#### Logs:

15 m/0.1 ha.

#### Weediness:

LF Code MH

LTG LNG **Typical Weed Species** Hypochoeris radicata Anthoxanthum odoratum Holcus lanatus

**Common Name** Cat's Ear Sweet Vernal Grass Yorkshire Fog

Invasive high high high

Impact low 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.

**Gippsland Plain bioregion** 

### EVC 6: Sand Heathland

#### **Description:**

Treeless heathland (or with occasional emergent mallee-form eucalypts and/or Banksias) occurring on deep infertile sands. Consists of a low, dense heathy shrub layer and a number of sedges and sedge-like species. Grasses and herbs are notably absent or infrequent.

Life Forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	7	55%	MS
Small Shrub	4	10%	SS
Medium Herb	3	5%	MH
Small or Prostrate Herb	2	5%	SH
Large Tufted Graminoid	1	5%	LTG
Large Non-tufted Graminoid	1	1%	LNG
Medium to Small Tufted Graminoid	2	5%	MTG
Medium to Tiny Non-tufted Graminoid	2	15%	MNG
Ground Fern	1	1%	GF
Bryophytes/Lichens	na	10%	BL
Soil Crust	na	10%	S/C

LF Code MS MS MS SS SS SS SS SS MH MH LNG LTG MTG MNG MNG	Species typical of at least part of EVC range Epacris impressa Banksia marginata Leptospermum continentale Leptospermum myrsinoides Dillwynia glaberrima Platylobium obtusangulum Hibbertia fasciculata var. prostrata Leucopogon virgatus Gonocarpus humilis Drosera peltata ssp. auriculata Gahnia radula Xanthorrhoea minor ssp. lutea Lepidosperma concavum Hypolaena fastigiata Schoenus brevifolius	Common Name Common Heath Silver Banksia Prickly Tea-tree Heath Tea-tree Smooth Parrot-pea Common Flat-pea Bundled Guinea-flower Common Beard-heath Shade Raspwort Tall Sundew Thatch Saw-sedge Small Grass-tree Sandhill Sword-sedge Tassel Rope-rush Zig-zag Bog-sedge
GF	Pteridium esculentum	Austral Bracken

#### **Recruitment:**

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

#### **Organic Litter:**

20% cover

#### Weediness:

There are no consistent weeds in this EVC.



### EVC 6: Sand Heathland - Gippsland Plain bioregion

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.

**Gippsland Plain bioregion** 

### EVC 7: Clay Heathland

#### **Description:**

Occurs on sites with impeded drainage, often on duplex soils. Dominated by heathy shrub species with or without an eucalypt overstorey. The ground layer is dense and diverse with a variety of landforms.

<sup>+</sup> woodland <u>only</u> components (ignore when assessing treeless areas and standardise final score as appropriate)

Large trees <sup>+</sup> : Species Eucalyptus spp.		<b>DBH(cm)</b> 40 cm	<b>#/ha</b> 10 / ha		
Tree Canopy C				•	
<b>%cover</b> 10%	Character Species Eucalyptus conspicua			Common Swamp S	<b>n Name</b> tringybark
Understorey:					
Life form		#Sp	p º	%Cover	LF code
Medium Shrub		6	-	0%	MS
Small Shrub		7	1	.0%	SS
Prostrate Shrub		2	1	.%	PS
Large Herb		2	1	.%	LH
Medium Herb		8	1	.0%	MH
Small or Prostra	te Herb	2	1	.%	SH
Large Tufted Gr	aminoid	3	5	5%	LTG
Medium to Sma	ll Tufted Graminoid	4	5	5%	MTG
Medium to Tiny	Non-tufted Graminoid	4	5	5%	MNG
Ground Fern		2	1	.%	GF
Bryophytes/Lich	ens	na	1	.0%	BL
Soil Crust		na	1	.0%	S/C
Total unders	torey projective foliage	cover	7	/5%	



### EVC 7: Clay Heathland - Gippsland Plain bioregion

LF Code	Species typical of at least part of EVC range	Commo
MS	Allocasuarina paludosa	Scrub She
MS	Leptospermum continentale	Prickly Tea
MS	Epacris impressa	Common H
MS	Hakea teretifolia ssp. hirsuta	Dagger Ha
SS	Dampiera stricta	Blue Damp
SS	Dillwynia sericea s.l.	Showy Par
SS	Hibbertia empetrifolia s.l.	Tangled G
SS	Sphaerolobium vimineum s.l.	Leafless G
PS	Xanthosia pusilla spp. agg.	Heath Xan
LH	Euphrasia collina	Purple Eye
LH	r <i>Hybanthus vernonii</i> ssp. <i>vernonii</i>	Erect Viole
MH	Gonocarpus teucrioides s.l.	Germande
MH	Drosera peltata ssp. auriculata	Tall Sunde
MH	Helichrysum scorpioides	Button Eve
SH	Opercularia varia	Variable St
SH	Drosera pygmaea	Tiny Sunde
LTG	Anisopogon avenaceus	Oat Spear-
LTG	Xanthorrhoea resinosa	Spear Gras
LTG	Deyeuxia quadriseta	Reed Bent
MTG	Themeda triandra	Kangaroo
MTG	Patersonia sericea	Silky Purpl
MTG	Lomandra filiformis	Wattle Ma
MTG	Patersonia glabrata	Leafy Purp
MNG	Schoenus brevifolius	Zig-zag Bo
MNG	Lepidosperma neesii	Stiff Rapie
MNG	Entolasia marginata	Bordered I
MNG	Schoenus lepidosperma	Slender Bo
GF	Lindsaea linearis	Screw Fer

#### on Name

eoak ea-tree Heath lakea piera arrot-pea Guinea-flower Globe-pea nthosia rebright let er Raspwort lew /erlasting Stinkweed dew r-grass ass-tree t-grass Grass ole-flag at-rush ple-flag og-sedge er-sedge Panic Bog-sedge rn

#### **Recruitment:**

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

#### **Organic Litter:**

20% Cover

#### Weediness:

There are no consistent weeds in this EVC.

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.

**Gippsland** Plain 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	6	40%	MS
Small Shrub	3	5%	SS
Prostrate Shrub	1	1%	PS
Medium Herb	3	5%	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	2	5%	MTG
Medium to Tiny Non-tufted Graminoid	5	20%	MNG
Ground Fern	1	1%	GF
Bryophytes/Lichens	na	20%	BL

LF Code	Species typical of at least part of EVC range	<b>Common Name</b>
MS	Melaleuca squarrosa	Scented Paperbark
MS	Leptospermum continentale	Prickly Tea-tree
MS	Allocasuarina paludosa	Scrub Sheoak
SS	Sprengelia incarnata	Pink Swamp-heath
SS	Platylobium obtusangulum	Common Flat-pea
SS	Epacris obtusifolia	Blunt-leaf Heath
MH	Epacris gunnii	Ace of Spades
MH	Gonocarpus humilis	Shade Raspwort
LNG	Gonocarpus tetragynus	Common Raspwort
MTG	Gahnia radula	Thatch Saw-sedge
MNG	Patersonia occidentalis	Long Purple-flag
MNG	Schoenus brevifolius	Zig-zag Bog-sedge
MNG	Schoenus lepidosperma	Slender Bog-sedge
MNG	Baumea juncea	Bare Twig-sedge
MNG	Leptocarpus tenax	Slender Twine-rush
SC	Cassytha glabella	Slender Dodder-laurel
GF	Lindsaea linearis	Screw Fern

#### **Recruitment:**

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

#### Organic Litter:

20% cover

#### Weediness:

There are no consistent weeds in this EVC.



### EVC 8: Wet Heathland - Gippsland Plain bioregion

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.

**Gippsland** Plain bioregion

### EVC 9: Coastal Saltmarsh

#### **Description:**

Occurs on and immediately above marine and estuarine tidal flats and contains distinct floristic communities as bands or zones in the same location, depending on the positioning of the various floristic communities in relation to the saline environment. Consists of a range of life forms including succulent herbs, low succulent shrubs, rushes and sedges.

Life Forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	2	20%	MS
Small Shrub	1	1%	SS
Medium Herb	3	20%	MH
Small or Prostrate Herb	2	15%	SH
Large Non-tufted Graminoid	1	1%	LNG
Medium to Small Tufted Graminoid	1	5%	MTG
Medium to Tiny Non-tufted Graminoid	2	10%	MNG
Soil Crust	na	10%	S/C
Total understorey projective foliage cover		<b>70%</b>	

LF Code	Species typical of at least part of EVC range	Common Name
MS	Sclerostegia arbuscula	Shrubby Glasswort
SS	Suaeda australis	Austral Seablite
MH	Sarcocornia quinqueflora	Beaded Glasswort
MH	Samolus repens	Creeping Brookweed
MH	Hemichroa pentandra	Trailing Hemichroa
SH	Disphyma crassifolium ssp. clavellatum	Rounded Noon-flower
MNG	Triglochin striatum	Streaked Arrowgrass
MNG	Distichlis distichophylla	Australian Salt-grass

#### **Recruitment:**

Continuous

#### Continuous

Organic Litter: 10 % cover

#### Weediness:

There are no consistent weeds in this EVC.



### EVC 9: Coastal Saltmarsh - Gippsland Plain bioregion

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.

**Gippsland** Plain 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 Swamp Paperbark *Melaleuca ericifolia* at the landward edge.

Life Forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	1	10%	MS
Small Shrub	2	5%	SS
Large Herb	2	5%	LH
Medium Herb	6	20%	MH
Small or Prostrate Herb	2	10%	SH
Large Tufted Graminoid	2	10%	LTG
Large Non-tufted Graminoid	1	5%	LNG
Medium to Small Tufted Graminoid	2	5%	MTG
Medium to Tiny Non-tufted Graminoid	3	20%	MNG
Total understorey projective foliage cover		85%	

LF Code	Species typical of at least part of EVC range	Common Name
MS	Melaleuca ericifolia	Swamp Paperbark
MH	Samolus repens	Creeping Brookweed
MH	Hydrocotyle hirta	Hairy Pennywort
SH	Selliera radicans	Shiny Swamp-mat
LTG	Lomandra longifolia	Spiny-headed Mat-rush
LTG	Juncus pallidus	Pale Rush
LNG	Juncus kraussii ssp. australiensis	Sea Rush
MNG	Ficinia nodosa	Knobby Club-sedge
MNG	Distichlis distichophylla	Australian Salt-grass

#### **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	Cirsium vulgare	Spear Thistle	high	high
LH	Sonchus oleraceus	Common Sow-thistle	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Plantago coronopus	Buck's-horn Plantain	high	high
MH	Cotula coronopifolia	Water Buttons	high	high



### EVC 10: Estuarine Wetland - Gippsland Plain bioregion

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.

Gippsland Plain bioregion

### EVC 11: Coastal Lagoon Wetland

#### Description:

Occupies the margins of coastal freshwater lagoons that have formed behind the coastal dune barrier and the adjacent hills. It has several zones dependent upon water depth and persistence of inundation. Within the lagoon itself where exposure is rare, the vegetation is dominated by graminoids whereas on the lagoon margin a tall scrub layer is common.

Life Forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	4	15%	MS
Small Shrub	2	1%	SS
Large Herb	1	1%	LH
Medium Herb	2	5%	MH
Small or Prostrate Herb	1	1%	SH
Large Tufted Graminoid	1	5%	LTG
Large Non-tufted Graminoid	2	15%	LNG
Medium to Small Tufted Graminoid	1	5%	MTG
Medium to Tiny Non-tufted Graminoid	2	5%	MNG
Ground Fern	1	5%	GF
Scrambler or Climber	1	1%	SC
Bryophytes/Lichens	na	10%	BL
Total understorey projective foliage cover		60%	
	6 F.V.O	•	

LF Code	Species typical of at least part of EVC range	Common Name
MS	Leptospermum continentale	Prickly Tea-tree
MS	Melaleuca squarrosa	Scented Paperbark
MS	Melaleuca ericifolia	Swamp Paperbark
MH	Gonocarpus tetragynus	Common Raspwort
LTG	Carex appressa	Tall Sedge
MTG	Triglochin procerum s.l.	Water Ribbons
LNG	Phragmites australis	Common Reed
LNG	Lepidosperma longitudinale	Pithy Sword-sedge
MNG	Baumea tetragona	Square Twig-sedge
SC	Cassytha glabella	Slender Dodder-laurel

#### Recruitment:

Continuous

#### Organic Litter:

20% cover

#### Weediness:

There are no consistent weeds in this EVC.



### EVC 11: Coastal Lagoon Wetland - Gippsland Plain bioregion

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.

Gippsland Plain bioregion

### EVC 12: Wet Swale Herbland

#### Description:

Occupies seasonally inundated dune swales often forming between the coastal dune barrier and hinterland hills. Soils are predominantly deep peats often with aeolian sand lenses where species typical of drier environments may grow. This EVC typically consists of a range of amphibious rushes, sedges and herbs.

Life forms:						
Life form	۱		#Spp	%Cover	LF code	
Small Shrul	b		1	1%	SS	
Large Herb	)		1	1%	LH	
Medium He	erb		7	15%	MH	
Small or Pr	osti	ate Herb	3	5%	SH	
Large Tufte	ed (	Graminoid	2	5%	LTG	
Large Non-tufted Graminoid		ed Graminoid	1	1%	LNG	
Medium to Small Tufted Graminoid		all Tufted Graminoid	4	10%	MTG	
Medium to Tiny Non-tufted Graminoid		4	25%	MNG		
Ground Fern		-	1	5%	GF	
Scrambler	Scrambler or Climber		2	1%	SC	
Total understorey projective foliage cove		storey projective foliage cover		70%		
LF Code		Species typical of at least part of	of EVC range	Com	nmon Name	
LH		Villarsia reniformis	_	Runn	ing Marsh-flower	
MH		Potamogeton tricarinatus s.l.		Float	ing Pondweed	
MH		Myriophyllum simulans		Ampl	nibious Water-milfoil	
MH		Viola hederacea sensu Willis (1972)		Ivy-leaf Violet		
MH		Veronica plebeia		Trailing Speedwell		
SH		Dichondra repens		Kidne	ey-weed	
SH		Hydrocotyle sibthorpioides		Shini	ng Pennywort	
SH		Asperula subsimplex		Wate	r Woodruff	
LTG		Lomandra longifolia		Spiny	/-headed Mat-rush	
LNG		Eleocharis sphacelata		Tall S	Spike-sedge	
MTG		Lepidosperma concavum		Sand	hill Sword-sedge	
MTG		Isolepis fluitans		Float	ing Club-sedge	
MTG		Lachnagrostis filiformis		Comr	mon Blown-grass	
MTG		Triglochin procerum s.l.		Wate	r Ribbons	
MNG		Imperata cylindrica		Blady	/ Grass	
MNG		<i>Hemarthria uncinata</i> var. <i>uncinata</i>		Mat 0	Grass	
MNG		<i>Microlaena stipoides</i> var. <i>stipoides</i>		Weep	oing Grass	
MNG	е	Pseudoraphis paradoxa			ler Mud-grass	
MNG		Ficinia nodosa			by Club-sedge	
GF		Pteridium esculentum			al Bracken	
SC		Billardiera scandens		Comr	mon Apple-berry	
SC		Glycine clandestina		Twin	ing Glycine	
Recruitme	nt:					

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

#### **Organic Litter:**

10% cover

#### Weediness:

LF Code MH MH **Typical Weed Species** *Hypochoeris radicata Leontodon taraxacoides* ssp. *taraxacoides*  Common Name Cat's Ear Hairy Hawkbit Invasive high high Impact low low



### EVC 12: Wet Swale Herbland - Gippsland Plain bioregion

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.

# EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plains bioregion

### EVC 14: Banksia Woodland

#### **Description:**

Open scrub to open woodland to 10 m tall on well-drained Quaternary and Tertiary sandy soils. The overstorey is dominated by Saw Banksia Banksia serrata, sometimes with emergent eucalypts while the understorey is shrub-rich.

Large trees: Species Banksia serrat	a	• •	<b>t/ha</b> 5 / ha	
Tree Canopy %cover	Cover: Character Species		Commo	n Name
15%	Banksia serrata		Saw Bank	
Understorey:				
Life form		#Spp	%Cover	LF code
Immature Can			5%	IT
,	ree or Large Shrub	1	5%	Т
Medium Shrub		10	25%	MS
Small Shrub		7	15%	SS
Large Herb		1	1%	LH
Medium Herb		5	10%	MH
Small or Prost		1	1%	SH
Large Tufted C		3	10%	LTG
Large Non-tuft		1	5%	LNG
Medium to Small Tufted Graminoid		5	10%	MTG
	y Non-tufted Graminoid	2	5%	MNG
Ground Fern		2	10%	GF
Scrambler or C	Climber	3	1%	SC
Bryophytes/Lic	chens	na	10%	BL



### EVC 14: Banksia Woodland - Gippsland Plains bioregion

LF Code	Species typical of at least part of EVC range	C
MS	Epacris impressa	(
MS	Leptospermum continentale	F
MS	Acacia terminalis	5
MS	Acacia suaveolens	S
SS	Dampiera stricta	E
SS	Amperea xiphoclada var. xiphoclada	E
SS	Tetratheca pilosa	F
SS	Dillwynia glaberrima	S
MH	Gonocarpus teucrioides s.l.	0
MH	Selaginella uliginosa	S
MH	Drosera peltata ssp. auriculata	Г
LTG	Lomandra longifolia	S
LTG	Xanthorrhoea resinosa	S
LTG	Gahnia clarkei	Г
LNG	Tetrarrhena juncea	F
MTG	Dianella caerulea var. caerulea	F
MTG	Patersonia glabrata	L
MTG	Lepidosperma laterale	<u>۱</u>
MTG	Burchardia umbellata	Ν
MNG	Empodisma minus	5
GF	Pteridium esculentum	A
GF	Lindsaea linearis	5
SC	Cassytha glabella	5
SC	Cassytha phaeolasia	F
SC	Billardiera scandens	C

#### **Common Name** Common Heath Prickly Tea-tree Sunshine Wattle Sweet Wattle Blue Dampiera Broom Spurge Hairy Pink-bells Smooth Parrot-pea Germander Raspwort Swamp Selaginella Tall Sundew Spiny-headed Mat-rush Spear Grass-tree Tall Saw-sedge Forest Wire-grass Paroo Lily Leafy Purple-flag Variable Sword-sedge Milkmaids Spreading Rope-rush Austral Bracken Screw Fern Slender Dodder-laurel Rusty Dodder-laurel Common Apple-berry

#### **Recruitment:**

Episodic/Fire. Desirable period between disturbances is 30 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 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.

**Gippsland Plain bioregion** 

### EVC 15: Limestone Box Forest

#### Description:

Occurs on generally well developed terra rossa soils derived from Tertiary limestones that outcrop around coastal streams, gullies and lakes. Open eucalypt forest to 20 m tall with a tall shrub layer understorey and a grass and herb-rich ground layer on sheltered aspects but may be almost completely bare on drier aspects.

Large trees:					
Species		DBH(cm)	#/ha		
<i>Eucalyptus</i> spp	).	70 cm	20 / ha		
Tree Canopy (	Cover:				
%cover	Character Species			Commo	n Name
25%	Eucalyptus baueriana			Blue Box	
2370	Eucalyptus bosistoana			Coast Gre	w-hox
	Eucalpytus globulus ssp. pseudo	alohulus			l Blue-gum
	Eucalyptus tereticornis ssp. med				Red-gum
	Eucalyptus cypellocarpa	ana			Grey-gum
	Euolippius oppolioolipu			Mountain	Grog guin
Understorey:					
Life form		#Sp	р	%Cover	LF code
Immature Can	opy Tree	• •		5%	IT
Understorev Tr	ee or Large Shrub	3		20%	Т
Medium Shrub		2		5%	MS
Large Herb		2		1%	LH
Medium Herb	4		10%	MH	
Small or Prostr	2		5%	SH	
Medium to Tiny Non-tufted Graminoid		2		5%	MNG
Ground Fern		3		15%	GF
Scrambler or Climber		4		10%	SC
Bryophytes/Lichens		na		10%	BL
				•	
LF_Code	Species typical of at least	part of EVC ra	nge		nmon Name
T	Exocarpos cupressiformis				ry Ballart
T	Pittosporum undulatum				et Pittosporum
T	Bursaria spinosa ssp. spinosa				et Bursaria
T	Acacia melanoxylon				wood
MS	<i>Hymenanthera dentata</i> s.l.				Violet
MS	Coprosma quadrifida				ly Currant-bush
LH	Urtica incisa				o Nettle
MH	Solanum prinophyllum				st Nightshade
MH	Stellaria flaccida				st Starwort
MH SH	Sambucus gaudichaudiana				e Elderberry
	Dichondra repens				ey-weed
MNG MNG	Oplismenus hirtellus				alian Basket-grass
	Microlaena stipoides var. stipoide	25			oing Grass
GF GF	Asplenium flabellifolium Pteris tremula				lace Fern er Brake
GF GF	Plens tremula Pellaea falcata s.l.				e Fern
GF GF	Doodia australis				
SC					mon Rasp-fern
SC	Eustrephus latifolius				ibat Berry
SC	Geitonoplesium cymosum Clematis glycinoides var. glycino	idas			nbling Lily st Clematis
SC	Marsdenia rostrata	1453		Milk	
50				IVIIIK	VIIIC



#### **Recruitment:**

Continuous

#### **Organic Litter:** 40 % cover

Logs: 15 m/0.1 ha.

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	Solanum nigrum sensu Willis (1972)	Black Nightshade	high	low
LH	Conyza bonariensis	Flaxleaf Fleabane	high	high
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Cirsium vulgare	Spear Thistle	high	high
MH	Cardamine hirsuta s.l.	Common Bitter-cress	high	low
LNG	Holcus lanatus	Yorkshire Fog	high	high
SC	Asparagus asparagoides	Bridal Creeper	high	high
SC	Rubus fruticosus spp. agg.	Blackberry	high	high
MH	Cerastium glomeratum s.l.	Common Mouse-ear Chickweed	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.

**Gippsland** Plain bioregion

### EVC 16: Lowland Forest

#### **Description:**

Eucalypt forest to 20 m tall on relatively fertile, moderately well-drained soils in areas of relatively high rainfall. Characterised by the diversity of life forms and species in the understorey including a range of shrubs, grasses and herbs.

Large trees: Species		DBH(cm)	#/ha		
<i>Eucalyptus</i> spp	•	70 cm	20 / ha		
Tree Canopy (	Cover:				
%cover	Character Species		Co	ommo	n Name
30%	Eucalyptus obliqua		Me	essmate	Stringybark
	Eucalyptus radiata s.l.		Na	irrow-lea	af Peppermint
	Eucalyptus consideniana		Ye	rtchuk	
11					
Understorey:		#C			I E codo
Life form		#Spj	p %C	over	LF code
Immature Can		2	0,0		IT
	ee or Large Shrub	2	10%		T
Medium Shrub		7	30%		MS
Small Shrub	_	5	10%		SS
Prostrate Shrul	)	2	5%		PS
Large Herb		1	1%		LH
Medium Herb		7	10%		MH
Small or Prostr		7 2	5%		SH
Large Tufted G			15% 5%		LTG LNG
Large Non-tuft		1 7	5% 15%		MTG
	all Tufted Graminoid	1	15%		MNG
Ground Fern	/ Non-tufted Graminoid	1 2	1%		GF
Scrambler or C	limbor	2	15%		SC
		-	1%		BL
Bryophytes/Lic	nens	na	10%		DL
LF Code	Species typical of at least	t part of EVC ra	nge	Com	mon Name
Т	Acacia melanoxylon	-	-	Black	wood
MS	Epacris impressa			Comn	non Heath
MS	Leptospermum continentale			Prickly	y Tea-tree
MS	Banksia marginata			Silver	Banksia
MS	Leptospermum myrsinoides			Heath	n Tea-tree
SS	Amperea xiphoclada var. xiphoc	lada		Broon	n Spurge
PS	Acrotriche serrulata			Hone	y-pots
MH	Gonocarpus tetragynus			Comn	non Raspwort
MH	Drosera peltata ssp. auriculata			Tall S	undew
MH	Viola hederacea sensu Willis (19	972)		Ivy-le	af Violet
SH	Opercularia varia			Varial	ble Stinkweed
LTG	Xanthorrhoea minor ssp. lutea				Grass-tree
LTG	Lomandra longifolia				-headed Mat-rush
LNG	Gahnia radula				h Saw-sedge
MTG	Lomandra filiformis				e Mat-rush
MTG	Poa australis spp. agg.				ock Grass
MNG	Microlaena stipoides var. stipoid	les			oing Grass
GF	Pteridium esculentum				al Bracken
SC	Billardiera scandens			Comn	non Apple-berry



Organic Litte	er:				
40 % cover					
20 m/0.1 ha.					
Weediness: LF Code	Typical Weed Species	Common Name	Invasive	Impact	
MH	Hypochoeris radicata	Cat's Ear	high	low	
Published by the Vict	orian Government Department of Sustainability an	d Environment April 2004			
© The State of Victor This publication is co	ria Department of Sustainability and Environment pyright. Reproduction and the making available of	2004	mmercial purposes is auth	orised, on condition that:	
<ul> <li>no offic</li> <li>the mat</li> </ul>	yright owner is acknowledged; ial connection is claimed; terial is made available without charge or at cost; a				
<ul> <li>the mat Requests for permiss</li> </ul>	terial is not subject to inaccurate, misleading or de ion to reproduce or communicate this material in a nated Officer, Copyright, 8 Nicholson Street, East N	erogatory treatment. any way not permitted by this licence (or by th	ne fair dealing provisions o	the <i>Copyright Act 1968)</i> s	hould be

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.

**Gippsland** Plain 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. The soil is 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.		<b>DBH(cm)</b> 80 cm		<b>#/ha</b> 20 / ha		
Tree Canopy Co %cover 40%	<b>Over:</b> Character Species Eucalyptus ovata Eucalyptus radiata s.l. Eucalyptus obliqua Eucalyptus viminalis					um af Peppermint Stringybark
Medium Shrub Small Shrub Large Herb Medium Herb Small or Prostrat Large Tufted Gra Large Non-tufted Medium to Smal	e or Large Shrub te Herb aminoid d Graminoid I Tufted Graminoid Non-tufted Graminoid		3 L 3 L 2 2 3 L 4 3 3 L	5 1 2 5 5 1 1 5 1 1 1 1 1 1 5 5	6 Cover % 5% 5% % 0% 5% % 0% 5% % % % 0%	LF code IT T MS SS LH MH SH LTG LNG MNG GF TRF SC BL



### EVC 18: Riparian Forest - Gippsland Plain bioregion

LF Code T T MS MS MS MS	Species typical of at least part of EVC range Acacia dealbata Acacia melanoxylon Acacia verticillata Goodenia ovata Ozothamnus ferrugineus	<b>Common Name</b> Silver Wattle Blackwood Prickly Moses Hop Goodenia Tree Everlasting
LH MH	Leptospermum continentale Senecio linearifolius Acaena novae-zelandiae	Prickly Tea-tree Fireweed Groundsel Bidgee-widgee
MH	Viola hederacea sensu Willis (1972)	Ivy-leaf Violet
SH	Dichondra repens	Kidney-weed
SH	Oxalis corniculata s.l.	Yellow Wood-sorrel
SH	Galium propinquum	Maori Bedstraw
SH	Hydrocotyle hirta	Hairy Pennywort
LTG	Gahnia sieberiana	Red-fruit Saw-sedge
LTG	Lomandra longifolia	Spiny baadad Mat rush
LTG	Corrandia fongliona	Spiny-headed Mat-rush
LTG	Carex appressa	Tall Sedge
LNG	Tetrarrhena juncea	Forest Wire-grass
MTG	Lepidosperma laterale	Variable Sword-sedge
MTG MTG MTG MNG	Dianella tasmanica Poa australis spp. agg. Poa tenera	Tasman Flax-lily Tussock Grass Slender Tussock-grass
MNG	Microlaena stipoides var. stipoides	Weeping Grass
MNG	Echinopogon ovatus	Common Hedgehog-grass
GF	Pteridium esculentum	Austral Bracken
GF	Adiantum aethiopicum	Common Maidenhair
GF	Blechnum nudum	Fishbone Water-fern
GF	Blechnum minus	Soft Water-fern
TRF	Cyathea australis	Rough Tree-fern
TRF	Dicksonia antarctica	Soft Tree-fern
SC	Clematis aristata	Mountain Clematis

#### **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
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Plantago lanceolata	Ribwort	high	low
LH	Cirsium vulgare	Spear Thistle	high	high
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Prunella vulgaris	Self-heal	high	low
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Anthoxanthum odoratum	Sweet Vernal-grass	high	high
SC	Galium aparine	Cleavers	high	low

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.

**Gippsland Plain bioregion** 

### EVC 19: Riparian Shrubland

#### **Description:**

Diverse, medium to tall shrubland to 8 m tall occurring on rocky substrates of major streams and banks and channels of rocky creeks and along perennial streams in gorge tracts. Able to withstand frequent flooding or regenerate rapidly after such disturbance and often forming dense thickets along the stream's edge during long periods without flooding. Trees may be irregularly scattered throughout but tend to be restricted to the banks of the rivers and creeks. Sedges and rushes common to riparian environments dominate the understorey as well as an array of herbs and grasses including many ephemeral species which survive on the bare sands or in rock crevice.

Canopy Cove	er:				
%cover	Character Species		Commo	n Name	
20%	Acacia melanoxylon		Blackwoo		
	Acacia falciformis		Large-leat	f Hickory-wattle	
Understorey					
Life form		#Spp	%Cover	LF code	
Medium Shru	b	9	25%	MS	
Large Herb		4	5%	LH	
Medium Herb		9	15%	MH	
Small or Pros		2	5%	SH	
Large Tufted		3	5%	LTG	
	nall Tufted Graminoid	3	10%	MTG	
	ny Non-tufted Graminoid	2	1%	MNG	
Ground Fern		4	10%	GF	
Scrambler or		2	5% SC		
Bryophytes/Li		na 10% BL			
Total unde	rstorey projective foliage cover		80%		
LF Code	Species typical of at least part o	of EVC range	Com	nmon Name	
MS	Kunzea ericoides		Burga		
MS	Prostanthera lasianthos		. 5	rian Christmas-bush	
MS	Ozothamnus ferrugineus			Everlasting	
MS	Cassinia longifolia			/ Cassinia	
LH	Urtica incisa		,	Nettle	
LH	Persicaria decipiens		Slend	ler Knotweed	
LH	Stypandra glauca			ling Blue-lily	
LH	Xerochrysum bracteatum			en Everlasting	
MH	Hydrocotyle hirta			Pennywort	
MH	Solanum prinophyllum			st Nightshade	
MH	Poranthera microphylla			l Poranthera	
SH	Oxalis corniculata s.l.		Yello	w Wood-sorrel	
SH	Dichondra repens		Kidne	ey-weed	
LTG	Carex polyantha		River	Sedge	
LTG	Lepidosperma urophorum		Taile	d Rapier-sedge	
LTG	Lomandra longifolia		Spiny	/-headed Mat-rush	
LTG	Carex appressa			Sedge	
MTG	Poa australis spp. agg.		Tusso	ock Grass	
MTG	Poa ensiformis		Swor	d Tussock-grass	
MTG	Lepidosperma laterale		Varia	ble Sword-sedge	
MTG	Dianella tasmanica		Tasm	nan Flax-lily	
MNG	Microlaena stipoides var. stipoides		Weer	ping Grass	
MNIC	luquia compostuia com o as		اتعاط	Waadwich	



Field Woodrush

Austral Bracken

Green Rock-fern

Wonga Vine

Small-leaf Bramble

Small-leaved Clematis

Common Ground-fern

Fishbone Water-fern

Luzula campestris spp. agg.

Cheilanthes austrotenuifolia

Pteridium esculentum

Calochlaena dubia

Blechnum nudum

Rubus parvifolius

Pandorea pandorana

Clematis microphylla

MNG

GF

GF

GF

GF

SC

SC

SC

#### **Recruitment:**

Episodic/flood - desirable period between flood events is 5 years.

#### **Organic Litter:**

20% cover

#### Logs:

10 m/0.1 ha (note: large log class does not apply)

Weediness:				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	Rosa rubiginosa	Sweet Briar	low	high
MS	Rubus fruticosus spp. agg.	Blackberry	high	high
LH	Conium maculatum	Hemlock	high	high
LH	Conyza bonariensis	Flaxleaf Fleabane	high	low
LH	Carduus tenuiflorus	Winged Thistle	high	high
LH	Sonchus asper s.l.	Rough Sow-thistle	high	low
LH	Plantago lanceolata	Ribwort	high	low
LH	Rumex crispus	Curled Dock	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Prunella vulgaris	Self-heal	high	low
MH	Trifolium arvense var. arvense	Hare's-foot Clover	high	low
MH	Anagallis arvensis	Pimpernel	high	low
MH	Euphorbia peplus	Petty Spurge	high	low
MH	Silene gallica	French Catchfly	high	low
MH	Petrorhagia nanteuilii	Childling Pink	high	low
MH	Gamochaeta purpurea s.l.	Purple Cudweed	high	low
MH	Centaurium erythraea	Common Centaury	high	low
SH	Modiola caroliniana	Red-flower Mallow	high	low
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Cyperus eragrostis	Drain Flat-sedge	high	high
MTG	Bromus catharticus	Prairie Grass	high	low
MTG	Vulpia bromoides	Squirrel-tail Fescue	high	low
MTG	Bromus hordeaceus ssp. hordeaceus	Soft Brome	high	low
MTG	Bromus diandrus	Great Brome	high	low
MNG	Aira caryophyllea	Silvery Hair-grass	high	low
SC	Vinca major	Blue Periwinkle	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.

Gippsland Plain 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.		<b>DBH(cm)</b> 60 cm	<b>#/ha</b> 20 / ha		
Tree Canopy Co %cover 30%	over: Character Species Eucalyptus consideniana Eucalyptus macrorhyncha			<b>Commo</b> Yertchuk Red Strin	
Medium Shrub Small Shrub Prostrate Shrub Medium Herb Medium to Smal Medium to Tiny Ground Fern Bryophytes/Lich	e or Large Shrub II Tufted Graminoid Non-tufted Graminoid	#Sp 1 1 9 1 4 4 1 1 1 na <b>over</b>	- 5 5 4 1 1 5 5 1 1 1	%Cover % 0% 5% % % % % % % 0% 5 <b>%</b>	LF code IT T MS SS PS MH MTG MNG GF BL
MS MS MS SS SS SS SS SS PS MH MH MH MTG MTG MTG MTG MTG MTG MTG MTG MTG MTG	Species typical of at least Acacia oxycedrus Brachyloma daphnoides Correa reflexa Epacris impressa Dampiera stricta Hibbertia fasciculata var. prostra Hibbertia virgata Leucopogon virgatus Bossiaea prostrata Gonocarpus tetragynus Lagenophora stipitata Comesperma calymega Lomandra filiformis Stylidium graminifolium s.l. Austrodanthonia setacea Arthropodium milleflorum s.l. Microlaena stipoides var. stipoide Thelymitra ixioides s.l. Pteridium esculentum Cassytha pubescens s.s.	ta	inge	Spik Dapl Com Blue Bun Twig Com Cree Com Blue Watt Gras Brist Pale Wee Spot Aust	mmon Name e Wattle nne Heath mon Correa mon Heath Dampiera dled Guinea-flower gy Guinea-flower mon Beard-heath ping Bossiaea mon Raspwort mon Bottle-daisy -spike Milkwort de Mat-rush ss Trigger-plant dy Wallaby-grass Vanilla-lily ping Grass ted Sun-orchid ral Bracken ny Dodder-laurel



#### **Recruitment:**

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

#### **Organic Litter:**

20 % cover

#### Logs:

20 m/0.1 ha.

#### Weediness:

LF Code MH MH MTG MTG

Typical Weed Species Hypochoeris glabra Hypochoeris radicata *Ehrharta erecta* var. *erecta* Sporobolus africanus

Common Name Smooth Cat's-ear Cat's Ear

Panic Veldt-grass

Rat-tail Grass

Invasive Impact high low high low high high 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.

**Gippsland Plain 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 with a secondary, smaller tree layer including a number of Acacia species. The understorey usually consists of a sparse shrub layer of medium height. Grassy Dry Forest is characterised by a ground layer dominated by a high diversity of drought-tolerant grasses and herbs, often including a suite of fern species.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 60 cm	<b>#/h</b> a 20 / h		
Tree Canopy Co %cover 30%	over: Character Species Eucalyptus melliodora Eucalyptus macrorhyncha Eucalyptus polyanthemos			Commo Yellow Bo Red String Red Box	
Medium Shrub Small Shrub Prostrate Shrub Large Herb Medium Herb Small or Prostra Large Tufted Gr Medium to Smal	e or Large Shrub te Herb aminoid II Tufted Graminoid Non-tufted Graminoid mber	# 2 9 4 2 2 8 2 3 1 1 2 3 1 1 2 3 1 1	1 a	<b>%Cover</b> 5% 10% 20% 5% 1% 5% 15% 5% 30% 10% 5% 10% 10%	LF code IT T MS SS PS LH MH SH LTG MNG SC BL S/C



### EVC 22: Grassy Dry Forest - Gippsland Plain bioregion

_		
LF Code	Character Species	Common Name
Т	Acacia mearnsii	Black Wattle
Т	Exocarpos cupressiformis	Cherry Ballart
MS	Cassinia aculeata	Common Cassinia
MS	Daviesia leptophylla	Narrow-leaf Bitter-pea
MS	Bursaria spinosa ssp. spinosa	Sweet Bursaria
MS	Epacris impressa	Common Heath
SS	Platylobium obtusangulum	Common Flat-pea
SS	Dillwynia cinerascens s.l.	Grey Parrot-pea
SS	Pimelea humilis	Common Rice-flower
SS	Acacia aculeatissima	Thin-leaf Wattle
PS	Acrotriche serrulata	Honey-pots
PS	Bossiaea prostrata	Creeping Bossiaea
LH	Senecio glomeratus	Annual Fireweed
LH	Senecio hispidulus	Rough Fireweed
MH	Plantago varia	Variable Plantain
MH	Gonocarpus tetragynus	Common Raspwort
SH	Opercularia varia	Variable Stinkweed
SH	Oxalis corniculata s.l.	Yellow Wood-sorrel
LTG	Austrostipa rudis	Veined Spear-grass
LTG	Xanthorrhoea minor ssp. lutea	Small Grass-tree
MTG	Themeda triandra	Kangaroo Grass
MTG	Joycea pallida	Silvertop Wallaby-grass
MTG	Dianella revoluta s.l.	Black-anther Flax-lily
MTG	Poa sieberiana	Grey Tussock-grass
MNG	Microlaena stipoides var. stipoides	Weeping Grass
GF	Pteridium esculentum	Austral Bracken
SC	Hardenbergia violacea	Purple Coral-pea
SC	Billardiera scandens	Common Apple-berry

#### **Recruitment:**

Continuous

#### **Organic Litter:**

20 % cover

#### Logs:

20 m/0.1 ha.

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	Cotoneaster pannosus	Velvet Cotoneaster	high	high
MS	Chrysanthemoides monilifera	Boneseed	high	high
LH	Plantago lanceolata	Ribwort	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MTG	Briza maxima	Large Quaking-grass	high	low
MTG	Anthoxanthum odoratum	Sweet Vernal-grass	high	high
MTG	Romulea rosea	Onion Grass	high	low
MTG	Agrostis capillaris s.l.	Brown-top Bent	high	high
MTG	Ehrharta erecta var. erecta	Panic Veldt-grass	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.

Gippsland Plain 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		<b>DBH(cm</b> 70 cm	)	<b>#/ha</b> 20 / h		
Tree Canopy C %cover 40%	<b>Cover:</b> Character Species Eucalyptus obliqua Eucalyptus radiata s.l.					<b>n Name</b> Stringybark af Peppermint
Understorey:						
Life form			#Spj	D	%Cover	LF code
Immature Cano	ppy Tree				5%	IT
	ee or Large Shrub		2		10%	Т
Medium Shrub			5		10%	MS
Small Shrub			2		5%	SS
Prostrate Shrub	)		1		1%	PS
Large Herb			2		1%	LH
Medium Herb			7		10%	MH
Small or Prostra	ate Herb		2		1%	SH
Large Tufted G			1		5%	LTG
Large Non-tufte			2		5%	LNG
Medium to Sma	all Tufted Graminoid		3		20%	MTG
	Non-tufted Graminoid		1		1%	MNG
Ground Fern			2		25%	GF
Scrambler or C	limber		2		5%	SC
Bryophytes/Lich	nens		na		20%	BL



### EVC 23: Herb-rich Foothill Forest - Gippsland Plain bioregion

LF Code MS MS MS MS	<b>Species typical of at least part of EVC range</b> Leptospermum continentale Epacris impressa Banksia marginata Acacia stricta
SS	Pimelea humilis
PS	Acrotriche prostrata
LH	Wahlenbergia gracilis s.l.
MH	Gonocarpus tetragynus
MH	Viola hederacea sensu Willis (1972)
MH	Hypericum gramineum
SH	Hydrocotyle laxiflora
LTG	Lomandra longifolia
LNG	Gahnia radula
MTG	Lomandra filiformis
MTG	Themeda triandra
MNG	Microlaena stipoides var. stipoides
GF	Pteridium esculentum
GF	Adiantum aethiopicum
SC	Clematis aristata
SC	Glycine clandestina

#### **Common Name**

Prickly Tea-tree Common Heath Silver Banksia Hop Wattle Common Rice-flower Trailing Ground-berry Sprawling Bluebell Common Raspwort Ivy-leaf Violet Small St John's Wort Stinking Pennywort Spiny-headed Mat-rush Thatch Saw-sedge Wattle Mat-rush Kangaroo Grass Weeping Grass Austral Bracken Common Maidenhair Mountain Clematis **Twining Glycine** 

#### **Recruitment:**

Continuous

#### **Organic Litter:**

40 % cover

#### Logs:

20 m/0.1 ha.

#### Weediness:

#### LF Code MH

MH

**Typical Weed Species** Hypochoeris radicata Centaurium erythraea

**Common Name** Cat's Ear **Common Centaury** 

Invasive high high

Impact low low

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.

**Gippsland** Plain bioregion

### EVC 29: Damp Forest

#### **Description:**

Grows on a wide range of geologies on well-developed generally colluvial soils on a variety of aspects, from sea level to montane elevations. Dominated by a tall eucalypt tree layer to 30 m tall over a medium to tall dense shrub layer of broad-leaved species typical of wet forest mixed with elements from dry forest types. The ground layer includes herbs and grasses as well as a variety of moisture-dependent ferns.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 90 cm	<b>#/ha</b> 20 / ha		
Tree Canopy C %cover 40%	<b>Cover:</b> <b>Character Species</b> <i>Eucalyptus obliqua</i> <i>Eucalyptus cypellocarpa</i>				<b>n Name</b> Stringybark Grey-gum
Understorey:					
Life form		#Sp	р	%Cover	LF code
Immature Cano				5%	IT
Understorey Tree or Large Shrub		3		20%	Т
Medium Shrub		9		25%	MS
Small Shrub		2		5%	SS
Prostrate Shrub	1	1		1%	PS
Large Herb		2		1%	LH
Medium Herb		6		10%	MH
Small or Prostra		1		1%	SH
Large Tufted G		3		5%	LTG
Large Non-tufte		1		5%	LNG
Medium to Small Tufted Graminoid		3		5%	MTG
Medium to Tiny Non-tufted Graminoid		1		1%	MNG
Ground Fern		3		20%	GF
Tree Fern		1		5%	TRF
Scrambler or Cl		4		10%	SC
Bryophytes/Lich	nens	na		20%	BL



### EVC 29: Damp Forest - Gippsland Plain bioregion

<b>LF Code</b> ⊤	Species typical of at least part of Pomaderris aspera	EVC range	Common Name Hazel Pomaderris	
Т	Bedfordia arborescens		Blanket-leaf	
MS	Coprosma quadrifida		Prickly Currant-bush	
MS	Goodenia ovata		Hop Goodenia	
MS	Polyscias sambucifolia		Elderberry Panax	
MS	Leucopogon lanceolatus var. lanceolatus		Lance Beard-heath	
MH	Viola hederacea sensu Willis (1972)		Ivy-leaf Violet	
MH	<i>Gonocarpus teucrioides</i> s.l.		Germander Raspwort	
MH	Lagenophora stipitata		Common Bottle-daisy	
MH	Poranthera microphylla		Small Poranthera	
LTG	Lomandra longifolia		Spiny-headed Mat-rush	
LTG	Poa labillardierei		Common Tussock Grass	
LNG	Tetrarrhena juncea		Forest Wire-grass	
MTG	Dianella tasmanica		Tasman Flax-lily	
MTG	Hierochloe rariflora		Cane Holy-grass	
MTG	<i>Dianella caerulea</i> var. <i>caerulea</i>		Paroo Lily	
MTG				
	Lepidosperma laterale		Variable Sword-sedge	
MNG	<i>Microlaena stipoides</i> var. <i>stipoides</i> <i>Pteridium esculentum</i>		Weeping Grass	
GF			Austral Bracken	
GF	Blechnum cartilagineum		Gristle Fern	
GF	Polystichum proliferum		Mother Shield-fern	
GF	Calochlaena dubia		Common Ground-fern	
TRF	Cyathea australis		Rough Tree-fern	
SC	Clematis aristata		Mountain Clematis	
SC	Billardiera scandens		Common Apple-berry	
SC	Smilax australis		Austral Sarsaparilla	
SC	Pandorea pandorana		Wonga Vine	
Organic Litter 50 % cover	r:			
30 m/0.1 ha.				
Weediness: LF Code	Typical Weed Species	Common Name	Invasive	Impact
MH	Hypochoeris radicata	Cat's Ear	high	low
Dublished U. M. M.				
© The State of Victoria	ian Government Department of Sustainability and Environr Department of Sustainability and Environment 2004 rright. Reproduction and the making available of this mater		on-commercial purposes is authorie	sed, 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.

**Gippsland** Plain 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.		<b>DBH(cm)</b> 90 cm	<b>#/ha</b> 20 / h		
Tree Canopy C	Cover:				
<b>%cover</b> 40%	Character Species Eucalyptus obliqua Eucalyptus cypellocarpa Eucalyptus globulus ssp. pseuc Eucalyptus viminalis ssp. vimin	•		Messma Mountai	<b>on Name</b> te Stringybark n Grey-gum nd Blue-gum Gum
Understorey:					
Life form		#	#Spp	%Cover	LF code
Immature Cano	.,			5%	IT
	ee or Large Shrub	3		20%	Т
Medium Shrub		6	-	15%	MS
Large Herb		1	-	1%	LH
Medium Herb		6		10%	MH
Small or Prostra		2		1%	SH
Large Tufted G		2		5%	LTG
Large Non-tufte		1		1%	LNG
	III Tufted Graminoid	3		15%	MTG
Ground Fern	Non-tufted Graminoid	1	-	10%	MNG
		4	-	15%	GF
Tree Fern Scrambler or Cl	imbor	1	-	15% 5%	TF SC
Bryophytes/Lich			ia	20%	BL



# EVC 30: Wet Forest - Gippsland Plain bioregion

LF Code	Species typical of at least part of EVC range	Common Name
Т	Pomaderris aspera	Hazel Pomaderris
Т	Acacia dealbata	Siver Wattle
Т	Acacia melanoxylon	Blackwood
Т	Olearia argophylla	Musk Daisy-bush
MS	Goodenia ovata	Hop Goodenia
MS	Cassinia longifolia	Shiny Cassinia
MS	Cassinia aculeata	Common Cassinia
MS	Ozothamnus ferrugineus	Tree Everlasting
SS	Rhytidosporum procumbens	White Marianth
LH	Senecio velleioides	Forest Groundsel
LH	Senecio glomeratus	Annual Fireweed
MH	<i>Viola hederacea</i> sensu Willis (1972)	Ivy-leaf Violet
MH	Gonocarpus teucrioides s.l.	Germander Raspwort
MH	Lagenophora stipitata	Common Bottle-daisy
SH	<i>Oxalis corniculata</i> s.l.	Yellow Wood-sorrel
SH	Dichondra repens	Kidney-weed
LTG	Lomandra longifolia	Spiny-headed Mat-rush
LTG	Cyperus lucidus	Leafy Flat-sedge
LTG	Juncus pallidus	Pale Rush
LNG	Gahnia radula	Thatch Saw-sedge
LNG	Tetrarrhena juncea	Forest Wire-grass
MTG	<i>Poa australis</i> spp. agg.	Tussock Grass
MTG	Dianella tasmanica	Tasman Flax-lily
MTG	Poa labillardierei	Common Tussock-grass
MNG	<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass
GF	Pteridium esculentum	Austral Bracken
GF	Blechnum cartilagineum	Gristle Fern
GF	Calochlaena dubia	Common Ground-fern
GF	Sticherus lobatus	Spreading Fan-fern
TRF	Cyathea australis	Rough Tree-fern
TRF	Dicksonia antarctica	Soft Tree-fern
SC	Clematis aristata	Mountain Clematis
SC	Billardiera scandens	Common Apple-berry
SC	Comesperma volubile	Love Creeper
Recruitment: Continuous		

## **Organic Litter:**

50 % cover

#### Logs:

30 m/0.1 ha.

### Weediness:

LF Code MH

Typical Weed Species Hypochoeris radicata

Common Name Cat's Ear

Invasive high

Impact 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.

# EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

# EVC 32: Warm Temperate Rainforest

## **Description:**

Closed forest to 20 m tall occurring along small streams and narrow coastal fringes associated with lakes and estuaries. Dominated by a range of non-eucalypt canopy species above an understorey of smaller trees and shrubs and usually visually dominated by ferns and climbers.

Large trees: Species Various spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 20 / ha		
Tree Canopy C	Cover:				
<b>%cover</b> 50%	Character Species Acmena smithii Acacia melanoxylon			Commo Lilly Pilly Blackwood	<b>n Name</b>
Understorey:					
Life form		#Sp	p (	%Cover	LF code
Immature Cano			- !	5%	IT
Understorey Tr	ee or Large Shrub	3	3	30%	Т
Medium Shrub		2		10%	MS
Large Herb		2	!	5%	LH
Medium Herb		3	!	5%	MH
Small or Prostra	ate Herb	1	!	5%	SH
Large Tufted G	raminoid	1		1%	LTG
Medium to Sma	all Tufted Graminoid	1		1%	MTG
,	Non-tufted Graminoid	2		5%	MNG
Ground Fern		4	-	25%	GF
Epiphyte		1	!	5%	EP
Scrambler or Cl	limber	7	-	20%	SC
Bryophytes/Lich	nens	na		20%	BL



## EVC 32: Warm Temperate Rainforest - Gippsland Plain bioregion

#### LF Code Species typical of at least part of EVC range **Common Name** Т Olearia argophylla Musk Daisy-bush т r Acronychia oblongifolia Yellow-wood Prickly Currant-bush MS Coprosma quadrifida LH Urtica incisa Scrub Nettle Sambucus gaudichaudiana White Elderberry MH MH Stellaria flaccida Forest Starwort Austrocynoglossum latifolium Forest Hound's-tongue MH SH Pyrrosia rupestris Rock Felt-fern SH Dichondra repens Kidney-weed LTG Gahnia melanocarpa Black-fruit Saw-sedge MNG Oplismenus hirtellus Australian Basket-grass MNG Microlaena stipoides var. stipoides Weeping Grass GF Asplenium flabellifolium Necklace Fern GF Pellaea falcata s.l. Sickle Fern GF Lastreopsis acuminata Shiny Shield-fern GF Pteris tremula Tender Brake EΡ Microsorum scandens Fragrant Fern Wombat Berry SC Eustrephus latifolius SC Clematis glycinoides var. glycinoides Forest Clematis SC Geitonoplesium cymosum Scrambling Lilv SC Austral Sarsaparilla Smilax australis

#### **Recruitment:**

Continuous

#### **Organic Litter:**

50 % cover

#### Logs:

20 m/0.1 ha.

### Weediness:

#### LF Code 1H

SC

**Typical Weed Species** Solanum nigrum sensu Willis (1972) Asparagus asparagoides

**Common Name** Black Nightshade Bridal Creeper

Invasive high high

Impact low 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.

Gippsland Plain bioregion

# EVC 34: Dry Rainforest

#### Description:

Open to closed non-eucalypt low forest or tall shrubland to 15 m tall. Occurs in areas of relatively low rainfall (750-900mm per annum) and primarily confined to topographic fire refuges most often associated with extensive cliffs, gorges and rock screes on northern and western aspects.

Large trees: Species Various spp.		<b>DBH(cm)</b> 60 cm	<b>#/h</b> a 10 / h				
Tree Canopy %cover	Cover: Character Species			Commo	n Nan		
50%	Rapanea howittiana Pittosporum undulatum			Mutton-we Sweet Pitt	bod		
Understorey:							
Life form Immature Car	nopy Tree	#Sp	p	<b>%Cover</b> 5%	LF CO	ode	
Understorey 1	Free or Large Shrub	3		20%	Т		
Medium Shrul	b	9		20%	MS		
Large Herb		5		5%	LH		
Medium Herb		12		15%	MH		
Small or Prost		5 2		5%	SH		
Large Tufted	nall Tufted Graminoid	2		5% 5%	LTG MTG		
	ny Non-tufted Graminoid	3		5%	MNG		
Ground Fern	ly Non-tarted Grammold	5		10%	GF		
Epiphyte		2		1%	EP		
Scrambler or	Climber	6		10%	SC		
Bryophytes/Li	chens	na		20%	BL		
Weediness:							
LF Code	Typical Weed Species	Com	mon Na	ame		Invasive	Impact
MS	Rubus fruticosus spp. agg.	Blackb	5			high	high
LH	Solanum nigrum sensu Willis (197	,	Nightsha	de		high	low
LH	Cirsium vulgare		Thistle			high	high
LH	<i>Conyza</i> spp.	Fleaba				high	low
MH	Hypochoeris radicata	Cat's I		d		high	low
MH MH	<i>Gamochaeta purpurea</i> s.l. <i>Cerastium glomeratum</i> s.l.		e Cudwee	eu se-ear Chickw	ood	high high	low low
MH	Polycarpon tetraphyllum		eaved Al		eeu	high	low
MH	Hypochoeris glabra		th Cat's-			high	low
MH	Galium murale		Goosegr			high	low
MH	Anagallis arvensis	Pimpe	0	400		high	low
MTG	Vulpia bromoides		el-tail Fe	scue		high	low
MTG	Ehrharta erecta var. erecta		Veldt-gra			high	high
MNG	Aira praecox	Early I	Hair-gras	SS		high	low



## EVC 34: Dry Rainforest - Gippsland Plain bioregion

LF Code		Species typical of at least part of EVC range Acacia meansii	Common Name Black Wattle
Ť		Acacia implexa	Lightwood
Ť		Acacia falciformis	Pale Hickory Wattle
MS		Olearia lirata	Snowy Daisy-bush
MS		Cassinia trinerva	Three-nerved Cassin
MS		Cassinia Iongifolia	Shiny Cassinia
MS		Coprosma quadrifida	Prickly Currant-bush
LH		Urtica incisa	Scrub Nettle
LH		Sigesbeckia orientalis ssp. orientalis	Indian Weed
LH		Senecio minimus	Shrubby Fireweed
MH		Solanum prinophyllum	Forest Nightshade
MH		<i>Viola hederacea</i> sensu Willis (1972)	Ivy-leaf Violet
MH		Sambucus gaudichaudiana	White Elderberry
MH		Lobelia anceps	Angled Lobelia
SH		Dichondra repens	Kidney-weed
SH		Hydrocotyle sibthorpioides	Shining Pennywort
SH		Pyrrosia rupestris	Rock Felt-fern
SH		Oxalis exilis	Shady Wood-sorrel
LTG		Lomandra longifolia	Spiny-headed Mat-ru
LTG		Lepidosperma urophorum	Tailed Rapier-sedge
LTG			1 0
MTG		Gahnia melanocarpa	Black-fruit Saw-sedge
MTG	-	Notodanthonia longifolia	Long-leaf Wallaby-gr
	I	Libertia paniculata	Branching Grass-flag
MTG		Lepidosperma laterale	Variable Sword-sedge
MTG		Poa hothamensis	Ledge Grass
MNG		Microlaena stipoides var. stipoides	Weeping Grass
MNG		Echinopogon ovatus	Common Hedgehog-
MNG		Oplismenus hirtellus	Australian Basket-gra
MNG		Entolasia marginata	Bordered Panic
GF		Pteris tremula	Tender Brake
GF		Asplenium flabellifolium	Necklace Fern
GF		Doodia australis	Common Rasp-fern
GF		Cheilanthes austrotenuifolia	Green Rock-fern
EP		Microsorum pustulatum ssp. pustulatum	Kangaroo Fern
EP		Hymenophyllum cupressiforme	Common Filmy Fern
EP		Sarcochilus australis	Butterfly Orchid
EP		Cassytha phaeolasia	Rusty Dodder-laurel
SC		Eustrephus latifolius	Wombat Berry
SC		Celastrus australis	Staff Climber
SC		Morinda jasminoides	Jasmine Morinda

twood Hickory Wattle wy Daisy-bush e-nerved Cassinia y Cassinia kly Currant-bush b Nettle an Weed ubby Fireweed st Nightshade leaf Violet te Elderberry ed Lobelia ey-weed ing Pennywort Felt-fern dy Wood-sorrel y-headed Mat-rush ed Rapier-sedge k-fruit Saw-sedge g-leaf Wallaby-grass ching Grass-flag able Sword-sedge ge Grass ping Grass mon Hedgehog-grass ralian Basket-grass lered Panic der Brake klace Fern mon Rasp-fern en Rock-fern garoo Fern nmon Filmy Fern erfly Orchid ty Dodder-laurel nbat Berry Climber nine Morinda

#### **Recruitment:**

Continuous

#### **Organic Litter:**

50 % cover

#### Logs:

10 m/0.1 ha.

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.

# EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

EVC 45: Shrubby Foothill Forest

## **Description:**

Eucalypt forest to 25 m tall over an understorey characterised by a distinctive middle strata dominated by a diversity of narrowleaved shrubs and a paucity of ferns, graminoids and herbs in the ground stratum.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 20 / ha		
Tree Canopy C %cover 40%	over: Character Species Eucalyptus obliqua Eucalyptus sieberi Eucalyptus baxteri s.l. Eucalyptus radiata s.l.			Messmate Silvertop / Brown Str	
Medium Shrub Small Shrub Prostrate Shrub Medium Herb Small or Prostra Large Tufted Gr Large Non-tufte Medium to Sma Ground Fern Scrambler or Cli Bryophytes/Lich	ee or Large Shrub ate Herb raminoid d Graminoid II Tufted Graminoid imber iens	# <b>Sp</b> 1 8 3 1 3 1 2 1 2 2 1 2 1 na	5% 5% 35' 10' 5% 5% 1% 10' 5% 10' 1% 10'	6 % % 6 % % % %	LF code IT T MS SS PS MH SH LTG LNG MTG GF SC BL
MS MS MS SS SS SS R PS MH LTG LNG MTG GF	Species typical of at least Spyridium parvifolium Goodenia ovata Epacris impressa Correa reflexa Amperea xiphoclada var. xiphoc Tetratheca ciliata Lomatia ilicifolia Tetratheca stenocarpa Acrotriche prostrata Viola hederacea sensu Willis (19 Gonocarpus tetragynus Lepidosperma elatius Tetrarrhena juncea Poa australis spp. agg. Lepidosperma laterale Pteridium esculentum Billardiera scandens	lada	nge	Dusty Hop ( Comr Broor Pink- Holly Long Trailii Ivy-le Comr Tall S Fores Tusso Varia Austr	Miller Goodenia non Heath non Correa n Spurge bells Lomatia Pink-bells ng Ground-berry eaf Violet non Raspwort word-sedge t Wire-grass ock Grass ble Sword-sedge al Bracken non Apple-berry



# EVC 45: Shrubby Foothill Forest - Gippsland Plain bioregion

#### **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.

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.

**Gippsland** Plain bioregion

# EVC 47: Valley Grassy Forest

## **Description:**

Large trees:

Valley Grassy Forest occurs under moderate rainfall regimes of 700-800 mm per annum on fertile well-drained colluvial or alluvial soils on gently undulating lower slopes and valley floors. Open forest to 20 m tall that may carry a variety of eucalypts, usually species which prefer more moist or more fertile conditions over a sparse shrub cover. In season, a rich array of herbs, lilies, grasses and sedges dominate the ground layer but at the drier end of the spectrum the ground layer may be sparse and slightly less diverse, but with the moisture-loving species still remaining.

Species Eucalyptus spp.		<b>DBH(cm</b> ) 70 cm	)	<b>#/ha</b> 20 / ha		
Tree Canopy C	Cover:					
<b>%cover</b> 20%	Character Species Eucalyptus radiata s.l. Eucalyptus leucoxylon Eucalyptus melliodora Eucalyptus rubida		<b>Common Name</b> Narrow-leaf Pepper Yellow Gum Yellow Box Candlebark		af Peppermint m x	
Understorey:						
Life form			#Spp	)	%Cover	LF code
Immature Cano	ppy Tree				5%	IT
Understorey Tr	ee or Large Shrub		2		10%	Т
Medium Shrub			2		15%	MS
Prostrate Shrub	)		1		1%	PS
Large Herb			2		5%	LH
Medium Herb			11		25%	MH
Small or Prostra			3		5%	SH
Large Tufted G			2		5%	LTG
Large Non-tufte			2		10%	LNG
	III Tufted Graminoid		16		40%	MTG
,	Non-tufted Graminoid		2		5%	MNG
Scrambler or C			1		1%	SC
Bryophytes/Lich	nens		na		20%	BL



## EVC 47: Valley Grassy Forest - Gippsland Plain bioregion

LF Code	Species typical of at least part of EVC range
Т	Acacia mearnsii
MS	<i>Myoporum</i> sp. 1
MS	Acacia pycnantha
MS	Bursaria spinosa ssp. spinosa
SS	Pimelea humilis
PS	Bossiaea prostrata
LH	Veronica gracilis
MH	Poranthera microphylla
MH	Gonocarpus tetragynus
MH	<i>Drosera peltata</i> ssp. <i>auriculata</i>
SH	Solenogyne dominii
SH	<i>Oxalis corniculata</i> s.l.
SH	Oxalis exilis
SH	Opercularia varia
LTG	Austrostipa rudis
LTG	Austrostipa mollis
LNG	Gahnia radula
MTG	Themeda triandra
MTG	Lomandra filiformis
MTG	Tricoryne elatior
MTG	Arthropodium strictum s.l.
MNG	Microlaena stipoides var. stipoides
SC	Billardiera scandens

#### **Common Name**

Black Wattle Sticky Boobialla Golden Wattle Sweet Bursaria Common Rice-flower Creeping Bossiaea Slender Speedwell Small Poranthera Common Raspwort Tall Sundew Smooth Solenogyne Yellow Wood-sorrel Shady Wood-sorrel Variable Stinkweed Veined Spear-grass Supple Spear-grass Thatch Saw-sedge Kangaroo Grass Wattle Mat-rush Yellow Rush-lily Chocolate Lily Weeping Grass Common Apple-berry

#### **Recruitment:**

Continuous

**Organic Litter:** 

20 % cover

#### Logs:

20 m/0.1 ha.

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	Plantago lanceolata	Ribwort	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Centaurium erythraea	Common Centaury	high	low
LTG	Watsonia meriana var. bulbillifera	Bulbil Watsonia	high	high
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Briza maxima	Large Quaking-grass	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	Ehrharta longiflora	Annual Veldt-grass	high	low
MTG	Ehrharta erecta var. erecta	Panic Veldt-grass	high	high
MTG	Anthoxanthum odoratum	Sweet Vernal-grass	high	high
MTG	Sporobolus africanus	Rat-tail Grass	high	high
MTG	Paspalum dilatatum	Paspalum	high	high
MTG	<i>Agrostis capillaris</i> s.l.	Brown-top Bent	high	high
MNG	Dactylis glomerata	Cocksfoot	high	high
SC	Galium aparine	Cleavers	high	low

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.

**Gippsland** Plain 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. Banksia serrata		<b>DBH(cm)</b> 50 cm 40 cm	<b>#/ha</b> 15 / ha		
<b>%cover</b> 10%	<b>Character Species</b> <i>Eucalyptus willisii</i> <i>Eucalyptus obliqua</i> <i>Eucalyptus radiata</i> s.l. <i>Eucalyptus viminalis</i> ssp. <i>pryori</i> <i>Banksia serrata</i>	iana		Jimmy's S Messmat Narrow-le	on Name Shining Peppermint e Stringybark eaf Peppermint arked Manna Gum ksia
Understorey:					
Life form		#Spp	-	%Cover	LF code
Immature Cano	py Tree			5%	IT
Medium Shrub		5		30%	MS
Small Shrub		5		20%	SS
Medium Herb		2		5%	MH
Small or Prostra		2		5%	SH
Large Tufted Gr		1		5%	LTG
Large Non-tufte		1		1%	LNG
	Il Tufted Graminoid	1		5%	MTG
,	Non-tufted Graminoid	2		5%	MNG
Ground Fern		1		5%	GF
Bryophytes/Lich	ens	na		10%	BL
Soil Crust		na		10%	S/C
MS MS MS SS SS SS LTG MTG MNG	Species typical of at least Epacris impressa Leptospermum myrsinoides Leptospermum continentale Monotoca scoparia Amperea xiphoclada var. xiphocla Leucopogon virgatus Dillwynia glaberrima Gahnia sieberiana Xanthorrhoea minor ssp. lutea Hypolaena fastigiata Cassytha glabella		nge	Com Heat Prick Prick Broo Com Smo Red- Sma Tass	mmon Name mon Heath h Tea-tree dy Tea-tree dy Broom-heath m Spurge mon Beard-heath oth Parrot-pea fruit Saw-sedge II Grass-tree el Rope-rush der Dodder-laurel



# EVC 48: Heathy Woodland - Gippsland Plain bioregion

#### **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 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.

**Gippsland** Plain 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 higher nutrient availability. The EVC is dominated by Swamp Paperbark *Melaleuca ericifolia* (or sometimes Woolly Tea-tree *Leptospermum lanigerum*) which often forms a dense thicket, out-competing other species. Occasional emergent eucalypts may be present. Where light penetrates to ground level, a moss/lichen/liverwort or herbaceous ground cover is often present. Dry variants have a grassy/herbaceous ground layer.

### **Canopy Cover:**

<b>%cover</b> 50%	Character Species Leptospermum lanigerum Melaleuca ericifolia	<b>Common Nan</b> Woolly Tea-tree Swamp Paperbark		a-tree
Understore	/:			
Life form		#Spp	%Cover	LF code
Medium Shrub	)	2	10%	MS
Small Shrub		2	1%	SS
Large Herb		2	5%	LH
Medium Herb		3	15%	MH
Small or Prost	rate Herb	2	5%	SH
Large Tufted	Graminoid	2	10%	LTG
Large Non-tuf	ted Graminoid	3	10%	LNG
Medium to Sm	nall Tufted Graminoid	2	5%	MTG
Medium to Tir	ny Non-tufted Graminoid	2	15%	MNG
Ground Fern		1	5%	GF
Scrambler or (	Climber	1	1%	SC
Bryophytes/Li	chens	na	20%	BL

LF Code	Species typical of at least part of EVC range	Common Name
MS	Coprosma quadrifida	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	Poa labillardierei	Common Tussock-grass
LNG	Gahnia radula	Thatch Saw-sedge
LNG	Phragmites australis	Common Reed
LNG	<i>Baumea rubiginosa</i> s.l.	Soft Twig-rush
MTG	<i>Triglochin procerum</i> s.l.	Water Ribbons
MTG	Juncus gregiflorus	Green Rush
MNG	Eleocharis acuta	Common Spike-sedge
GF	Blechnum cartilagineum	Gristle Fern
SC	Calystegia sepium	Large Bindweed



#### **Recruitment:**

Continuous

#### **Organic Litter:**

40 % cover

## Weediness:

#### LF Code MH

LNG

**Typical Weed Species** Hypochoeris radicata Holcus lanatus

**Common Name** Cat's Ear Yorkshire Fog

Invasive high high

Impact low 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.

# EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

EVC 55: Plains Grassy Woodland

## **Description:**

An open, eucalypt woodland to 15 m tall occurring on a number of geologies and soil types. Occupies poorly drained, fertile soils on flat or gently undulating plains at low elevations. The understorey consists of a few sparse shrubs over a species-rich grassy and herbaceous ground layer.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 80 cm	<b>#/ha</b> 10 / ha	
Tree Canopy Concert Magnetic Concert 20%	over: Character Species Eucalyptus tereticornis ssp. me Eucalyptus camaldulensis	odiana	Gippsla	<b>mon Name</b> and Red-gum Red-gum
Understorey: Life form Immature Cano		#Sp	p %Cov	ver LF code
Understorey Tre Medium Shrub Small Shrub Prostrate Shrub Large Herb Medium Herb Small or Prostra Large Tufted Gr Large Non-tufte Medium to Smal Medium to Tiny Bryophytes/Lich <b>LF Code</b> T T T MS SS PS MH MH SH SH LTG	te or Large Shrub te Herb aminoid d Graminoid II Tufted Graminoid Non-tufted Graminoid	1 2 1 1 1 2 1 9 2 na <b>part of EVC ra</b>	5% 10% 1% 5% 20% 5% 5% 10% 35% 10% 10%	T MS SS PS LH MH SH LTG LNG MTG MNG BL Common Name Black Sheoak Black Wattle Black Sheoak Bur Grassland Wood-sorrel Kidney-weed Small Poranthera Veined Spear-grass Thatch Saw-sedge
MTG MTG MTG MTG	Themeda triandra Carex breviculmis Lomandra filiformis Schoenus apogon Microlaena stipoides var. stipoide	25		Kangaroo Grass Common Grass-sedge Wattle Mat-rush Common Bog-sedge Weeping Grass



#### **Recruitment:**

Continuous

#### **Organic Litter:** 10 % cover

Logs:

10 m/0.1 ha.

#### Weediness:

ccamcoor	
LF Code	Typical Weed Species
LH	Plantago lanceolata
MH	Hypochoeris radicata
MH	Centaurium erythraea
LNG	Holcus lanatus
MTG	Anthoxanthum odoratum
MNG	Romulea rosea
MNG	Briza maxima
MNG	Briza minor

Common Name	Invasive	Impact
Ribwort	high	low
Cat's Ear	high	low
Common Centaury	high	low
Yorkshire Fog	high	high
Sweet Vernal-grass	high	high
Onion Grass	high	low
Large Quaking-grass	high	low
Lesser Quaking-grass	high	low

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.

**Gippsland Plain bioregion** 

# EVC 56: Floodplain Riparian Woodland

## **Description:**

An open eucalypt woodland to 20 m tall over a medium to tall shrub layer with a ground layer consisting of amphibious and aquatic herbs and sedges. Occurs along the banks and floodplains of the larger meandering rivers and major creeks, often in conjunction with one or more floodplain wetland communities. Elevation and rainfall are relatively low and soils are fertile alluviums subject to periodic flooding and inundation.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 80 cm	<b>#/ha</b> 15 / ha		
Tree Canopy C	over:				
%cover	Character Species			Commo	n Name
20%	Eucalyptus camaldulensis			River Red-	
	Eucalyptus tereticornis ssp. me	ediana		Gippsland	
	Eucalyptus ovata			Swamp Gu	um
Understorey:		#C	- 0/	Course	
Life form	<b>-</b>	#Sp		Cover	LF code
Immature Cano		2	5%	-	IT
	ee or Large Shrub	2		%	Т
Medium Shrub		5		%	MS
Large Herb		7		%	LH
Medium Herb		5		%	MH
Small or Prostra		2	5%		SH
Large Tufted Gr		2		%	LTG
Large Non-tufte		1		%	LNG
	II Tufted Graminoid	5		%	MTG
,	Non-tufted Graminoid	2		%	MNG
Scrambler or Cl		2	5%	-	SC
Bryophytes/Lich	iens	na	10	%	BL
LF Code	Species typical of at least	part of EVC ra	nae	Com	mon Name
	Acacia implexa	<b>P</b>		Liahty	
	Acacia melanoxylon			Black	
	Ozothamnus ferrugineus				Everlasting
	<i>Bursaria spinosa</i> ssp. <i>spinosa</i>				t Bursaria
	<i>Hymenanthera dentata</i> s.l.			Tree	
LH	Urtica incisa				Nettle
LH	Persicaria subsessilis			Hairv	Knotweed
LH	Senecio quadridentatus				ny Fireweed
	Acaena novae-zelandiae				e-widgee
	Hydrocotyle hirta				Pennywort
	Stellaria pungens				y Starwort
MH	Veronica plebeia				, ng Speedwell
SH	<i>Oxalis corniculata</i> s.l.			Yellov	v Wood-sorrel
SH	Dichondra repens				v-weed
LTG	Carex appressa			Tall S	edge
LTG	Poa labillardierei				non Tussock-grass
LNG	Phragmites australis				non Reed
MTG	Juncus amabilis			Hollov	w Rush
MTG	<i>Cyperus</i> spp.			Flat-s	edge
MNG	Microlaena stipoides var. stipoide	es		Weep	ing Grass
MNG	Eleocharis acuta			Comn	non Spike-sedge
SC	Calystegia sepium			Large	Bindweed



### **Recruitment:**

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

#### **Organic Litter:**

40 % cover

#### Logs:

30 m/0.1 ha.

### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
Т	Crataegus monogyna	Hawthorn	high	high
Т	Fraxinus spp.	Ash	high	high
MS	Solanum pseudocapsicum	Madeira Winter-cherry	high	low
MS	Prunus cerasifera	Cherry Plum	high	high
MS	Rubus fruticosus spp. agg.	Blackberry	high	high
LH	Rumex conglomeratus	Clustered Dock	high	low
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Plantago lanceolata	Ribwort	high	low
LH	Rumex crispus	Curled Dock	high	low
LH	Rorippa palustris	Marsh Yellow-cress	high	high
LH	Helminthotheca echioides	Ox-tongue	high	low
LH	<i>Verbena bonariensis</i> s.l.	Purple-top Verbena	high	high
LH	Aster subulatus	Aster-weed	high	low
MH	Ranunculus repens	Creeping Buttercup	high	high
MH	Leontodon taraxacoides ssp. taraxacoides	Hairy Hawkbit	high	low
MH	<i>Taraxacum officinale</i> spp. agg.	Garden Dandelion	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
SH	<i>Trifolium repens</i> var. <i>repens</i>	White Clover	high	low
SH	Modiola caroliniana	Red-flower Mallow	high	low
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Bromus catharticus	Prairie Grass	high	low
MTG	<i>Ehrharta erecta</i> var. <i>erecta</i>	Panic Veldt-grass	high	high
MTG	Cyperus eragrostis	Drain Flat-sedge	high	high
MTG	Paspalum dilatatum	Paspalum	high	high
MTG	Lolium perenne	Perennial Rye-grass	high	low
MTG	<i>Agrostis capillaris</i> s.I.	Brown-top Bent	high	high
MNG	Paspalum distichum	Water Couch	high	high
SC	Galium aparine	Cleavers	high	low
SC	Tradescantia fluminensis	Wandering Jew	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.

**Gippsland Plain bioregion** 

# EVC 59: Riparian Thicket

## **Description:**

Dense thickets of Woolly Tea-tree Leptospermum lanigerum and/or Scented Paperbark Melaleuca squarrosa to 6 m tall with occasional emergent eucalypts that occur on broad beds of small streams or on regular flooded terraces of large streams and rivers. Ground layer is dominated by a number of ferns, tree-ferns and sedges.

Canopy	Cover:
--------	--------

%cover 50%

Leptospermum lanigerum Melaleuca squarrosa

**Character Species** 

**Common Name** Woolly Tea-tree Scented Paperbark

Understorev

Understorey:			
Life form	#Spp	%Cover	LF code
Medium Shrub	8	30%	MS
Small Shrub	3	5%	SS
Prostrate Shrub	1	1%	PS
Large Herb	2	5%	LH
Medium Herb	5	10%	MH
Small or Prostrate Herb	1	5%	SH
Large Tufted Graminoid	3	10%	LTG
Large Non-tufted Graminoid	2	5%	LNG
Medium to Small Tufted Graminoid	2	5%	MTG
Medium to Tiny Non-tufted Graminoid	3	15%	MNG
Ground Fern	3	10%	GF
Tree Fern	1	5%	TRF
Scrambler or Climber	2	5%	SC
Bryophytes/Lichens	na	20%	BL

LF Code	Species typical of at least part of EVC range	Common Name
MS	Epacris impressa	Common Heath
MS	Cassinia aculeata	Common Cassinia
MS	Ozothamnus rosmarinifolius	Rosemary Everlasting
MS	Kunzea ericoides	Burgan
SS	Dampiera stricta	Blue Dampiera
SS	Amperea xiphoclada var. xiphoclada	Broom Spurge
SS	Acacia brownii	Heath Wattle
PS	Acrotriche prostrata	Trailing Ground-berry
LH	Senecio minimus	Shrubby Fireweed
LH	Epilobium pallidiflorum	Showy Willow-herb
MH	Viola hederacea sensu Willis (1972)	Ivy-leaf Violet
MH	Gonocarpus tetragynus	Common Raspwort
LTG	Cyperus lucidus	Leafy Flat-sedge
LTG	Carex appressa	Tall Sedge
LNG	Tetrarrhena juncea	Forest Wire-grass
LNG	Gahnia radula	Thatch Saw-sedge
MTG	Lomandra filiformis	Wattle Mat-rush
MTG	Lepidosperma filiforme	Common Rapier-sedge
MNG	Poa tenera	Slender Tussock-grass
MNG	Microlaena stipoides var. stipoides	Weeping Grass
MNG	Baumea tetragona	Square Twig-sedge
GF	Gleichenia dicarpa	Pouched Coral-fern
GF	Pteridium esculentum	Austral Bracken
GF	Blechnum minus	Soft Water-fern
TRF	Cyathea australis	Rough Tree-fern
SC	Billardiera scandens	Common Apple-berry



#### **Recruitment:**

Continuous

#### **Organic Litter:** 40 % cover

## Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
Т	Salix cinerea	Grey Sallow	high	high
Т	Pinus radiata	Radiata Pine	high	high
MS	Prunus cerasifera	Cherry Plum	high	high
MS	Cotoneaster pannosus	Velvet Cotoneaster	high	high
MS	Erica lusitanica	Spanish Heath	high	high
SS	Rubus sp. aff. armeniacus	Blackberry	high	high
LH	Solanum nigrum sensu Willis (1972)	Black Nightshade	high	low
MH	Lotus suaveolens	Hairy Bird's-foot Trefoil	high	high
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Prunella vulgaris	Self-heal	high	low
SH	Callitriche stagnalis	Common Starwort	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.

Gippsland Plain bioregion

# EVC 61: Box Ironbark Forest

## Description:

Occurs on gently undulating rises, low hills and peneplains on infertile, often stony soils derived from a range of geologies. The open overstorey to 20 m tall consists of a variety of eucalypts, often including one of the Ironbark species. The mid storey often forms a dense to open small tree or shrub layer over an open ground layer ranging from a sparse to well-developed suite of herbs and grasses.

Large trees: Species		DBH(cm)	#/ha	1	
Eucalyptus spp.		70 cm	15 / ha	•	
Tree Canopy C	over:				
%cover	Character Species				n Name
30%	Eucalyptus polyanthemos Eucalyptus macrorhyncha			Red Box	avbark
	Eucalyptus macromyncha Eucalyptus globoidea			Red Strin White Str	0,5
	Eucalyptus tricarpa			Red Iront	0,
Understorey:					
Life form		#Sp	n	%Cover	LF code
Immature Cano	nny Tree	<i>"</i> 3P	Υ	5%	IT
Medium Shrub		4		20%	MS
Small Shrub		3		10%	SS
Prostrate Shrub		2		1%	PS
Large Herb		2		5%	LH
Medium Herb		10		15%	MH
Small or Prostra	ate Herb	2		1%	SH
Large Tufted Gr	raminoid	1		1%	LTG
Medium to Sma	II Tufted Graminoid	5		10%	MTG
Ground Fern		1		1%	GF
Bryophytes/Lich	nens	na		10%	BL
Soil Crust		na		20%	S/C
Total understorey projective foliage		over		80%	
	Species typical of at least	t part of EVC ra	ange	Con	nmon Name
MS	Acacia pycnantha			Gold	en Wattle
MS	Acacia genistifolia			Spre	ading Wattle
	Pultenaea gunnii			Gold	en Bush-pea
	Kunzea ericoides			Burg	
	Dillwynia phylicoides				I-leaf Parrot-pea
	Leucopogon virgatus				mon Beard-heath
SS	Dillwynia cinerascens s.l.				Parrot-pea
	Acrotriche serrulata				ey-pots
LH	Senecio tenuiflorus				der Fireweed
LH	Wahlenbergia stricta				Bluebell
	Gonocarpus tetragynus Glossodia major				mon Raspwort
MH	Drosera peltata ssp. auriculata				-lip Orchid Sundew
MH	Poranthera microphylla				l Poranthera
SH	Opercularia varia				ble Stinkweed
SH	Hydrocotyle laxiflora				ing Pennywort
LNG	Gahnia radula				ch Saw-sedge
	Joycea pallida				rtop Wallaby-grass
	Lomandra filiformis ssp. filiformi	is			le Mat-rush
	Lomandra nana	-			rf Mat-rush
MTG	<i>Dianella revoluta</i> s.l.				c-anther Flax-lily
SC	Thysanotus patersonii				ing Fringe-lily



#### **Recruitment:**

Continuous

#### Organic Litter:

20 % cover

Logs: 20 m/0.1 ha.

#### Weediness:

LF Code MH MTG

Briza maxima

**Typical Weed Species** Hypochoeris radicata

**Common Name** Cat's Ear Large Quaking-grass

Impact Invasive high low 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.

**Gippsland** Plain bioregion

# EVC 68: Creekline Grassy Woodland

## **Description:**

Eucalypt-dominated woodland to 15 m tall with occasional scattered shrub layer over a mostly grassy/sedgy to herbaceous ground-layer. Occurs on low-gradient ephemeral to intermittent drainage lines, typically on fertile colluvial/alluvial soils, on a wide range of suitably fertile geological substrates. These minor drainage lines can include a range of graminoid and herbaceous species tolerant of waterlogged soils, and are presumed to have sometimes resembled a linear wetland or system of interconnected small ponds.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 80 cm	<b>#/ha</b> 15 / ha		
Tree Canopy C %cover 15%	over: Character Species Eucalyptus camaldulensis Eucalyptus ovata			<b>Commo</b> River Red Swamp G	Gum
Medium Shrub Small Shrub Large Herb Medium Herb Small or Prostra Large Tufted Gr Medium to Sma	te or Large Shrub te Herb aminoid II Tufted Graminoid Non-tufted Graminoid	# <b>Sp</b> 2 2 2 2 8 1 3 12 3 na	5 1 5 1 5 1 1 1 1 2 1	%Cover % 0% % % 5% 5% 0% 5% 0%	LF code IT T MS SS LH MH SH LTG MTG MNG BL
T MS SS MH MH SH LTG LTG MTG MTG	Species typical of at least Acacia mearnsii Ozothamnus ferrugineus Acacia pycnantha Pimelea humilis Gonocarpus tetragynus Acaena echinata Hydrocotyle laxiflora Carex appressa Poa labillardierei Elymus scaber var. scaber Lachnagrostis filiformis Microlaena stipoides var. stipoid		nge	Black Tree Golde Comr Comr Shee Stink Tall S Comr Comr Comr	Wattle Everlasting en Wattle non Rice-flower non Raspwort p's Burr ing Pennywort Gedge non Tussock-grass non Wheat-grass non Blown-grass ping Grass



#### **Recruitment:**

Continuous

#### **Organic Litter:** 40% cover

Logs: 20m/0.1 ha

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Cirsium vulgare	Spear Thistle	high	low
LH	Plantago lanceolata	Ribwort	high	low
MH	Hypochoeris radicata	Cat's Ear	low	low
MH	Anagallis arvensis	Pimpernel	low	low
LTG	Phalaris aquatica	Toowoomba Canary-grass	low	high
MNG	Briza maxima	Large Quaking-grass	high	low
MNG	Romulea rosea	Onion Grass	high	low
MNG	Vulpia bromoides	Squirrel-tail Fescue	high	low
MNG	Briza minor	Lesser Quaking-grass	high	low
MNG	Aira elegantissima	Delicate Hair-grass	high	low

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.

Gippsland Plain bioregion

# EVC 82: Riverine Escarpment Scrub

## **Description:**

Shrubland to 10 m tall with occasional emergent eucalypts. Occurs on shallow colluvial soils along rocky cliffs and slopes associated with rivers and creeks and may extend onto alluvial terraces. Characterised by a dense medium to tall shrub layer over a ground layer which can range from low to high diversity and consist of a variety of graminoids, grasses and herbs. Ferns can often be a major component of the ground stratum.

#### Canopy Cover:

%cover	
25%	

<b>%cover</b> 25%	<b>Character Species</b> Acacia dealbata Pomaderris aspera	<b>Common Name</b> Silver Wattle Hazel Pomaderris		
Understorey	/:			
Life form		#Spp	%Cover	LF code
Immature Ca	anopy Tree		5%	IT
Medium Shru	du	10	20%	MS
Large Herb		4	5%	LH
Medium Her	b	13	20%	MH
Small or Pros	strate Herb	6	10%	SH
Large Tufted	l Graminoid	2	5%	LTG
Medium to Small Tufted Graminoid		6	10%	MTG
Medium to Tiny Non-tufted Graminoid		2	10%	MNG
Ground Fern		7	20%	GF
Scrambler or	<sup>r</sup> Climber	4	5%	SC
Bryophytes/I	Lichens	na	10%	BL



## EVC 82: Riverine Escarpment Scrub - Gippsland Plain bioregion

LF Code	Species typical of at least part of EVC range	(
MS	Olearia lirata	S
MS	Coprosma quadrifida	P
MS	Pimelea axiflora	E
MS	Prostanthera lasianthos	<u>۱</u>
SS	Hibbertia obtusifolia	C
PS	Acrotriche serrulata	F
LH	Ajuga australis	A
LH	Xerochrysum bracteatum	C
LH	Senecio tenuiflorus	
MH	Euchiton collinus s.l.	9
MH	Veronica calycina	F
MH	Acaena novae-zelandiae	E
MH	Hypericum gramineum	E S K
SH	Dichondra repens	k
SH	Oxalis exilis	
SH	Hydrocotyle laxiflora	9 9 9 9 9
SH	Desmodium gunnii	S
LTG	Carex appressa	Т
LTG	Austrostipa rudis ssp. nervosa	<u>۱</u>
LTG	Lomandra longifolia ssp. exilis	C
LNG	Tetrarrhena juncea	C F
MTG	Dianella tasmanica	Т
MTG	Carex breviculmis	C
MTG	Isolepis inundata	S
MTG	Schoenus maschalinus	L
MNG	Microlaena stipoides var. stipoides	V
MNG	Echinopogon ovatus	C
MNG	Poa tenera	5
GF	Pteridium esculentum	S
GF	Adiantum aethiopicum	C
GF	Polystichum proliferum	
GF	Pellaea falcata s.l.	5
TRF	Dicksonia antarctica	N S S F
TRF	Cyathea australis	F
SC	Člematis glycinoides var. glycinoides	F

#### **Common Name**

Snowy Daisy-bush Prickly Currant-bush Bootlace Bush Victorian Christmas-bush Grey Guinea-flower Honey-pots Austral Bugle Golden Everlasting Slender Fireweed Clustered/Creeping Cudweed Hairy Speedwell Bidgee-widgee Small St John's Wort Kidney-weed Shady Wood-sorrel Stinking Pennywort Southern Tick-trefoil Tall Sedge Veined Spear-grass Cluster-headed Mat-rush Forest Wire-grass Tasman Flax-lily Common Grass-sedge Swamp Club-sedge Leafy Bog-sedge Weeping Grass Common Hedgehog-grass Slender Tussock-grass Austral Bracken Common Maidenhair Mother Shield-fern Sickle Fern Soft Tree-fern Rough Tree-fern Forest Clematis

#### **Recruitment:**

Continuous

#### **Organic Litter:**

40 % cover

#### Logs:

мс

5 m/0.1 ha.

#### Weediness:

#### LF Code **Typical Weed Species** Rubus polvanthemus

115	Rubus poryuntinemus
MS	Rubus fruticosus spp. agg.
LH	Cirsium vulgare
MH	Hypochoeris radicata
MH	Centaurium erythraea
MH	Prunella vulgaris
MH	Gamochaeta purpurea s.l.

Common Name	Invasive	Impact
Blackberry	high	high
Blackberry	high	high
Spear Thistle	high	high
Cat's Ear	high	low
Common Centaury	high	low
Self-heal	high	low
Purple Cudweed	high	low

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.

# EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain 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.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 15 / ha		
Tree Canopy C %cover 20%	<b>Cover:</b> Character Species Eucalyptus ovata Eucalyptus radiata s.l.			<b>Common Name</b> Swamp Gum Narrow-leaf Peppermint	
Immature Canopy Tree5Understorey Tree or Large Shrub4Medium Shrub5Small Shrub1Prostrate Shrub1Large Herb3Small or Prostrate Herb3Small or Prostrate Herb3Large Tufted Graminoid1Large Non-tufted Graminoid1Medium to Small Tufted Graminoid5Medium to Tiny Non-tufted Graminoid2Ground Fern2Scrambler or Climber2		)% )% % % % )%	LF code IT T MS SS PS LH MH SH LTG LNG MTG MNG GF SC BL		
LF Code T T MS MS LH MH MH MH SH LTG LTG LTG LTG LTG LTG LTG LTG MTG MTG MTG MTG MTG GF	Species typical of at least Acacia melanoxylon Melaleuca ericifolia Leptospermum lanigerum Leptospermum continentale Coprosma quadrifida Bursaria spinosa Senecio minimus Gonocarpus tetragynus Acaena novae-zelandiae Hydrocotyle hirta Dichondra repens Carex appressa Cyperus lucidus Lepidosperma elatius Juncus procerus Phragmites australis Themeda triandra Lomandra filiformis Microlaena stipoides var. stipoid Pteridium esculentum		nge	Blackw Swam Woolly Prickly Sweet Shrubl Comm Bidgee Hairy I Kidney Tall Se Leafy Tall Sv Tall Sv Tall Ru Comm Kanga Wattle Weepi	p Paperbark / Tea-tree / Tea-tree / Currant-bush Bursaria by Fireweed on Raspwort -widgee Pennywort /-weed 2dge Flat-sedge word-sedge



#### **Recruitment:**

Continuous

#### **Organic Litter:** 20 % cover

Logs:

20 m/0.1 ha.

## Weediness:

LF Code	Typic
LH	Cirsiun
LH	Sonch
MH	Нурос
MH	Prunel
LNG	Holcus
MTG	Antho
MTG	Briza r

pical Weed Species m vulgare nus oleraceus choeris radicata ella vulgaris ıs lanatus xanthum odoratum maxima

Common Name
Spear Thistle
Common Sow-thistle

Cat's Ear Self-heal Yorkshire Fog Sweet Vernal-grass Large Quaking-grass

Invasive	Impact
high	high
high	low
high	low
high	high
high	high
high	high
high	low

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.

Gippsland Plain bioregion

# EVC 125: Plains Grassy Wetland

## Description:

This EVC is usually treeless, but in some instances can include sparse River Red Gum *Eucalyptus camaldulensis* or Swamp Gum *Eucalyptus ovata*. A sparse shrub component may also be present. The characteristic ground cover is dominated by grasses and small sedges and herbs. The vegetation is typically species-rich on the outer verges but is usually species-poor in the wetter central areas.

Life forms:			
Life form	#Spp	%Cover	LF code
Large Herb	3	10%	LH
Medium Herb	10	20%	MH
Small or Prostrate Herb	2	10%	SH
Large Tufted Graminoid	2	5%	LTG
Large Non-tufted Graminoid	2	10%	LNG
Medium to Small Tufted Graminoid	10	20%	MTG
Medium to Tiny Non-tufted Graminoid	4	10%	MNG
Bryophytes/Lichens	na	10%	BL
Total understorey projective foliage cover		95%	

LF Code		Species typical of at least part of EVC range	Common Name
LH	v	Craspedia paludicola	Swamp Billy-buttons
LH		Villarsia reniformis	Running Marsh-flower
MH		Myriophyllum crispatum	Upright Water-milfoil
MH		Lythrum hyssopifolia	Small Loosestrife
MH		Centella cordifolia	Centella
SH		Neopaxia australasica	White Purslane
SH		Myriophyllum integrifolium	Tiny Water-milfoil
LTG		Amphibromus nervosus	Common Swamp Wallaby-grass
LNG		Baumea arthrophylla	Fine Twig-sedge
MTG		Schoenus tesquorum	Soft Bog-sedge
MTG		Triglochin alcockiae	Southern Water-ribbons
MTG		Notodanthonia semiannularis	Wetland Wallaby-grass
MTG		Austrodanthonia duttoniana	Brown-back Wallaby-grass
MNG		Eleocharis acuta	Common Spike-sedge
MNG		Hemarthria uncinata var. uncinata	Mat Grass
MNG	k	Eleocharis macbarronii	Grey Spike-sedge
MNG		Triglochin striatum	Streaked Arrowgrass

#### Recruitment:

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

#### **Organic Litter:**

10% cover



#### Logs:

5 m/0.1 ha.(where trees are overhanging the wetland)

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	Rumex conglomeratus	Clustered Dock	high	high
LH	Plantago lanceolata	Ribwort	high	low
MH	Leontodon taraxacoides ssp. taraxacoides	Hairy Hawkbit	high	low
MH	Lotus corniculatus	Bird's-foot Trefoil	high	high
MH	Mentha pulegium	Pennyroyal	high	high
MH	Centaurium erythraea	Common Centaury	high	low
MH	Plantago coronopus	Buck's-horn Plantain	high	high
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Anagallis arvensis	Pimpernel	high	low
SH	<i>Trifolium repens</i> var. <i>repens</i>	White Clover	high	high
LTG	<i>Watsonia meriana</i> var. <i>bulbillifera</i>	Bulbil Watsonia	high	high
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Paspalum dilatatum	Paspalum	high	high
MTG	Anthoxanthum odoratum	Sweet Vernal-grass	high	high
MTG	Gladiolus undulatus	Wild Gladiolus	high	low
MTG	Juncus articulatus	Jointed Rush	high	high
MTG	Lolium perenne	Perennial Rye-grass	high	high
MTG	Briza minor	Lesser Quaking-grass	high	low
MTG	<i>Agrostis capillaris</i> s.l.	Brown-top Bent	high	high
MNG	Paspalum distichum	Water Couch	high	high
TTG	Cyperus tenellus	Tiny Flat-sedge	high	low
SNG	Sisyrinchium iridifolium	Blue Pigroot	high	high

Published by the Victorian Government Department of Sustainability and Environment May 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.

# EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

EVC 127: Valley Heathy Forest

## **Description:**

A low, open forest to 15 m tall with a sedgy/grassy understorey with a component of small ericoid shrubs and grass-trees. Soil and moisture factors are critical in delimiting the vegetation.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 20 / ha		
Tree Canopy Cover: %cover Character Species				Commo	e
30%	Eucalyptus melliodora Eucalyptus goniocalyx s.l. Eucalyptus cephalocarpa s.l. Eucalyptus obliqua				x Stringybark Stringybark
Understorey:					
Life form		#	Spp	%Cover	LF code
Immature Canopy Tree				5%	IT
Understorey Tree or Large Shrub		2		10%	Т
Medium Shrub		7		15%	MS
Small Shrub		5		5%	SS
Prostrate Shrub		2		1%	PS
Medium Herb		6		10%	MH
Small or Prostra		3 2		5% 5%	SH LTG
Large Tufted Graminoid		2		20%	LNG
Large Non-tufted Graminoid Medium to Small Tufted Graminoid		2		15%	MTG
Medium to Small Fulled Graminoid Medium to Tiny Non-tufted Graminoid		, 1		1%	MNG
Ground Fern		1		1%	GF
Scrambler or Climber		3		5%	SC
Bryophytes/Lich		na	3	10%	BL



# EVC 127: Valley Heathy Forest - Gippsland Plain bioregion

LF Code	Species typical of at least part of EVC range	Common Name
Т	Exocarpos cupressiformis	Cherry Ballart
MS	Epacris impressa	Common Heath
MS	Cassinia aculeata	Common Cassinia
MS	Daviesia leptophylla	Narrow-leaf Bitter-pea
MS	Cassinia arcuata	Drooping Cassinia
SS	Platylobium obtusangulum	Common Flat-pea
SS	Dillwynia cinerascens s.l.	Grey Parrot-pea
SS	Hovea heterophylla	Common Hovea
SS	Pimelea humilis	Common Rice-flower
PS	Acrotriche serrulata	Honey-pots
PS	Bossiaea prostrata	Creeping Bossiaea
MH	Leptorhynchos tenuifolius	Wiry Buttons
MH	Gonocarpus tetragynus	Common Raspwort
MH	Helichrysum scorpioides	Button Everlasting
SH	Opercularia varia	Variable Stinkweed
SH	Drosera whittakeri ssp. aberrans	Scented Sundew
SH	Oxalis corniculata s.l.	Yellow Wood-sorrel
LTG	Xanthorrhoea minor ssp. lutea	Small Grass-tree
LTG	Deyeuxia quadriseta	Reed Bent-grass
LNG	Gahnia radula	Thatch Saw-sedge
MTG	Joycea pallida	Silvertop Wallaby-grass
MTG	Lomandra filiformis	Wattle Mat-rush
MTG	Themeda triandra	Kangaroo Grass
MTG	Poa morrisii	Soft Tussock-grass
MTG	<i>Dianella revoluta</i> s.l.	Black-anther Flax-lily
MNG	Microlaena stipoides var. stipoides	Weeping Grass
GF	Lindsaea linearis	Screw Fern
SC	Billardiera scandens	Common Apple-berry
SC	Hardenbergia violacea	Purple Coral-pea

#### **Recruitment:**

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

#### **Organic Litter:**

40 % cover

#### Logs:

20 m/0.1 ha.

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
Т	Pinus radiata	Radiata Pine	high	high
MS	Rubus fruticosus spp. agg.	Blackberry	high	high
LH	Plantago lanceolata	Ribwort	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MTG	Briza maxima	Large 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.

**Gippsland** Plain 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.	· · ·	<b>#/ha</b> 20 / ha		
Tree Canopy Cover:				
%coverCharacter Species20%Eucalyptus goniocalyx s.l.Eucalyptus radiata s.l.		Bundy	<b>Common Name</b> Bundy Narrow-leaf Peppermint	
Understorey:				
Life form	#Spp	%Cover	LF code	
Immature Canopy Tree		5%	IT	
Understorey Tree or Large Shrub	2	10%	Т	
Medium Shrub	4	10%	MS	
Small Shrub	2	1%	SS	
Prostrate Shrub	2	5%	PS	
Large Herb	1	1%	LH	
Medium Herb	5	10%	MH	
Small or Prostrate Herb	3	5%	SH	
Large Tufted Graminoid	2	5%	LTG	
Large Non-tufted Graminoid Medium to Small Tufted Graminoid	1	1%	LNG	
Ground Fern	3	45%	MTG	
Scrambler or Climber	1 3	1% 5%	GF SC	
Bryophytes/Lichens	na	10%	BL	



## EVC 128: Grassy Forest - Gippsland Plain bioregion

LF Code	Species typical of at least part of EVC range Acacia melanoxylon
MS	Bursaria spinosa ssp. spinosa
MS	Cassinia aculeata
MS	Acacia stricta
SS	Pimelea humilis
SS	Hovea heterophylla
PS	Bossiaea prostrata
PS	Platylobium formosum
PS	Acrotriche prostrata
MH	Hypericum gramineum
MH	Acaena agnipila
MH	Ranunculus lappaceus
SH	Oxalis corniculata s.l.
SH	Opercularia varia
SH	Dichondra repens
SH	Goodenia lanata
LNG	Tetrarrhena juncea
MTG	Joycea pallida
MTG	Themeda triandra
MTG	Poa morrisii
MTG	Lomandra filiformis
GF	Adiantum aethiopicum
SC	Glycine clandestina
SC	Comesperma volubile

#### **Recruitment:**

Continuous

### **Organic Litter:**

40 % cover

#### Logs:

20 m/0.1 ha.

## Weediness:

LF Code MS LH MH MTG

**Typical Weed Species** Rubus fruticosus spp. agg. Plantago lanceolata Hypochoeris radicata Briza maxima

Common Name	
Blackberry	
Ribwort	
Cat's Ear	
Large Quaking-grass	

Invasive high high high high

Impact

high

low

low

low

**Common Name** Blackwood Sweet Bursaria Common Cassinia Hop Wattle Common Rice-flower Common Hovea Creeping Bossiaea Handsome Flat-pea Trailing Ground-berry Small St John's Wort Hairy Sheep's Burr Australian Buttercup Yellow Wood-sorrel Variable Stinkweed Kidney-weed Trailing Goodenia Forest Wire-grass Silvertop Wallaby-grass Kangaroo Grass Soft Tussock-grass Wattle Mat-rush Common Maidenhair Twining Glycine Love Creeper

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.

# EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

# EVC 132\_61: LaTrobe Valley Plains Grassland

## **Description:**

Treeless vegetation dominated by largely grass and herb life forms. Shrubs and trees may be also occasionally present.

Life Forms:			
Life form	#Spp	%Cover	LF code
Small Shrub	1	1%	SS
Large Herb	2	5%	LH
Medium Herb	12	30%	MH
Small or Prostrate Herb	3	5%	SH
Large Tufted Graminoid	1	1%	LTG
Medium to Small Tufted Graminoid	10	40%	MTG
Medium to Tiny Non-tufted Graminoid	2	5%	MNG
Bryophytes/Lichens	na	10%	BL
Total understorey projective foliage cover		95%	

LF Code	Species typical of at least part of EVC range	Common Name
LH	Calocephalus citreus	Lemon Beauty-heads
MH	Eryngium ovinum	Blue Devil
MH	Acaena echinata	Sheep's Burr
MH	<i>Drosera peltata</i> ssp. <i>peltata</i>	Pale Sundew
MH	Leptorhynchos squamatus	Scaly Buttons
SH	Solenogyne dominii	Smooth Solenogyne
MTG	Themeda triandra	Kangaroo Grass
MTG	Schoenus apogon	Common Bog-sedge
MTG	Austrodanthonia setacea	Bristly Wallaby-grass
MNG	Microlaena stipoides var. stipoides	Weeping Grass
SC	Convolvulus erubescens spp. agg.	Pink Bindweed

## **Recruitment:**

Episodic/Fire or Grazing. Desirable period between disturbances is 5 years.

## **Organic Litter:**

10 % cover



## EVC 132\_61: LaTrobe Valley Plains Grassland - Gippsland Plain bioregion

Weediness:				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
SS	Galenia pubescens var. pubescens	Galenia	high	high
LH	Rumex conglomeratus	Clustered Dock	high	low
LH	Plantago lanceolata	Ribwort	high	low
LH	Senecio jacobaea	Ragwort	high	high
LH	Rapistrum rugosum	Giant Mustard	high	high
LH	Lepidium africanum	Common Peppercress	high	low
LH	Urtica dioica	Giant Nettle	high	low
LH	Cirsium vulgare	Spear Thistle	high	high
MH	Plantago coronopus	Buck's-horn Plantain	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	<i>Cerastium glomeratum</i> s.l.	Common Mouse-ear Chickweed	high	low
SH	<i>Trifolium repens</i> var. <i>repens</i>	White Clover	high	low
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Paspalum dilatatum	Paspalum	high	high
MTG	Sporobolus africanus	Rat-tail Grass	high	high
MTG	Bromus catharticus	Prairie Grass	high	low
MTG	Bromus hordeaceus ssp. hordeaceus	Soft Brome	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	<i>Agrostis capillaris</i> s.l.	Brown-top Bent	high	high
MTG	Vulpia bromoides	Squirrel-tail Fescue	high	low
MTG	Lolium rigidum	Wimmera Rye-grass	high	low
MTG	<i>Ehrharta erecta</i> var. <i>erecta</i>	Panic Veldt-grass	high	high
MTG	Ehrharta longiflora	Annual Veldt-grass	high	low
MNG	Dactylis glomerata	Cocksfoot	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.

Gippsland Plain bioregion

EVC 132\_62: South Gippsland Plains Grassland

### Description:

Treeless or with occasional scattered trees above a largely grassy understorey on grey silty-loamy soils, often seasonally waterlogged. Shrubs may be also occasionally present.

Life Forms:			
Life form	#Spp	%Cover	LF code
Large Herb	5	5%	LH
Medium Herb	12	5%	MH
Small or Prostrate Herb	6	5%	SH
Large Tufted Graminoid	3	10%	LTG
Medium to Small Tufted Graminoid	5	50%	MTG
Medium to Tiny Non-tufted Graminoid	2	10%	MNG
Bryophytes/Lichens	na	10%	BL
Total understorey projective foliage cover		95%	

LF Code LH LH LH H MH SH LTG LTG MTG MTG MTG MTG MTG MTG MTG	Species typical of at least part of EVC range Tricoryne elatior Leptorhyncos tenuifolius Calocephalus lacteus Haloragis heterophylla Oxalis exilis Acaena novae-zelandiae Dichondra repens Poa labillardierei Lomandra longifolia Themeda triandra Lachnagrostis filiformis Schoenus apogon Austrodanthonia laevis Hemarthria uncinata var. uncinata	Common Name Yellow Rush-lily Wiry Buttons Milky Beauty-heads Varied Raspwort Shady Wood-sorrel Bidgee-widgee Kidney-weed Common Tussock-grass Spiny-headed Mat-rush Kangaroo Grass Common Blown-Grass Common Blown-Grass Common Bog-sedge Smooth Wallaby-grass Mat Grass
		55
MNG	Hemartnria uncinata var. uncinata Distichlis distichopylla	Mat Grass Australian Salt-grass
SC	Clematis microphylla	Small-leaved Clematis

### Recruitment:

Episodic/Fire or Grazing.

### Organic Litter:

10 % cover



Weediness:				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
SS	Galenia pubescens var. pubescens	Galenia	high	high
LH	Rumex conglomeratus	Clustered Dock	high	low
LH	Plantago lanceolata	Ribwort	high	high
LH	Senecio jacobaea	Ragwort	high	high
LH	Lepidium africanum	Common Peppercress	high	low
LH	Urtica dioica	Giant Nettle	high	low
LH	Cirsium vulgare	Spear Thistle	high	low
LH	Centaurium tenuiflorum	Slender Centaury	high	low
MH	Plantago coronopus	Buck's-horn Plantain	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	<i>Cerastium glomeratum</i> s.l.	Common Mouse-ear Chickweed	high	low
MH	Leontodon taraxacoides ssp. taraxacoides	Hairy Hawkbit	high	high
SH	<i>Trifolium repens</i> var. <i>repens</i>	White Clover	high	high
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Anthoxanthum odoratum	Sweet Vernal-grass	high	high
MTG	Paspalum dilatatum	Paspalum	high	high
MTG	Sporobolus africanus	Rat-tail Grass	high	high
MTG	Bromus catharticus	Prairie Grass	high	low
MTG	Bromus hordeaceus ssp. hordeaceus	Soft Brome	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	<i>Agrostis capillaris</i> s.l.	Brown-top Bent	high	high
MTG	Vulpia bromoides	Squirrel-tail Fescue	high	low
MTG	Lolium rigidum	Wimmera Rye-grass	high	low
MTG	Lolium perenne	Perennial Rye-grass	high	low
MTG	Ehrharta erecta var. erecta	Panic Veldt-grass	high	high
MTG	Ehrharta longiflora	Annual Veldt-grass	high	low
MTG	Briza minor	Lesser Quaking-grass	high	high
MNG	Dactylis glomerata	Cocksfoot	high	high

Published by the Victorian Government Department of Sustainability and Environment August 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; ٠
- 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.

**Gippsland Plain bioregion** 

## EVC 133: Limestone Pomaderris Shrubland

### **Description:**

Open woodland to 10 m tall or shrubland with scattered emergent eucalypts to 5 m tall occurring on steep, north facing aspects associated with limestone cliffs with an understorey dominated by medium shrubs. It is found at altitudes of 750 m above sea level and receives a moderate rainfall of approximately over 700 mm per annum.

<sup>+</sup> woodland <u>only</u> components (ignore when assessing shrubland areas and standardise final score as appropriate)

Large trees <sup>+</sup> : Species Eucalyptus spp.		<b>DBH(cm)</b> 60 cm	<b>#/h</b> 10/		
Tree Canopy C	over+:				
<b>%cover</b> 10%	Character Species Eucalyptus viminalis			<b>Commo</b> Manna Gu	
Understorey:					
Life form		#	Spp	%Cover	LF code
Immature Cano				5%	IT
Understorey Tree or Large Shrub <sup>+</sup>		2		10%	Т
Medium Shrub		9		45%	MS
Small Shrub		2		1%	SS
Large Herb		5		5%	LH
Medium Herb		10	)	15%	MH
Small or Prostra	te Herb	3		5%	SH
Large Tufted Gr	aminoid	2		1%	LTG
Medium to Small Tufted Graminoid		7		30%	MTG
Scrambler or Cli	mber	3		1%	SC
Bryophytes/Lich	ens	na	Э	10%	BL
Soil Crust		na	a	10%	S/C



### EVC 133: Limestone Pomaderris Shrubland - Gippsland Plain bioregion

LF Code		Species typical of at least part of EVC range	Common Name
Т	Vν	Acacia caerulescens	Limestone Blue Wattle
MS	Κv	Ozothamnus adnatus	Winged Everlasting
MS		<i>Bursaria spinosa</i> ssp. <i>lasiophylla</i>	Hairy Bursaria
MS	Rr		Limestone Pomaderris
MS		Pomaderris oraria	Bassian Pomaderris
SS	r	Pimelea flava ssp. dichotoma	Diosma Rice-flower
SS		Pimelea glauca	Smooth Rice-flower
PS		Astroloma humifusum	Cranberry Heath
LH		<i>Wahlenbergia gracilis</i> s.l.	Sprawling Bluebell
LH		Senecio quadridentatus	Cotton Fireweed
LH	r	Arthropodium sp. 1 (robust glaucous)	Tall Vanilla-lily
MH		Oxalis perennans	Grassland Wood-sorrel
MH		Daucus glochidiatus	Australian Carrot
MH		Galium migrans	Wandering Bedstraw
SH		Dichondra repens	Kidney-weed
SH		Hydrocotyle laxiflora	Stinking Pennywort
SH		Cymbonotus preissianus	Austral Bear's-ear
LTG		Lomandra longifolia	Spiny-headed Mat-rush
LTG		Austrostipa nodosa	Knotty Spear-grass
LTG		Austrostipa blackii	Crested Spear-grass
MTG		Themeda triandra	Kangaroo Grass
MTG		Carex breviculmis	Common Grass-sedge
MTG		<i>Dianella revoluta</i> s.l.	Black-anther Flax-lily
MTG		Poa labillardierei	Common Tussock-grass
GF		Pleurosorus rutifolius s.l.	Blanket Fern
SC	k	Clematis microphylla var. leptophylla	Skeleton Vine
SC		Clematis microphylla	Small-leaved Clematis
SC		Convolvulus erubescens spp. agg.	Pink Bindweed
Recruitm			
Continuc	ous		

**Organic Litter:** 

20 % cover

### Logs<sup>+</sup>:

5 m/0.1 ha.

### Weediness:

WCCumc55				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	Rosa rubiginosa	Sweet Briar	low	high
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Cirsium vulgare	Spear Thistle	high	low
LH	Centaurium tenuiflorum	Slender Centaury	high	low
MH	Centaurium erythraea	Common Centaury	high	low
MH	Anagallis arvensis	Pimpernel	high	low
MH	Taraxacum officinale spp. agg.	Garden Dandelion	high	low
MH	Galium murale	Small Goosegrass	high	low
MH	<i>Cardamine hirsuta</i> s.l.	Common Bitter-cress	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Petrorhagia velutina	Velvety Pink	high	low
MH	Veronica persica	Persian Speedwell	high	low
MH	Stellaria media	Chickweed	high	low
MTG	Catapodium rigidum	Fern Grass	high	low

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.

**Gippsland Plain bioregion** 

## EVC 134: Sand Forest

### **Description:**

I area traac

Eucalypt forest to 20 m tall occurring on deep, low fertility sand deposits subject to high fire frequency. The understorey is visually dominated by Austral Bracken and the overall diversity is low.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 15 / ha		
Tree Canopy C %cover 30%	over: Character Species Eucalyptus globoidea Eucalyptus consideniana Eucalyptus obliqua			<b>Commo</b> White Stri Yertchuk Messmate	
Medium Shrub Small Shrub Prostrate Shrub Medium Herb Large Tufted Gr Medium to Sma	ee or Large Shrub raminoid II Tufted Graminoid Non-tufted Graminoid	# <b>Sp</b> 1 3 1 2 2 1 7 2 1 7 2 1 na		<b>%Cover</b> 5% 5% 5% 5% 5% 1% 15% 15% 1% 50% 10 %	LF code IT T MS SS PS MH LTG MTG MNG GF BL
T T MS MS SS PS PS MH LTG MTG MTG MTG	Species typical of at leas Acacia mearnsii Banksia serrata Leptospermum continentale Brachyloma daphnoides Acacia paradoxa Astroloma conostephioides Bossiaea prostrata Astroloma humifusum Goodenia geniculata Gonocarpus tetragynus Xanthorrhoea australis Lomandra filiformis Austrodanthonia geniculata Lomandra nana Microlaena stipoides var. stipoid Pteridium esculentum	-	inge	Black Saw I Prickl Daph Hedg Flame Creep Crant Bent Comr Austr Wattl Knee Dwar Weep	Wattle Banksia y Tea-tree ne Heath e Wattle e Heath bing Bossiaea berry Heath Goodenia non Raspwort al Grass-tree e Mat-rush d Wallaby-grass f Mat-rush bing Grass al Bracken

### **Recruitment:**

Continuous

### **Organic Litter:**

40 % cover

### Logs:

15m/0.1 ha



## EVC 134: Sand Forest - Gippsland Plain bioregion

### Weediness:

LF Code	Typical W
MH	Hypochoeri
MH	Hypochoeri
LNG	Holcus lana
MNG	Vulpia bron
MNG	Briza minor
MNG	Briza maxin
MNG	Aira elegan
MNG	Holcus seto
MNG	Aira praeco

#### **Veed Species** is radicata

nypoenoens radicata	
Hypochoeris glabra	
Holcus lanatus	
Vulpia bromoides	
Briza minor	
Briza maxima	
Aira elegantissima	
Holcus setosus	
Aira praecox	

### **Common Name**

Cat's Ear
Smooth Cat's-ear
Yorkshire Fog
Squirrel-tail Fescue
Lesser Quaking-grass
Large Quaking-grass
Delicate Hair-grass
Annual Fog
Early Hair-grass

Invasive	Impact
high	low
high	low
high	high
high	low

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.

Gippsland Plain bioregion

## EVC 135: Gallery Rainforest

### **Description:**

Closed forest to 20 m tall occurring along the fringes of substantial streams that periodically flood. The understorey comprises of a number of willowy shrubs that can withstand flooding while mature woody vines are generally absent.

Large trees: Species Various spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 20 / ha	
Tree Canopy	Cover:			
<b>%cover</b> 50%	Character Species Tristaniopsis laurina Acacia melanoxylon		<b>Commo</b> Kanooka Blackwoo	on Name
Understorey:				
Life form Immature Can	lopy Tree	#Sp	p %Cover 5%	<b>LF code</b> Ⅲ
	ree or Large Shrub	4	20%	Т
Medium Shrub	)	12	30%	MS
Small Shrub		2	5%	SS
Prostrate Shru	ıb	1	1%	PS
Large Herb		1	1%	LH
Medium Herb		6	10%	MH
Small or Prost		2	1%	SH
Large Tufted (		4	15%	LTG
Large Non-tuf		1	1%	LNG
	all Tufted Graminoid	4	5%	MTG
	y Non-tufted Graminoid	2	5%	MNG
Ground Fern		6	20%	GF
Tree Fern		1	1%	TRF
Epiphyte Scrambler or (	Climbor	2 8	5%	EP
Bryophytes/Lic		8 na	10% 20%	SC BL



## EVC 135: Gallery Rainforest - Gippsland Plain bioregion

LF Code	<b>Species typical of at least part of EVC range</b>	<b>Common Name</b>
T	Elaeocarpus reticulatus	Blue Oliveberry
T	Rapanea howittiana	Mutton-wood
MS	Notelaea venosa	Large Mock-olive
MS	Coprosma quadrifida	Prickly Currant-bush
MS	Lomatia myricoides	River Lomatia
MS	Leucopogon lanceolatus var. lanceolatus	Lance Beard-heath
PS	Platylobium formosum	Handsome Flat-pea
MH	Viola hederacea sensu Willis (1972)	Ivy-leaf Violet
MH	Geranium potentilloides	Cinquefoil Cranesbill
MH	Gratiola peruviana	Austral Brooklime
MH	Opercularia aspera	Coarse Stinkweed
SH	Dichondra repens	Kidney-weed
LTG	Lomandra longifolia	Spiny-headed Mat-rush
LTG	Gahnia sieberiana	Red-fruit Saw-sedge
LTG	Gahnia clarkei	Tall Saw-sedge
LNG	Tetrarrhena juncea	Forest Wire-grass
MTG	Dianella tasmanica	Tasman Flax-lily
MTG MTG MTG MNG GF GF	Dianella caerulea var. caerulea Isolepis inundata Poa sieberiana Microlaena stipoides var. stipoides Oplismenus hirtellus Blechnum nudum Adiantum aethiopicum	Paroo Lily Swamp Club-sedge Grey Tussock-grass Weeping Grass Australian Basket-grass Fishbone Water-fern Common Maidenhair
GF	Calochlaena dubia	Common Ground-fern
GF	Clechnum cartilagineum	Gristle Fern
TRF	Cyathea australis	Rough Tree-fern
EP	Hymenophyllum cupressiforme	Common Filmy Fern
SC	Eustrephus latifolius	Wombat Berry
SC	Smilax australis	Austral Sarsaparilla
SC	Tylophora barbata	Bearded Tylophora
SC	Clematis aristata	Mountain Clematis

### **Recruitment:**

Continuous

### **Organic Litter:**

40 % cover

### Logs:

20 m/0.1 ha.

### Weediness:

LF Code Typical Weed Species LH Conyza spp. MH Prunella vulgaris MH Hypochoeris radicata

### Common Name Fleabane Self-heal Cat's Ear

Invasive high high high

Impact low low low

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.

**Gippsland** Plain bioregion

## EVC 136: Sedge Wetland

### **Description:**

Occupies seasonal wetlands and consists of generally treeless vegetation dominated by sedges. May contain a fringe of shrubs and isolated shrubs may also be present throughout. Usually of low diversity in central areas, but richer on verges and in some more ephemeral forms of the EVC. Frequently on soils of high organic content, in depressions within sandy terrain.

Life form:			
Life form	#Spp	%Cover	LF code
Medium Shrub	1	5%	MS
Large Herb	1	5%	LH
Medium Herb	4	10%	MH
Large Tufted Graminoid	1	15%	LTG
Large Non-tufted Graminoid	2	30%	LNG
Medium to Small Tufted Graminoid	1	1%	MTG
Medium to Tiny Non-tufted Graminoid	2	10%	MNG
Bryophytes/Lichens	na	10%	BL
Total understorey projective foliage cover		85%	

LF Code	Species typical of at least part of EVC range	Common Name
MS	Allocasuarina misera/paradoxa	Slender/Green Sheoak
LH	Villarsia reniformis	Running Marsh-flower
MH	Utricularia australis	Yellow Bladderwort
MH	Goodenia humilis	Swamp Goodenia
MH	Centella cordifolia	Centella
LTG	Baumea articulata	Jointed Twig-sedge
LNG	Lepidosperma longitudinale	Pithy Sword-sedge
LNG	Baumea rubiginosa s.l.	Soft Twig-rush
MTG	Lepidosperma concavum	Sandhill Sword-sedge
MNG	Lepyrodia muelleri	Common Scale-rush
MNG	Isolepis fluitans	Floating Club-sedge

### **Recruitment:**

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

### **Organic Litter:**

10 % cover

### Weediness:

There are no consistent weeds in this EVC.



## EVC 136: Sedge Wetland - Gippsland Plain bioregion

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.

**Gippsland Plain bioregion** 

## EVC 140: Mangrove Shrubland

### **Description:**

Shrubland to 2m tall. Confined to protected low energy coastal environments where there is sufficient shelter from strong wave action and currents to allow the accumulation of fine sediments, generally on mud flats within the tidal zone.

Life Forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	1	40%	MS
Medium to Tiny Non-tufted Graminoid	1	5%	MNG
Total understorey projective foliage cover		25%	

LF Code	<b>Species typical of at least part of EVC range</b>	<b>Common Name</b>
MS	<i>Avicennia marina ssp. australasica</i>	White Mangrove
MNG	<i>Zostera muelleri</i>	Dwarf Grass-wrack
Recruitmen	it:	

Continuous

### Weediness:

There are no consistent weeds in this EVC.



## EVC 140: Mangrove Shrubland - Gippsland Plain bioregion

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.

**Gippsland Plain bioregion** 

## EVC 141: Sandy Flood Scrub

### **Description:**

Structurally dominated by medium to large shrubs to 8 m tall with occasional eucalypt emergents. The understorey may contain a range of shrubs, grasses/sedges and herbs/ferns depending on location and period of inundation. Occupies alluvial terraces with coarse to fine sandy soils of permanent streams and rivers.

Canopy Cover %cover 40%	r: Character Species Leptospermum continentale Kunzea ericoides Pomaderris aspera Acacia mearnsii	<b>Common Name</b> Prickly Tea-tree Burgan Hazel Pomaderris Black Wattle		a-tree naderris	
Understorey:					
Life form		#Spp	%Cover	LF code	
Medium Shrub	)	3	15%	MS	
Small Shrub		1	1%	SS	
Medium Herb		2	5%	MH	
Small or Prost	rate Herb	1	1%	SH	
Large Tufted (	Graminoid	3	15%	LTG	
Large Non-tuf	ted Graminoid	1	10%	LNG	
Medium to Sm	all Tufted Graminoid	1	1%	MTG	
Medium to Tin	y Non-tufted Graminoid	2	5%	MNG	
Ground Fern		1	5%	GF	
Bryophytes/Lichens na 20% BL		BL			
Total understorey projective foliage cover			75%		
LF Code	Species typical of at least part of	of EVC range	Con	nmon Name	
MS	Monotoca scoparia			ly Broom-heath	
MS	Banksia marginata			r Banksia	
MS	Callistemon citrinus			son Bottlebrush	
SS	Hibbertia fasciculata var. prostrata			led Guinea-flower	
MH	Phyllanthus hirtellus		Thyme Spurge		
LTG	Lomandra longifolia		Spiny-headed Mat-rush		
LTG	Poa labillardierei		Common Tussock-grass		
LTG	Carex appressa		Tall Sedge		
LNG	Lepidosperma longitudinale		Pithy Sword-sedge		
MNG	Caustis flexuosa		Curly Wig		
MNG	<i>Microlaena stipoides</i> var. <i>stipoides</i>			ping Grass	
TTG	<i>Centrolepis strigosa</i> ssp. <i>strigosa</i>			Centrolepis	
GF	Pteridium esculentum			al Bracken	
GF	Adiantum aethiopicum		Com	mon Maidenhair	
De envitere entre					

### **Recruitment:**

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

### **Organic Litter:**

10 % cover

**Logs:** 5 m/0.1 ha. (note: large log class does not apply)

### Weediness:

There are no consistent weeds in this EVC.



## EVC 141: Sandy Flood Scrub - Gippsland Plain bioregion

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.

Gippsland Plain bioregion

## EVC 151: Plains Grassy Forest

### **Description:**

Open forest to 20 m tall often above a heathy shrub layer and a diverse grassy, sedgy and herbaceous ground layer. Occurs on lowland plains and old river terraces made up of gravelly sandy clays.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 20 / ha		
Tree Canopy C %cover 30%	over: Character Species Eucalyptus muelleriana Eucalyptus bridgesiana s.l.			<b>Commo</b> Yellow Str But But	
	Eucalyptus polyanthemos Eucalyptus macrorhyncha			Red Box Red String	gybark
Understorey:					
Life form		#Sp	р	%Cover	LF code
Immature Canopy Tree				5%	IT
Understorey Tree or Large Shrub		3		15%	Т
Medium Shrub		6		20%	MS
Small Shrub		3		5%	SS
Prostrate Shrub		2		5%	PS
Large Herb Medium Herb		3		5% 10%	LH MH
i iouiuiii iioib	to Horb	6 2		10% 5%	SH
Small or Prostrate Herb		2		10%	LTG
Large Tufted Graminoid Large Non-tufted Graminoid		1		5%	LNG
Medium to Small Tufted Graminoid		4		15%	MTG
Medium to Tiny Non-tufted Graminoid		2		1%	MNG
Ground Fern		2		10%	GF
Bryophytes/Lich	ens	na		10%	BL



### EVC 151: Plains Grassy Forest - Gippsland Plain bioregion

LF Code	Species typical of at least part of EVC range	Common Name
Т	Allocasuarina littoralis	Black Sheoak
Т	Acacia mearnsii	Black Wattle
Т	Acacia implexa	Lightwood
Т	Exocarpos cupressiformis	Cherry Ballart
MS	Leptospermum continentale	Prickly Tea-tree
MS	Banksia marginata	Silver Banksia
MS	Kunzea ericoides	Burgan
MS	Melaleuca parvistaminea	Rough-barked Honey-myrtle
SS	Pimelea humilis	Common Rice-flower
SS	Hibbertia riparia	Erect Guinea-flower
SS	Platylobium obtusangulum	Common Flat-pea
SS	Phyllanthus hirtellus	Thyme Spurge
PS	Acrotriche serrulata	Honey-pots
PS	Bossiaea prostrata	Creeping Bossiaea
PS	Astroloma humifusum	Cranberry Heath
LH	Tricoryne elatior	Yellow Rush-lily
LH	Wahlenbergia gracilis s.l.	Sprawling Bluebell
MH	Poranthera microphylla	Small Poranthera
MH	Hypericum gramineum	Small St John's Wort
MH	Hydrocotyle hirta	Hairy Pennywort
MH	Gonocarpus tetragynus	Common Raspwort
SH	Dichondra repens	Kidney-weed
SH	Oxalis corniculata s.l.	Yellow Wood-sorrel
SH	Opercularia varia	Variable Stinkweed
LTG	Xanthorrhoea minor ssp. lutea	Small Grass-tree
LTG	Lomandra longifolia	Spiny-headed Mat-rush
LNG	Gahnia radula	Thatch Saw-sedge
MTG	Themeda triandra	Kangaroo Grass
MTG	Poa australis spp. agg.	Tussock Grass
MTG	Lomandra filiformis	Wattle Mat-rush
MTG	Lepidosperma laterale	Variable Sword-sedge
MNG	Microlaena stipoides var. stipoides	Weeping Grass
MNG	Entolasia marginata	Bordered Panic
GF	Pteridium esculentum	Austral Bracken

### **Recruitment:**

Continuous

### **Organic Litter:**

20 % cover

### Logs:

MH

20 m/0.1 ha.

### Weediness:

LF Code	Typical Weed Species
LH	Centaurium tenuiflorum
MH	Hypochoeris radicata

Hypochoeris radicata Centaurium erythraea

### Common Name Slender Centaury

Cat's Ear Common Centaury Invasive high high high

Impact low low low

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

## EVC 155: Bird Colony Succulent Herbland

### **Description:**

Closed herbland formed on nutrient-enriched sandy substrates associated with shearwater and penguin breeding colonies. A species-poor EVC dominated by species able to cope with both the nutrient enrichment and the severe disturbance caused by the large numbers of burrowing birds.

Life Forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	1	10%	MS
Large Herb	2	5%	LH
Medium Herb	5	10%	MH
Small or Prostrate Herb	1	10%	SH
Large Non-tufted Graminoid	1	5%	LNG
Medium to Small Tufted Graminoid	3	30%	MTG
Medium to Tiny Non-tufted Graminoid	2	5%	MNG
Scrambler or Climber	1	5%	SC
Total understorey projective foliage cover		75%	

LF Code	Character Species
LI COUC	character openes

MS	Rhagodia candolleana ssp. candolleana
MH	Plantago varia
MH	Asperula conferta
MTG	Poa poiformis
SC	Tetragonia implexicoma
SC	Clematis microphylla

**Common Name** Seaberry Saltbush Variable Plantain Common Woodruff Coast Tussock-grass Bower Spinach Small-leaved Clematis

### **Recruitment:**

Continuous.

### **Organic Litter:**

ŇA

### Weediness:

### LF Code Typical Weed Species

LF Cod	e Typical Weed Species	Common Name	Invasive	Impact
MS	Lycium ferocissimum	African Box-thorn	high ł	high
LH	Sonchus oleraceus	Common Sow-thistle	high I	low
LH	Senecio elegans	Purple Groundsel	high I	high
MH	Hypochoeris radicata	Cat's Ear	high I	low
MH	Cakile maritima ssp. maritima	Sea Rocket	high I	low
LNG	Ammophila arenaria	Marram Grass	high ł	high
LNG	Holcus lanatus	Yorkshire Fog	high ł	high
MTG	Ehrharta longiflora	Annual Veldt-grass	high I	low
MTG	Bromus diandrus	Great Brome	high I	low
MTG	<i>Ehrharta erecta</i> var. <i>erecta</i>	Panic Veldt-grass	high ł	high
MNG	Lagurus ovatus	Hare's-tail Grass	high I	low
MNG	Vulpia fasciculata	Dune Fescue	high I	low



Published by the Victorian Government Department of Sustainability and Environment September 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.

Gippsland Plain bioregion

## EVC 160: Coastal Dune Scrub

### **Description:**

Closed scrub to 5 m tall with occasional emergents occurring on secondary dunes along ocean and bay beaches and lake shores. Occupies siliceous and calcareous sands that are subject to high levels of saltspray and continuous disturbance from onshore winds.

Life forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	6	50%	MS
Large Herb	1	1%	LH
Medium Herb	3	10%	MH
Small or Prostrate Herb	1	1%	SH
Large Tufted Graminoid	2	5%	LTG
Medium to Small Tufted Graminoid	6	15%	MTG
Medium to Tiny Non-tufted Graminoid	1	1%	MNG
Scrambler or Climber	3	5%	SC
Bryophytes/Lichens	na	10%	BL

LF Code	Species typical of at least part of EVC range	Common Name
MS	Acacia longifolia s.l.	Coast Wattle
MS	Leptospermum laevigatum	Coast Tea-tree
MS	Rhagodia candolleana ssp. candolleana	Seaberry Saltbush
MS	Leucopogon parviflorus	Coast Beard-heath
SH	Carpobrotus rossii	Karkalla
LTG	Austrostipa mollis	Supple Spear-grass
LTG	Austrostipa flavescens	Coast Spear-grass
MTG	Austrodanthonia geniculata	Kneed Wallaby-grass
MTG	Lepidosperma concavum	Sandhill Sword-sedge
SC	Tetragonia implexicoma	Bower Spinach

### **Recruitment:**

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

### **Organic Litter:**

40 % cover



## EVC 160: Coastal Dune Scrub - Gippsland Plain bioregion

Weediness:				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	Chrysanthemoides monilifera	Boneseed	high	high
MS	Coprosma repens	Mirror Bush	low	high
MS	Lycium ferocissimum	African Box-thorn	low	high
MS	Cotoneaster pannosus	Velvet Cotoneaster	low	high
LH	Sonchus oleraceus	Common Sow-thistle	high	low
MH	Salpichroa origanifolia	Pampas Lily-of-the-Valley	high	high
MH	Hypochoeris radicata	Cat's Ear	high	high
MH	Hypochoeris glabra	Smooth Cat's-ear	high	low
SH	Medicago polymorpha	Burr Medic	high	low
SH	<i>Crassula multicava</i> ssp. <i>multicava</i>	Shade Crassula	high	low
SH	Carpobrotus edulis	Hottentot Fig	high	high
LNG	Pennisetum clandestinum	Kikuyu	high	high
MTG	<i>Ehrharta erecta</i> var. <i>erecta</i>	Panic Veldt-grass	high	high
MTG	Ehrharta longiflora	Annual Veldt-grass	high	low
MTG	Bromus diandrus	Great Brome	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	Sporobolus africanus	Rat-tail Grass	high	high
MTG	Vulpia bromoides	Squirrel-tail Fescue	high	low
MTG	Hainardia cylindrica	Common Barb-grass	high	low
MTG	Bromus catharticus	Prairie Grass	high	low
MNG	Lagurus ovatus	Hare's-tail Grass	high	low
MNG	Aira caryophyllea	Silvery Hair-grass	high	low
SC	Tradescantia fluminensis	Wandering Jew	high	high
SC	Delairea odorata	Cape Ivy	high	high
SC	Asparagus asparagoides	Bridal Creeper	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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

EVC 161: Coastal Headland Scrub

### **Description:**

Scrub or low shrubland to 2 m tall 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	7	50%	MS
Small Shrub	2	5%	SS
Large Herb	2	1%	LH
Medium Herb	4	5%	MH
Small or Prostrate Herb	2	5%	SH
Large Tufted Graminoid	1	1%	LTG
Medium to Small Tufted Graminoid	4	10%	MTG
Medium to Tiny Non-tufted Graminoid	2	5%	MNG
Scrambler or Climber	2	5%	SC
Bryophytes/Lichens	na	10%	BL
Total understorey projective foliage cover		70%	

LF Code	Species typical of at least part of EVC range	Common Name
MS	Leptospermum laevigatum	Coast Tea-tree
MS	Acacia longifolia ssp. sophorae	Coast Wattle
MS	Rhagodia candolleana ssp. candolleana	Seaberry Saltbush
MS	Leucopogon parviflorus	Coast Beard-heath
SS	Leucophyta brownii	Cushion Bush
SH	Dichondra repens	Kidney-weed
SH	Disphyma crassifolium ssp. clavellatum	Rounded Noon-flower
MTG	Dianella brevicaulis	Small-flower Flax-lily
MTG	Lachnagrostis billardierei s.l.	Coast Blown-grass
MTG	Poa poiformis	Coast Tussock-grass
MTG	Austrodanthonia caespitosa	Common Wallaby-grass
MNG	Ficinia nodosa	Knobby Club-sedge
SC	Clematis microphylla	Small-leaved Clematis
SC	Tetragonia implexicoma	Bower Spinach

### **Recruitment:**

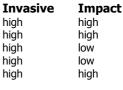
Continuous

### **Organic Litter:**

40 % cover

### Weediness:

LF Code	Typical Weed Species	Common Name
MS	Chrysanthemoides monilifera	Boneseed
MS	<i>Polygala myrtifolia</i> var. <i>myrtifolia</i>	Myrtle-leaf Milkwort
LH	Sonchus oleraceus	Common Sow-thistle
MH	Hypochoeris radicata	Cat's Ear
MTG	<i>Ehrharta erecta</i> var. <i>erecta</i>	Panic Veldt-grass





## EVC 161: Coastal Headland Scrub - Gippsland Plain bioregion

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain 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	20%	MS
Small Shrub	1	5%	SS
Prostrate Shrub	1	1%	PS
Large Herb	2	5%	LH
Medium Herb	5	10%	MH
Small or Prostrate Herb	3	5%	SH
Large Tufted Graminoid	3	10%	LTG
Medium to Small Tufted Graminoid	4	25%	MTG
Medium to Tiny Non-tufted Graminoid	2	5%	MNG
Bryophytes/Lichens	na	10%	BL
Soil Crust	na	10%	S/C

LF Code	Species typical of at least part of EVC range
MS	Leucopogon parviflorus
MS	Correa alba
MH	Viola hederacea sensu Willis (1972)
MH	Samolus repens
MH	Asperula conferta
MH	Daucus glochidiatus
SH	Selliera radicans
LTG	Gahnia trifida
LTG	Austrostipa stipoides
LTG	Dichelachne crinita
MTG	Poa poiformis
MTG	Schoenus apogon
MTG	Dianella revoluta s.l.
MTG	Lepidosperma gladiatum
MNG	Baumea juncea

### **Recruitment:**

Continuous

### Organic Litter: 20 % cover

Weediness:
------------

Typical Weed Species	С
Sonchus oleraceus	Co
Hypochoeris radicata	Ca
Anagallis arvensis	Pi
Plantago coronopus	Bi
Leontodon taraxacoides ssp. taraxacoides	H
	Sonchus oleraceus Hypochoeris radicata Anagallis arvensis Plantago coronopus

Common Name	Invasive	Impact
Common Sow-thistle	high	low
Cat's Ear	high	low
Pimpernel	high	low
Buck's-horn Plantain	high	low
Hairy Hawkbit	high	low

**Common Name** Coast Beard-heath White Correa Ivy-leaf Violet Creeping Brookweed Common Woodruff Austral Carrot Shiny Swamp-mat Coast Saw-sedge Prickly Spear-grass Long-hair Plume-grass Coast Tussock-grass Common Bog-sedge Black-anther Flax-lily Coast Sword-sedge Bare Twig-sedge



## EVC 163: Coastal Tussock Grassland - Gippsland Plain bioregion

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

EVC 164: Creekline Herb-rich Woodland

### **Description:**

Woodland or open forest to 15 m tall occurring on creek terraces and along shallow drainage lines with ephemeral flows. Soils are mostly alluvial deposits of seasonally wet sands and silts. Characterised by a sparse shrub layer above a grassy/sedgy understorey, often rich in herbs within the inter-tussock spaces.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 10 / ha		
Tree Canopy C %cover 20%	<b>over:</b> <b>Character Species</b> <i>Eucalyptus viminalis</i> <i>Eucalyptus ovata</i>			<b>Commo</b> Manna Gu Swamp G	
Medium Shrub Large Herb Medium Herb Small or Prostra Large Tufted Gr Large Non-tufte Medium to Sma	ee or Large Shrub ate Herb raminoid ed Graminoid II Tufted Graminoid Non-tufted Graminoid	<b>#Sp</b> 2 5 2 5 1 3 1 2 2 2 2 1 3		<b>PoCover</b> 5% 10% 15% 1% 5% 15% 5% 5% 10% 20% 20%	LF code IT T MS LH MH SH LTG LNG MTG MNG GF BL
T MS MS LH LH MH SH LTG LTG LTG LTG MNG MNG MNG GF GF	Species typical of at least Acacia melanoxylon Leptospermum continentale Ozothamnus ferrugineus Cassinia aculeata Senecio minimus Senecio linearifolius Lobelia anceps Senecio sp. aff. tenuiflorus Oxalis exilis Lomandra longifolia Lepidosperma laterale var. maju Poa labillardierei Gahnia radula Poa clelandii Microlaena stipoides var. stipoid Poa tenera Imperata cylindrica Pteridium esculentum Adiantum aethiopicum	5	nge	Black Prick Tree Com Shrul Firew Angle Beak Shad Spiny Varia Com Thate Noah Weey Slenc Blady Austr	<b>twoon Name</b> twood ly Tea-tree Everlasting mon Cassinia bby Fireweed veed Groundsel ed Lobelia ed Fireweed y Wood-sorrel <i>y</i> -headed Mat-rush ble Sword-sedge mon Tussock-grass ch Saw-sedge l's Ark bing Grass der Tussock-grass <i>y</i> Grass ral Bracken mon Maidenhair ing Glycine



Continuous Organic Litter: 20 % cover

10 m/0.1 ha.

Logs:

### EVC 164: Creekline Herb-rich Woodland - Gippsland Plain bioregion

Weediness:				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	Chrysanthemoides monilifera	Boneseed	high	high
MS	Rubus sp. aff. armeniacus	Blackberry	high	high
LH	Plantago lanceolata	Ribwort	high	low
LH	Crepis capillaris	Smooth Hawksbeard	high	low
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Cirsium vulgare	Spear Thistle	high	high
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Oxalis pes-caprae	Soursob	high	high
MH	Cerastium glomeratum s.l.	Common Mouse-ear Chickweed	high	low
MH	Trifolium dubium	Suckling Clover	high	low
MH	Centaurium erythraea	Common Centaury	high	low
SH	Trifolium repens var. repens	White Clover	high	low
LTG	Watsonia meriana var. bulbillifera	Bulbil Watsonia	high	high
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Anthoxanthum odoratum	Sweet Vernal-grass	high	high
MTG	Romulea rosea	Onion Grass	high	low
MTG	Gladiolus undulatus	Wild Gladiolus	high	low
MTG	Agrostis capillaris s.l.	Brown-top Bent	high	high
MTG	Poa annua	Annual Meadow-grass	high	low
MTG	Paspalum dilatatum	Paspalum	high	high
MTG	Ehrharta longiflora	Annual Veldt-grass	high	low
MTG	Ehrharta erecta var. erecta	Panic Veldt-grass	high	high
MTG	Briza maxima	Large Quaking-grass	high	low
MNG	Dactylis glomerata	Cocksfoot	high	high
MNG	Aira caryophyllea	Silvery Hair-grass	high	low
SC	Vicia sativa	Common Vetch	high	low

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.

Gippsland Plain bioregion

## EVC 169: Dry Valley Forest

### **Description:**

Open eucalypt forest to 20 m tall occurring along minor gullies, ephemeral streams and river flats. The understorey consists of a range of shrubs and herbs.

Large trees: Species Eucalyptus spp		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 20 / ha		
Tree Canopy C %cover 30%	Cover: Character Species Eucalyptus globoidea Eucalyptus muelleriana Eucalyptus polyanthemos Eucalyptus macrorhyncha Eucalyptus radiata Eucalyptus bridgesiana			White Str Yellow St Red Box Red Strin	ingybark
Medium Shrub Medium Herb Small or Prostra Large Tufted G Medium to Sma	ee or Large Shrub ate Herb raminoid all Tufted Graminoid v Non-tufted Graminoid limber	<b>#Sp</b> 2 4 9 4 1 1 2 3 3 3 na		<b>%Cover</b> 5% 10% 30% 20% 10% 5% 10% 10% 5% 10%	LF code IT T MS MH SH LTG MTG MNG GF SC BL
LF Code T T MS MS MS MS SS MH MH MH MH MH SH SH SH SH SH SH SH SH SH SH SH SH SH	Species typical of at least Acacia mearnsii Exocarpos cupressiformis Pomaderris aspera Kunzea ericoides Cassinia longifolia Hymenanthera dentata Coprosma quadrifida Rubus parvifolius Hydrocotyle laxiflora Acaena novae-zelandiae Viola hederacea Veronica plebeia Opercularia hispida Oxalis corniculata s.l. Dichondra repens Lepidosperma laterale Microlaena stipoides var. stipoid Luzula campestris spp. agg. Pteridium esculentum Adiantum aethiopicum Asplenium flabellifolium Clematis aristata		nge	Blaci Cher Haze Burg Shin Tree Prick Sma Stinh Bidg Ivy-I Trail Hain Yellc Kidn Varia Wee Field Aust Com	hmon Name (Wattle ry Ballart Pomaderris an y Cassinia Violet dy Currant-bush I-leaf Bramble king Pennywort ee-widgee eaf Violet ing Speedwell y Stinkweed w Wood-sorrel ey-weed able Sword-sedge ping Grass Woodrush ral Bracken mon Maidenhair clace Fern ntain Clematis



### **Recruitment:**

Continuous

#### **Organic Litter:** 40 % cover

Logs:

20 m/0.1 ha.

### Weediness:

LF Code LH MH MH MH

**Typical Weed Species** Cirsium vulgare Cerastium glomeratum s.l. Hypochoeris radicata Polycarpon tetraphyllum

**Common Name** Spear Thistle Common Mouse-ear Chickweed Cat's Ear Four-leaved Allseed

Invasive Impact high high high low high low 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.

Gippsland Plain 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 Eucalyptus spp. Allocasuarina spp.	<b>DBH(cm)</b> 70 cm 40 cm	<b>#/ha</b> 15 / ha		
Tree Canopy Cover:				
%coverCharacter Species15%Eucalyptus radiata s.l. Allocasuarina verticillata			<b>Common Name</b> Narrow-leaf Peppermint Drooping Sheoak	
Understorey:				
Life form	#Sp	p %	∕₀Cover	LF code
Immature Canopy Tree		5	%	IT
Understorey Tree or Large Shrub	2	-	0%	Т
Medium Shrub	6	_	5%	MS
Small Shrub	2		%	SS
Prostrate Shrub	2	1	%	PS
Large Herb	2	5	%	LH
Medium Herb	8	1	0%	MH
Small or Prostrate Herb	3	5	%	SH
Large Tufted Graminoid	2	1	0%	LTG
Large Non-tufted Graminoid	1		0%	LNG
Medium to Small Tufted Graminoid	6	2	0%	MTG
Medium to Tiny Non-tufted Graminoid	2	-	0%	MNG
Ground Fern	1	5	%	GF
Scrambler or Climber	2		%	SC
Bryophytes/Lichens	na	1	0%	BL



## EVC 175: Grassy Woodland - Gippsland Plain bioregion

	Creation trained of at least work of EVC reason	Common Norma
LF_Code	Species typical of at least part of EVC range	Common Name
T T	Acacia mearnsii	Black Wattle
	Allocasuarina littoralis	Black Sheoak
Т	Exocarpos cupressiformis	Cherry Ballart
MS	Leptospermum continentale	Prickly Tea-tree
MS	Epacris impressa	Common Heath
MS	Cassinia aculeata	Common Cassinia
MS	Acacia paradoxa	Hedge Wattle
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	<i>Pterostylis longifolia</i> s.l.	Tall Greenhood
MH	Gonocarpus tetragynus	Common Raspwort
MH	<i>Drosera peltata</i> ssp. <i>auriculata</i>	Tall Sundew
SH	Dichondra repens	Kidney-weed
SH	Opercularia varia	Variable Stinkweed
SH	<i>Drosera whittakeri</i> ssp. <i>aberrans</i>	Scented Sundew
LTG	Deyeuxia quadriseta	Reed Bent-grass
LTG	Xanthorrhoea minor ssp. lutea	Small Grass-tree
LTG	Lomandra longifolia	Spiny-headed Mat-rush
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
Т	Pinus radiata	Radiata Pine	high	high
Т	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 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.

**Gippsland** Plain bioregion

## EVC 191: Riparian Scrub

### **Description:**

A dense shrubland to 6 m tall with occasional eucalypt emergents growing on waterlogged substrates often with a peaty surface horizon. Emergent eucalypts may be occasionally present. The understorey is often species-poor and consists typically of sedges tolerant of seasonal waterlogging. Occurs along creeks and minor stream tributaries of the lowland plains.

Canopy Cover	1			
%cover	Character Species		Commo	n Name
60%	Melaleuca squarrosa		Scented P	•
	Leptospermnum continentale		Prickly Te	a-tree
Understorey:				
Life form		#Spp	%Cover	LF code
Medium Shrub		3	10%	MS
Small Shrub		1	1%	SS
Medium Herb		1	1%	MH
Small or Prostr	ate Herb	1	1%	SH
Large Tufted G	Graminoid	1	10%	LTG
Large Non-tuft	ed Graminoid	1	5%	LNG
Medium to Sm	all Tufted Graminoid	1	1%	MTG
Medium to Tin	y Non-tufted Graminoid	3	15%	MNG
Ground Fern		1	5%	GF
Scrambler or Climber		2	15%	SC
Bryophytes/Lichens		na	20%	BL
Total under	storey projective foliage cover		80%	
LF Code	Species typical of at least part of	of EVC range	Com	mon Name
MS	Coprosma quadrifida	-	Prick	y Currant-bush
MS	Ozothamnus ferrugineus			, Everlasting
MS	Acacia verticillata		Prickl	y Moses
MS	Ozothamnus rosmarinifolius		Rose	mary Everlastiong
SS	Amperea xiphoclada var. xiphoclada			n Spurge
MH	Gonocarpus tetragynus		Comr	non Raspwort
MH	Selaginella uliginosa			np Selaginella
LTG	Gahnia sieberiana			ruit Saw-sedge
LNG	Lepidosperma longitudinale		,	Sword-sedge
MNG	Baumea tetragona			re Twig-rush
MNG	Schoenus brevifolius			ag Bog-sedge
MNG	Empodisma minus			ding Rope-rush
GF	Pteridium esculentum			al Bracken
SC	Gleichenia microphylla			nbling Coral-fern
SC	Billardiera scandens			non Apple-berry
SC	Cassytha glabella		Slend	ler Dodder-laurel

### **Recruitment:**

Continuous

### **Organic Litter:**

40 % cover

### Weediness:

There are no consistent weeds in this EVC.



## EVC 191: Riparian Scrub - Gippsland Plain 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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

### EVC 309: Calcareous Swale Grassland

### **Description:**

MH

SH

SH

LTG

LTG

MTG

MTG

MTG

MTG

MTG

MNG

MNG

SC SC

A low coastal grassland that develops on the swales of calcareous sand dunes of Quaternary origin. The only known location of this grassland, at Wilsons Promontory, was disturbed in the past and is now invaded by Coast Tea-tree, Silky Guinea-flower and Drooping Sheoak.

Life forms: Life form Medium Shrub Small Shrub Prostrate Shr Large Herb Medium Herb Small or Pros	- ub	<b>#Spp</b> 3 1 1 2 2	<b>%Cover</b> 30% 1% 1% 5% 5%	LF code MS SS PS LH MH SH
Large Tufted Graminoid Medium to Small Tufted Graminoid Medium to Tiny Non-tufted Graminoid Scrambler or Climber Bryophytes/Lichens		2 2 4 1 2 na	5% 10% 20% 5% 20%	LTG MTG MNG SC BL
LF Code MS MS MS MS SS PS LH MH	Species typical of at least part Leptospermum laevigatum Leucopogon parviflorus Bursaria spinosa ssp. spinosa Allocasuarina verticillata Hibbertia sericea s.l. Acrotriche prostrata Senecio pinnatifolius Lagenophora stipitata	of EVC range	Coast Coast Swee Droo Silky Traili Varia	trea-tree E Beard-heath t Bursaria ping Sheoak Guinea-flower ng Ground-berry ble Groundsel non Bottle-daisy



Cinquefoil Cranesbill

Shady Wood-sorrel

Coast Spear-grass

Black-anther Flax-lily

Common Grass-sedge

Long-hair Plume-grass

Small-leaved Clematis

Knobby Club-sedge

Bare Twig-sedge

Love Creeper

Bristly Wallaby-grass Kangaroo Grass

Spiny-headed Mat-rush

Kidney-weed

Geranium potentilloides

Dichondra repens

Lomandra longifolia

Dianella revoluta s.l.

Carex breviculmis

Themeda triandra

Dichelachne crinita

Clematis microphylla

Comesperma volubile

Ficinia nodosa

Baumea juncea

Austrostipa flavescens

Austrodanthonia setacea

Oxalis exilis

#### **Recruitment:**

Continuous

#### **Organic Litter:** 10%

### Weediness:

#### LF Code Typical Weed Species мн Centaurium ervthraea

1.11.1	centadinani crytinaca
MH	Anagallis arvensis
MH	Arenaria serpyllifolia ssp. serpyllifolia
MTG	Catapodium rigidum
MNG	Aira caryophyllea
Und	Hypochoeris spp.

Common Name	1
Common Centaury	h
Pimpernel	ŀ
Thyme-leaved Sandwort	ŀ
Fern Grass	ŀ
Silvery Hair-grass	ŀ
Cat's Ear	h

Invasive Impact high high high high high low high low high high high high

Published by the Victorian Government Department of Sustainability and Environment September 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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

## EVC 311: Berm Grassy Shrubland

### **Description:**

Low shrubland to 1.5 m tall occurring in sheltered coastal areas where sand deposits have formed as a result of low energy wave action. Contains a number of halophytic species over a ground layer of grasses and herbs.

Life Forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	2	20%	MS
Small Shrub	2	5%	SS
Large Herb	2	5%	LH
Medium Herb	2	10%	MH
Small Herb	2	5%	SH
Large Tufted Graminoid	1	1%	LTG
Medium to Small Tufted Graminoid	2	25%	MTG
Medium to Tiny Non-tufted Graminoid	2	10%	MNG
Total understorey projective foliage cover		<b>70%</b>	

LF Code MS MS SS LH LH H MH MH SH SH SH LTG MTG MTG	Species typical of at least part of EVC range Atriplex cinerea Rhagodia candolleana ssp. candolleana Frankenia pauciflora var. gunnii Senecio pinnatifolius Senecio glomeratus Sarcocornia quinqueflora ssp. quinqueflora Pseudognaphalium luteoalbum Actites megalocarpa Disphyma crassifolium ssp. clavellatum Dichondra repens Dichelachne crinita Poa poiformis Austrofesturea littoralis	<b>Common Name</b> Coast Saltbush Seaberry Saltbush Southern Sea-heath Variable Groundsel Annual Fireweed Beaded Glasswort Jersey Cudweed Coast Sow-thistle Rounded Noon-flower Kidneyweed Long-hair Plume Grass Coast Tussock-grass Coast Fescue
		5
MTG MNG MNG	Austrofestuca littoralis Distichlis distichophylla Ficinia nodosa	Coast Fescue Australian Salt-grass Knobby Club-sedge

### **Recruitment:**

Continuous

### **Organic Litter:**

10% Cover

### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	Chrysanthemoides monilifera ssp. monilifera	Boneseed	high	high
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Conyza albida	Tall Fleabane	high	low
MH	Polycarpon tetraphyllum	Four-leaved Allseed	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Anagallis arvensis	Pimpernel	high	low
MNG	Vulpia myuros	Rat's-tail Fescue	high	low
MNG	Lagurus ovatus	Hare's-tail Grass	high	low



## EVC 311: Berm Grassy Shrubland - Gippsland Plain bioregion

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.

Gippsland Plain bioregion

## EVC 316: Shrubby Damp Forest

#### **Description:**

Grows in gullies and on protected slopes on relatively skeletal but fertile sedimentary soils. Occurs at elevations of around 500 m above sea level and receives a low to moderate annual rainfall of approximately 750 mm. The overstorey includes a variety of Eucalypt species to 30 m tall. Silver Wattle is a common understorey tree. The dense mid stratum is comprised of medium to large shrubs characteristic of both drier and damper environments. The ground layer has a sparse cover of grasses and herbs, and commonly includes Austral Bracken.

Large trees: Species Eucalyptus spp	).		<b>/ha</b> / ha	
Tree Canopy %cover 40%	Cover: Character Species Eucalyptus obliqua		•••••••	<b>n Name</b> Stringybark
Medium Shrub Small Shrub Prostrate Shru Large Herb Medium Herb Small or Prosti Large Tufted G Large Non-tuft	ree or Large Shrub b rate Herb Graminoid	<b>#Spp</b> 4 8 2 1 4 8 2 2 1 4 8 2 2 1 3	<b>%Cover</b> 5% 20% 20% 10% 1% 5% 15% 5% 5% 5% 1% 1%	LF code IT MS SS PS LH MH SH LTG LNG MTG
Medium to Tin Ground Fern Tree Fern Scrambler or C Bryophytes/Lic		1 2 1 2 na	5% 15% 1% 5% 20%	MNG GF TRF SC BL



## EVC 316: Shrubby Damp Forest - Gippsland Plain bioregion

LF Code T T MS MS MS MS SS LH MH MH LTG LTG MTG MTG MTG MTG MTG MTG GF GF GF SC	Species typical of at least par Pomaderris aspera Acacia dealbata Exocarpos cupressiformis Cassinia longifolia Pimelea axiflora Coprosma quadrifida Olearia lirata Olearia megalophylla Senecio linearifolius Viola hederacea sensu Willis (1972) Gonocarpus tetragynus Lagenophora stipitata Lomandra longifolia Gahnia sieberiana Dianella tasmanica Poa australis spp. agg. Dianella revoluta s.l. Austrodanthonia pilosa Microlaena stipoides var. stipoides Pteridium esculentum Polystichum proliferum Blechnum wattsii Clematis aristata	t of EVC range	Common Hazel Poma Silver Wattl Cherry Balla Shiny Cassi Bootlace Bu Prickly Curr Snowy Dais Large-leaf I Fireweed G Ivy-leaf Vio Common Ra Common Ra Common Ra Common Ra Common Ra Tasman Fla Tussock Gra Black-anthe Velvet Walla Weeping Gra Austral Brac Mother Shie Hard Water Mountain C	aderris e art nia ush ant-bush polisy-bush roundsel let aspwort ottle-daisy ed Mat-rush aw-sedge x-lily ass er Flax-lily aby-grass rass cken eld-fern -fern	
Continuous Organic Litte 50 % cover Logs: 30 m/0.1 ha. Weediness: LF Code	r: Typical Weed Species	Common Name		Invasive	Impact
MH MH	<i>Hypochoeris radicata</i> <i>Cerastium glomeratum</i> s.l.	Cat's Ear Common Mouse-ear Chic	kweed	high high	low low

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

EVC 641: Riparian Woodland

#### **Description:**

Occurs beside permanent streams, typically on narrow alluvial deposits. Woodland to 20 m tall generally dominated by *Eucalyptus camaldulensis* over a tussock grass-dominated understorey. Tall shrubs may be present and amphibious herbs may occur in occasional ponds and beside creeks. While flooding may be common, sites are rarely inundated for lengthy periods.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 80 cm	<b>#/ha</b> 15 / ha		
Tree Canopy C %cover 20%	over: Character Species Eucalyptus camaldulensis Eucalyptus viminalis ssp. vimin Eucalyptus tereticornis	alis	Ri Mi	ommon I ver Red-gu anna Gum ippsland Re	im
Understorey: Life form Immature Cano Understorey Tre	py Tree ee or Large Shrub	<b>#Sp</b> ] 2	5%	<b>Cover</b> % 9%	<b>LF code</b> IT T
Medium Shrub Small Shrub Large Herb Medium Herb		4 1 4 5	5% 15 10	5% )%	MS SS LH MH
	aminoid d Graminoid II Tufted Graminoid	1 3 1 4	5% 20	5% % 9%	SH LTG LNG MTG
Scrambler or Cli Bryophytes/Lich	ens	2 1 na		% )%	MNG SC BL
T T MS MS MS SS LH LH LH LH MH MH MH SH LTG LTG LTG LTG LTG MTG MTG MNG	Species typical of at least Acacia mearnsii Melaleuca ericifolia Bursaria spinosa ssp. spinosa Hymenanthera dentata Callistemon sieberi Gynatrix pulchella Rubus parvifolius Wahlenbergia gracilis s.s. Senecio minimus Myriophyllum crispatum Rumex brownii Oxalis perennans Mentha australis Acaena novae-zelandiae Dichondra repens Poa labillardierei Carex appressa Phragmites australis Lachnagrostis filiformis var. filifo Triglochin procerum s.l. Eleocharis acuta Calystegia sepium		nge	Black I Swam Sweet Tree V River I Hemp Small- Spraw Shrubl Uprigh Slende Grassl River I Bidgee Kidney Comm Tall Se Comm Comm Water Comm	Bottlebrush Bush leaf Bramble ling Bluebell by Groundsel at Water-milfoil er Dock and Wood-sorrel Mint e-widgee /weed ion Tussock-grass



#### **Recruitment:**

Continuous

#### **Organic Litter:**

30% cover

Logs:

20m / 0.1 ha

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	Rosa rubiginosa	Sweet Briar	high	high
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Cirsium vulgare	Spear Thistle	high	high
LH	Plantago lanceolata	Ribwort	high	low
LH	Helminthotheca echioides	Ox-tongue	high	low
LH	Rumex crispus	Curled Dock	high	low
LH	Aster subulatus	Aster-weed	high	low
LH	Rorippa palustris	Marsh Yellow-cress	high	high
MH	Leontodon taraxacoides ssp. taraxacoides	Hairy Hawkbit	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
LTG	Phalaris aquatica	Toowoomba Canary-grass	high	high
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Bromus hordeaceus ssp. hordeaceus	Soft Brome	high	low
MTG	Anthoxanthum odoratum	Sweet Vernal-grass	high	high
MNG	Paspalum distichum	Water Couch	high	high
SC	Galium aparine	Cleavers	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; ٠
- 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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

EVC 651: Plains Swampy Woodland

#### **Description:**

Eucalypt woodland to 15 m tall with ground layer dominated by tussock grasses, sedges and herbs. Shrubs are often scattered throughout. Occurs on poorly drained, seasonally waterlogged heavy soils.

Large trees:					
Species		DBH(cm)	#/ha		
<i>Eucalyptus</i> spp	).	80 cm	10 / ha		
Tree Canopy	Cover:				
%cover	Character Species			Commo	n Name
10%	Eucalyptus ovata			Swamp G	um
Understorey:					
Life form		#Sp	p (	%Cover	LF code
Immature Can	opy Tree			5%	IT
Understorey T	ree or Large Shrub	1	1	5%	Т
Medium Shrub		3		15%	MS
Large Herb		3	1	5%	LH
Medium Herb		8		20%	MH
Small or Prostr	ate Herb	4	!	5%	SH
Large Tufted G	Graminoid	3		30%	LTG
Large Non-tuft	ed Graminoid	1		1%	LNG
Medium to Sm	all Tufted Graminoid	7		10%	MTG
Medium to Tin	y Non-tufted Graminoid	2	!	5%	MNG
Bryophytes/Lic	hens	na	2	20%	BL
LF Code	Species typical of at leas	t part of EVC ra	nae	Com	nmon Name
T	Acacia melanoxylon	• p • • · • · • · •			wood
MS	Leptospermum continentale			Prick	y Tea-tree
MS	Ozothamnus ferrugineus				Everlasting
MS	Allocasuarina paludosa				o Sheoak
LH	Senecio tenuiflorus			Slend	ler Fireweed
LH	Villarsia reniformis				ing Marsh-flower
MH	Asperula conferta				mon Woodruff
MH	Centella cordifolia			Cente	ella
MH	Lobelia anceps			Angle	ed Lobelia
MH	Acaena novae-zelandiae				e-widgee
SH	Eryngium vesiculosum			Prick	
SH	Oxalis exilis			Shad	y Wood-sorrel
SH	Hypericum japonicum				ed St John's Wort
LTG	Gahnia trifida			Coast	t Saw-sedge
LTG	Carex appressa				Sedge
LTG	Poa labillardierei var. labillardie	rei			non Tussock-grass
MTG	Poa clelandii				's Ark
MTG	Lomandra filiformis			Wattl	e Mat-rush
MTG	Themeda triandra				aroo Grass
MNG	Poa tenera			5	ler Tussock-grass
MNG	Hemarthria uncinata var. uncin	ata		Mat (	0
-					



#### **Recruitment:**

Continuous

#### **Organic Litter:** 10 % cover

Logs:

10 m/0.1 ha.

#### Weediness:

The Country of the Co				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	Plantago lanceolata	Ribwort	high	low
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Sonchus asper s.l.	Rough Sow-thistle	high	low
LH	Cirsium vulgare	Spear Thistle	high	high
MH	Trifolium dubium	Suckling Clover	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Prunella vulgaris	Self-heal	high	low
MH	Leontodon taraxacoides ssp. taraxacoides	Hairy Hawkbit	high	low
LTG	Festuca arundinacea	Tall Fescue	high	high
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Briza minor	Lesser Quaking-grass	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	Vulpia bromoides	Squirrel-tail Fescue	high	low
MTG	Anthoxanthum odoratum	Sweet Vernal-grass	high	high
MNG	Holcus setosus	Annual Fog	high	low
MNG	Juncus capitatus	Capitate Rush	high	low
TTG	Cyperus tenellus	Tiny Flat-sedge	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.

**Gippsland Plain bioregion** 

## EVC 653: Aquatic Herbland

#### **Description:**

Herbland of permanent to semi-permanent wetlands, dominated by sedges (especially on shallower verges) and/or aquatic herbs. Occurs on fertile paludal soils, typically heavy clays beneath organic accumulations.

Life Forms:			
Life form	#Spp	%Cover	LF code
Large Herb	2	10%	LH
Medium Herb	3	20%	MH
Small or Prostrate Herb	3	15%	SH
Large Non-tufted Graminoid	2	20%	LTG
Medium to Small Tufted Graminoid	2	10%	MTG
Medium to Tiny Non-tufted Graminoid	1	5%	MNG
Total understorey projective foliage cover		80%	

LF Code LH MH SH SH SH SH	Species typical of at least part of EVC range Persicaria decipiens Myriophyllum verrucosum Potamogeton pectinatus Lemna disperma Azolla filiculoides Mimulus repens Wolffia australiana	<b>Common Name</b> Slender Knotweed Red Water-milfoil Fennel Pondweed Common Duckweed Pacific Azolla Creeping Monkey-flower Tiny Duckweed Pacid Leaf Comburgi
	5 1	
SH	Mimulus repens	Creeping Monkey-flower
SH	Wolffia australiana	Tiny Duckweed
LNG	Typha orientalis	Broad-leaf Cumbungi
LNG	Phragmites australis	Common Reed
MTG	Triglochin procerum s.l.	Water Ribbons
MNG	Bolboschoenus caldwellii	Salt Club-sedge

#### Recruitment:

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

#### **Organic Litter:**

10% Cover

#### Weediness:

LF	Code
LH	
MH	

**Typical Weed Species** *Aster subulatus Cotula coronopifolia*  **Common Name** Aster-weed Water Buttons **Invasive** high high

**Impact** low high



## EVC 653: Aquatic Herbland - Gippsland Plain bioregion

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.

**Gippsland** Plain bioregion

### EVC 656: Brackish Wetland

#### **Description:**

Sedgeland or herbland, occasionally grassland, dominated by salt-tolerant species, but samphires, if present usually with low cover. Typically occurs on heavy, at least seasonally shallowly inundated to waterlogged soils, on a range of geologies. Common in estuaries, along the shorelines of saline/brackish lakes and along poorly defined drainage lines near the coast.

Life Forms:			
Life form	#Spp	%Cover	LF code
Large Herb	1	5%	LH
Medium Herb	4	20%	MH
Small or Prostrate Herb	2	5%	SH
Large Tufted Graminoid	1	15%	LTG
Large Non-tufted Graminoid	1	10%	LNG
Medium to Small Tufted Graminoid	2	5%	MTG
Medium to Tiny Non-tufted Graminoid	3	15%	MNG
Scrambler or Climber	1	5%	SC
Total understorey projective foliage cover		80%	

LF Code	Species typical of at least part of EVC range Epilobium billardierianum	Common Name Variable Willow-herb
MH	Myriophyllum verrucosum	Red Water-milfoil
	, , ,	
MH	Myriophyllum muelleri	Hooded Water-milfoil
MH	Lilaeopsis polyantha	Australian Lilaeopsis
MH	Samolus repens	Creeping Brookweed
SH	Mimulus repens	Creeping Monkey-flower
SH	Selliera radicans	Shiny Swamp-mat
LTG	Juncus kraussii ssp. australiensis	Sea Rush
LNG	Phragmites australis	Common Reed
MTG	Triglochin procerum s.l.	Water Ribbons
MTG	Poa poiformis	Coast Tussock-grass
MNG	Bolboschoenus caldwellii	Salt Club-sedge
MNG	Ruppia polycarpa	Many-fruit Tassel
MNG	Ruppia megacarpa	Large-fruit Tassel
MNG	Triglochin striatum	Streaked Arrowgrass
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
MH	Cicendia filiformis	Slender Cicendia	high	low
MH	Anagallis arvensis	Pimpernel	high	low
SH	Anagallis minima	Chaffweed	high	low
MTG	Bromus hordeaceus ssp. hordeaceus	Soft Brome	high	low
MTG	Polypogon maritimus var. subspathaceus	Coast Beard-grass	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	Briza minor	Lesser Quaking-grass	high	low
MNG	Aira cupaniana	Quicksilver Grass	high	low
TTG	Cyperus tenellus	Tiny Flat-sedge	high	low



## EVC 656: Brackish Wetland - Gippsland Plain bioregion

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.

Gippsland Plain bioregion

## EVC 674: Sandy Stream Woodland

#### Description:

Reed, sedge or shrub-dominated woodland to 15 m tall with a large range of amphibious herbs. Occupies the beds of seasonal creeks where large amounts of course sand have been deposited by past flows, often resulting in a distinctive 'U' shape to the drainage line. Sites periodically inundated through the wetter months and soils moist throughout the year. Restricted to moderately high rainfall areas (>600 mm) where coarse parent material available upstream.

Large trees: Species Eucalyptus spp		<b>DBH(cm)</b> 80 cm	<b>#/ha</b> 10 / ha		
Tree Canopy C %cover 10%	Cover: Character Species Eucalyptus ovata			<b>Commo</b> Swamp G	o <b>n Name</b> Jum
Medium Shrub Medium Herb Small or Prostra Large Tufted G Large Non-tufte Medium to Sma	ee or Large Shrub ate Herb raminoid ed Graminoid all Tufted Graminoid v Non-tufted Graminoid	# <b>Sp</b> 2 5 6 3 2 2 10 3 1 2 10 3 1 2 2 10	•	%Cover 5% 15% 15% 10% 5% 10% 20% 30% 5% 1% 5% 10%	LF code IT T MS MH SH LTG LNG MTG MNG TF GF BL
LF Code T T MS MS MS SS LH MH MH SH SH LTG LTG LTG LTG LTG LTG LTG LTG LTG LTG	Species typical of at least Acacia melanoxylon Acacia dealbata Prostanthera lasianthos Leptospermum continentale Melaleuca squarrosa Leptospermum continentale Rubus parvifolius Persicaria decipiens Oxalis perennans Acaena novae-zelandiae Lobelia pratioides Crassula helmsii Poa labillardierei Juncus procerus Carex appressa Gahnia sieberiana Phragmites australis Typha domingensis Poa tenera Austrodanthonia caespitosa Juncus pauciflorus Juncus caespiticius Microlaena stipoides var. stipoid Eleocharis acuta Ficinia nodosa Dicksonia antarctica Blechnum nudum Hypolepis spp.		nge	Black Silve Victo Prick Scen Prick Smal Slend Com Tall I Tall S Red- Com Cum Slend Com Loos Gras Wee Com Loos Gras	nmon Name swood r Wattle brian Christmas-bush ly Tea-tree ted Paperbark ly Tea-tree ll-leaf Bramble der Knotweed sland Wood-sorrel ee-widgee on Lobelia mp Crassula mon Tussock-garss Rush Sedge fruit Saw-sedge mon Reed bungi der Tussock-grass mon Wallaby-grass e-flower Rush sy Rush ping Grass mon Spike-sedge oby Club-sedge Tree-fern pone Water-fern ind Fern



#### **Recruitment:**

Continuous

#### Organic Litter:

40 % cover

Logs:

20 m/0.1 ha.

#### Weediness:

weeumess.				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
Т	Salix fragilis	Crack Willow	high	high
MS	Lycium ferocissimum	African Box-thorn	low	high
MS	Genista monspessulana	Montpellier Broom	high	high
MS	Rosa fruticosus spp. agg	Blackberry	high	high
MS	Rubus sp. aff. armeniacus	Blackberry	high	high
LH	Plantago lanceolata	Ribwort	high	low
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Verbena bonariensis s.l.	Purple-top Verbena	high	high
LH	Rumex crispus	Curled Dock	high	high
LH	Rumex conglomeratus	Clustered Dock	high	high
LH	Conium maculatum	Hemlock	high	high
LH	Helminthotheca echioides	Ox-tongue	high	low
LH	Aster subulatus	Aster-weed	high	low
LH	Sonchus asper s.l.	Rough Sow-thistle	high	low
LH	Solanum nigrum sensu Willis (1972)	Black Nightshade	high	high
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Foeniculum vulgare	Fennel	high	high
SH	Modiola caroliniana	Red-flower Mallow	high	low
LTG	Phalaris aquatica	Toowoomba Canary-grass	high	high
LTG	Piptatherum miliaceum	Rice Millet	high	high
MTG	<i>Ehrharta erecta</i> var. <i>erecta</i>	Panic Veldt-grass	high	high
MTG	Paspalum dilatatum	Paspalum	high	high
MTG	Bromus catharticus	Prairie Grass	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	Bromus diandrus	Great Brome	high	low
MTG	Briza maxima	Large Quaking-grass	high	low
MTG	Agrostis capillaris s.l.	Brown-top Bent	high	high
MNG	Dactylis glomerata	Cocksfoot	high	high
MNG	Paspalum distichum	Water Couch	high	high
SC	Tradescantia fluminensis	Wandering Jew	high	high

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

## EVC 707: Sedgy Swamp Woodland

#### **Description:**

Eucalypt woodland to 15 m tall with sedgy ground layer and a range of herbs tolerant of seasonal waterlogging. Occurs on poorly drained, seasonally wet flats on sandy soils over heavier subsoils.

Large trees: Species Eucalyptus sp	).	<b>DBH(cm)</b> 80 cm	<b>#/ha</b> 10 / ha		
Tree Canopy %cover 10%	Cover: Character Species Eucalyptus ovata			<b>Commo</b> Swamp G	o <b>n Name</b> Gum
Large Non-tuff	rate Herb Graminoid all Tufted Graminoid red Graminoid y Non-tufted Graminoid	<b>#Sp</b> 2 3 6 5 1 4 2 2 na	p	<b>%Cover</b> 5% 5% 10% 5% 10% 5% 40% 1% 5%	LF code IT MS LH MH SH LTG MTG LNG MNG BL
LF Code MS LH LH MH MH MH MTG LNG LNG	Species typical of at leas Leptospermum continentale Villarsia reniformis Epilobium billardierianum Centella cordifolia Goodenia humilis Gratiola pubescens Triglochin procerum s.l. Lepidosperma longitudinale Baumea rubiginosa s.l.	t part of EVC ra	inge	Prick Run Varia Cen Swa Glar Wate Pith	nmon Name kly Tea-tree ning Marsh-flower able Willow-herb tella mp Goodenia idular Brooklime er Ribbons y Sword-sedge Twig-rush
Recruitment: Continuous					
Organic Litter 20 % cover	r:				
<b>Logs:</b> 10 m/0.1 ha.					



## EVC 651: Sedgy Swamp Woodland - Gippsland Plain bioregion

Weediness	::	S	es	n	i	d	e	e	V	V	
-----------	----	---	----	---	---	---	---	---	---	---	--

Typical Weed Species	Common Name	Invasive	Impact
Plantago lanceolata	Ribwort	high	low
Sonchus oleraceus	Common Sow-thistle	high	low
Sonchus asper s.l.	Rough Sow-thistle	high	low
Cirsium vulgare	Spear Thistle	high	high
Trifolium dubium	Suckling Clover	high	low
Hypochoeris radicata	Cat's Ear	high	low
Prunella vulgaris	Self-heal	high	low
Leontodon taraxacoides ssp. taraxacoides	Hairy Hawkbit	high	low
Festuca arundinacea	Tall Fescue	high	high
Holcus lanatus	Yorkshire Fog	high	high
Briza minor	Lesser Quaking-grass	high	low
Romulea rosea	Onion Grass	high	low
Vulpia bromoides	Squirrel-tail Fescue	high	low
Anthoxanthum odoratum	Sweet Vernal-grass	high	high
Holcus setosus	Annual Fog	high	low
Juncus capitatus	Capitate Rush	high	low
Cyperus tenellus	Tiny Flat-sedge	high	low
	Plantago lanceolata Sonchus oleraceus Sonchus asper s.l. Cirsium vulgare Trifolium dubium Hypochoeris radicata Prunella vulgaris Leontodon taraxacoides ssp. taraxacoides Festuca arundinacea Holcus lanatus Briza minor Romulea rosea Vulpia bromoides Anthoxanthum odoratum Holcus setosus Juncus capitatus	Plantago lanceolataRibwortSonchus oleraceusCommon Sow-thistleSonchus asper s.l.Rough Sow-thistleCirsium vulgareSpear ThistleTrifolium dubiumSuckling CloverHypochoeris radicataCat's EarPrunella vulgarisSelf-healLeontodon taraxacoides ssp. taraxacoidesHairy HawkbitFestuca arundinaceaTall FescueHolcus lanatusYorkshire FogBriza minorLesser Quaking-grassVulpia bromoidesSquirrel-tail FescueAnthoxanthum odoratumSweet Vernal-grassHolcus setosusAnnual FogJuncus capitatusCapitate Rush	Plantago lanceolataRibworthighSonchus oleraceusCommon Sow-thistlehighSonchus asper s.l.Rough Sow-thistlehighCirsium vulgareSpear ThistlehighTrifolium dubiumSuckling CloverhighHypochoeris radicataCat's EarhighPrunella vulgarisSelf-healhighLeontodon taraxacoides ssp. taraxacoidesHairy HawkbithighHolcus lanatusYorkshire FoghighBriza minorLesser Quaking-grasshighVulpia bromoidesSquirrel-tail FescuehighVulpia bromoidesSquirrel-tail FescuehighAnthoxanthum odoratumSweet Vernal-grasshighJuncus capitatusCapitate Rushhigh

Published by the Victorian Government Department of Sustainability and Environment July 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.

**Gippsland** Plain bioregion

## EVC 710: Damp Heathland

#### **Description:**

Developed on sites of intermittent waterlogging, typically wet in winter and dry in summer, with low nutrient availability. Closed tall heathland, or scrub if long unburnt. There is a dense ground layer of rushes and sedges, and sometimes emergent eucalypts.

	b Frate Herb Graminoid Eed Graminoid all Tufted Graminoid y Non-tufted Graminoid Climber	<b>#Spp</b> 5 5 1 4 3 2 1 4 2 3 na	<b>%Cover</b> 50% 10% 1% 10% 5% 1% 5% 10% 5% 20%	LF code MS SS PS MH SH LTG LNG MTG MNG SC BL
LF Code MS MS SS SS SS SS SS SS SS SS SS SS MH MH LTG LTG LTG LTG LTG LTG MTG MTG MTG MTG SC SC SC SC	Species typical of at least part of Leptospermum continentale Allocasuarina paludosa Banksia marginata Hibbertia sericea s.l. Platylobium obtusangulum Pimelea humilis Dillwynia glaberrima Acrotriche serrulata Gonocarpus tetragynus Selaginella uliginosa Viola hederacea sensu Willis (1972) Deyeuxia quadriseta Xanthorrhoea minor ssp. lutea Lepidosperma longitudinale Patersonia fragilis Lepidosperma concavum Burchardia umbellata Hypolaena fastigiata Baumea juncea Cassytha pubescens s.s. Cassytha glabella Billardiera scandens	of EVC range	Prick Scrul Silve Silky Com Smod Hone Com Swar Ivy-k Reec Smal Pithy Shor Sand Milkr Tass Bare Dow Slend	hmon Name ly Tea-tree b Sheoak r Banksia Guinea-flower mon Flat-pea mon Rice-flower oth Parrot-pea ey-pots mon Raspwort mp Selaginella eaf Violet I Bent-grass I Grass-tree Sword-sedge t Purple-flag Ihill Sword-sedge naids el Rope-rush Twig-sedge my Dodder-laurel der Dodder-laurel mon Apple-berry

#### **Recruitment:**

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

#### **Organic Litter:**

20% cover

#### Weediness:

#### **LF Code** MH

Typical Weed Species Hypochoeris radicata Common Name Cat's Ear Invasive

Impact low



## EVC 710: Damp Heathland - Gippsland Plain bioregion

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

EVC 793: Damp Heathy Woodland

#### **Description:**

Woodland to 10 m tall with tall dense heathy understorey which becomes tall scrub if long unburnt in high rainfall areas. The ground layer consists of grasses, herbs, small shrubs and tough-leaved monocots. Developed on sandy soils of moderate to low fertility, typically wet in winter due to impeding layer in soil and dry in summer.

Large trees Species Eucalyptus		<b>DBH(cm)</b> 60 cm	<b>#/ha</b> 10 / ha			
Tree Canop	v Cover:					
<b>%cover</b> 15%	<b>Character Species</b> Eucalyptus cephalocarpa s.l. Eucalyptus radiata s.l. Eucalyptus ovata		Me Na	aly String rrow-leaf amp Gun	ybark Pepperm	nint
Understore	<b>v</b> :					
Life form		#Sp	p %	Cover	LF co	de
Immature C			- 5%		IT	
Medium Shr		5	300		MS	
Small Shrub		4	5%		SS	
Prostrate Sh		2	1%		PS	
Medium Her Small or Pro	-	3 3	5% 209		MH SH	
Large Tufte		2	5%		LTG	
5	Small Tufted Graminoid	3	109		MTG	
	Finy Non-tufted Graminoid	1	5%		MNG	
Ground Ferr		1	5%		GF	
Bryophytes/	Lichens	na	209	%	BL	
Soil Crust		na	100	%	S/C	
LF Code MS	Species typical of at leas Leptospermum continentale	t part of EVC ra	inge	Prickl	<b>mon N</b> y Tea-tre	e
MS	Epacris impressa				non Heat	h
MS	Banksia marginata				Banksia	
MS	Kunzea ericoides			Burga		1
SS SS	Hibbertia riparia Hovea heterophylla				Guinea-f	
PS	Acrotriche serrulata				y-pots	d
MH	Gonocarpus tetragynus				non Rasp	wort
SH	Drosera whittakeri ssp. aberran	95			ed Sund	
LTG	Xanthorrhoea minor ssp. lutea			Small	Grass-tr	ee
MTG	Themeda triandra			Kanga	aroo Gras	SS
MTG	Lepidosperma filiforme					er-sedge
GF	Pteridium esculentum				al Bracke	
SC	Cassytha glabella			Slend	er Dodde	er-laurel
Recruitmen Episodic/Fire	<b>t:</b> e. Desirable period between disturl	oances is 30 years.				
Organic Litt 20 % cover	er:					
<b>Logs:</b> 10 m/0.1 ha	ı.					
Weediness:						
LF Code MH	Typical Weed Species Hypochoeris radicata	Common N Cat's Ear	Name	<b>Inva</b> high	sive	Impact low



## EVC 793: Damp Heathy Woodland - Gippsland Plain bioregion

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.

**Gippsland** Plain bioregion

### EVC 821: Tall Marsh

#### **Description:**

Occurs on Quaternary sedimentary geology of mainly estuarine sands, soils are peaty, silty clays, and average annual rainfall is approximately 600 mm. It requires shallow water (to 1 m deep) and low current-scour, and can only tolerate very low levels of salinity. Closed to open grassland/sedgeland to 2-3 m tall, dominated by Common Reed and Cumbungi. Small aquatic and semi-aquatic species occur amongst the reeds.

Life Forms:			
Life form	#Spp	%Cover	LF code
Large Herb	3	10%	LH
Medium Herb	2	5%	MH
Small or Prostrate Herb	6	10%	SH
Large Tufted Graminoid	1	5%	LTG
Large Non-tufted Graminoid	2	40%	LNG
Medium to Tiny Non-tufted Graminoid	1	1%	MNG
Total understorey projective foliage cover	er	<b>70%</b>	

LF Code LH LH MH MH SH SH SH SH LTG LTG LNG LNG LNG LNG	Species typical of at least part of EVC range Myriophyllum verrucosum Myriophyllum salsugineum Villarsia reniformis Rumex bidens Lilaeopsis polyantha Lepilaena bilocularis Lemna disperma Azolla filiculoides Wolffia australiana Mimulus repens Triglochin procerum s.l. Juncus ingens Schoenoplectus tabernaemontani Phragmites australis Typha domingensis	<b>Common Name</b> Red Water-milfoil Lake Water-milfoil Running Marsh-flower Mud Dock Australian Lilaeopsis Small-fruit Water-mat Common Duckweed Pacific Azolla Tiny Duckweed Creeping Monkey-flower Water Ribbons Giant Rush River Club-sedge Common Reed Cumbungi
	Phragmites australis	5
LNG		5
LNG	Typha orientalis	Broad-leaf Cumbungi
MNG	Lepilaena cylindrocarpa	Long-fruit Water-mat
MNG	Eleocharis acuta	Common Spike-sedge

#### Recruitment:

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

#### **Organic Litter:**

10% cover

#### Weediness:

LF Code	Typical Weed Species
MH	Cotula coronopifolia
MNG	Paspalum distichum

**Common Name** Water Buttons Water Couch **Invasive** high high **Impact** high high



## EVC 821: Tall Marsh - Gippsland Plain bioregion

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

### EVC 858: Coastal Alkaline Scrub (syn. Calcarenite Dune Woodland)

#### **Description:**

Near-coastal, deep calcareous (alkaline) and largely stable sand dunes and swales commonly dominated by Moonah Melaleuca lanceolata ssp. lanceolata. It occurs at low elevations of 20-60 m above sea level, average annual rainfall is approximately 550-950 mm, and it occurs on a variety of geologies and soil types. Low woodland or tall shrubland to 8 m tall, typically with a medium shrub layer, small shrub layer and sedges, grasses and herbs in the ground layer.

## **Canopy Cover:**

<b>%cover</b> 30%	Character Species Melaleuca lanceolata ssp. lanceolata Allocasuarina verticillata Leptospermum laevigatum Bursaria spinosa ssp. macrophylla		<b>Commo</b> Moonah Drooping Coast Tea Sweet Bu	a-tree
Life forms:				
Life form		#Spp	%Cover	LF code
Medium Shru	b	4	30%	MS
Small Shrub		2	5%	SS
Large Herb		1	1%	LH
Medium Herb		5	10%	MH
Small or Pros	trate Herb	2	5%	SH
Large Tufted	Graminoid	1	5%	LTG
Medium to Sr	nall Tufted Graminoid	4	10%	MTG
Medium to Ti	ny Non-tufted Graminoid	2	5%	MNG
Scrambler or	Climber	2	1%	SC
Bryophytes/L	ichens	na	20%	BL
Total unde	rstorey projective foliage cover		80%	
I E Code	Species typical of at least part of	FVC range	Con	mon Name

LF Code	Species typical of at least part of EVC range	Co
MS	Acacia longifolia ssp. sophorae	Coa
MS	Leucopogon parviflorus	Coa
MS	<i>Acacia retinodes</i> var. <i>uncifolia</i>	Coa
MS	Pomaderris paniculosa	Coa
SS	<i>Hibbertia sericea</i> s.l.	Silk
SS	<i>Pimelea serpyllifolia</i> ssp. <i>serpyllifolia</i>	Thy
MH	Lagenophora stipitata	Cor
MH	Geranium potentilloides	Cin
MH	Acaena novae-zelandiae	Bid
SH	Dichondra repens	Kidı
SH	Oxalis exilis	Sha
LTG	Lomandra longifolia	Spi
MTG	<i>Dianella revoluta</i> s.l.	Bla
MTG	Carex breviculmis	Cor
MTG	Lachnagrostis billardierei s.l.	Coa
MTG	Austrodanthonia setacea	Bris
MNG	Ficinia nodosa	Kno
MNG	<i>Microlaena stipoides</i> var. <i>stipoides</i>	We
SC	Clematis microphylla	Sm
SC	Comesperma volubile	Lov

**Common Name** ast Wattle ast Beard-heath ast Wirilda oast Pomaderris ky Guinea-flower nyme-leaf Rice-flower ommon Bottle-daisy nguefoil Cranesbill dgee-widgee dney-weed nady Wood-sorrel piny-headed Mat-rush ack-anther Flax-lily ommon Grass-sedge bast Blaown-grass istly Wallaby-grass obby Club-sedge eeping Grass nall-leaved Clematis ve Creeper



#### **Recruitment:**

Continuous

#### **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
MH	Centaurium erythraea	Common Centaury	high	low
MH	Anagallis arvensis	Pimpernel	high	low
MH	Hypochoeris spp.	Cat's Ear	high	low
MTG	Ehrharta erecta	Panic Veldt-grass	high	high
MTG	Catapodium rigidum	Fern Grass	high	low
MNG	Aira caryophyllea	Silvery Hair-grass	high	low
SC	Myrsiphyllum asparagoides	Smilax Asparagus	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.

**Gippsland Plain 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	Species typical of at least part of EVC range	Common Name
MS	Solanum aviculare	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
LH	Aster subulatus
MH	Cotula coronopifolia

**Common Name** Aster-weed Water Buttons **Invasive** high high

Impact low high



## EVC 863: Floodplain Reedbed - Gippsland Plain bioregion

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; ٠
- 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.

**Gippsland** Plain bioregion

### EVC 875: Blocked Coastal Stream Swamp

#### **Description:**

Margins of coastal streams that are consistently flooded for long periods where the entrances become plugged by sand during low flow periods. The blockage is breached during floods, briefly exposing the wetlands before the mouth silts up and the dammed river overflows, flooding the habitat of this EVC. Soils are peats derived from Quaternary swamp and lagoonal deposits. Elevation is near sea level and average annual rainfall is 900 mm.

#### Life Forms:

Life form	#Spp	%Cover	LF code	
Large Herb	3	25%	LH	
Medium Herb	1	5%	MH	
Small or Prostrate Herb	1	1%	SH	
Large Non-tufted Graminoid	1	55%	LNG	
Medium to Small Tufted Graminoid	3	5%	MTG	
Medium to Tiny Non-tufted Graminoid	1	1%	MNG	
Total understorey projective foliage cover		<b>90</b> %		

LF Code LH LH MH MH SH LNG MTG MTG MTG MTG MTG MTG MTG MTG MTG	r r	Lepidosperma filiforme Lachnagrostis rudis Isolepis platycarpa Juncus caespiticius Triglochin striatum	Common Name Purple Eyebright Narrow-leaf Cumbungi Variable Willow-herb Fairies' Aprons Forked Sundew Common Bitter-cress Shining Pennywort Leafy Twig-sedge Common Rapier-sedge Ruddy Blown-grass Broad-fruit Club-sedge Grassy Rush Streaked Arrowgrass
MNG		Schoenus nitens Baumea juncea	Shiny Bog-sedge Bare Twig-sedge
		-	5 5

#### **Recruitment:**

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

#### **Organic Litter:**

10% cover

#### Weediness:

There are no consistent weeds in this EVC.



Published by the Victorian Government Department of Sustainability and Environment September 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.

Gippsland Plain bioregion

## EVC 876: Spray-zone Coastal Shrubland

#### **Description:**

A wind-pruned salt-affected open shrubland usually less than 1 m tall (with occasional emergent taller shrubs) that occurs on the most exposed coastal areas subject to salt-spray and run-off at the crest of sea cliffs. This EVC usually occurs in association with taller Coastal Headland Scrub (EVC 161).

Medium to Tin Scrambler or C Soil Crust	rate Herb Graminoid all Tufted Graminoid y Non-tufted Graminoid	<b>#Spp</b> 2 4 2 4 2 4 1 1 na	<b>%Cover</b> 5% 30% 5% 5% 5% 10% 1% 5% 10% <b>60%</b>	LF code MS SS MH SH LTG MTG MNG SC S/C
LF Code MS MS SS SS SS SS MH MH MH MH MH SH SH SH SH SH SH SH SH SH SH SH SH SH	Species typical of at least part of Olearia axillaris Alyxia buxifolia Leucophyta brownii Ozothamnus turbinatus Rhagodia candolleana ssp. candolleana Correa alba Sarcocornia quinqueflora Samolus repens Senecio piannatifolius Actites megalocarpa Dichondra repens Disphyma crassifolium ssp. clavellatum Carpobrotus rossii Calandrinia calyptrata Austrostipa stipoides Dichelachne crinita Ficinia nodosa Lachnagrostis billardierei s.l. Poa poiformis Lepidosperma gladiatum Dianella brevicaulis Tetragonia implexicoma	f EVC range	Coast Sea E Cushi Coast Seab White Bead Creep Tooth Coast Kidne Roun Karka Pink I Prickl Long Knob Coast Coast Coast Small	on Bush Everlasting erry Saltbush correa ed Glasswort bing Brookweed ned Groundsel Sow-thistle ey-weed ded Noon-flower

#### **Recruitment:**

Continuous

#### **Organic Litter:**

10 % cover



### EVC 876: Spray-zone Coastal Shrubland - Gippsland Plain bioregion

#### Weediness: **LF Code Typical Weed Species** Sonchus oleraceus LH LNG Pennisetum clandestinum MH Hypochoeris radicata MH Oxalis pes-caprae MS Chrysanthemoides monilifera MS Polygala myrtifolia var. myrtifolia MS Coprosma repens MS Lycium ferocissimum MTG Ehrharta erecta var. erecta SC Delairea odorata

**Common Name** Common Sow-thistle Kikuyu Cat's Ear Soursob Boneseed Myrtle-leaf Milkwort Mirror Bush African Box-thorn Panic Veldt-grass Cape Ivy

Invasive Impact high low high high low 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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

EVC 877: Lowland Herb-rich Forest

#### **Description:**

Primarily occurs in gullies and along lower slopes close to minor drainage lines. Soils are reasonably fertile colluvial loams. Open eucalypt forest to 20 m tall with a range of medium shrubs conspicuous in the mid-stratum. The ground layer is dominated by a dense cover of grasses and a high diversity of tussock-forming graminoids and herbs.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm		<b>/ha</b> ) / ha		
Tree Canopy Co	over:					
<b>%cover</b> 30%	Character Species Eucalyptus cypellocarpa Eucalyptus globoidea Eucalyptus polyanthemos				Common Mountain ( White Strin Red Box	Grey-gum
Understorey:						
Life form			#Spp	Q	%Cover	LF code
Immature Cano				-	5%	IT
	e or Large Shrub		3	_	.0%	Т
Medium Shrub			4	_	.0%	MS
Small Shrub			1	-	.%	SS
Prostrate Shrub			1	-	5%	PS
Large Herb			2	-	6%	LH
Medium Herb			13	-	0%	MH
Small or Prostrate Herb			4	-	%	SH
Large Non-tufted Graminoid			1	_	.5%	LTG
Medium to Small Tufted Graminoid			5	-	%	MTG
,	Non-tufted Graminoid		2	-	.0%	MNG
Bryophytes/Lich	ens	I	na	1	.0%	BL



### EVC 877: Lowland Herb-rich Forest - Gippsland Plain bioregion

LF Code		Species typical of at least part of EVC range	Common Name
Т		Acacia mearnsii	Black Wattle
MS	r	Zieria smithii	Sandfly Zieria
MS		Kunzea ericoides	Burgan
MS		Cassinia longifolia	Shiny Cassinia
MS		Cassinia aculeata	Common Cassinia
MS		Melaleuca parvistaminea	Rough-barked Honey-myrtle
SS		Pimelea humilis	Common Rice-flower
PS		Bossiaea prostrata	Creeping Bossiaea
LH		Stypandra glauca	Nodding Blue-lily
LH		Senecio tenuiflorus	Slender Fireweed
MH		Hypericum gramineum	Small St John's Wort
MH		Lagenophora stipitata	Common Bottle-daisy
MH		Pterostylis concinna	Trim Greenhood
SH		Opercularia varia	Variable Stinkweed
SH		Hydrocotyle laxiflora	Stinking Pennywort
SH		Oxalis exilis	Shady Wood-sorrel
SH		Dichondra repens	Kidney-weed
LNG		Gahnia radula	Thatch Saw-sedge
MTG		Luzula meridionalis	Common Woodrush
MTG		Lomandra filiformis ssp. coriacea	Wattle Mat-rush
MTG		Poa sieberiana	Grey Tussock-grass
MTG		Dianella caerulea var. caerulea	Paroo Lily
MNG		<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass
MNG		Entolasia marginata	Bordered Panic
SC		Comesperma volubile	Love Creeper
Boowitme			

#### **Recruitment:**

Continuous

#### **Organic Litter:**

40 % cover

#### Logs:

20 m/0.1 ha.

#### Weediness:

LF Code MS LH

LH

MH

MH

MH

SH

#### **Typical Weed Species**

Rubus fruticosus spp. agg.
Conyza bonariensis
Centaurium tenuiflorum
Hypochoeris radicata
Prunella vulgaris
<i>Cerastium glomeratum</i> s.l.
<i>Trifolium repens</i> var. <i>repens</i>

#### **Common Name** Invasive Impact Blackberry high high Flaxleaf Fleabane high low Slender Centaury high low Cat's Ear high low Self-heal high low Common Mouse-ear Chickweed high low White Clover high low

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

### EVC 879: Coastal Dune Grassland

#### **Description:**

Consists of grasses and halophytes (succulents) that colonise the foredunes of ocean beaches. Soils are siliceous sands that have a very low humus content.

Life Forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	1	5%	MS
Small Shrub	1	5%	SS
Prostrate Shrub	1	1%	PS
Large Herb	2	5%	LH
Medium Herb	4	5%	MH
Small or Prostrate Herb	3	10%	SH
Medium to Small Tufted Graminoid	3	10%	MTG
Medium to Tiny Non-tufted Graminoid	2	25%	MNG
Scrambler or Climber	1	1%	SC
Total understorey projective foliage cover		<b>60%</b>	

Species typical of at least part of EVC range Atriplex cinerea Suaeda australis Acaena novae-zelandiae Actites megalocarpa Senecio pinnatifolius Carpobrotus rossii Crassula sieberiana Disphyma crassifolium ssp. clavellatum Apium annuum Dianella brevicaulis Carex pumila Spinifex sericeus	<b>Common Name</b> Coast Saltbush Austral Seablite Bidgee-widgee Dune Thistle Variable Groundsel Karkalla Sieber Crassula Rounded Noon-flower Annual Celery Small-flower Flax-lily Strand Sedge Hairy Spinifex
	5
	Atriplex cinerea Suaeda australis Acaena novae-zelandiae Actites megalocarpa Senecio pinnatifolius Carpobrotus rossii Crassula sieberiana Disphyma crassifolium ssp. clavellatum Apium annuum Dianella brevicaulis Carex pumila Spinifex sericeus Ficinia nodosa

#### **Recruitment:**

Continuous

#### **Organic Litter:**

10 % cover

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
LH	Sonchus oleraceus	Common Sow-thistle	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Leontodon taraxacoides ssp. taraxacoides	Hairy Hawkbit	high	low
MTG	Thinopyrum junceiforme	Sea Wheat-grass	high	high
LTG	Ammophila arenaria	Marram Grass	high	high



## EVC 879: Coastal Dune Grassland - Gippsland Plain bioregion

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.

Gippsland Plain bioregion

## EVC 895: Escarpment Shrubland

#### **Description:**

Occurs on rocky escarpments in steep valleys or gorges, associated with limestone or basalt. Sites have moderate to high fertility, are well-drained but subject to regular summer drought due to shallow soils. Eucalypt woodland to 15 m tall or noneucalypt shrubland to 8 m tall, sometimes with occasional eucalypts; lichen-covered rock outcrops are common.

<sup>+</sup> eucalypt woodland only components (ignore when assessing shrubland areas and standardise site condition score as required)

Large trees <sup>+</sup> : Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 15 / ha		
Tree Canopy C	over:				
<b>%cover</b> 15%	<b>Character Species</b> <i>Acacia implexa</i> <i>Allocasuarina verticillata</i> <i>Acacia mearnsii</i> <i>Bursaria spinosa</i> <i>Eucalyptus radiata</i>			Commo Lightwood Drooping Black Wat Sweet Bun Narrow-le	l Sheoak tle
Understorey: Life form Immature Cano Understorey Tre	py Tree⁺ ee or Large Shrub⁺	<b>#Ѕр</b> г 3	5	<b>%Cover</b> 5% 0%	<b>LF code</b> I⊺ T
Medium Shrub Small Shrub Large Herb Medium Herb		3 2 3 4	5 5 1	0% ;% ;% 0%	MS SS LH MH
	aminoid d Graminoid II Tufted Graminoid	5 1 1 9 3	5 5 2	% % % 25%	SH LTG LNG MTG MNG
Medium to Tiny Non-tufted Graminoid Ground Fern Scrambler or Climber Bryophytes/Lichens Soil Crust		1 1 na na	5 5 2	5% 5% 20% 0%	GF SC BL S/C
MS r MS SS LH MH MH SH SH LTG MTG MTG MTG GF SC	Species typical of at least Rhagodia parabolica Hymenanthera dentata s.l. Enchylaena tomentosa var. tom Wahlenbergia communis s.l. Oxalis perennans Maireana enchylaenoides Einadia nutans ssp. nutans Chamaesyce drummondii Dichondra repens Austrostipa bigeniculata Austrodanthonia racemosa var. Austrodanthonia setacea Panicum effusum Cheilanthes distans Clematis microphylla Convolvulus erubescens spp. ag	entosa racemosa	nge	Fragr Tree Ruby Tufte Grass Wing Nodd Flat S Kidne Stipe Bristl Hairy Bristl Small	ant Saltbush Violet Saltbush d Bluebell sland Wood-sorrel less Bluebush ing Saltbush Spurge ey-weed d Spear-grass d Wallaby-grass y Wallaby-grass Panic y Cloak-fern I-leaved Clematis Bindweed



#### **Recruitment:**

Continuous

#### **Organic Litter:**

20 % cover

Logs:

15 m/0.1 ha+. 5 m/0.1 ha. (note: large log class does not apply)

Weediness:				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
Т	Schinus molle	Pepper Tree	high	high
MS	Lycium ferocissimum	African Box-thorn	high	high
MS	Genista monspessulana	Montpellier Broom	high	high
SS	Marrubium vulgare	Horehound	high	high
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Helminthotheca echioides	Ox-tongue	high	low
LH	Lactuca serriola	Prickly Lettuce	high	low
LH	Sisymbrium officinale	Hedge Mustard	high	high
LH	Sonchus asper s.l.	Rough Sow-thistle	high	low
LH	Verbascum thapsus ssp. thapsus	Great Mullein	high	high
LH	Echium plantagineum	Paterson's Curse	high	high
LH	Centaurium tenuiflorum	Slender Centaury	high	low
LH	Foeniculum vulgare	Fennel	high	high
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Trifolium arvense var. arvense	Hare's-foot Clover	high	low
MH	Trifolium subterraneum	Subterranean Clover	high	low
MH	<i>Trifolium campestre</i> var. <i>campestre</i>	Hop Clover	high	low
MH	Trifolium angustifolium var. angustifolium	Narrow-leaf Clover	high	low
MH	Lotus suaveolens	Hairy Bird's-foot Trefoil	high	low
MH	Cerastium glomeratum s.l.	Common Mouse-ear Chickweed	high	low
SH	Medicago polymorpha	Burr Medic	high	low
SH	Trifolium glomeratum	Cluster Clover	high	low
SH	Modiola caroliniana	Red-flower Mallow	high	low
SH	Aptenia cordifolia	Heart-leaf Ice-plant	high	high
LTG	Phalaris aquatica	Toowoomba Canary-grass	high	high
LNG	Holcus lanatus	Yorkshire Fog	high	high
LNG	Avena fatua	Wild Oat	high	low
MTG	Nassella trichotoma	Serrated Tussock	high	high
MTG	Ehrharta longiflora	Annual Veldt-grass	high	low
MTG	Briza maxima	Large Quaking-grass	high	low
MTG	Bromus hordeaceus ssp. hordeaceus	Soft Brome	high	low
MTG	Sporobolus africanus	Rat-tail Grass	high	high
MTG	Vulpia bromoides	Squirrel-tail Fescue	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	Pentaschistis airoides ssp. airoides	False Hair-grass	high	low
MTG	Lolium perenne	Perennial Rye-grass	high	low
MTG	Dactylis glomerata	Cocksfoot	high	high
MTG	Vulpia myuros	Rat's-tail Fescue	high	low
MTG	Bromus rubens	Red Brome	high	low
MTG	Avena barbata	Bearded Oat	high	low
MTG	Aira caryophyllea	Silvery Hair-grass	high	low
SC	<i>Vicia sativa</i> ssp. <i>sativa</i>	Common Vetch	low	low

Published by the Victorian Government Department of Sustainability and Environment February 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.

Gippsland Plain bioregion

## EVC 902: Gully Woodland

#### **Description:**

Woodland or open forest to 20 m tall occurring along moderately steep gullies. Soils are mostly colluvial deposits of sands and silts. Characterised by a medium dense small tree and shrub layer above a grassy/sedgy understorey, often rich in herbs within the inter-tussock spaces.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 10 / ha		
Tree Canopy Cove	er:				
20% Eu	haracter Species ucalyptus viminalis ucalyptus ovata	<b>Common Name</b> Manna Gum Swamp Gum			im
Understorey:					
Life form	-	#S	рр	%Cover	LF code
Immature Canopy T Understorey Tree or		4		5% 15%	IT T
Medium Shrub	Large Sillub	6		15%	MS
Small Shrub		1		1%	SS
Large Herb		2		1%	LH
Medium Herb		6		10%	MH
Small or Prostrate H	lerb	2		5%	SH
Large Tufted Gramin	noid	2		5%	LTG
Large Non-tufted Gr	raminoid	1		5%	LNG
Medium to Small Tu	Ifted Graminoid	8		20%	MTG
Medium to Tiny Nor	n-tufted Graminoid	2		10%	MNG
Ground Fern		3		10%	GF
Scrambler or Climbe	er	4		10%	SC
Bryophytes/Lichens		na		20%	BL

#### **Recruitment:**

Continuous

#### **Organic Litter:**

20 % cover

Logs:

10 m/0.1 ha.



## EVC 902: Gully Woodland - Gippsland Plain bioregion

			<b>C</b>	News	
LF_Code	Species typical of at least part	of EVC range	Common		
T	Acacia mearnsii		Black Wattl	e	
T	Acacia melanoxylon		Blackwood		
Т	Bursaria spinosa		Sweet Burs		
Т	Allocasuarina littoralis		Black Sheoa		
MS	Goodenia ovata		Hop Goode		
MS	Coprosma quadrifida		Prickly Curr	ant-bush	
MS	Cassinia aculeata		Dogwood		
SS	Rubus parvifolius		Small-leaf E	Bramble	
LH	Senecio glomeratus		Annual Fire	weed	
LH	Senecio tenuiflorus		Slender Fire	eweed	
MH	Acaena novae-zelandiae		Bidgee-wid	gee	
MH	Gonocarpus tetragynus		Common Ra	aspwort	
MH	Hypericum gramineum		Small St Jol	hn's-wort	
MH	Viola hederacea sensu Willis (1972)		Ivy-leaf Vio	let	
SH	Dichondra repens		Kidneyweed	ł	
SH	Oxalis exilis		Shady Woo	d-sorrel	
LTG	Lomandra longifolia		Spiny-head	ed Mat-rush	
LNG	Gahnia radula		Thatch Saw		
MTG	Poa labillardierei			ussock-grass	
MTG	Austrodanthonia racemosa var. racemo.	sa	Stpied Wall		
MTG	Lepidosperma laterale var. laterale		Variable Sw		
MTG	Poa morrisii		Soft Tussoc	5	
MNG	Microlaena stipoides var. stipoides		Weeping G		
MNG	Poa tenera		Slender Tus		
GF	Pteridium esculentum		Austral Bra	5	
GF	Adiantum aethiopicum		Common M		
GF	Doodia australis		Common Ra		
SC	Clematis aristata		Mountain C	•	
SC	Pandorea pandorana		Wonga Vine		
SC	Clematis microphylla		Small-leaf (		
SC	Comesperma volubile		Love Creep		
EP	Amyema pendula		Drooping M		
E.	, injenia penada		Drooping r	istictoc	
Weediness:					
LF Code	Typical Weed Species	Common Name		Invasive	Impact
MS	Chrysanthemoides monilifera	Boneseed		high	high
MS	Rubus fruticosus spp. agg.	Blackberry		high	high
LH	Plantago lanceolata	Ribwort		high	low
LH	Sonchus oleraceus	Common Sow-thistle		high	low
LH	Cirsium vulgare	Spear Thistle		high	high
MH	Hypochoeris radicata	Cat's Ear		high	low
MH	Oxalis pes-caprae	Soursob		high	high
MH	<i>Cerastium glomeratum</i> s.l.	Common Mouse-ear Chi	ickweed	high	low
MH	Anagallis arvensis	Scarlet Pimpernel		high	low
MH	Centaurium erythraea	Common Centaury		high	low
MH	Oxalis incarnata	Pale Wood-sorrel		high	high
LNG	Holcus lanatus	Yorkshire Fog		high	high
MTG	Anthoxanthum odoratum	Sweet Vernal-grass		high	high
MTG	Ehrharta erecta	Panic Veldt Grass		high	high
MTG	Romulea rosea	Onion Grass		high	low
MTG	Ehrharta longiflora	Annual Veldt-grass		high	low
MTG	<i>Ehrharta erecta</i> var. <i>erecta</i>	Panic Veldt-grass		high	high
MTG	Briza maxima	Large Quaking-grass		high	low
MNG	Dactylis glomerata	Cocksfoot		high	high
MNG	Allium triquetrum	Angled Onion		high	high
MNG	<i>Agrostis capillaris</i> s.l.	Brown-top Bent		high	high
SC	Asparagus asparagoides	Bridal Creeper		high	high
	,	·····		5	5

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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

### EVC 914: Estuarine Flats Grassland

#### **Description:**

Closed to open grassland to 1.5 m tall with occasional shrubs occurring on estuarine flats often associated with current or old beach berms or sand sheets that are occasionally inundated by high tides. Occupies areas on marginally higher ground inland from Coastal Saltmarsh.

Life Forms:			
Life form	#Spp	%Cover	LF code
Medium Shrub	2	5%	MS
Small Shrub	1	5%	SS
Large Herb	1	1%	LH
Medium Herb	3	15%	MH
Small Herb	4	15%	SH
Large Tufted Graminoid	2	15%	LTG
Medium to Small Tufted Graminoid	2	20%	MTG
Medium to Tiny Non-tufted Graminoid	3	15%	MNG
Total understorey projective foliage cover		85%	

LF Code MS MS SS LH MH MH SH SH SH LTG LTG MTG MTG MTG MNG	Species typical of at least part of EVC range Atriplex cinerea Rhagodia candolleana ssp. candolleana Frankenia pauciflora var. gunnii Senecio pinnatifolius Sarcocornia quinqueflora ssp. quinqueflora Suaeda australis Samolus repens Disphyma crassifolium ssp. clavellatum Selliera radicans Hemichroa pentandra Austrostipa stipoides Gahnia filum Poa poiformis Lachnagrostis billardierei ssp. billardierei Spinifex sericeus	Common Name Coast Saltbush Seaberry Saltbush Southern Sea-heath Variable Groundsel Beaded Glasswort Austral Seablite Creeping Brookweed Rounded Noon-flower Shiny Swamp-mat Trailing Hemichroa Prickly Spear-grass Chaffy Saw-sedge Coast Tussock-grass Coast Blown-grass Hairy Spinifex
	5	5
MNG	Distichlis distichophylla	Australian Salt-grass
MNG	Ficinia nodosa	Knobby Club-sedge

#### **Recruitment:**

Continuous

#### **Organic Litter:**

10% Cover

#### Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	Chrysanthemoides monilifera ssp. monilifera	Boneseed	high	high
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Conyza albida	Tall Fleabane	high	low
MH	Polycarpon tetraphyllum	Four-leaved Allseed	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
MH	Anagallis arvensis	Pimpernel	high	low
MNG	Vulpia myuros	Rat's-tail Fescue	high	low
MNG	Lagurus ovatus	Hare's-tail Grass	high	low



## EVC 914: Estuarine Flats Grassland - Gippsland Plain bioregion

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.

Gippsland Plain bioregion

## EVC 934: Brackish Grassland

#### **Description:**

Grassland or sedgeland occurring on silts in low-lying areas within brackish floodplains. Often occurs in association with Brackish Wetland.

Life Forms: Life form	#Spp	%Cover	LF code
Large Herb	1 T	1%	LH
Medium Herb	3	5%	MH
Small or Prostrate Herb	5	5%	SH
Large Tufted Graminoid	2	20%	LTG
Medium to Small Tufted Graminoid	4	20%	MTG
Medium to Tiny Non-tufted Graminoid	1	10%	MNG
Bryophytes/Lichens	na	10%	BL
Total understorey projective foliage cover		70%	

LF Code	Species typical of at least part of EVC range Senecio glomeratus	Common Name Annual Fireweed
MH	Sarcocornia quinqueflora	Beaded Glasswort
MH	Samolus repens	Creeping Brookweed
MH	Sebaea albidiflora	White Sebaea
MH	Calocephalus lacteus	Milky Beuaty-heads
SH	Selliera radicans	Shiny Swamp-mat
SH	Utricularia tenella	Pink Bladderwort
LTG	Gahnia filum	Chaffy Saw-sedge
LTG	Gahnia trifida	Coast Saw-sedge
LTG	Poa labillardierei	Common Tussock-grass
MTG	Poa poiformis	Blue Tussock-grass
MTG	Schoenus apogon	Common Bog-sedge
MTG	Austrodanthonia geniculata	Kneed Wallaby-grass
MNG	Distichlis distichophylla	Australian Salt-grass

#### **Recruitment:**

Continuous

**Organic Litter:** 10% cover

#### Weediness:

There are no consistent weeds in this EVC.



## EVC 934: Brackish Grassland - Gippsland Plain bioregion

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; ٠
- 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.

**Gippsland Plain bioregion** 

## EVC 937: Swampy Woodland

#### **Description:**

Open eucalypt woodland to 15 m tall with ground-layer dominated by tussock grasses and/or sedges and often rich in herbs. Occurs on poorly drained, seasonally waterlogged heavy soils, primarily on swamp deposits but extending to suitable substrates within some landscapes of sedimentary origin.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 15 / ha		
Tree Canopy Co %cover 15%	over: Character Species Eucalyptus ovata Eucalyptus cephalocarpa s.s. Eucalyptus radiata s.l. Eucalyptus obliqua			<b>Common Name</b> Swamp Gum Mealy Stringybark Narrow-leaf Peppermint Messmate Stringybark	
Understorey: Life form Immature Canopy Tree Understorey Tree or Large Shrub Medium Shrub Medium Herb Small or Prostrate Herb Large Tufted Graminoid Large Non-tufted Graminoid Medium to Small Tufted Graminoid Bryophytes/Lichens		<b>#Spp</b> 1 2 5 3 4 2 4 na		%Cover % % 0% 0% 0% 0% 0% 0%	LF code IT T MS MH SH LTG LNG MTG BL
T MS MH MH SH LTG LTG LTG LNG LNG MTG MTG MNG	Species typical of at least Melaleuca ericifolia Leptospermum continentale Acaena novae-zelandiae Centella cordifolia Gratiola peruviana Mazus pumilio Gahnia sieberiana Poa labillardierei Carex appressa Gahnia radula Phragmites australis Schoenus apogon Lepidosperma laterale Poa tenera Juncus holoschoenus	part of EVC ra	nge	Swan Prickl Bidge Cente Austr Swan Red-f Comr Tall S Thatc Comr Comr Varia Slend	al Brooklime np Mazus iruit Saw-sedge non Tussock-grass

Recruitment: Continuous

#### **Organic Litter:**

20 % cover

#### Logs:

15 m/0.1 ha.



## EVC 937: Swampy Woodland - Gippsland Plain bioregion

#### Weediness:

**LF Code** MS MH LNG MTG

#### **Typical Weed Species** Rubus sp. aff. armeniacus Hypochoeris radicata

Anthoxanthum odoratum

Holcus lanatus

**Common Name** 

Blackberry Cat's Ear Yorkshire Fog Sweet Vernal-grass Invasive high high high high

Impact high low 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.

## EVC/Bioregion Benchmark for Vegetation Quality Assessment Gippsland Plain bioregion

## EVC 938: Shrubby Gully Forest

#### **Description:**

An open eucalypt forest to woodland to 20 m tall confined to narrow bands along low gradient gullies on minor streams within foothills. Often associated with granite soils. The understorey is dominated by shrubs, sedges and ferns and lacks the diversity of herbs and grasses associated with drainage lines on more fertile soils.

Large trees: Species Eucalyptus spp.		<b>DBH(cm)</b> 70 cm	<b>#/ha</b> 20 / ha		
Tree Canopy Co %cover 30%	over: Character Species Eucalyptus radiata s.l. Eucalyptus ovata Eucalyptus viminalis ssp. vimin	alis	Na Sv	• • • • • • •	
Understorey: Life form Immature Canop		#Spj	<b>%C</b> 5% 10%	over	<b>LF code</b> IT T
Medium Shrub Medium Herb Small or Prostrat	e or Large Shrub te Herb	2 5 5 3	10% 20% 10% 5%	)	n MS MH SH
Large Tufted Graminoid Large Non-tufted Graminoid Medium to Small Tufted Graminoid Medium to Tiny Non-tufted Graminoid		3 2 3 1	15% 10% 10% 5%	)	ltg lng Mtg Mng
Ground Fern Scrambler or Cli Bryophytes/Lich	mber	4 2 na	20% 1%	20% GF	
T / / / / / / / / / / / / / / / / / / /	Species typical of at least Acacia melanoxylon Melaleuca squarrosa Melaleuca ericifolia Leptospermum continentale Ozothamnus ferrugineus Coprosma quadrifida Goodenia ovata Veronica plebeia Viola hederacea sensu Willis (19: Oxalis corniculata s.l. Dichondra repens Desmodium gunnii Carex appressa Lomandra longifolia Poa labilardierei Cyperus lucidus Phragmites australis Gahnia radula Poa morrisii Lomandra filiformis Polystichum proliferum Calochlaena dubia Billardiera scandens		nge	Blacky Scenter Swam Prickly Tree E Prickly Hop G Trailin Ivy-lea Yellow Kidney South Tall Se South Tall Se South Tall Se Spiny- Comm Leafy Comm Thatcl Soft T Wattle Mothe Comm	ed Paperbark p Paperbark / Tea-tree Everlasting / Currant-bush Goodenia g Speedwell af Violet / Wood-sorrel y-weed ern Tick-trefoil



#### **Recruitment:**

Continuous

#### **Organic Litter:** 20 % cover

Logs:

15 m/0.1 ha.

#### Weediness:

LF Code MS MH

MTG

**Typical Weed Species** Rubus fruticosus spp. agg. Hypochoeris radicata Anthoxanthum odoratum

#### **Common Name**

Blackberry Cat's Ear Sweet Vernal-grass Invasive high high high

Impact high low 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.

**Gippsland Plain bioregion** 

### EVC 953: Estuarine Scrub

#### **Description:**

Closed scrub to 6 m tall growing on the edge of estuarine waterbodies such as creeks, rivers and lagoons with intermediate salinity and poor drainage conditions. Dominated by Swamp Paperbark *Melaleuca ericifolia* with a halophytic (succulent) ground layer dominated by graminoids and herbs. Often occurs in close association with Estuarine Wetland.

Canopy Cov %cover	ver: Character Species	Common Name			
50%	Melaleuca ericifolia	Melaleuca ericifolia		Swamp Paperbark	
Understore	y:				
Life form		#Spp	%Cover	LF code	
Medium Shrub		2	10%	MS	
Medium Herb		3	20%	MH	
Small or Prostrate Herb		2	5%	SH	
Medium to Small Tufted Graminoid		2	10%	MTG	
Medium to Tiny Non-tufted Graminoid		2	15%	MNG	
Total und	lerstorey projective foliage cover		60%		
LF Code Species typical of at least part of EVC range Commo			nmon Name		

El COUC	openes cypical of at least part of Eve range	
MS	Rhagodia candolleana ssp. candolleana	Seaberry Saltbush
MS	Atriplex cinerea	Coast Saltbush
MH	Samolus repens	Creeping Brookweed
MH	Chenopodium glaucum	Glaucous Goosefoot
MH	Sarcocornia quinqueflora	Beaded Glasswort
SH	Selliera radicans	Shiny Swamp-mat
SH	Apium prostratum ssp. prostratum	Sea Celery
MTG	Poa poiformis	Blue Tussock-grass
MTG	Poa labillardierei	Common Tussock-grass
MNG	Ficinia nodosa	Knobby Club-sedge
MNG	Distichlis distichophylla	Australian Salt-grass

#### Recruitment:

Continuous

#### **Organic Litter:**

20 % cover

#### Logs:

5 m/0.1 ha. (note: large log class does not apply)

#### 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



## EVC 953: Estuarine Scrub - Gippsland Plain bioregion

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.