

## **Gippsland Vegetation Types: Ecological Vegetation Classes (EVC'S)**

EVC description derived from Davies et.al (2001) Ecological Vegetation Class Mapping at 1:25 000 in Gippsland.

### **EVC 3 Damp Sands Herb-rich Woodland**

A woodland with a grassy, heathy or bracken-dominated understorey and a ground layer rich in herbs, grasses, and orchids. Occurs mainly on flat or undulating areas on moderately fertile, relatively well drained, deep sand or sandy loam.

#### **Floristic Community 3-01 *Gippsland Lakes Damp Sands Herb-rich Woodland***

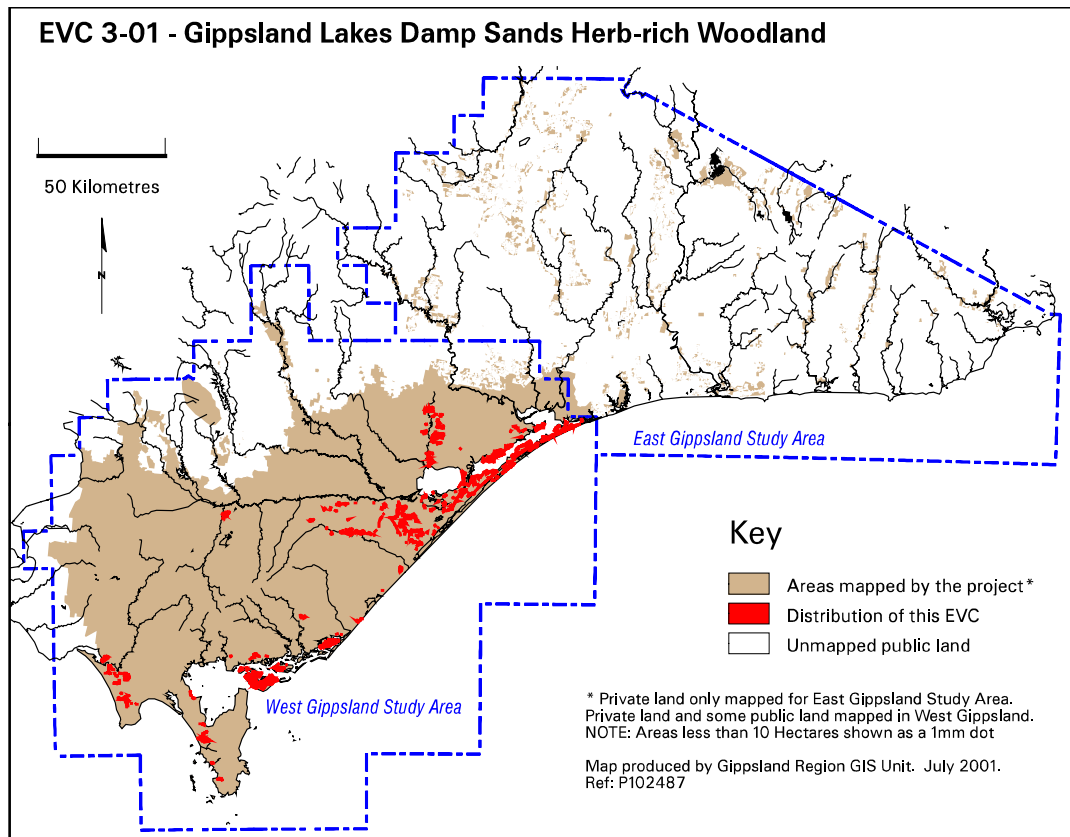


*Gippsland Lakes Damp Sands Herb-rich Woodland at Spermwhale Head, Gippsland Lakes. Photo: John Davies 1996.*



Gippsland Lakes Damp Sands Herb-rich Woodland on Snake Island, South Gippsland. Photo: John Davies 1998.

<b>Elevation (metres above sea level)</b>	<100
<b>Rainfall average p.a. (mm)</b>	<1000
<b>Topography</b>	Gippsland plains and South Gippsland coastal plains
<b>Geology</b>	Quaternary aeolian sands
<b>Soils</b>	Fertile, black to grey sand or loam
<b>Related/adjacent EVCs/FCs</b>	Coast Banksia Woodland and Coastal Dune Scrub Mosaic (seaward), Heathy Woodland and Sand Heathland (with reduced fertility)
<b>Present land use</b>	Agriculture, plantation, recreation, residential subdivision
<b>Present distribution</b>	Gippsland Lakes, Gippsland plains, Tidal River (Wilson's Promontory National Park)
<b>Examples of sites/quadrats/lists</b>	Snake Island, Providence Ponds (U23126), Longford (U23070), Jack Smith Lake (U23091), Holey Plains (U23192)
<b>Total Area(ha)/ Number of polygons</b>	13,624/421



#### Vegetation: structure/floristics:

A woodland with an understorey that includes both heathy and herbaceous species. Dominated by Coast Manna Gum *Eucalyptus viminalis* subsp. *pyroriana*, Shining Peppermint *E. willisii* and Narrow-leaf Peppermint *E. radiata*, but Bangalay *E. botryoides* is found in this EVC on Raymond Island and elsewhere eastward through the Gippsland Lakes area. Yellow Box *E. melliodora* and But But *E. angophoroides/bridgesiana* are also sometimes present.

Tall shrubs or small trees of Black Wattle *Acacia mearnsii*, Coast Banksia *Banksia integrifolia* var. *integrifolia* and Saw Banksia *B. serrata* are often found over an understorey of smaller shrubs including Prickly Tea-tree *Leptospermum continentale*, Coast Tea-tree *L. laevigatum*, Coast Wattle *Acacia longifolia* var. *sophorae*, Common Heath *Epacris impressa*, Honey-pots *Acrotriche serrulata* and Spike Wattle *Acacia oxycedrus*. The climbers, Common Apple-berry *Billardiera scandens* var. *scandens* and Small-leaved Clematis *Clematis microphylla* are also frequently present.

The herb-rich ground cover which reflects the relatively fertile sandy soil, includes Stinking Pennywort *Hydrocotyle laxiflora*, Creeping Wood-sorrel *Oxalis corniculata* s.s., Kidney-weed *Dichondra repens*, Common Bottle-daisy *Lagenophora stipitata*, Ivy-leaf Violet *Viola hederacea* s.l, Hairy Pennywort *Hydrocotyle hirta* and Knobby Club-sedge *Isolepis nodosa*. Austral Bracken *Pteridium esculentum* is typically present with the tussock-forming grass *Poa labillardierei* and mats of the widespread palatable native Weeping Grass *Microlaena stipoides* var. *stipoides*. Spiny-headed Mat-rush *Lomandra longifolia* tussocks are also common. Blady Grass *Imperata cylindrica* is sometimes present but would probably be much more extensive in areas with a higher fire frequency. Spike Wattle *Acacia oxycedrus* and Black Wattle *Acacia mearnsii* are notably infrequent or absent from this EVC at Wilsons Promontory.

Common orchids found in this EVC include Small Gnat-orchid *Cyrtostylis reniformis*, Trim Greenhood *Pterostylis concinna*, Blunt Greenhood *P. curta* and Nodding Greenhood *P. nutans*.

#### Comments:

Gippsland Lakes Damp Sands Herb-rich Woodland has close floristic and geographic affinities with Coast Banksia Woodland as halophytic species such as Bower Spinach *Tetragonia implexicoma* and Seaberry Saltbush *Rhagodia candolleana* subsp. *candolleana* appear in the understorey near the coast. Where copses of old-growth Saw Banksia *Banksia serrata* occur, a dense ground cover of leaf litter can develop which may inhibit herb diversity due to low

light levels and chemical influences. This situation represents the most species depauperate form of this EVC and approaches closely to the floristic composition of old-growth Heathy Woodland. Weed invasion can also be a problem in some areas.

Near the coast where salt-laden winds occur *Gippsland Lakes* Damp Sands Herb-rich Woodland merges into Coast Banksia Woodland on the older, more fertile, darker sand and Coastal Dune Scrub Mosaic on the younger, more infertile loose, light coloured sand. Coast Banksia *Banksia integrifolia* var. *integrifolia* is the dominant shrub. The same suite of herbs is present as well as succulent salt-adapted species such as Bower Spinach *Tetragonia implexicoma* and Seaberry Saltbush *Rhagodia candolleana* subsp. *candolleana* as a result of coastal influences. This EVC also has links with *Coastal Barrier* Heathy Woodland through Tree Broom-heath *Monotoca elliptica*.

## Gippsland species list including species frequency and fidelity.

**Fidelity:** Rating of faithfulness of a species to an EVC or Floristic Community. Highest fidelity rating indicated by an “F” ie species only recorded in respective group.

**% Frequency:** Percentage occurrence of a species/taxa in an EVC or Floristic Community – **NB. Species highlighted in red are the most frequent and important.**  
 \*= weed ie: non-native.

Rarity categories from NRE’s Flora Information System (FIS).

### EVC 3-01: GIPPSLAND LAKES DAMP SANDS HERB-RICH WOODLAND

Lifeform	Scientific Name	Common Name	% Fr	F
Trees	<i>Eucalyptus viminalis</i> ssp. <i>pryoriana</i>	Coast Manna Gum	45	3
	<i>Eucalyptus botryoides</i>	Bangalay	18	F
	<i>Eucalyptus willisii</i>	Shining Peppermint	14	8
	<i>Eucalyptus tereticornis</i>	Forest Red Gum	9	2
Shrubs	<i>Melaleuca ericifolia</i>	Swamp Paperbark	43	4
	<i>Banksia serrata</i>	Saw Banksia	43	3
	<i>Banksia integrifolia</i>	Coast Banksia	41	28
	<i>Acrotriche serrulata</i>	Honey-pots	41	5
	<i>Acacia mearnsii</i>	Black Wattle	39	14
	<i>Monotoca elliptica</i>	Tree Broom-heath	36	20
	<i>Acacia longifolia</i> var. <i>longifolia</i>	Sallow Wattle	34	18
	<i>Pimelea humilis</i>	Common Rice-flower	32	3
	<i>Epacris impressa</i>	Common Heath	32	1
	<i>Acacia genistifolia</i>	Spreading Wattle	23	15
	<i>Monotoca scoparia</i>	Prickly Broom-heath	23	2
	<i>Kunzea ericoides</i>	Burgan	20	3
	<i>Leptospermum laevigatum</i>	Coast Tea-tree	20	2
	<i>Leptospermum continentale</i>	Prickly Tea-tree	20	0.7
	<i>Hibbertia virgata</i>	Twiggy Guinea-flower	16	7
	<i>Hibbertia acicularis</i>	Prickly Guinea Flower	16	2
	<i>Leucopogon parviflorus</i>	Coast Beard-heath	16	1
	<i>Banksia marginata</i>	Silver Banksia	16	1
	<i>Astroloma pinifolium</i>	Pine Heath	14	18
	<i>Brachyloma daphnoides</i>	Daphne Heath	14	6
	<i>Bursaria spinosa</i>	Sweet Bursaria	14	1
	<i>Bossiaea cinerea</i>	Showy Bossiaea	14	1
	<i>Leptospermum myrsinoides</i>	Heath Tea-tree	14	1
	<i>Muehlenbeckia adpressa</i>	Climbing Lignum	11	8
	<i>Acacia oxycedrus</i>	Spike Wattle	11	1
	<i>Leucopogon virgatus</i>	Common Beard-heath	11	1
r	<i>Thryptomene micrantha</i>	Ribbed Thryptomene	9	21
	<i>Myoporum insulare</i>	Common Boobialla	7	2
Herbs	<i>Lagenophora stipitata</i>	Common Bottle-daisy	82	3

Lifeform	Scientific Name	Common Name	% Fr	F
	<i>Dichondra repens</i>	Kidney-weed	82	3
	<i>Crassula sieberiana</i>	Australian Stonecrop	75	17
	<i>Hydrocotyle hirta</i>	Hairy Pennywort	75	6
	<i>Oxalis corniculata</i> s.l.	Yellow Wood-sorrel	73	5
	<i>Geranium potentilloides</i>	Cinquefoil Cranesbill	52	3
	<i>Gonocarpus teucrioides</i>	Germander Raspwort	50	195
	<i>Luzula campestris</i> spp.agg.	Field Woodrush	50	12
	<i>Ranunculus sessiliflorus</i>	Annual Buttercup	48	25
	<i>Cotula australis</i>	Common Cotula	48	8
	<i>Wahlenbergia gracilis</i>	Sprawling Bluebell	45	5
	<i>Centrolepis strigosa</i>	Hairy Centrolepis	43	14
	<i>Senecio quadridentatus</i>	Cotton Fireweed	43	13
	<i>Drosera peltata</i>	Tall Sundew	41	10
	<i>Poranthera microphylla</i>	Small Poranthera	41	3
	<i>Hydrocotyle sibthorpioides</i>	Hairy Pennywort	34	12
	<i>Euchiton gymnocephalus</i>	Creeping Cudweed	34	3
	<i>Stellaria pungens</i>	Prickly Starwort	32	17
	<i>Acaena novae-zelandiae</i>	Bidgee-widgee	32	2
	<i>Stellaria multiflora</i>	Rayless Starwort	25	33
	<i>Galium gaudichaudii</i>	Rough Bedstraw	25	8
	<i>Kennedia prostrata</i>	Running Postman	25	8
	<i>Veronica plebeia</i>	Trailing Speedwell	23	4
	<i>Opercularia varia</i>	Variable Stinkweed	23	2
	<i>Viola hederacea</i>	Ivy-leaf Violet	23	1
	<i>Hypericum gramineum</i>	Small St John's Wort	18	1
	<i>Desmodium gunnii</i>	Southern Tick-trefoil	16	7
	<i>Leptinella reptans</i>	Creeping Cotula	16	7
	<i>Solanum prinophyllum</i>	Forest Nightshade	16	7
	<i>Senecio minimus</i>	Shrubby Fireweed	16	3
	<i>Gonocarpus tetragynus</i>	Common Raspwort	16	0.6
	<i>Cardamine gunnii</i>	Common Bitter-cress	14	18
	<i>Wahlenbergia stricta</i>	Tall Bluebell	14	6
	<i>Wahlenbergia gracilentia</i>	Annual Bluebell	14	5
	<i>Apium prostratum</i> ssp. <i>prostratum</i>	Sea Celery	11	5
	<i>Dampiera stricta</i>	Blue Dampiera	11	1
	<i>Burchardia umbellata</i>	Milkmaids	9	1
Orchids	<i>Cyrtostylis reniformis</i>	Mosquito Orchid	48	56
	<i>Acianthus exsertus/pusillus</i>	Gnat Orchid/ Tiny Gnat Orchid	43	10
	<i>Pterostylis coccinea</i>	Trim Greenhood	39	113
	<i>Pterostylis nutans</i>	Nodding Greenhood	29	58
	<i>Caladenia latifolia</i>	Pink Fairies Caladenia	20	22
	<i>Pterostylis curta</i>	Blunt Greenhood	18	106
	<i>Glossodia major</i>	Wax-lip Orchid	16	8
	<i>Caladenia carnea</i> spp. agg.	Pink Fingers Caladenia	14	12
	<i>Pterostylis pedunculata</i>	Maroon-hood	11	17
Halophytes	<i>Tetragonia implexicoma</i>	Bower Spinach	36	16
	<i>Rhagodia candolleana</i> ssp. <i>candolleana</i>	Seaberry Saltbush	29	6
	<i>Selliera radicans</i>	Shiny Swamp-mat	25	5
	<i>Samolus repens</i>	Creeping Brookweed	20	5
	<i>Disphyma crassifolium</i> ssp. <i>clavellatum</i>	Rounded Noon-flower	18	7
	<i>Einadia nutans</i> ssp <i>nutans</i>	Nodding Saltbush	14	40
	<i>Carpobrotus rossii</i>	Karkalla	14	6
Climbers/Vines	<i>Glycine clandestina</i>	Twining Glycine	52	10
	<i>Comesperma volubile</i>	Love Creeper	32	2
	<i>Clematis microphylla</i>	Small-leaved Clematis	18	2

<b>Lifeform</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>% Fr</b>	<b>F</b>
	<i>Cassytha phaeolasia</i>	Rusty Dodder-laurel	14	32
Lilies	<i>Dianella brevicaulis/revoluta</i>	Black-anther Flax-lily	23	2
Ferns	<i>Pteridium esculentum</i>	Austral Bracken	84	2
Sedges	<i>Lepidosperma concavum</i>	Sand-hill Sword-sedge	68	19
	<i>Isolepis nodosa</i>	Knobby Club-sedge	66	5
	<i>Isolepis marginata</i>	Little Club-sedge	36	11
	<i>Baumea juncea</i>	Bare Twig-sedge	34	27
	<i>Schoenus brevifolius</i>	Zig-zag Bog-sedge	18	5
Other	<i>Lomandra longifolia</i>	Spiny-headed Mat-rush	89	3
	<i>Lomandra filiformis</i>	Wattle Mat-rush	11	0.5
Rushes	<i>Juncus pallidus</i>	Pale Rush	34	12
	<i>Juncus kraussii</i> ssp. <i>australiensis</i>	Sea Rush	14	4
Grasses	<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass	57	2
	<i>Poa</i> sp.	Tussock grass	50	1
	<i>Imperata cylindrica</i>	Blady Grass	43	19
	<i>Distichlis distichophylla</i>	Australian Salt-grass	20	5
	<i>Themeda triandra</i>	Kangaroo Grass	20	2
Weeds	* <i>Hypochoeris radicata</i>	Cat's Ear	86	2
	* <i>Cerastium glomeratum</i>	Common Mouse-ear Chickweed	57	13
	* <i>Sonchus oleraceus</i>	Sow-thistle	36	3
	* <i>Cirsium vulgare</i>	Spear Thistle	34	2
	* <i>Aira caryophyllea</i>	Silvery Hair-grass	32	4
	* <i>Sonchus asper</i>	Rough Sow-thistle	27	5
	* <i>Conyza bonariensis</i>	Tall Fleabane	27	4
	* <i>Anagallis arvensis</i>	Pimpernel	25	2
	* <i>Polycarpon tetraphyllum</i>	Four-leaved Allseed	23	33
	* <i>Stellaria media</i>	Chickweed	23	9
	* <i>Holcus lanatus</i>	Yorkshire Fog	20	1
	* <i>Taraxacum</i> Sect. <i>Ruderalia</i>	Garden Dandelion	18	11
	* <i>Centaurium tenuiflorum</i>	Branched Centaury	18	1
	* <i>Carpobrotus aequilaterus</i>	Angled Pigface	16	93
	* <i>Acetosella vulgaris</i>	Sheep Sorrel	14	4
	* <i>Poa annua</i>	Annual Meadow-grass	11	11