

Gippsland Vegetation Types: Ecological vegetation Classes (EVC's)

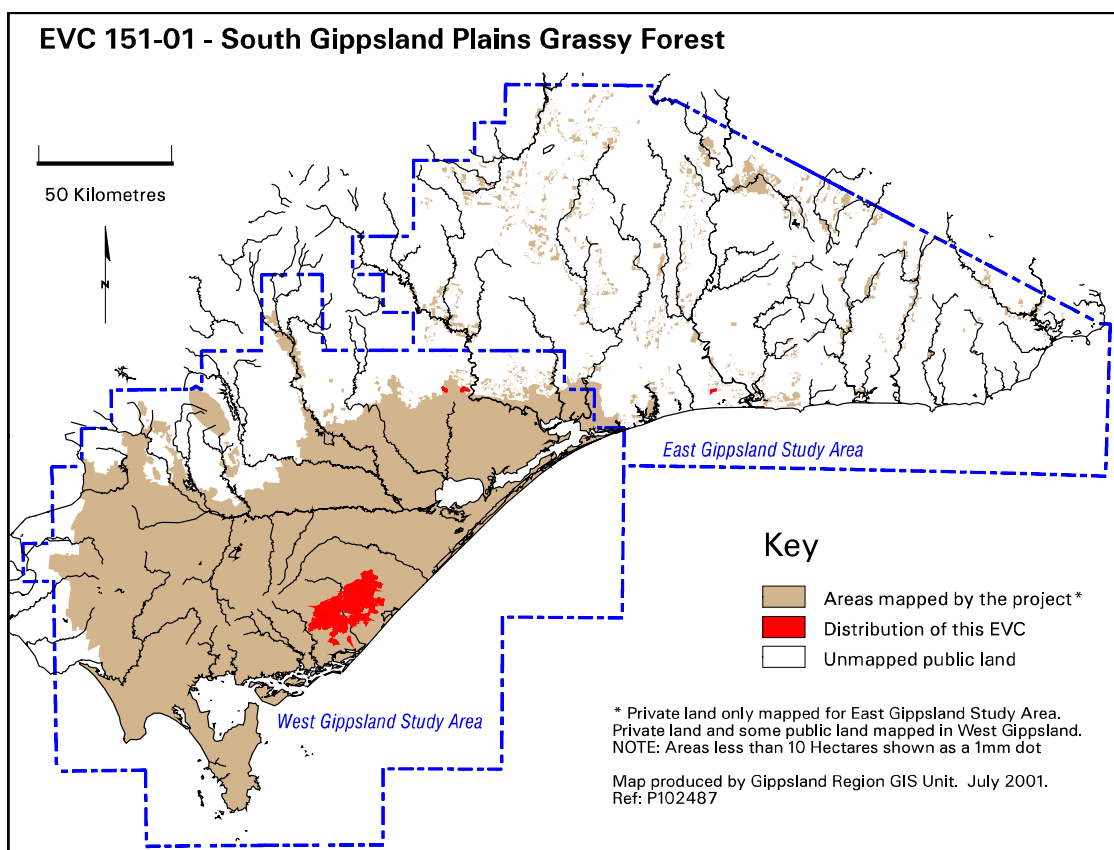
EVC description derived from Davies et.al (2001) Ecological Vegetation Class Mapping at 1:25 000 in Gippsland.

EVC 151 Plains Grassy Forest

Occurs on lowland plains and old river terraces in Gippsland where it grows on gravelly sandy clay loam of Tertiary origin. A tall eucalypt forest with a shrub understorey over a rich grassy and herbaceous ground layer.

Floristic Community 151-01 *South Gippsland Plains Grassy Forest*

| | |
|---|---|
| Elevation (metres above sea level) | 15-180 |
| Average rainfall p.a. (mm) | 600-850 |
| Topography | Plains and areas of low relief |
| Geology | Mainly Tertiary deposits |
| Soils | Gravelly sandy clay loam |
| Related/adjacent EVCs/FCs | Herb-rich Foothill Forest, Lowland Forest, <i>Gippsland Plains Grassy Woodland</i> , Box Ironbark Forest |
| Present land use | Timber harvesting, nature conservation, recreation, minor forest produce |
| Present distribution | North, east and west of Yarram in the Mullungdung and Won Wron State Forests, Gormandale-Flynns Creek area, west and south-west of Morwell, north-west of Bairnsdale near Glenaladale |
| Examples of sites/quadrats/lists | Won Wron State Forest (U23406), Mullungdung State Forest (C28105), Swifts Road north of Glenaladale |
| Total Area(ha)/ Number of polygons | 16,950/140 |



Vegetation: structure/floristics:

Dominated by Yellow Stringybark *Eucalyptus muelleriana* but may also include Messmate *E. obliqua*, Narrow-leaf Peppermint *E. radiata*, Apple-topped Box/But But *E. angophoroides/bridgesiana* with Swamp Gum *E. ovata* in the poorer drainage areas, White Stringybark *E. globoidea*, Gippsland Blue Gum *E. globulus* subsp. *pseudoglobulus* and even Silver-top *E. sieberi*.

Around Glenaladale the overstorey may also include Red Box *E. polyanthemos* subsp. *vestita*, Red Stringybark *E. macrorhyncha*, Gippsland Stringybark *E. mackintii* and Mountain Grey Gum *E. cypellocarpa*. Understorey trees and tall shrubs include Black Wattle *Acacia mearnsii*, Tree Violet *Hymenanthera dentata*, Shiny Cassinia *Cassinia longifolia* and Large Mock-olive *Notelaea venosa*.

The understorey shrub layer around Glenaladale includes Prickly Bush-pea *Pultenaea forsythiana*, Eastern Nightshade *Solanum pungetium*. The ground cover is characteristically herbaceous and grassy and may include the shrubs, Prickly Tea-tree *Leptospermum continentale*, Common Heath *Epacris impressa*, Common Rice-flower *Pimelea humilis*, Creeping Bossiaea *Bossiaea prostrata* and Swamp Paperbark *Melaleuca ericifolia*. Characteristic shrubs are Hedge Wattle *Acacia paradoxa* and Rough Guinea-flower *Hibbertia aspera* but these species are not particularly frequent. Common Tussock-grass *Poa labillardierei*, Grey Tussock-grass *P. sieberiana*, Kangaroo Grass *Themeda triandra*, Common Hedgehog Grass *Echinopogon ovatus*, Weeping Grass *Microlaena stipoides* var. *stipoides* and Reed bent-grass *Deyeuxia quadriseta*, are commonly present as are Wattle Mat-rush *Lomandra filiformis*, Spiny-headed Mat-rush *L. longifolia* and Variable Sword-sedge *Lepidosperma laterale*. The herb-rich ground cover includes Common Raspwort *Gonocarpus tetragynus*, Small Poranthera *Poranthera microphylla*, Ivy-leaf Violet *Viola hederacea*, Slender Bottle-daisy *Lagenophora gracilis*, Small St John's Wort *Hypericum gramineum*, Sprawling Bluebell *Wahlenbergia gracilis*, and Variable Stinkweed *Opercularia varia*. Other species present include Austral Bracken *Pteridium esculentum* and Thatch Saw-sedge *Gahnia radula*.

In the East Gippsland FMA, Plains Grassy Forest is represented by the floristic community called *Gippsland Plains Grassy Forest*. An example of *Gippsland Plains Grassy Forest*, which is a regional variant of *South Gippsland Plains Grassy Forest*, may be found off the Princes Highway at Waygara, just west of Newmerella. This particular area is floristically similar to the surrounding Lowland Forest, but has a greater diversity of grasses and herbs. *Gippsland Plains Grassy Forest* was not recognised when East Gippsland EVC mapping commenced in 1992 as such areas were then regarded as Lowland Forest. Further fieldwork in East Gippsland would doubtless increase the range of the one currently known location of *Gippsland Plains Grassy Forest*.

Overstorey trees in this Waygara example consist of Red Box *E. polyanthemos* subsp. *vestita*, Blue Box *E. baueriana*, Southern Mahogany *E. botryoides*, Apple Box *E. angophoroides*, Red Stringybark *E. macrorhyncha*, Mann Gum *E. viminalis* subsp. *viminalis*, Red Ironbark *E. tricarpa*, Mountain Grey Gum *E. cypellocarpa*, Messmate *E. obliqua*, White Stringybark *E. globoidea*, Yellow Stringybark *E. muelleriana* and Silver-top Ash *E. sieberi*. Throughout the stand the understorey varies from a tall or medium shrub layer with a grassy ground layer, to one where Austral Bracken *Pteridium esculentum* dominates. Grasses generally dominate the ground layer.

On sandy clay soils Red Stringybark *E. macrorhyncha*, White Stringybark *E. globoidea* and Red Box *E. polyanthemos* subsp. *vestita* dominate the overstorey whilst Silver Wattle *Acacia dealbata* forms a tall shrublayer above Burgan *Kunzea ericoides*. The ground layer includes Thatch Saw-sedge *Gahnia radula* with Veined Spear-grass *Austrostipa rudis* subsp. *nervosa*, Kangaroo Grass *Themeda triandra* and Grey Tussock-grass *Poa sieberiana* common components. Other common ground layer species include Creeping Bossiaea *Bossiaea prostrata*, Milkmaids *Burchardia umbellata*, Purple Coral-pea *Hardenbergia violacea*, Forest Wire-grass *Tetrarrhena juncea* and Germander Raspwort *Gonocarpus teucroides*. Silver Wattle *Acacia dealbata* occasionally forms a dense, tall shrublayer beneath predominantly White Stringybark *E. globoidea*, with the ground layer dominated by Thatch Saw-sedge *Gahnia radula*. Common shrubs include Sunshine Wattle *A. terminalis*, Narrow-leaf Geebung *Persoonia linearis*, Sweet Bursaria *Bursaria spinosa*, Tangled Guinea-flower *Hibbertia empetrifolia* and Common Heath *Epacris impressa*. Small Grass-tree *Xanthorrhoea minor* subsp. *lutea* is scattered but common throughout the EVC.

On sandy soils where the understorey is dominated by Austral Bracken *Pteridium esculentum*, tall shrubs of Sallow Wattle *A. longifolia* and Sunshine Wattle *A. terminalis* occur beneath a canopy of White Stringybark *E. globoidea*, Red Stringybark *E. macrorhyncha* and Silver-top Ash *E. sieberi*. Shrubs present in areas dominated by Austral Bracken *Pteridium esculentum* are Prickly Tea-tree *Leptospermum continentale* and Narrow-leaf Geebung *Persoonia linearis*. Where Austral Bracken is less dense, Grey Tussock-grass *Poa sieberiana*, Veined Spear-grass *Austrostipa rudis* subsp. *nervosa*, Reed Bent-grass *Deyeuxia quadriseta*, Nodding Blue-lily *Stypandra glauca* and

Variable Sword-sedge *Lepidosperma laterale* together with ground layer species including Purple Coral-pea *Hardenbergia violacea*, Small St John's Wort *Hypericum gramineum* and Handsome Flat-pea *Platylobium formosum* are common. Wetter sites contain Blady Grass *Imperata cylindrica* and Short-stem Sedge *Carex breviculmis*. Areas where Swamp Paperbark *Melaleuca ericifolia* occur, there is a ground layer of Thatch Saw-sedge *Gahnia radula*, Austral Bracken *Pteridium esculentum*, Grey Tussock-grass *Poa sieberiana* and Bearded Tylophora *Tylophora barbata*.

Open grassy areas on clay soils contain dense stands of Veined Spear-grass *Austrostipa rudis* subsp. *nervosa* interspersed with Kangaroo Grass *Themeda triandra*, Grey Tussock-grass *Poa sieberiana*, Silvertop Wallaby-grass *Joycea pallida* and Slender Wallaby-grass *Austrodanthonia penicillata*. Herbs present include Sheep's Burr *Acaena echinata*, Small St John's Wort *Hypericum gramineum*, Creeping Bossiaea *Bossiaea prostrata* and Purple Coral-pea *Hardenbergia violacea*. The overstorey contains Red Box *E. polyanthemos* subsp. *vestita* and White Stringybark *E. globoidea*, with the occasional Southern Mahogany *E. botryoides* and Red Stringybark *E. macrorhyncha* present.

Where Red Stringybark *E. macrorhyncha* and White Stringybark *E. globoidea* are dominant overstorey trees in areas on sandy soils, stands of tall Black She-oak *Allocasuarina littoralis* occur. The understorey includes scattered shrubs of Sweet Bursaria *Bursaria spinosa*, Sallow Wattle *Acacia longifolia* var. *longifolia* and Common Cassinia *Cassinia longifolia* above a ground layer of Paroo Lily *Dianella caerulea*, Holly Lomatia *Lomatia ilicifolia* and Spiny-headed Mat-rush *Lomandra longifolia*. The dominant grass is Veined Spear-grass *Austrostipa rudis* subsp. *nervosa* and other grasses present include Kangaroo Grass *Themeda triandra*, Wallaby-grasses and Grey Tussock-grass. Thatch Saw-sedge *Gahnia radula* is an occasional component.

Lightwood *A. implexa* is an occasional component of this EVC. Scented Paperbark *M. squarrosa* occurs in damper areas where Apple Box *E. angophoroides* is a component of the overstorey. Other commonly occurring shrubs of this EVC are Elderberry *Panax polyscias sambucifolius* subsp. 3, Blue Olive-berry *Elaeocarpus reticulatus*, Sweet Wattle *A. suaveolens*, Hop Bitter-pea *Daviesia latifolia*, Rough Bush-pea *Pultenaea scabra*, Prickly Currant-bush *Coprosma quadrifida* and Snow Daisy-bush *Olearia lirata*. Cherry Ballart *Exocarpos cupressiformis* is an occasional component.

Small shrubs present throughout the stand include Blunt Bush-pea *Pultenaea retusa*, Grey Guinea-flower *Hibbertia obtusifolia*, Forest Nightshade *Solanum pungetium*, Common Heath *Epacris impressa*, Handsome Flat-pea *Platylobium formosum* and Hairy Pink-bells *Tetratheca pilosa* subsp. *latifolia*. Small groundcover shrubs include Honey-pots *Acrotriche serrulata*, Cranberry Heath *Astroloma humifusum* and Holly Lomatia *Lomatia ilicifolia*. Lilies present include Paroo Lily *Dianella caerulea*, Black-anther Flax-lily *D. revoluta*, Tasman flax-lily *D. tasmanica* and Nodding Blue-lily *Stypandra glauca*. Small Grass-tree *Xanthorrhoea minor* subsp. *lutea*, Thatch Saw-sedge *Gahnia radula* and Spiny-headed Mat-rush *Lomandra longifolia* are common.

The ground layer is rich in herbs including Showy Violet *Viola betonicifolia* subsp. *betonicifolia*, Kidney-weed *Dichondra repens*, Germander Raspwort *Gonocarpus teucroides*, Common Rice-flower *Pimelea humilis*, Golden Weather-glass *Hypoxis hygrometrica*, Milkmaids *Burchardia umbellata*, White Marianth *Rhytidosporum procumbens* and Southern Tick-trefoil *Desmodium gunnii*. Other small herbs present include Creeping Bossiaea *Bossiaea prostrata*, Stinking Pennywort *Hydrocotyle laxiflora* and Grassland Wood-sorrel *Oxalis perennans*.

The species-rich ground layer is augmented by a diversity of grasses that commonly occur throughout this EVC and includes Kangaroo Grass *Themeda triandra*, Grey Tussock-grass *Poa sieberiana*, Common Tussock-grass *P. labillardierei*, Silvertop Wallaby-grass *Joycea pallida*, Slender Wallaby-grass *Austrodanthonia penicillata*, Long-leaf Wallaby-grass *Notodanthonia longifolia*, Veined Spear-grass *Austrostipa rudis* subsp. *nervosa*, Common Blown-grass *Agrostis avenacea* var. *avenacea*, Blady Grass *Imperata cylindrica*, Reed Bent-grass *Deyeuxia quadriseta*, Hedgehog Grass *Echinopogon ovatus*, Weeping Grass *Microlaena stipoides* var. *stipoides* and Forest Wire-grass *Tetrarrhena juncea*.

Climbers and scramblers include Bearded Tylophora *Tylophora barbata*, Love Creeper *Comesperma volubile*, Twining Glycine *Glycine clandestina*, Common Apple-berry *Billardiera scandens*, Forest Clematis *Clematis glycinoides* var. *glycinoides* and Rusty Dodder-laurel *Cassytha phaeolasia*. The mat-forming herb *Hypsela hypsela tridens* occurs in a soak.

Ferns present include Common Ground-fern *Calochlaena dubia*, Rough Tree-fern *Cyathea australis*, Screw Fern *Lindsaea linearis*, Gristle Fern *Blechnum cartilagineum* and Common Maidenhair *Adiantum aethiopicum*.

Orchids present include Greenhood *Pterostylis* spp., Parson's Bands *Eriochilus cucullatus* and Hyacinth Orchid *Dipodium punctatum*.

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 151-01: SOUTH GIPPSLAND PLAINS GRASSY FOREST

| Lifeform | Scientific Name | Common Name | % Fr | F | |
|-------------------------------|---|----------------------------------|--------------------|-----|---|
| Trees | <i>Eucalyptus muelleriana</i> | Yellow Stringybark | 54 | 30 | |
| | <i>Eucalyptus obliqua</i> | Messmate | 39 | 4 | |
| | <i>Eucalyptus radiata</i> s.l. | Narrow-leaf Peppermint | 39 | 3 | |
| | <i>Eucalyptus angophoroides/bridgesiana</i> | Apple-topped Box/But But | 28 | 6 | |
| | <i>Eucalyptus ovata</i> | Swamp Gum | 20 | 5 | |
| | <i>Eucalyptus globoidea</i> | White Stringybark | 15 | 8 | |
| | <i>Eucalyptus globulus</i> ssp. <i>pseudoglobulus</i> | Gippsland Blue Gum | 13 | 4 | |
| | <i>Eucalyptus sieberi</i> | Silvertop Ash | 11 | 12 | |
| | Shrubs | <i>Pimelea humilis</i> | Common Rice-flower | 59 | 7 |
| | | <i>Leptospermum continentale</i> | Prickly Tea-tree | 46 | 2 |
| <i>Epacris impressa</i> | | Common Heath | 41 | 1 | |
| <i>Bossiaea prostrata</i> | | Creeping Bossiaea | 37 | 5 | |
| <i>Melaleuca ericifolia</i> | | Swamp Paperbark | 30 | 3 | |
| <i>Olearia lirata</i> | | Snow Daisy-bush | 30 | 3 | |
| <i>Cassinia aculeata</i> | | Common Cassinia | 28 | 2 | |
| <i>Astroloma humifusum</i> | | Cranberry Heath | 26 | 5 | |
| <i>Acrotriche serrulata</i> | | Honey-pots | 24 | 3 | |
| <i>Ozothamnus ferrugineus</i> | | Tree Everlasting | 24 | 2 | |
| <i>Acacia stricta</i> | | Hop Wattle | 22 | 17 | |
| <i>Acacia mucronata</i> | | Narrow-leaf Wattle | 22 | 6 | |
| <i>Cassinia longifolia</i> | | Shiny Cassinia | 22 | 5 | |
| <i>Acacia paradoxa</i> | | Hedge Wattle | 17 | 51 | |
| <i>Hibbertia aspera</i> | | Guinea-flower | 17 | 41 | |
| <i>Olearia phlogopappa</i> | | Dusty Daisy-bush | 17 | 4 | |
| <i>Kunzea ericoides</i> | | Burgan | 17 | 2 | |
| Herbs | | <i>Poranthera microphylla</i> | Small Poranthera | 61 | 5 |
| | | <i>Viola hederacea</i> | Ivy-leaf Violet | 61 | 3 |
| | | <i>Gonocarpus tetragynus</i> | Common Raspwort | 61 | 2 |
| | <i>Lagenophora gracilis</i> | Slender Bottle Daisy | 59 | 20 | |
| | <i>Oxalis corniculata</i> s.l. | Yellow Wood-sorrel | 56 | 4 | |
| | <i>Wahlenbergia gracilis</i> | Sprawling Bluebell | 48 | 5 | |
| | <i>Hypericum gramineum</i> | Small St John's Wort | 54 | 4 | |
| | <i>Opercularia varia</i> | Variable Stinkweed | 37 | 4 | |
| | <i>Euchiton gymnocephalus</i> | Creeping Cudweed | 28 | 3 | |
| | <i>Hydrocotyle hirta</i> | Hairy Pennywort | 28 | 2 | |
| | <i>Lagenophora stipitata</i> | Common Bottle-daisy | 28 | 1 | |
| | <i>Drosera peltata</i> ssp. <i>auriculata</i> | Tall Sundew | 20 | 2 | |
| | <i>Hydrocotyle laxiflora</i> | Stinking Pennywort | 17 | 2 | |
| | <i>Senecio hispidulus</i> | Rough Fireweed | 15 | 4 | |
| | <i>Veronica calycina</i> | Hairy Speedwell | 15 | 2 | |
| | <i>Acaena novae-zelandiae</i> | Bidgee-widgee | 13 | 0.6 | |

| Lifeform | Scientific Name | Common Name | % Fr | F |
|----------------------------|--|------------------------------|------------------------|-----------|
| Climbers/Vines | <i>Billardiera scandens</i> var. <i>scandens</i> | Common Apple-berry | 39 | 5 |
| | <i>Glycine clandestina</i> | Twining Glycine | 24 | 4 |
| | <i>Clematis aristata</i> | Mountain Clematis | 24 | 1 |
| Ferns | <i>Pteridium esculentum</i> | Austral Bracken | 74 | 2 |
| Sedges | <i>Gahnia radula</i> | Thatch Saw-sedge | 76 | 3 |
| | <i>Lepidosperma laterale</i> | Variable Sword-sedge | 26 | 3 |
| Grasses | <i>Poa</i> sp. | Tussock Grass | 80 | 2 |
| | <i>Microlaena stipoides</i> var. <i>stipoides</i> | Weeping Grass | 87 | 3 |
| | <i>Deyeuxia quadriseta</i> | Reed Bent-grass | 35 | 6 |
| | <i>Dichelachne micrantha</i> | Short-hair Plume-grass | 30 | 9 |
| | <i>Austrodanthonia pilosa</i> | Velvet Wallaby-grass | 24 | 11 |
| | <i>Austrostipa rudis</i> | Spear-grass | 24 | 6 |
| | <i>Tetrarrhena juncea</i> | Forest Wire-grass | 24 | 2 |
| | <i>Austrodanthonia racemosa</i> var. <i>racemosa</i> | Stiped Wallaby-grass | 20 | 3 |
| | <i>Themeda triandra</i> | Kangaroo Grass | 11 | 1 |
| | Other | <i>Lomandra filiformis</i> | Wattle Mat-rush | 80 |
| <i>Lomandra longifolia</i> | | Spiny-headed Mat-rush | 63 | 2 |
| Grass-trees | <i>Xanthorrhoea minor</i> ssp. <i>lutea</i> | Small Grass-tree | 37 | 3 |
| Lilies | <i>Tricoryne elatior</i> | Yellow Rush-lily | 28 | 4 |
| Weeds | * <i>Hypochoeris radicata</i> | Cat's Ear | 63 | 1 |
| | * <i>Anthoxanthum odoratum</i> | Sweet Vernal-grass | 61 | 2 |
| | * <i>Centaureum tenuiflorum</i> | Branched Centaury | 46 | 4 |
| | * <i>Aira caryophyllea</i> | Silvery Hair-grass | 28 | 3 |
| | * <i>Senecio jacobaea</i> | Ragwort | 17 | 2 |