

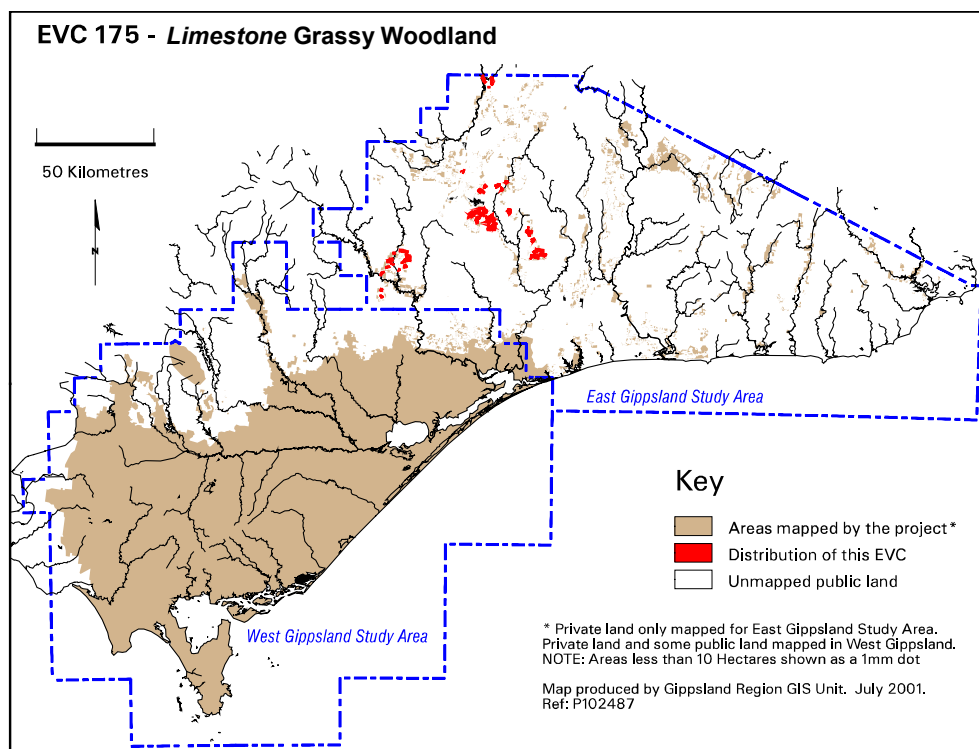
EVC 175 Grassy Woodland

A variable open eucalypt woodland over a diverse ground layer of grasses and herbs. Occurs on sites with moderate fertility on undulating hills on a range of geology. Previously widespread and locally extensive but now largely cleared for agriculture. Remnants are generally heavily grazed.

Floristic Community 175-03 Limestone Grassy Woodland

The description below is from Woodgate (1994).

Elevation (metres above sea level)	300-400
Average rainfall p.a. (mm)	800-900
Topography	Undulating hills
Geology	Devonian limestones
Soils	Fertile terra rossa soils
Related/adjacent EVCs/FCs	<i>Rainshadow</i> Grassy Woodland
Present land use	Agriculture, recreation, nature conservation
Present distribution	Restricted to the limestones of the Buchan and Murrindal River valleys. Remaining intact vegetation is now restricted to small areas on cave reserves around Buchan and Murrindal. The largest single occurrence is at the southern end of Gillingal Station which is private land
Examples of sites/quadrats/lists	The Pyramids, Murrindal, and Wyatts Reserve
Total Area (ha)/ Number of polygons	211/7
Group analysis no.	Not available for East Gippsland Study Area



Vegetation: structure and floristics:

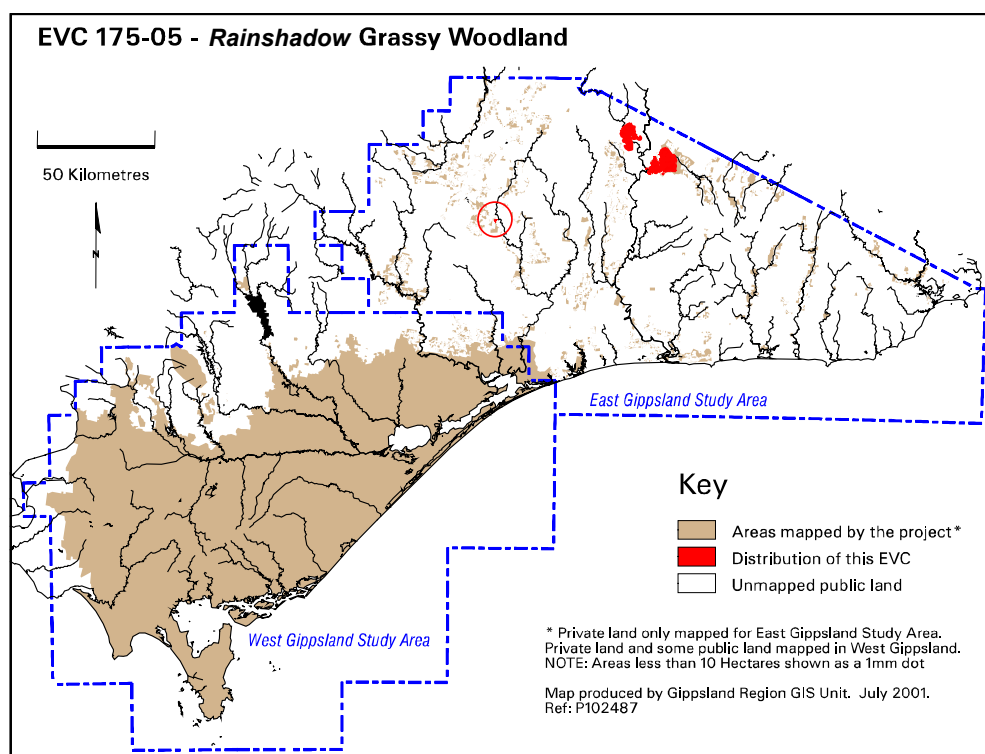
Limestone Grassy Woodland occurs on fertile soils that have largely been cleared for agriculture. The structure of the vegetation varies from an open woodland to open forest. Dominant trees on ridges are Yellow Box *Eucalyptus melliodora* and Manna Gum *E. viminalis*. Candlebark *E. rubida* may be co-dominant in the valleys. The understorey is characterised by a tall shrublayer of low diversity that typically includes such species as Blackwood *Acacia melanoxylon*, Lightwood *A. implexa*, Limestone Blue Wattle *A. caerulescens*, Tree Violet *Hymenanthera dentata*, Sweet Bursaria *Bursaria spinosa* and Drooping Sheoak *Allocasuarina verticillata*.

The groundlayer is dominated by grasses with Kangaroo Grass *Themeda triandra*, the most common. Other grasses present include Red-leg Grass *Bothriochloa macra*, Common Tussock-grass *Poa labillardierei*, Soft Tussock-grass *P. morrisii* and Blady Grass *Imperata cylindrica*. A variety of herbs are present and commonly include Cinquefoil Cranesbill *Geranium potentilloides*, Bidgee-widgee *Acaena novae-zelandiae*, Sheep's Burr *Acaena echinata*, Hairy Solenogyne *Solenogyne gunnii*, Small-leaf Bramble *Rubus parvifolius*, Kidney Weed *Dichondra repens*, Grassland Wood-sorrel *Oxalis perennans* and Maori Bedstraw *Galium propinquum*.

Floristic Community 175-05 *Rainshadow Grassy Woodland*

Description below is from Gippsland RFA (Commonwealth of Australia and NRE, 1999) and additional information from East Gippsland study area mapping.

Elevation (metres above sea level)	200-700
Average rainfall p.a. (mm)	<700
Topography	Rolling hills and ridges
Geology	Ordovician granodiorites
Soils	Well-drained, sandy-gravelly loam soils
Related/adjacent EVCs/FCs	Limestone Grassy Woodland
Present land use	Agriculture, grazing
Present distribution	Tambo River valley in the vicinity of Swifts Creek, Ensay, Cassilis and Tubbut
Examples of sites/quadrats/lists	Sheep Station Creek and Boonabirrah Track intersection at Doctors Flat, at intersection of the Great Alpine Road and Swifts Creek – Omeo Road, 2.5km north of Horse Creek on the Deddick River Road
Total Area (ha)/ Number of polygons	8,475/28
Group analysis no.	Not available for East Gippsland Study Area



Vegetation: structure/floristics:

The dominant overstorey tree is White Box *Eucalyptus albens* with occasional Red Stringybark *E. macrorhynca* and Kurrajong *Brachychiton populneus*. Around Swifts Creek and Omeo areas, the

overstorey is generally dominated by Snow Gum *E. pauciflora* with sub- or co-dominants variously represented by a combination of Red Stringybark *E. macrorhynca*, White Box *E. albens*, Black Sallee *E. stellulata*, or Candlebark *E. rubida*.

The sparse understorey consists of Shiny Cassinia *Cassinia longifolia*, Red-stem Wattle *Acacia rubida*, Tree Violet *Hymenanthera dentata*, and Austral Indigo *Indigofera australis*. Understorey trees present in the Swifts Creek and Omeo areas include Black Wattle *Acacia mearnsii*, Blackwood *A. melanoxylon*, Kurrajong *Brachychiton populneus* ssp. *populneus* and occasionally Pale-fruit Ballart *Exocarpos strictus*. Understorey shrubs in that area are generally well-represented although sparse, and include Burgan *Kunzea ericoides*, Shiny Cassinia *Cassinia longifolia*, Grey Guinea-flower *Hibbertia obtusifolia*, Ploughshare Wattle *A. gunnii*, Daphne Heath *Brachyloma daphnoides*, Leafy Bossiaea *Bossiaea foliosa*, Sweet Bursaria *Bursaria spinosa*, Peach Heath *Lissanthe strigosa* ssp. *subulata*, and Dagger Wattle *A. siculiformis*.

Grass species which characterise *Rainshadow* Grassy Woodland include Leafy Wallaby-grass *Austrodanthonia fulva*, Kangaroo Grass *Themeda triandra*, Dense Spear-grass *Austrostipa densiflora*, Rough Spear-grass *A. scabra*, Common Wheat-grass *Elymus scaber* var. *scaber* and Grey Tussock-grass *Poa sieberiana* var. *sieberiana*. The most dominant forbs are Slender Tick-trefoil *Desmodium varians*, *Einadia* spp., Tall Bluebell *Wahlenbergia stricta*, Pale Vanilla-lily *Arthropodium milleflorum*, Cotton Fireweed *Senecio quadridentatus*, and Rough Bedstraw *Galium gaudichaudii* with the ferns Necklace Fern *Asplenium flabellifolium* and Green Rock Fern *Cheilanthes austrotenuifolia* also being common.

Comments:

At Tubbut, the overstorey is dominated by White Box and Yellow Box *E. melliodora*. The understorey is not as diverse as that occurring around Swifts Creek – Omeo, and is generally dominated by Burgan *Kunzea ericoides* with scattered herbs, forbs and grasses present in the ground layer. Austral Bear's-ears *Cymbonotus preissianus*, Common Wheat-grass *Elymus scaber* var. *scaber*, Bristly Wallaby-grass *Austrodanthonia setacea* var. *setacea*, Grey Tussock-grass *Poa sieberiana*, Nodding Saltbush *Einadia nutans* ssp. *nutans* are the most common ground layer species. Also present in the shrub layer is Peach Heath *Lissanthe strigosa* ssp. *subulata*.

Floristic Community 175-12 *Dargo* Grassy Woodland

Description below is from Gippsland RFA (Commonwealth of Australia and NRE, 1999) and additional information from East Gippsland study area mapping.

Elevation (metres above sea level)	200-400
Average rainfall p.a. (mm)	700-800
Topography	Lower slopes on rolling hills
Geology	Granodiorite
Soils	Well-drained, sandy-gravelly loams
Related/adjacent EVCs/FCs	<i>Rainshadow</i> Grassy Woodland
Present land use	Agriculture, grazing
Present distribution	Isolated occurrences along Wonnangatta River and in the Dargo Valley
Examples of sites/quadrats/lists	Wonnangatta Road and Billy Goat Bluff Track intersection, above Quag Munjie Creek, Dalmore Road
Total Area (ha)/ Number of polygons	615/24
Group analysis no.	Not available for East Gippsland Study Area

Vegetation: structure/floristics:

Structurally, this floristic community is an open woodland with scattered shrubs and small trees of Blackwood *Acacia melanoxylon*, Clustered Everlasting *Chrysocephalum semipapposum* and Burgan *Kunzea ericoides* and a dense field layer of grasses and forbs.

The overstorey is dominated by Yellow Box *Eucalyptus melliodora*, But But *E. bridgesiana*, Candlebark *E. rubida*, and occasionally Snow Gum *E. pauciflora*. Around Hawkhurst on the Wonnangatta Road, Yellow Box *E. melliodora* dominates the vegetation with Red Stringybark *E.*

macrorhyncha and Red Box *E. polyanthemos*. Small understorey trees present around the Wonnangatta Road area are Blackwood *Acacia melanoxylon*, Large-leaf Hickory-wattle *A. falciformis*, and Cherry Ballart *Exocarpos cupressiformis*. Understorey shrubs include Shiny Cassinia *Cassinia longifolia*, Tree Violet *Hymenanthera dentata*, Hedge Wattle *A. paradoxa*, Austral Indigo *Indigofera australis* Narrow-leaf Pomaderris *Pomaderris angustifolia*, Sticky Hop-bush *Dodonea viscosa* and Bitter Cryptandra *Cryptandra amara*.

A dense ground layer includes Kangaroo Grass *Themeda triandra*, Common Wheat-grass *Elymus scaber* var. *scaber*, Rough Spear-grass *Austrostipa scabra*, Grey Tussock-grass *Poa sieberiana*, Weeping Grass *Microlaena stipoides* var. *stipoides*, and Bristly Wallaby-grass *Austrodanthonia setacea* var. *setacea*. Also present are Clover Glycine *Glycine latrobeana*, Sweet Bursaria *Bursaria spinosa*, Yellow Rush-lily *Tricoryne elatior* and St. John's Wort *Hypericum* spp. Around Hawkhurst Austral Bear's-ears *Cymbonotus preissianus*, Scrub Nettle *Urtica incisa*, Plantain *Plantago* spp., Nodding Saltbush *Einadia nutans* ssp. *nutans*, Kidney-weed *Dichondra repens* and Grassland Wood-sorrel *Oxalis perennans* are present. Green Rock-fern *Cheilanthes austrotenuifolia* is the only fern, and Small-leaved Clematis *Clematis microphylla* var. *microphylla* is the only climber recorded for this EVC at Hawkhurst.