

MU 4 SHELTERED GULLY BROWN BARREL FERNY FOREST

□ CORRESPONDING CLASSIFICATIONS

Regional: [WSF73 Cool Montane Wet Forest](#)

State: [Southern Tableland Wet Sclerophyll Forests](#)

Number of Sites: 3

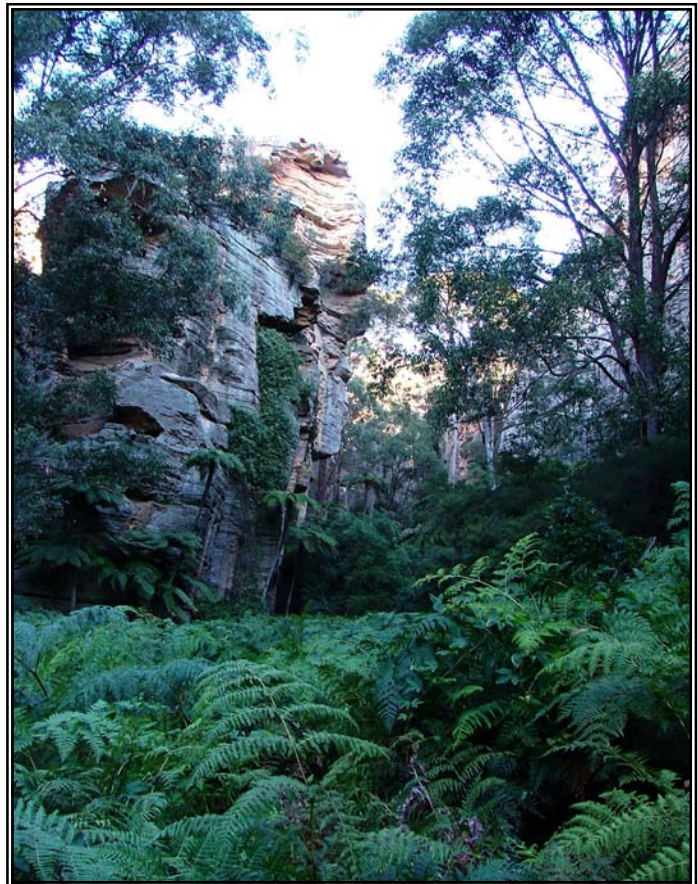
Average number of identified native species per plot: 27.7

□ DESCRIPTION

A tall to very tall forest, often with an open to sparse midstratum. The main canopy is usually dominated by brown barrel (*E. fastigata*) although there may also be monkey gum (*E. cypellocarpa*) and peppermints (*E. dives*, *E. radiata* and *E. piperita*). Midstratum species that may occur in the sites include the broad-leaved hickory (*Acacia falciformis*) and *Leptospermum polygalifolium*, and in some cases various 'rainforest' (mesophyll) species such as *Rapanea* and *Polyosma*. The groundcover stratum is likewise variable, but in most cases is dense and dominated by taller ground-ferns such as soft bracken fern (*Calochlaena dubia*) and gristle ferns (*Blechnum* species). Herbs are not common on the floor of the forest, probably due to shading by the denser strata above it.

The soil is usually a deep, humic loam with higher moisture levels. The unit typically occurs on Narrabeen Sandstone or talus deposits derived from this unit, although the occurrences near Mount Walker are on metamorphosed sediments. The altitude range goes from 525 metres to 1110 metres above sea level, with average annual precipitation between 740 millimetres and 970 millimetres.

The unit aligns to the Cool Montane Wet Forest of Tindall *et al.* (2004) and is part of the Southern Tableland Wet Sclerophyll Forests of Keith (2004). It shares the closest association with sites describing the Montane Gully Brown Barrel Community within the Warrgamba Special Area (NPWS 2003). There are relatively large areas represented in the reserve system and past clearing is considered to be low.



□ STRUCTURAL SUMMARY

Stratum	Count	AvLowHt	AvHt	maxHt	AvCover	SDcover	minCover	maxCover
T	2	11	26	40	40	14.14	30	50
M1	1	1	20	20	50		50	50
L1	2		1.25	1.5	80	0	80	80

Note that not all sites in the map unit have structural data available.

□ FLORISTIC SUMMARY

Trees

Eucalyptus cypellocarpa, *E. fastigata*, *E. viminalis*

Low Trees and Shrubs

Acacia falciformis, *Cyathea australis*, *Leptospermum polygalifolium*, *Polyosma cunninghamii*, *Rapanea variabilis*

Ground Covers

Asplenium flabellifolium, *Blechnum cartilagineum*, *Blechnum nudum*, *Calochlaena dubia*, *Desmodium varians*, *Doodia aspera*, *Geranium* spp. (mainly *G. solanderi*), *Polystichum proliferum*, *Pteridium esculentum*, *Stellaria pungens*, *Viola sieberiana*

Vines & Climbers

Clematis glycinoides, *Geitonoplesium cymosum*

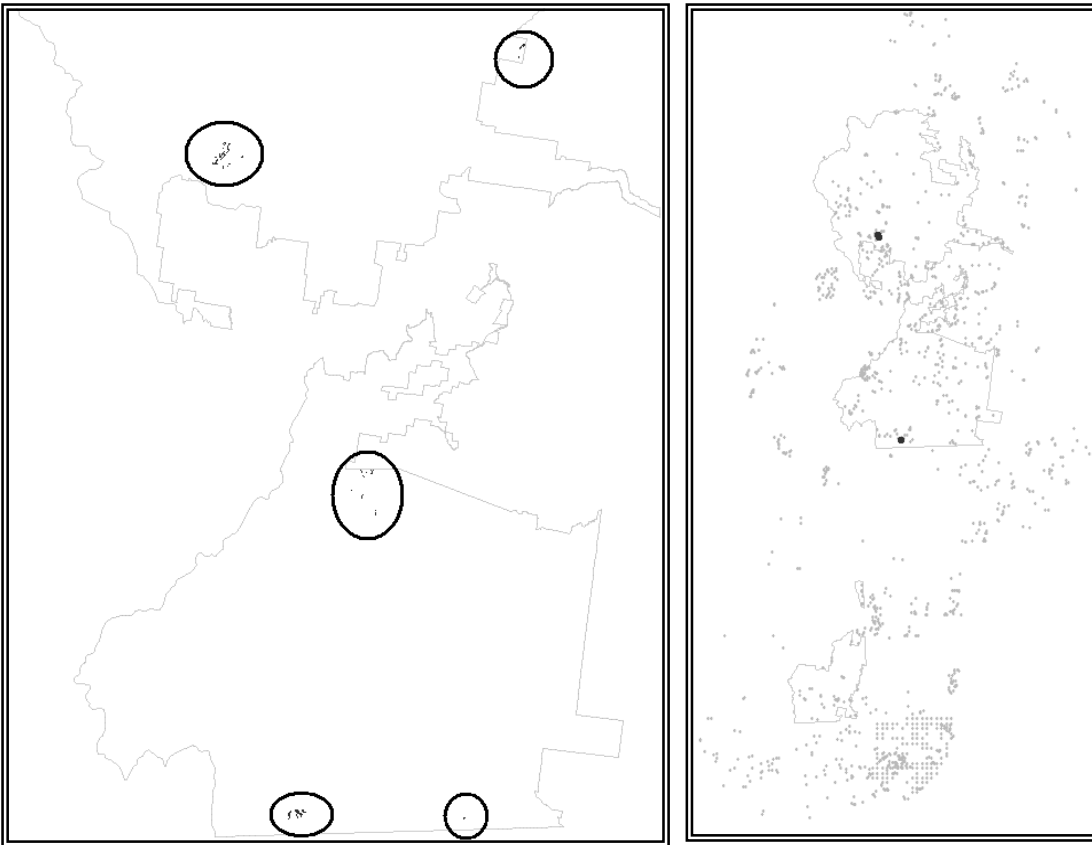
□ KEY IDENTIFYING FEATURES

Easily recognisable features to assist in identifying this map unit are:

- Canopy dominated by brown barrel (*E. fastigata*) with sparse to moderate midstratum the composition of which is largely site dependent and may include mesophyll species such as *Rapanea* or *Polyosma*, or *Leptospermum*).
- Dense groundcover of softer ferns such as *Calochlaena* and *Hypolepis*, often with *Blechnum* and *Doodia*.

□ EXAMPLE LOCATIONS

Mount Airly in deeper sandstone grottoes; Mount Walker; Wolgan River gorge, near 'Spanish Steps'.



□ CONDITION ASSESSMENT

Disturbance Class	Area (ha)	Proportion Extant (%)
A Low	47.3	66.4
B Medium	23.85	33.51
C High		
Total	71.1	100

□ THREATENED PLANT SPECIES

Definite: *Derwentia blakelyi*

Possible: *Eucalyptus cannonii*, *Prostanthera stricta*, *Euphrasia bowdeniae*, *Lastreopsis hispida*

□ **DIAGNOSTIC SPECIES**

Species Name	Group Score	Group Freq (%)	Non Group Score	Non Group Freq (%)	Fidelity Class
<i>Blechnum cartilagineum</i>	2	66.68	2	5.03	positive
<i>Blechnum nudum</i>	3	100.01	3	3.28	positive
<i>Calochlaena dubia</i>	5	66.68	3	2.72	positive
<i>Clematis glycinoides</i>	2	100.01	2	30.55	positive
<i>Cyathea australis</i>	3	66.68	2	3.43	positive
<i>Doodia aspera</i>	3	66.68	2	4.31	positive
<i>Eucalyptus fastigata</i>	4	100.01	4	7.1	positive
<i>Geitonoplesium cymosum</i>	2	66.68	2	13.33	positive
<i>Geranium solanderi</i>	2	66.68	2	13.89	positive
<i>Leptospermum polygalifolium</i>	5	66.68	2	7.98	positive
<i>Polystichum proliferum</i>	2	100.01	2	2.64	positive
<i>Pteridium esculentum</i>	2	100.01	2	32.07	positive
<i>Rapanea variabilis</i>	3	66.68	1	0.8	positive
<i>Stellaria pungens</i>	2	66.68	2	23.06	positive
<i>Viola sieberiana</i>	3	66.68	2	2.96	positive
<i>Lomandra filiformis</i>	0	0.01	2	36.29	negative
<i>Lomandra longifolia</i>	4	33.34	2	39.56	negative
<i>Poa sieberiana</i>	0	0.01	2	40.04	negative