

MU 42 CAPERTEE HILLS WHITE BOX – TUMBLEDOWN REDGUM – IRONBARK – *CALLITRIS* SHRUBBY WOODLAND

❑ CORRESPONDING CLASSIFICATIONS

Regional: No matching type in Tindall *et al.* (2004)

State: Western Slopes Dry Sclerophyll Forests

Number of Sites: 8

Average number of identified native species per plot: 42.3

❑ DESCRIPTION

The deep gorges of the western hills of the Capertee Valley reveal the metamorphic rocks that lie underneath the Permian strata. A low open woodland delineates the transition between these two substrates. The shallow though enriched soils support a mix of pure stands of white box (*E. albens*) on gorge slopes, with ironbark (*E. crebra*) and grey gum (*E. punctata*) on the narrow upper slopes and ridges, and tumbledown red gum (*E. dealbata*) on rocky steep slopes. Black cypress pine (*Callitris endlecheri*) is found throughout. The understorey may be shrubby, where *Bursaria*, *Olearia* and *Cassinia* dominate. The groundcover is often sparsely grassy, but usually has a quite diverse range of forbs. Most common grasses are speargrass (*Austrostipa*), wallaby grass (*Notodanthonia*) and barbwire grass (*Cymbopogon*), and *Dichondra* species A is one of the most frequent elements of the groundcover.

The favoured substrates are the Silurian and Devonian metasediments, particularly those rich in quartz, although rhyolite and tuffs are also known to support the unit. Where the soils are richer in lime and clay the canopy tends to support more white box, and a grassier understorey. The unit is found between 330 and 700 metres above sea level, with the bulk of the unit at around 500 metres. Rainfall is about 600 millimetres to 700 millimetres *per annum*.



The map unit does not show similarity to any unit identified in Tindall *et al.* (2004), being further north and more influenced by the western slopes than any unit found in that study. It falls between the Western Slopes Grassy and Dry Sclerophyll Forests of Keith (2004). The map unit is worthy of additional field survey to clarify community composition. Examples of this community are found in a number of gorges within the Gardens of Stone National Park. Distribution of the community is likely to be more extensive in catchments to the north and west of the Hawkesbury – Nepean.

❑ STRUCTURAL SUMMARY

Stratum	Count	AvLowHt	AvHt	maxHt	AvCover	SDcover	minCover	maxCover
T	8	8.5	21.88	30	22.1	11.17	10	40
M1	8	1.0	5.81	12	26.9	13.08	5	45
M2	2	0.4	1.90	2	21.5	19.09	8	35
L1	8		0.34	0.7	17.0	9.77	7	35

❑ FLORISTIC SUMMARY

Trees

Eucalyptus albens, *E. crebra*, *E. dealbata*, *E. punctata*, *E. rossii*

Low Trees and shrubs

Acacia decora, *Brachychiton populneus*, *Callitris endlicheri*, *Leucopogon muticus*, *Olearia elliptica*

Ground Covers

Aristida vagans, *Arthropodium milleflorum*, *Austrostipa scabra*, *Calotis lappulacea*, *Cheilanthes austrotenuifolia*, *Cymbopogon refractus*, *Desmodium varians*, *Dianella revoluta*, *Dichelachne micrantha*, *Dichondra* species A, *Digitaria diffusa*, *Goodenia hederacea*, *Joycea pallida*, *Lomandra confertifolia*, *Lomandra filiformis*, *Notodanthonia longifolia*, *Opercularia diphylla*, *Oxalis perennans*, *Pomax umbellata*

Vines & Climbers

Glycine clandestina

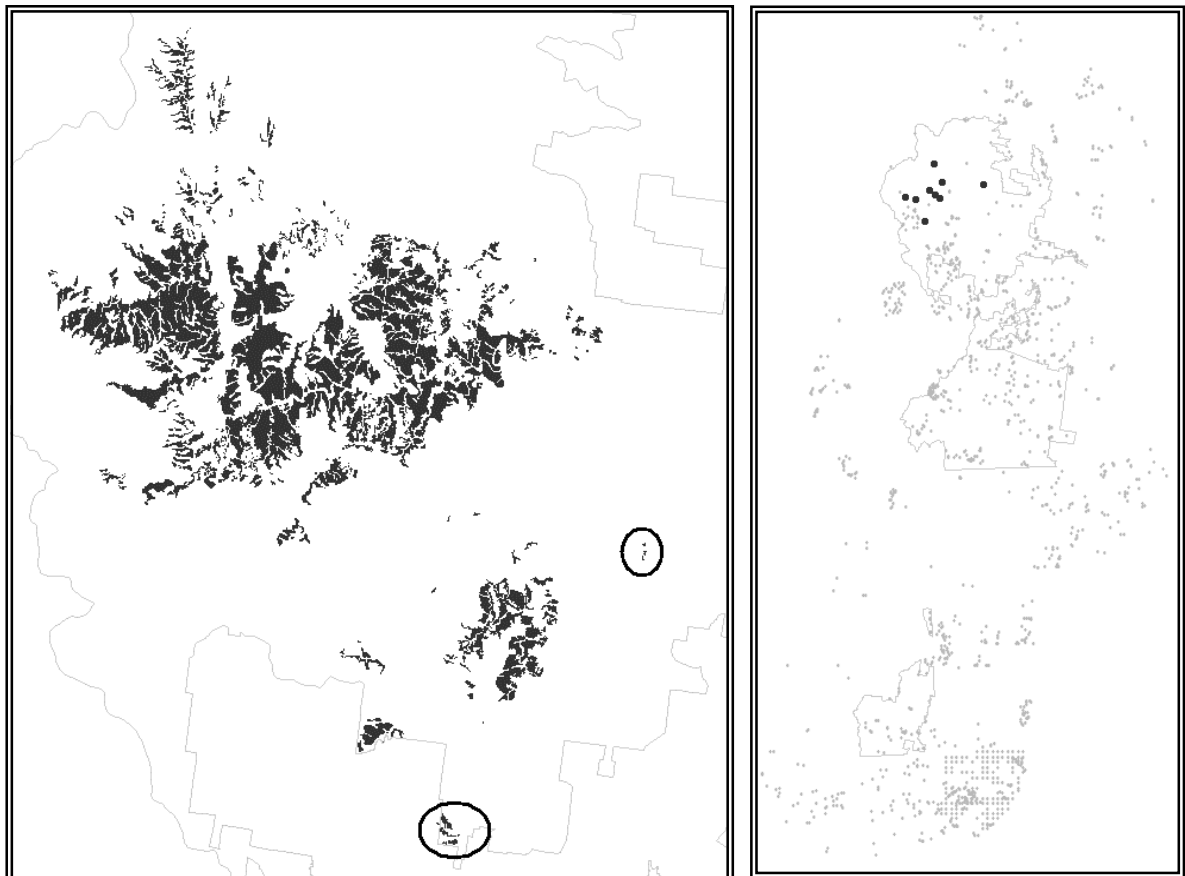
□ KEY IDENTIFYING FEATURES

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

- Presence of white box and ironbark in the canopy, often with tumbledown red gum (*E. dealbata*) and *Callitris* pine.
- Shrubby understorey, often dominated by wattles, but may have *Cassinia*, *Olearia* and *Leucopogon*. Where pine is abundant it may form a 'locked-up' stand and this often results in a sparse understorey and shrub layer.
- Favours the metamorphic strata in the western Capertee.

□ EXAMPLE LOCATIONS

Capertee Valley, around Crown Creek – Coco Creek area and northwest from 'Port Macquarie' towards Ulambra Creek.



Location of mapping unit and sites in ALOC group 17 shown with study area.

❑ **CONDITION ASSESSMENT**

Disturbance Class	Area (ha)	Proportion Extant (%)
A Low	2851.37	48.22
B Medium	1574.80	26.63
C High	1486.93	25.15
Total	5913	100

❑ **THREATENED PLANT SPECIES**

Definite: *Eucalyptus cannonii*, *Grevillea obtusiflora*

Possible: *Diuris tricolor* (syn. *D. sheaffiana*), *Phebalium bifidum*, *Prostanthera stricta*

❑ **DIAGNOSTIC SPECIES**

Species Name	Group Score	Group Freq (%)	Non Group Score	Non Group Freq (%)	Fidelity Class
<i>Acacia decora</i>	2	66.67	2	3.20	positive
<i>Acacia gladiiformis</i>	2	33.33	0	0.00	positive
<i>Aristida vagans</i>	2	44.44	2	5.84	positive
<i>Arthropodium milleflorum</i>	2	44.44	2	4.64	positive
<i>Austrostipa scabra</i>	3	44.44	2	5.28	positive
<i>Callitris endlicheri</i>	3	55.56	2	3.92	positive
<i>Calotis lappulacea</i>	2	44.44	2	2.48	positive
<i>Cheilanthes sieberi</i>	2	66.67	2	20.34	positive
<i>Chorizema parviflorum</i>	1	11.11	0	0.00	positive
<i>Cymbopogon refractus</i>	2	44.44	2	5.04	positive
<i>Desmodium varians</i>	2	44.44	2	19.15	positive
<i>Dianella revoluta</i>	2	77.78	2	27.56	positive
<i>Dichelachne micrantha</i>	2	55.56	2	8.09	positive
<i>Dichondra species A</i>	2	44.44	2	3.76	positive
<i>Digitaria ramularis</i>	2	44.44	2	1.76	positive
<i>Eucalyptus crebra</i>	3	44.44	3	5.04	positive
<i>Eucalyptus punctata</i>	3	44.44	3	21.23	positive
<i>Eucalyptus rossii</i>	3	55.56	3	12.98	positive
<i>Evolvulus alsinoides</i> var. <i>decumbens</i>	2	11.11	0	0.00	positive
<i>Glycine clandestina</i>	2	44.44	2	20.43	positive
<i>Goodenia hederacea</i>	2	77.78	2	17.79	positive
<i>Hibbertia cistoidea</i>	3	11.11	0	0.00	positive
<i>Joycea pallida</i>	2	55.56	2	14.02	positive
<i>Leucopogon muticus</i>	3	77.78	2	8.73	positive
<i>Lomandra confertifolia</i>	2	66.67	2	11.06	positive
<i>Lomandra glauca</i>	2	44.44	2	25.16	positive
<i>Notodanthonia longifolia</i>	2	55.56	2	6.89	positive
<i>Opercularia diphylla</i>	2	44.44	2	6.81	positive
<i>Oxalis perennans</i>	2	55.56	2	10.26	positive
<i>Pomax umbellata</i>	3	77.78	2	20.59	positive
<i>Lomandra filiformis</i>	2	77.78	2	35.90	constant
<i>Lomandra longifolia</i>	0	0.00	2	39.82	negative
<i>Poa sieberiana</i>	2	22.22	2	40.06	negative