

MU 16 CAPERTEE LIMESTONE HILLS GREY BOX – GRASS TREE – SPINIFEX GRASSY WOODLAND

□ CORRESPONDING CLASSIFICATIONS

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

State: Western Slopes Grassy Woodlands

Number of Sites: 2

Average number of identified native species per plot: 33.0

□ DESCRIPTION

A localised and distinctive community in the Capertee Valley identifiable clearly both on the ground and using air photos. The tree canopy is usually very open, with grey box (*E. moluccana*) being the most common species. The understorey is of varying density, but is dominated by tussock grasses (*Dichanthium*, *Cymbopogon* and *Themeda* in particular) and hummock grasses (*Triodia*). Grass trees (*Xanthorrhoea*) form a prominent mid-stratum and in places (as photographed) may be the dominant upper stratum at the site. The more open groundcover sites usually occur on areas with a higher proportion of exposed and broken rock outcrop.

The community ranges in altitude from 440 to 500 metres in the southeast of the valley, and 470 to 570 metres in the northwest. The two main areas of occurrence are separated by the mesa-like Mount Airly – Genowlan sandstone massif, but follow a continuous geographic trend beneath the mountain. Rainfall values range between 650 and 700 millimetres *per annum*.

The community shows no similarity to any unit mapped elsewhere in the catchment (Tindall *et al.* 2004) and is likely to be a unique assemblage. The relationships to inland communities is shown by the presence of the spinifex/porcupine grasses and the *Xanthorrhoea* dominance under a box canopy which bear resemblance to communities on limestone and serpentinite in the Tamworth and Barraba areas to the north. It is likely to form a component of the Western Slopes Grassy Woodlands in Keith (2004). However clearing for agriculture has most likely avoided the rocky shallow soils that lie beneath this community. However limestone quarries are numerous in the region and some loss may have been experienced through these developments. Small areas are protected on the edge of the Gardens of Stone National Park.



□ STRUCTURAL SUMMARY

Stratum	Count	AvLowHt	AvHt	maxHt	AvCover	SDcover	minCover	maxCover
T	2	5.0	16.50	18	18.5	9.19	12	25
M1	2	0.6	2.15	2.5	27.5	31.82	5	50
L1	2		0.40	0.5	40.0	14.14	30	50

□ FLORISTIC SUMMARY

Trees

Eucalyptus albens, *E. moluccana*

Low Trees and shrubs

Acacia ixiophylla, *Acacia melanoxylon*, *Xanthorrhoea johnsonii*

Ground Covers

Cymbopogon refractus, *Dianella revoluta*, *Dichanthium sericeum*, *Enneapogon gracilis*, *Lepidosperma gunnii*, *Pimelea glauca*, *Polygala japonica*, *Themeda australis*, *Triodia scariosa*, *Wahlenbergia communis*

Vines & Climbers

Hardenbergia violacea

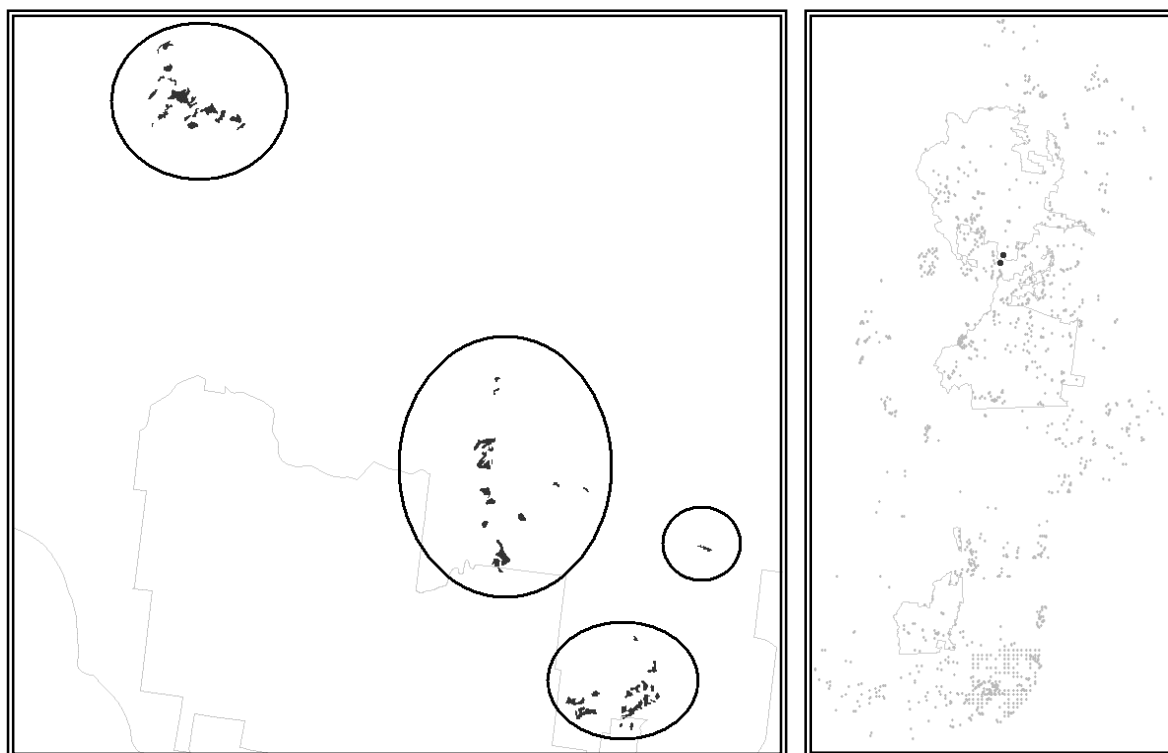
❑ KEY IDENTIFYING FEATURES

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

- Open, sparse understorey dominated by hummocks of porcupine (spinifex) grass (*Triodia*) and tussock grasses (*Themeda*, *Dichanthium*, *Cymbopogon*), with a mid-stratum of grass trees (*Xanthorrhoea*).
- Sparse groundcover, with much loose surface rock. The rock is typically limestone or very lime-rich marl, and often has extensive outcrops at the surface.
- The canopy of grey box is frequently quite open.
- *Poa sieberiana*, *Lomandra longifolia* and *Persoonia linearis* are absent.

❑ EXAMPLE LOCATIONS

Mainly restricted to the hills around Crown Creek, Coco Creek / 'Nioka' and north of Mount Airly near Oaky Creek. Uncommon and disjunct, but usually embedded within the Marl Box community.



❑ CONDITION ASSESSMENT

Disturbance Class	Area (ha)	Proportion Extant (%)
A Low	35.7	33.03
B Medium	15.51	14.35
C High	56.88	52.62
Total	108.09	100

❑ THREATENED PLANT SPECIES

By the guidelines presented, this community may fall within the realms of *White Box – Yellow Box – Blakely's Red Gum Woodland* Endangered Ecological Community.

□ **DIAGNOSTIC SPECIES**

Species Name	Group Score	Group Freq (%)	Non Group Score	Non Group Freq (%)	Fidelity Class
<i>Acacia implexa</i>	2	50.00	1	5.97	positive
<i>Acacia ixiophylla</i>	2	50.00	2	2.15	positive
<i>Cymbopogon obtectus</i>	2	50.00	0	0.00	positive
<i>Cymbopogon refractus</i>	3	100.00	2	5.17	positive
<i>Dianella revoluta</i>	2	50.00	2	27.89	positive
<i>Dichanthium sericeum</i> subsp. <i>sericeum</i>	2	100.00	0	0.00	positive
<i>Enneapogon gracilis</i>	2	50.00	2	0.39	positive
<i>Eucalyptus albens</i>	3	50.00	3	2.62	positive
<i>Eucalyptus moluccana</i>	3	50.00	3	0.71	positive
<i>Hardenbergia violacea</i>	2	100.00	1	20.32	positive
<i>Lepidosperma gunnii</i>	3	50.00	2	8.68	positive
<i>Pimelea glauca</i>	2	50.00	1	0.07	positive
<i>Polygala japonica</i>	2	100.00	1	0.23	positive
<i>Templetonia stenophylla</i>	1	50.00	0	0.00	positive
<i>Themeda australis</i>	2	100.00	2	9.24	positive
<i>Triodia scariosa</i> subsp. <i>scariosa</i>	4	100.00	3	0.47	positive
<i>Wahlenbergia communis</i>	2	50.00	1	5.81	positive
<i>Xanthorrhoea johnsonii</i>	5	100.00	2	3.50	positive
<i>Lomandra filiformis</i>	1	100.00	2	36.10	negative
<i>Lomandra longifolia</i>	0	0.00	2	39.60	negative
<i>Poa sieberiana</i>	0	0.00	2	40.00	negative