

# YLB Yarlerberrie Land System

(Equivalent to Yarlerberrie Land System of Rangelands)

**Area:** 78.5 km<sup>2</sup>

**Landscape:** Very gently undulating plains and low rises formed on Tertiary clays (Blanchetown Clay equivalent), capped by highly calcareous windblown silty sands (Woorinen Formation). There are minor deposits of Moornaba Sand as low to moderate linear sandhills, and occasional granitic outcrops protruding through the clay substrate.

**Annual rainfall:** 275 - 300 mm average

**Main soils:**

Kimba - D3 (Hypercalcic, Red Sodosol)  
Medium thickness hard loamy sand to loam overlying a strongly subangular blocky red clay, highly calcareous (Class I carbonate) from about 30 cm, grading to Blanchetown Clay equivalent.

Wiabuna - A5 (Hypercalcic / Supracalcic Calcarosol)  
Calcareous loam becoming more clayey and calcareous (sometimes rubbly) with depth, grading to a very highly calcareous clay (Class I carbonate) over Tertiary clay.

Wiabuna (rubbly) - A4a (Regolithic, Lithocalcic / Supracalcic Calcarosol)  
Calcareous sandy loam to sandy clay loam grading to carbonate rubble.

Yanee - C1 (Sodic, Supracalcic / Hypercalcic, Red Kandosol)  
Medium thickness hard sandy clay loam grading to a coarsely columnar brown sandy clay loam, highly calcareous from shallow depth with variable rubble, over Tertiary clay within 100 cm.

**Minor soils:**

Moornaba - H2 (Calcareous, Arenic, Yellow-Orthic Tenosol)  
Very thick red to brown sand, becoming weakly calcareous and often grading to an orange clayey sand with depth, overlying variable carbonate (fine to rubbly, occasionally sheet).

Magnesia sandy loam - A4b (Epihypersodic, Supracalcic, Regolithic Calcarosol)  
Calcareous sandy loam to sandy clay loam, becoming more clayey and rubbly with depth. Saline throughout.

Magnesia clay loam - A6 (Hypervescent, Regolithic, Hypercalcic Calcarosol)  
Highly calcareous clay loam becoming more calcareous with depth, over clay. Saline throughout, with surface concentration.

Skeletal soil - L1 (Lithic / Leptic Tenosol / Rudosol)  
Variable gravelly loamy sand to sandy clay loam over basement rock, shallower than 50 cm.

**Summary:** Although most soils are moderately deep and relatively fertile, this land is effectively non arable due to low rainfall. The gentle slopes have some potential for water erosion, and the lighter soils are prone to wind erosion. The underlying clayey sediments restrict leaching, so accumulation of boron at toxic concentrations at shallow depth is common. Lack of leaching capacity has similarly caused the concentration of salts in some soils to the point where scattered magnesia patches have formed.



**Soil Landscape Unit summary:** 4 Soil Landscape Units (SLUs) mapped in the Yarlerberrie Land System

SLU	% of area	Component	Main soils	Prop#	Notes
A-g	0.4	Granite outcrops	Skeletal	D	Non arable rocky outcrops
HEA	43.9	Flats	Kimba	E	Mixture of sandy loam over clay soils and calcareous sandy clay loams - moderately deep and relatively fertile. Minor wind erosion potential, minor to moderate water erosion potential. Boron toxicity common. Magnesia patches affect up to 2% of land.
			Wiabuna	E	
			Yaninee	E	
			Magnesia clay loam	M	
IfB	48.8	Gently sloping low rises	Wiabuna)	E	Calcareous sandy loams to loams. Moderately fertile, some with restricted water holding capacity due to rubble or shallow depth to toxic materials. Slight wind and water erosion potential.
			Wiabuna (rubbly)	E	
			Magnesia sandy loam	M	
U-C	6.9	Moderate to low sandhills	Moornaba	D	Moderately high wind erosion potential, low fertility and some water repellence.

# PROPORTION codes assigned to Soil Landscape Unit (SLU) components:

D	Dominant in extent (>90% of SLU)	C	Common in extent (20–30% of SLU)
V	Very extensive in extent (60–90% of SLU)	L	Limited in extent (10–20% of SLU)
E	Extensive in extent (30–60% of SLU)	M	Minor in extent (<10% of SLU)

**Further information:** [DEWNR Soil and Land Program](#)

