

7. East Mt Mitchell – Carinya Unit

The more extensive areas of the flatter and poorer-drained areas of the undulating basaltic terrain form this unit. Poorly drained plains and drainage depressions comprise most of the area, although occasional rises are also included. Drainage is frequently assisted by man-made ditches and channels. The soils are typically grey uniform clays, or yellowish brown duplex soils often containing buckshot. The native vegetation has been cleared and grazing is the predominant land use.

Geology: Quaternary basalt

Slope: Average 1%; range 0-5%

Landforms: 95% Plain – flat to gently undulating, broad drainage depression
5% Narrow drainage depression, scarp, scarp footslope, rocky rise

Soils:

Dominant: Dy3.21, Db1.21, Db1.11, Dy3.22, Dy3.12. Brown or yellow duplex soils are common, with silty clay loam, grey-brown topsoils; a pale A₂ horizon is usually present, commonly containing buckshot, just above the subsoil; subsoils are heavy clay in texture, brown without mottles or yellow with reddish mottles, with an acid to neutral pH.

Gn3.72, Gn3.72. Yellow gradational variants of the previous soil groups occur to a minor extent: topsoils of grey-brown silty clay loams grade into red-mottled yellow clay subsoils, with buckshot above the subsoil.

Ug5.2, Ug5.3. Grey, or less commonly brown, uniform cracking clay soils, varying in depth, but typically greater than 1 metre deep; cracks form as the soils dry out, and gilgai features may occur; seasonal shrinking and swelling of the soils creates difficult conditions for plant growth.

See appendix 13 for a typical soil profile description from this unit.

Stone rock outcrop: Average less than 1%.

Pans: Weakly iron-oxide cemented hardpans sometimes occur beneath the clay subsoils.

Land use: Primarily grazing, apart from minor cropping.

Observed land deterioration: Little deterioration observed, except for limited gully erosion where man-made channels have scoured out, and pugging of the topsoil during wet conditions.

Susceptibility to land deterioration:

Gully erosion (low)
Compaction (moderate)

Land capability classification:

Generally land capability class of 3 within this Unit being determinant upon both soil type and drainage (see Table 1).