

LAND SYSTEM
Ross Mudstone Hills

154131

Area (ha):
1303

COMPONENT	A	B	C
PROPORTION (%)	80	10	10
RAINFALL (mm)	Approximate Annual Rainfall: 375-500		
GEOLOGY	Predominantly Permian Mudstone/Siltstone		
TOPOGRAPHY		Rolling Low Hills	
Position	Crests/Slopes	Drainage Lines/Flats	Well Drained Flats
Typical Slope (°)	7	2	0
NATIVE VEGETATION			
Structure	(Low) Open Woodland	Open Woodland	
Floristic Association (See Appendix 1 for common names)	<i>Eucalyptus amygdalina</i>	<i>Eucalyptus rubida</i>	<i>Eucalyptus pauciflora</i>
	<i>Eucalyptus pauciflora</i>	<i>Acacia dealbata</i>	<i>Eucalyptus amygdalina</i>
	<i>Eucalyptus globulus</i>	<i>Lomandra longifolia</i>	<i>Themeda australis</i>
	<i>Eucalyptus rubida</i>	<i>Lissanthe strigosa</i>	<i>Helichrysum apiculatum</i>
	<i>Eucalyptus viminalis</i>	<i>Themeda australis</i>	<i>Bossiaea riparia</i>
	<i>Acacia dealbata</i>		<i>Stipa mollis</i>
	<i>Daviesia latifolia</i>		
	<i>Lissanthe strigosa</i>		
	<i>Hibbertia riparia</i>		
	<i>Casuarina littoralis</i>		
<i>Leptorhynchus squamatus</i>			
<i>Danthonia sp.</i>			
SOIL			
Surface (A) Texture Fine Sandy Loam		Light Clay	Fine Sandy Loam
B Horizon (subsoil) Colour (moist) Texture and primary profile form	Extremely shallow stony fine	Deep medium clay - yellowish	Deep medium clay - brownish
	sandy loam - yellowish brown (10 YR 5/4) over bedrock.	brown (10 YR 5/4) with dark grey (10 YR 4/1) mottle.	yellow (10 YR 6/8) to light grey (10 YR 7/1) with strong brown (7.5 YR 5/8) mottle.
	Uniform.	Duplex.	Duplex.
Permeability	High	Low/Moderate	Low/Moderate
Typical depth(m)	0.20	1.10	0.90
LAND USE	Rough Grazing		Grazing
HAZARDS	High Sheet, Rill, Gully, Tunnel Erosion		

12.3 LAND SYSTEM DESCRIPTIONS AND DIAGRAMS

164131

ROSS MUDSTONE HILLS

This land system is situated near Ross and occurs in one of the lowest rainfall areas in Tasmania (<500 mm per year). It consists of low rolling mudstone hills and associated flats. Surface soils vary in colour from grey or light grey when dry to dark brown when wet. Soil depth and profile form vary from <0.20 m stony uniform fine sandy loams on crests and slopes (where exposure of bedrock is common), to deep duplex soils on drainage lines and flats. Deep uniform or gradational clays may also occur along drainage lines.

The soils in this land system are described and mapped as "podzolic soils on mudstone" by Leamy (1961). They commonly have a fine sandy loam surface darkened by organic matter (A1), overlying a bleached fine sandy loam (A2) that varies in colour from brown to yellowish brown to greyish brown. Shallow soils (0.40 m) are widespread and typically contain angular fragments of mudstone distributed through a uniform textured profile which has developed directly on bedrock. Deep duplex soils with clayey B horizons occur on lower slopes, flats and drainage lines. The clays are usually yellowish brown to brownish yellow but often exhibit a dark brown to strong brown mottle. When dry these soils have a tendency to repel water. As a result, surface runoff is often rapid.

The land is naturally infertile and is used for extensive grazing, but with clearing and top dressing, it may support improved pasture. Pastures are inclined to dry off markedly during summer, as the ground surface sets hard.

The vegetation consists of dry sclerophyll low open to open woodland often with a sparse understorey developed on a rocky substrate. *Eucalyptus amygdalina* is usually dominant but *Eucalyptus pauciflora*, *Eucalyptus globulus*, *Eucalyptus viminalis* and *Eucalyptus rubida* may also be present. The understorey typically contains *Acacia dealbata*, *Daviesia latifolia*, *Lissanthe strigosa*, *Hibbertia riparia*, *Casuarina littoralis*, *Bossiaea riparia*, *Leptorhynchus squamatus*, *Lomandra longifolia*, *Themeda australis*, *Helichrysum apiculatum* and *Stipa mollis*. On slopes and crests, stony shallow soils often support remnant eucalypts that have large exposed roots along the ground surface. Such areas are often unsuitable for agricultural development and are best left to native vegetation. Crests and slopes are particularly susceptible to sheet and rill erosion, and bare ground can quickly result from stock trampling. Lower slopes, flats and drainage lines are particularly vulnerable to gully and tunnel erosion.

The land system is closely related to Ellinthorp Plains (273122) Land System which occurs on more arenaceous (sandstone) parent material north-west of Tunbridge.

ROSS MUDSTONE HILLS (164131) LAND SYSTEM



Mudstone crests and slopes on the Auburn Road west of Ross are typical of the Ross Mudstone Hills (164231) Land System. The vegetation consists of a low open woodland of *Eucalyptus amygdalina* with a sparse understorey. This type of country is particularly susceptible to sheet, rill, gully and tunnel erosion.