

LAND SYSTEM
Hamilton

173131

Area (ha):
2538

COMPONENT	A	B	C	D	E
PROPORTION (%)	30	30	20	10	10
RAINFALL (mm)	Approximate Annual Rainfall: 375-500				
GEOLOGY	Triassic Predominantly Sandstone, Siltstone, Mudstone, Shale				
TOPOGRAPHY	Low Rolling Hills and Associated Flats				
Position	Crests /Upper Slopes	Upper Slopes	Lower Slopes/Flats	Sandy Flats	Flats
Typical Slope (°)	12	20	5	0	0
NATIVE VEGETATION Structure	Open Woodland	(Low) Woodland	Woodland	(Open) Woodland	Woodland
Floristic Association (See Appendix 1 for common names)	<u>Eucalyptus viminalis</u> <u>Bursaria spinosa</u>	<u>Eucalyptus viminalis</u> <u>Llssanthe strigosa</u> <u>Acacia dealbata</u>	<u>Eucalyptus viminalis</u> <u>Acacia dealbata</u> <u>Eucalyptus ovata</u>	<u>Eucalyptus viminalis</u> <u>Eucalyptus ovata</u> <u>Acacia dealbata</u> <u>Casuarina stricta</u> <u>Banksia marginata</u> <u>Lomandra longifolia</u> <u>Danthonia laevis</u> <u>Danthonia pilosa</u> <u>Agrostis aemula</u> <u>Themeda australis</u> <u>Poa rodwayi</u> <u>Poa labillardieri</u> <u>Deyeuxia quadriseta</u>	Cleared
SOIL Surface (A) Texture	Clay Loam/Sand	Sandy (Clay) Loam	Sandy Loam	Sandy (Clay) Loam	Clay Loam
B Horizon(subsoil) Colour (moist) Texture and primary profile form	Shallow stony clay loam or sand - Dark yellowish brown (10 YR 4/4) . Uniform.	clay - Light yellowish brown - (10 YR 6/4) on bedrock. Duplex.	Deep sandy clay - greyish brown (10 YR 5/2) to brown (10 YR 5/3) with yellow brown (10 YR 5/8) mottle. Duplex.	Deep clay - Brown (10 YR 5/3) to light yellowish brown (10 YR 6/4). Duplex .	Deep clay - very dark greyish brown (2.5 Y 3/2) to olive brown (2.5 Y 4/4). Duplex.
Permeability	High	High	Moderate	Moderate	Moderate
Typical depth(m)	0.30	0.55	1.00	1.00	>1.40
LAND USE	Grazing				
HAZARDS	High Sheet, Rill, Gully, Streambank, Tunnel Erosion				

HAMILTON

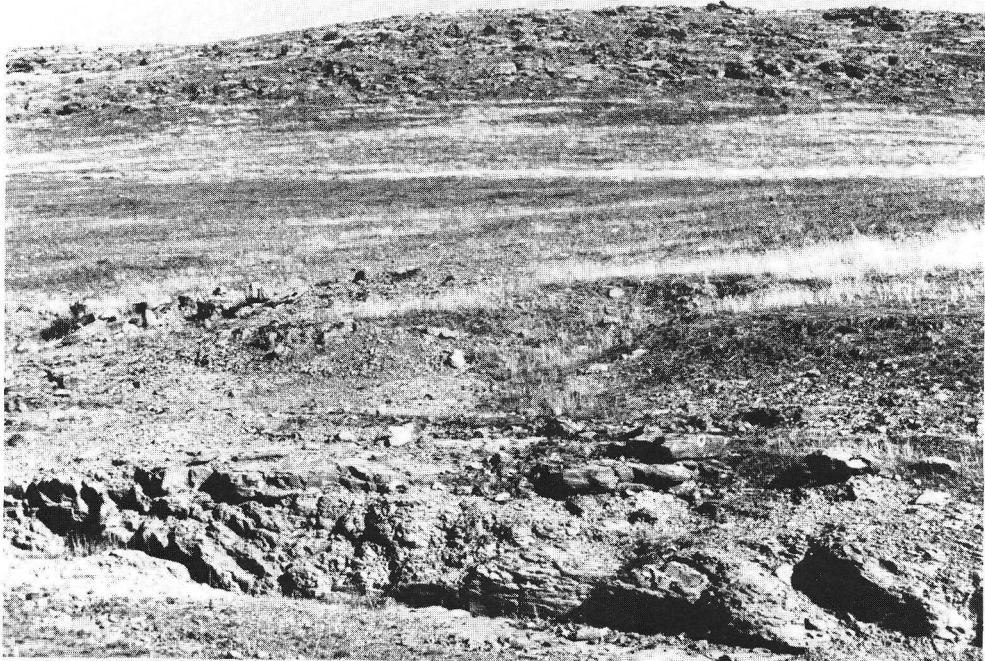
This land system near Hamilton, Hollow Tree and Ross consists of hills and associated flats formed from interbedded sandstone, siltstone, mudstone and shale. The average annual rainfall is less than 500 mm (20 inches).

Crests typically have a stony, shallow (0.30 m), uniform, dark yellowish brown clay loam or sand developed on bedrock. Deep duplex soils (1.00 m) are common on the lower slopes and flats.

The vegetation consists of a low woodland to low open woodland dominated by *Eucalyptus viminalis* over a grassland understorey. *Eucalyptus ovata* is often present on the flats. The understorey includes species such as *Bursaria spinosa*, *Lissanthe strigosa*, *Acacia dealbata*, *Acacia melanoxylon*, *Casuarina stricta*, *Banksia marginata* and *Lomandra longifolia*. Common native grasses present include *Danthonia laevis*, *Danthonia pilosa*, *Agrostis aemula*, *Themeda australis*, *Poa rodrayi*, *Poa labillardieri* and *Deyeuxia quadriseta*.

This country is particularly susceptible to erosion. Sheet and rill erosion hazards are high on the crests and slopes where rock outcrop is common, whilst rill, gully, tunnel and streambank erosion occur frequently on the lower slopes and flats.

Soils in this land system have been described and mapped as "brown soils on micaceous sandstone" by Dimmock (1961) on the Ellendale sheet, and as "podzolic soils on sandstone" by Leamy (1961) on the Interlaken Sheet.



Extensive sheet erosion on hills near Hamilton. These "brown soils on micaceous sandstone" (Dimmock 1961) are particularly prone to erosion.