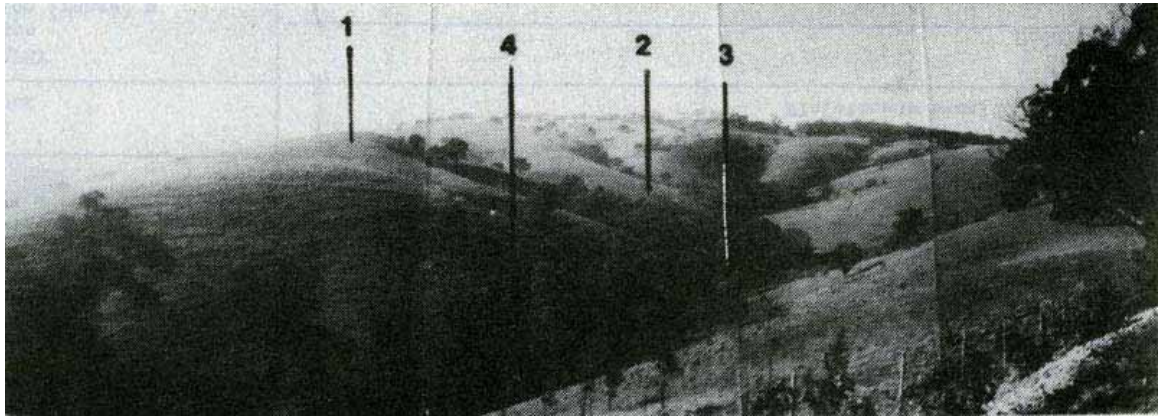
6.25 Springfield Land System

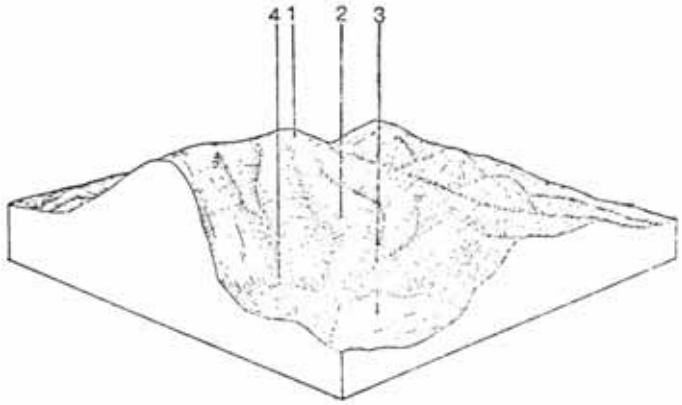


This land system occurs in several places in the north and covers 121.3 km^2 or 4.7% of the study area. This land system is separated from Darraweit Guim by steeper topography.

Large areas have been cleared for grazing though some open forest still remains.

The crests have gravelly gradational soils with non-structured, light textured topsoils and structured clay subsoils. A yellow to red duplex soil with a structured and dispersible clay subsoil occurs on the slopes and in depressions. The depressions also contain a brown gradational soil with a heavy clay subsoil.

The dispersible subsoils of the duplex and brown gradational soils combined with steep slopes gives a high erosion hazard; particularly for tunnelling and gullying. It is therefore recommended that the protective topsoils are carefully maintained and that deep rooted species are planted to increase water loss from the subsoil.



Schematic Block Diagram

Drainage Pattern

COMPONENT Proportion %	1 10	2 45	3 40	4 5
CLIMATE Rainfall (av.) Temperature (av.) Seasonal growth limitations	Annual: 710-750 mm (monthly range: October 70 mm – January 40 mm) Annual: 13^0C (monthly range: January 19^0C – July 7^0C) Temperature: less than 10^0C June - August Precipitation less than potential evapotranspiration November – March			
GEOLOGY Age, rock	Silurian mudstone and sandstone			
TOPOGRAPHY Landscape Elevation (range) m Local relief (av.) m Drainage pattern Drainage density km/km^2 Land form Slope (av.) %, slope shape	Low hills with convex slopes 250-400 45 Dendritic 5.5 Crest 9; Convex	Upper Slope 25; Convex	Lower Slope 16: Straight	Drainage Line 3; Concave
NATIVE VEGETATION Structure Dominant species	Low open forest *E. goniocalyx, E. macrorhyncha*	*E. goniocalyx, E. radiata, E. macrorhyncha*	Open forest *E. radiata, E. viminalis, E. goniocalyx, E. melliodora E. macrorhyncha, E. rubida*	*E. radiata, E. goniocalyx, E. viminalis, E. rubida, E. obliqua, E. leucoxylon*
SOIL Parent Material Description Factual Key Surface Texture Permeability Depth (av.) m	In situ weathered rock Shallow stony gradational soils Gn 2.81 Gravelly loam High 0.3	High – Moderate 0.5	Mottled yellow, brown sodic duplex soils, coarse structure Db 2.32 Sandy loam Low – Moderate 1.0	Alluvium Brown gradational soils Gn 2.81 Clay loam Moderate – Low 1.5
LAND USE	Grazing			
SOIL DETERIORATION HAZARD Critical land features Processes Forms	Hard setting surfaces, slope gradient Overland flow Sheet erosion	Slope gradient, hard setting surfaces, dispersibility Overland flow, subsurface flow Sheet and tunnel erosion	Slope gradient, hard setting surfaces, dispersibility Overland flow, subsurface flow Sheet and tunnel erosion	High watertable, dispersibility, hard setting surfaces Periodic waterlogging, overland flow Gully Erosion