

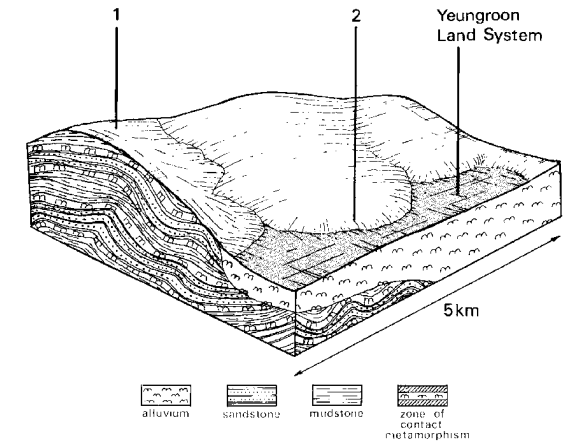
7.3 Bald Hill land system

Rounded hills in the north between Coonooer Bridge and Charlton represent remnants of a metamorphic aureole. The slopes are lower and gentler than their counterparts to the south.

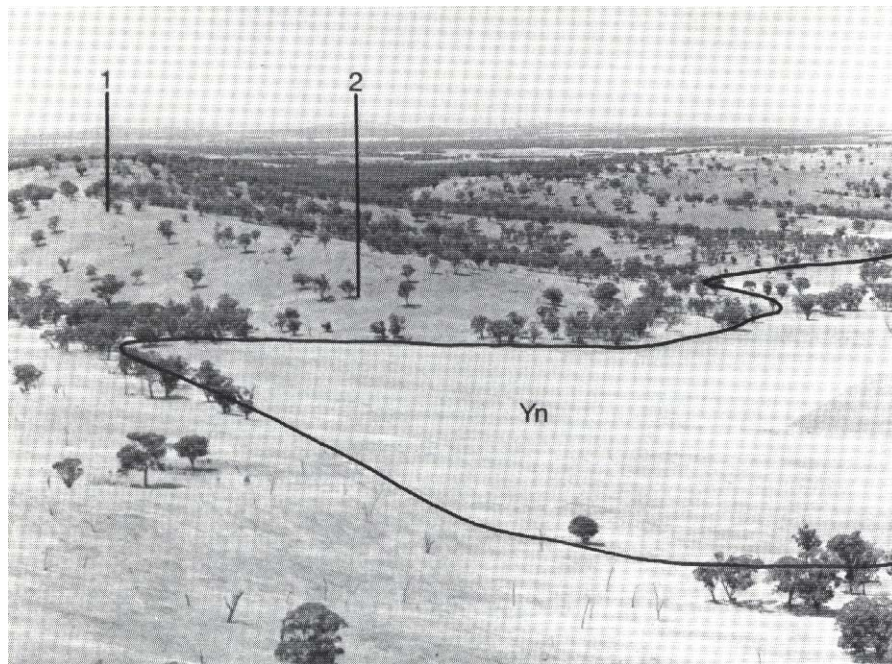
The hills are mostly cleared of the original *Eucalyptus microcarpa* open forest, and shallow stony loam soils prevail.

Land use is mainly grazing, but there is considerable quarrying for road metal, and mixed farming is practised on the deeper soils of the lower slopes.

Run-off accompanied by sheet erosion is severe, particularly during intensive rainfalls over the summer-autumn period. Deep percolation of water through the rock strata, particularly during the wetter months when transpiration by the native pastures is low, brings about salinity problems in low-lying, adjoining areas.



A permanent cover of native grasses is required on the upper slopes to minimise the sheet erosion hazard.



Productivity is low on the cleared metamorphic hills in the drier northern areas of the catchment.

BALD HILL LAND SYSTEM Area 60 sq. km

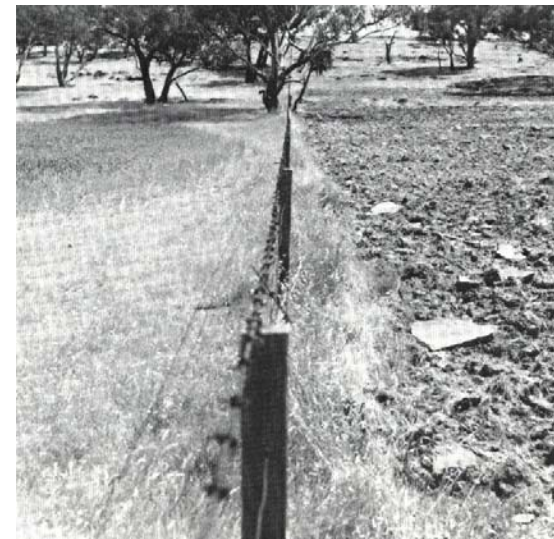
CLIMATE Rainfall (min) Temperature (°C) Seasonal growth limitations	Annual, 400-450; lowest January (18), highest June (59) Annual, 15; lowest July (8), highest February (22) Temperature: less than 10°C (av.) June-August Rainfall: less than potential evapotranspiration September - April	
GEOLOGY Age, lithology	Ordovician sandstone and mudstone	
PHYSIOGRAPHY Elevation range (m) Relative relief (m) Drainage pattern Drainage density (km/ sq. km) Landform	160-320 40 Dendritic 0.4 Hill (metamorphic aureole)	
LAND COMPONENT Percentage of land system	1 90%	2 10%
PHYSIOGRAPHY Position on land form Slope (typical) and range (%) Slope shape	Crest and upper slope 20, 15-25 Convex	Lower slope 8, 6-9 Linear
NATIVE VEGETATION Structure Dominant species	Open forest <i>E. microcarpa</i>	Open forest <i>E. microcarpa</i> <i>E. leucoxyton</i>
SOIL Parent material Description Classification Surface texture Surface consistence (dry) Depth (m) Nutrient status Available soil water capacity Perviousness to water Drainage Exposed stone Dispersibility Slaking tendency	Sandstone and mudstone Shallow stony uniform loam soils U m 5.21-3/1/030 Stony loam S oft 0-0.1 Very low Very low Rapid Excessively drained Abundant Nil Nil	Sandstone and mudstone Stony red sodic duplex soils Dr 2.21-2/1/ 025 Sandy loam Moderately hard 0.1-0.5 Low Low Moderate-rapid Well drained Common Low Low
PRESENT LAND USE	Grazing, quarrying	Grazing, cropping

Land disturbance hazards - Bald Hill land system

Disturbance	Component	Affected process and trend	Primary resultant deterioration		Primary resultant off-site process
			Form	Susceptibility	
Altered vegetation -reduced leaf area, rooting depth, perenniality	1,2	Reduced transpiration, increased leaching	Nutrient decline	Low	Movement of water and salts to groundwaters
Reduced soil surface cover	1	Increased soil detachment	Sheet erosion	High	Increased flash flows and sediment loads
	2	Increased soil detachment	Sheet erosion	Moderate	Increased flash flows and sediment loads
Cultivation, increased trafficking, trampling	1,2	Increased soil compaction	Structure decline	Low	Increased flash flows and sediment loads



Sloping land with shallow stony soils and low nutrient status is extremely susceptible to sheet erosion when cultivated.



Controlled grazing is essential on the steeper slopes to minimise sheet erosion.