

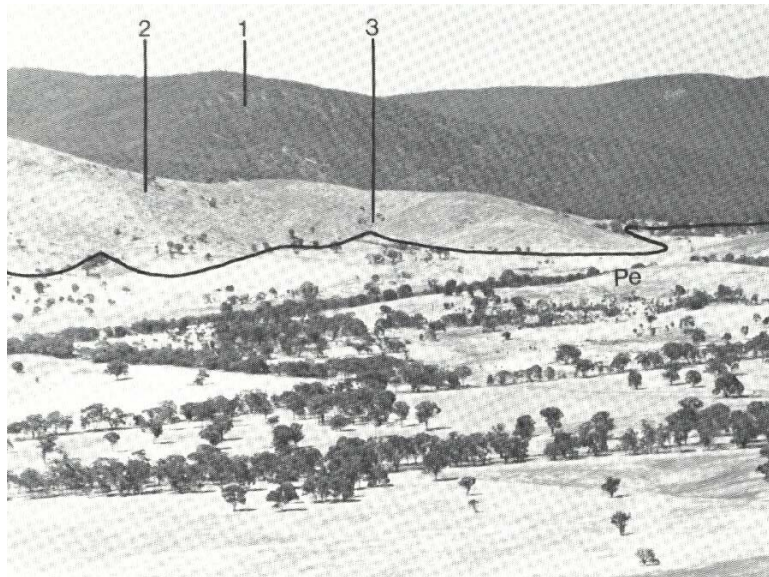
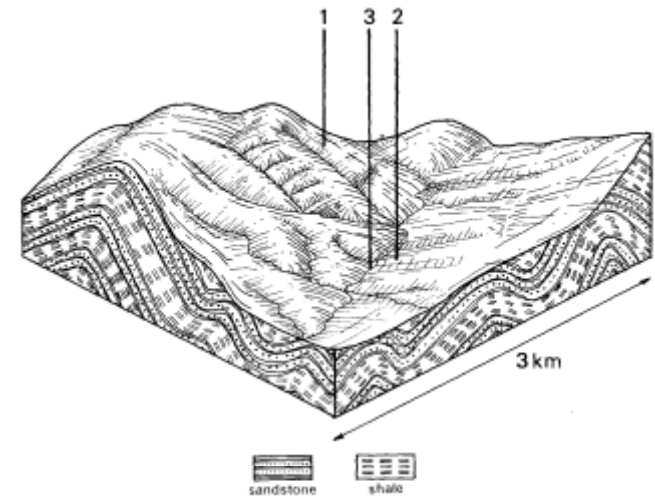
7.18 Pyrenees North land system

The steep mountain range on Cambrian sandstones and slates to the north of Moonambel has shallow soils with open forests comprising mainly *Eucalyptus polyanthemos* and *E macrorhyncha*.

Logging is the major enterprise, but substantial areas on the lower slopes have been cleared for grazing, mainly on native pastures of low productivity. Teddington Reservoir is located in this land system and its catchment area forms approximately half the Kara Kara State Park set aside for conservation of the flora and fauna common to these hills.

Major hazards are sheet erosion and the percolation of salt-bearing waters to adjacent lands.

The incidence of sheet and gully erosion, landslips and saline seeps is more pronounced than in the Pyrenees South land system, where the climate is more humid and clearing not so extensive.



Some of the middle and lower slopes of the Pyrenees North land system have been cleared for grazing, but the upper slopes still have the original forest vegetation.



The tree canopy and ground litter help reduce sheet erosion on the steep slopes. The natural understorey species provide only sparse cover.

PYRENEES NORTH LAND SYSTEM Area 99 sq. km

CLIMATE Rainfall (mm) Temperature (°C) Seasonal growth limitations	Annual, 550-625; lowest January (24), highest June (83) Annual, 13; lowest July (6), highest February (18) Temperature: less than 10 ⁰ C (av.) June-August Rainfall: less than potential evapotranspiration September-April		
GEOLOGY Age, lithology	Cambrian sandstone and slate		
PHYSIOGRAPHY Elevation range (m) Relative relief (m) Drainage pattern Drainage density (km/ sq. km) Land form	280-520 60 Dendritic 1.4 Mountain ridge		
LAND COMPONENT Percentage of land system	1 80%	2 15%	3 5%
PHYSIOGRAPHY Position on land form Slope (typical) and range(%) Slope shape	Upper and middle slope 35, 20~45 Convex	Lower slope 10,2-20 Linear	Drainage floor 3, 1-5 Concave
NATIVE VEGETATION Structure Dominant species	Open forest <i>E. macrorhyncha</i> <i>E. polyanthemos</i> <i>E. goniocalyx</i> <i>E. melliodora</i>	Open forest <i>E. microcarpa</i> <i>E. polyanthemos</i> <i>E. macrorhyncha</i> <i>E. goniocalyx</i>	Open forest <i>E. leucoxydon</i> <i>E. microcarpa</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 slate Complex shallow stony uniform loam soils and stony red duplex soils Urn 5.21 - 3/1/005: Dr 2.41 – 3/1/012 Stony loam Slightly hard 0 - 1 (extremely variable) Very low throughout Low throughout Moderate Excessively drained Abundant Nil Nil	Sandstone and slate Shallow stony red duplex soils Dr 2.41 - 3/1/012 Stony loam Slightly hard 015-1 Very low throughout Low surface, moderate subsoil Moderate Excessively drained Abundant Nil Nil	Sandstone and slate Yellow gradational soils Gn 4.14 – 3/1/010 Fine sandy loam Slightly hard 0-5-1 Very low throughout Moderate throughout Moderate Somewhat poorly drained Nil Nil Low
PRESENT LAND USE	Forestry	Forestry	Grazing

Land deterioration hazards - Pyrenees North 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 -
	1	Increased wetness	Landslips	Moderate	
Reduced soil surface cover	1,2	Increased soil detachment	Sheet erosion	High	Increased flash flows and sediment loads
Increased trafficking, trampling	2,3	Increased soil compaction	Structure decline	Low	Increased flash flows and sediment loads
Increased soil disruption and run-on	3	Increased subsoil detachment	Gully erosion	Moderate	Increased flash flows and sediment loads



The 'West of England' fire tower overlooks some of the forested areas remaining in the Avoca and Avon River catchments.



Severe sheet, gully and tunnel erosion has been caused by the complete removal of trees from the steep slopes.