

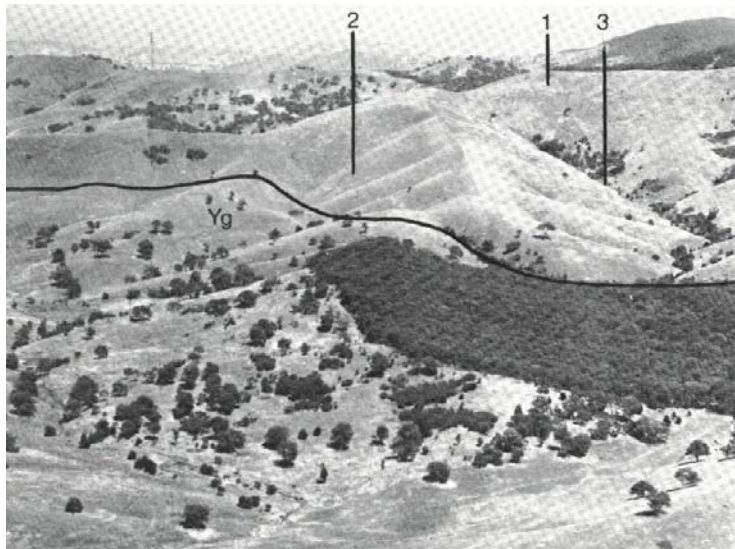
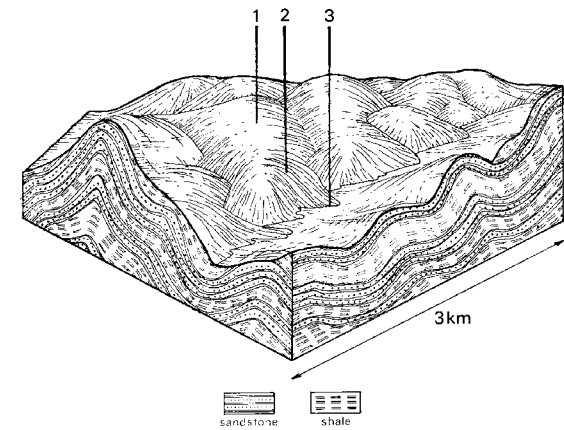
7.19 Pyrenees South land system

The south-western catchment boundary is a high, steep range on Cambrian sandstones and slates.

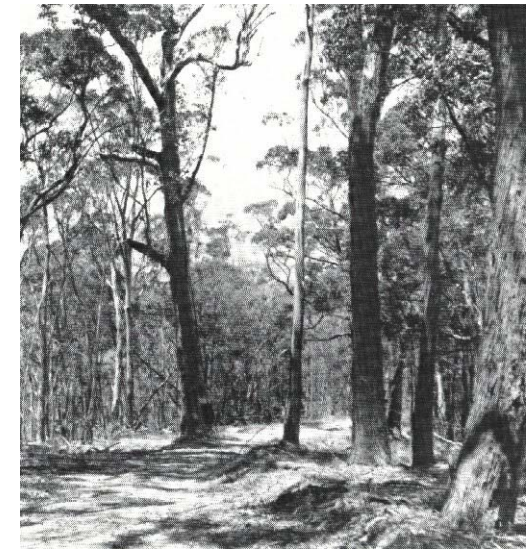
The ridgetop has the highest rainfall in the catchment, as reflected by a tall open forest of *Eucalyptus st-johnii* and *E. obliqua*. The steep slopes, with stony red duplex and stony uniform loam soils of variable depth, support *E. macrorhyncha*.

Access is difficult and, apart from timber production, land use is limited. Bushwalking and other recreational pursuits have only developed to a minor extent. The relatively high rainfall and long growing season have allowed permanent pastures of introduced species to be established on the lower slopes. Streams arising from the Pyrenees Range are not permanent, but they feed the Sugarloaf Reservoir, which supplies the Avoca township.

The area remains largely under native forests, and land deterioration is minimal despite a severe sheet erosion hazard on the steep slopes. Salt movement to adjacent lowlands via percolating waters appears to be limited by the low content of soluble salts in the soils and rocks resulting from leaching under the relatively high rainfall.



The slopes in this mountainous landscape have a higher rainfall and a more permanent ground cover than similar slopes to the north.



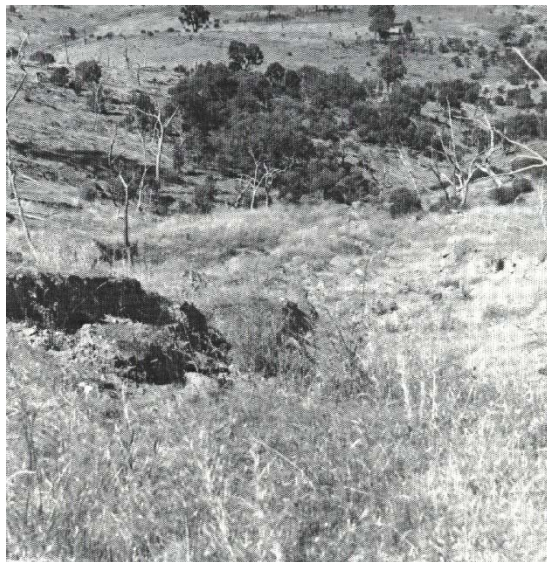
*The tall open forest on the upper slopes consist of red stringybark (*E. macrorhyncha*) and red box (*E. polyanthemos*).*

PYRENEES SOUTH LAND SYSTEM Area155sq.kni

CLIMATE Rainfall (mm) Temperature (°C) Seasonal growth limitations	Annual, 590-625; lowest January (26), highest August (74) Annual, 11; lowest July (5), highest February (17) Temperature: less than 10°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	300-720 60 Dendritic 0.8 Mountain ridge		
LAND COMPONENT Percentage of land system	1 30%	2 65%	3 5%
PHYSIOGRAPHY Position on land form Slope (typical) and range (%) Slope shape	Crest 10,5-15 Convex	Upper and lower slope 20,6-40 Linear	Drainage floor 4,1-8 Concave
NATIVE VEGETATION Structure Dominant species	Tall open forest <i>E. st-johnii</i> <i>E. obliqua</i> <i>E. rubida</i>	Open forest <i>E. macrorhyncha</i> <i>E. polyanthemus</i> <i>E. goniocalyx</i>	Tall open forest <i>E. rubida</i> <i>E. globulus</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 shallow stony U m 5. 21 – 3/1/005 Stony loam Slightly hard 0 - 1 (extremely variable) Very low throughout Very low throughout Moderate Excessively drained Abundant(rock) Nil Nil	Site 901 Sandstone and slate uniform loam soils and red duplex soils Dr 2.41 - 3/1/012 Stony loam Slightly hard 0 - 1 (extremely variable) Very low throughout Very low throughout Moderate Excessively drained Abundant (rock) Nil Nil	Sandstone and state Stony reddish yellow gradational soils Gn 4.14 – 3/1/010 Stony loam Slightly hard 0*5-1 Low throughout Low throughout Moderate Moderate Nil Nil Low
PRESENT LAND USE	Forestry	Forestry, grazing	Forestry

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



Saturated unstable conditions in the steep drainage depressions can lead to landslides.



The shallow rocky soils are highly susceptible to sheet erosion.