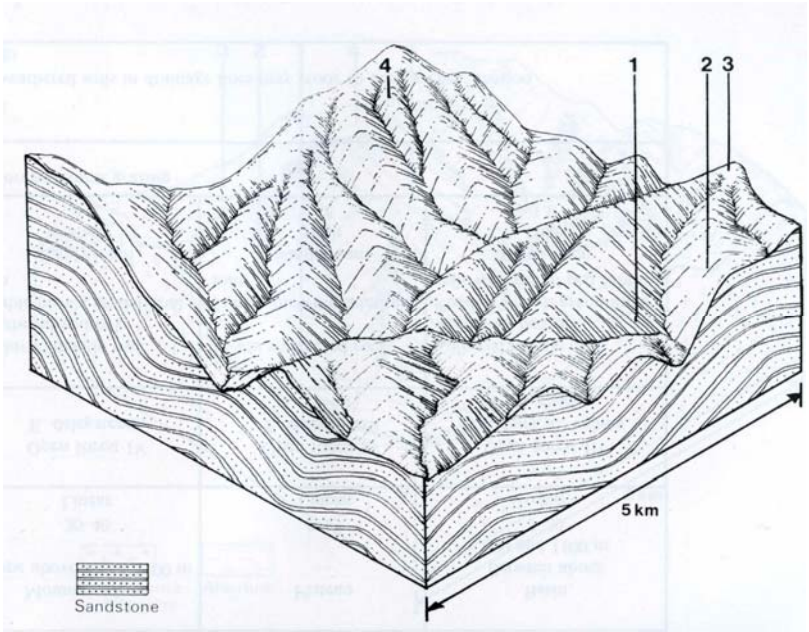
7.20 Porepunkah land system

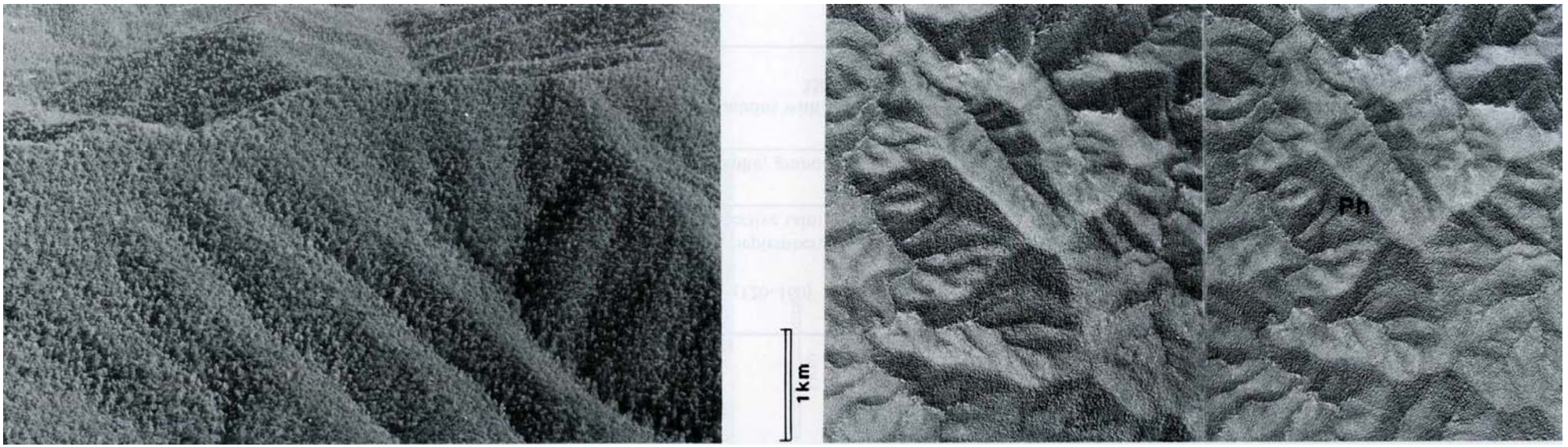
The Porepunkah land system occupies the major part of the mountainous central and eastern part of the study area on Ordovician sedimentary rocks, where steep mountain slopes from narrow ridges and spurs and narrow valleys. Annual rainfall ranges from moderate to high, with occasional winter snow on the highest areas. Summers are usually warm to hot in the drier northern areas and cooler in the south. Winters are generally cool to cold and wet.

Weakly bleached reddish brown gradational soils predominate in the drier areas; in moister areas on the lower and less-steep slopes, reddish brown gradational soils with rough ped fabric predominate; friable brown gradational soils with very stony forms are most common on the steeper and upper slopes. Stony loam soils are typical of the narrow ridge-tops and occasionally occur on the steepest slopes.

The native vegetation is open forest of *Eucalyptus radiata* with *E. rubida* and *E. dives* with *E. rubida* or *E. macrorhyncha* on dry sites. Occasionally *E. dalrympleana* and *E. chapmaniana* occur in the higher areas and *E. viminalis* is more common in moist valleys.

The main erosion problems are associated with badly located access tracks. The soils are generally fairly stable.





POREPUNKAH LAND SYSTEM Area 156 sq km

CLIMATE				
Rainfall, mean (mm)	Annual 850-1200; lowest January (45-50), highest July (120-160)			
Temperature, mean (^{o}C)	Annual 12-14; lowest July (5-7), highest January (18-20)			
Seasonal growth limitations	Temperature – less than 10^{o}C (av): June-August Precipitation – months less than 50% frequency of effective rain: January – February			
GEOLOGY				
Age, lithology	Ordovician greywacke, sandstone, siltstone, shale, mudstone			
PHYSIOGRAPHY				
Landscape	Mountains – ridges and spurs			
Elevation range (m)	350-800			
Relative relief (m)	200			
LAND COMPONENT	1	2	3	4
Percentage of land system	35	15	10	40
PHYSIOGRAPHY				
Land form	Mountain slope	Mountain slope	Mountain top	Mountain slope
Position on land form	Lower, drier slope	Lower, moister slope	Crest	Upper, moist slope
Slope range (%)	15-30	10-25	25-40	25-40
Slope shape	Linear-concave	Concave	Convex	Linear
NATIVE VEGETATION				
Structure	Open forest II	Open forest III	Open forest II	Open forest III
Dominant species	*E. macrorhyncha, E. dives, E. rubida*	*E. radiata, E. rubida, E. dives, E. viminalis*	*E. dives, E. rubida*	*E. radiata, E. rubida, E. dives*
SOIL				
Parent material	Colluvial mantle over weathered bedrock	Colluvial mantle over weathered bedrock	Colluvial mantle over weathered bedrock	Colluvial mantle over weathered bedrock
Description	Weakly bleached reddish brown gradational soils	Reddish brown gradational sols with rough ped fabric	Stony loam soils	Friable brown gradational soils
Surface texture	Gravelly loam	Loam	Gravelly loam	Loam
Permeability	High	High	High	High
Depth (m)	0.7	1.5	0.2	1.5
LAND USE	Mostly uncleared; limited timber production from better-quality forest; forest grazing Cleared areas; areas around Bright and Myrtleford have been planted to *Pinus radiata*			
SOIL DETERIORATION HAZARD				
Critical land features, processes, forms	Compaction of soils in intensive-use areas results in concentration of surface run-off, which can cause erosion there; protective ground cover, including any leaf litter, is important in reducing the rate of surface run-off; high rates of run-off may cause sheet erosion and contribute to gully or stream-bank erosion lower in the landscape.			