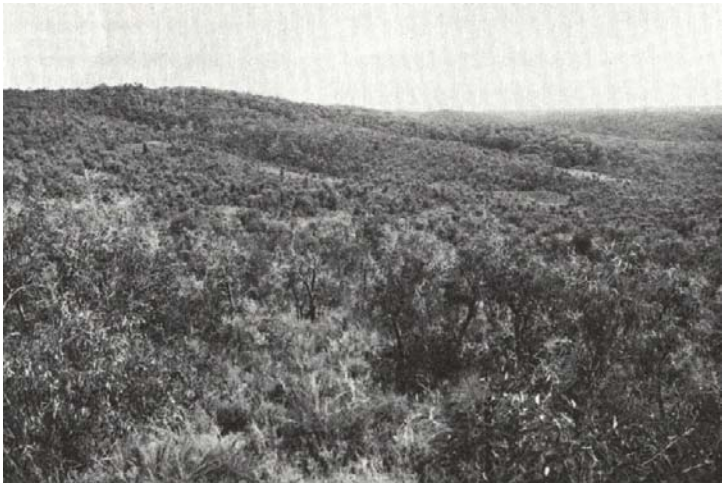


7.22 Junction Track Land System

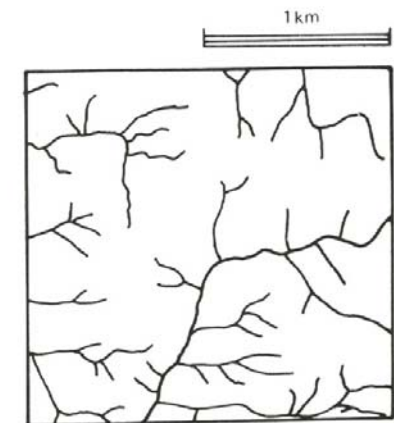
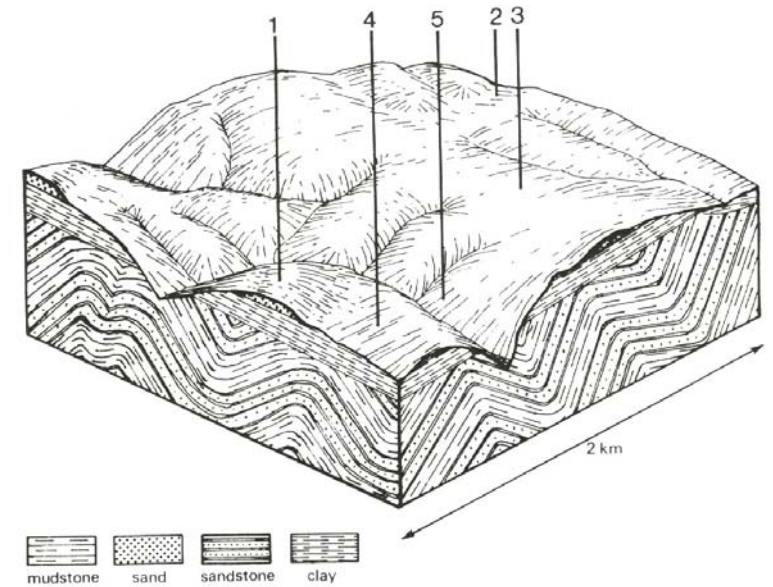
The junction between Cretaceous and Tertiary sediments on the western periphery of the Otway Range is clearly reflected in vegetation changes. However, the junction is discontinuous and there is a belt of land where the higher parts of the landscape are capped by Tertiary sands with only occasional areas of silts and clays derived from Cretaceous sediments. The lower slopes are often steeper, with outcrops of Cretaceous sandstones and mudstones. Thus, the higher areas carry low woodlands of *Eucalyptus nitida* and *E. baxteri*, while the lower slopes support open forests or even tall open forests of *E. obliqua* and *E. cypellocarpa*.

This landscape pattern is somewhat similar to the Redwater Creek land system. The major distinguishing feature is that the position in the landscape at which the Cretaceous sediments outcrop is very variable. The deposit of sand above the Cretaceous sediments varies in thickness, but is usually deep enough for the native vegetation to be dependent upon the sand for its nutrient supply.

Most parts of this land system remain uncleared and unused. Some sand and gravel extraction pits have been established in the past. Pines have been established on small areas adjoining privately held land.



Most slopes support low woodlands of *E. nitida*, but outcrops of Cretaceous sediments can be recognised by the increases soil fertility and the accompanying change to open forests or tall open forests of *E. obliqua* and *E. cypellocarpa*.



JUNCTION TRACK

Area: 41 km²

	Component and its proportion of land system				
	1 30%	2 5%	3 20%	4 30%	5 15%
CLIMATE Rainfall, mm Temperature, 0°C Seasonal growth limitations	Annual: 1,100 – 1,400, lowest January (55), highest August (150) Annual: 12, Lowest July (7), highest February (17) Temperature: less than 10°C (av.) May – September Precipitation: less than potential evapotranspiration late November – mid March				
GEOLOGY Age, lithology	Paleocene unconsolidated sand, gravel, silt and clay				Lower Cretaceous sandstone and mudstone
TOPOGRAPHY Landscape Elevation, m Local relief, m Drainage pattern Drainage density, km/km ² Land form Land form element Slope (and range), % Slope shape	Dissected hills with broad gentle hill cappings on western periphery of the Otway Range 30 - 270 75 Dendritic with some radial areas 3.5 Hill				
NATIVE VEGETATION Structure Dominant species	Low woodland <i>E. nitida, E. baxteri</i>	Closed scrub <i>Leptospermum juniperinum, Melaleuca squarrosa</i>	Low open woodland <i>E. baxteri, E. nitida</i>	Open forest <i>E. baxteri, E. obliqua, E. radiata, E. nitida</i>	Tall open forest <i>E. obliqua, E. cypellocarpa</i>
SOIL Parent material Description Surface texture Permeability Depth, m	Quartz sand and gravel Grey sand soils, uniform texture Loamy sand Very high >2	Alluvial sand, plant remains Black sand soils, uniform texture Silty loam High >2	Quartz sand and gravel Grey sand soils with hardpans, uniform texture Loamy sand Very low 1.1	Clay, silt, sand and gravel Yellow gradational soils, weak structure Sandy loam High >2	In-situ weathered rock Brown gradational soils Fine sandy clay loam Moderate 1.5
LAND USE	Uncleared areas: Sand and gravel extraction; hardwood forestry for posts, poles, fuel and some sawlogs on more fertile soils; nature conservation; water supply protection				
SOIL DETERIORATION HAZARD Critical land features, processes, forms	Very low inherent fertility and high permeability lead to nutrient decline. Steeper slopes with compacted soils are prone to sheet, rill and scour gully erosion.	High water tables lead to waterlogging.	Hardpans restrict vertical drainage leading to seasonal waterlogging. Very low inherent fertility, with some leaching of permeable high acidic surfaces, leads to nutrient decline.	Low inherent fertility and high permeability lead to nutrient decline. Weakly structured soils on steeper slopes are prone to sheet erosion.	Clay subsoils on steeper slopes subject to periodic saturation are prone to landslips. Soils of moderate permeability on steep slopes are prone to sheet erosion.