724231

NIETTA

Nietta land system comprises areas of low hills formed on Cambrian sediments. It has a scattered distribution in the north-east quarter of the Region where it extends outwards from the footslopes of Black Bluff and St Valentines Peak land systems. On steeper valley slopes it gives way to Forth River land system.

The soils vary in texture grade from duplex on the crests to gradational in the intermediate positions to a uniformly textured clay on the footslopes and along the flowlines. The rather dense B horizon of the duplex soil and the slowly permeable mottled soil found in the poorly drained depressions contrast with the well structured and highly permeable profiles on the other components. Gravel is a feature of the soils except on the crests.

Stringybark and gum-topped stringybark dominate the forests on the crests and side slopes and in the depressions. In the tall mixed forest along the flowlines, however, the same species occupy subsidiary positions while myrtle and sassafras assume the dominant role. Cutting grass is prominent on the poorer drained sites, whereas silver wattle tends to grow on the better drained soils. Another wattle, *Acacia mucronata,* dominates the understorey on the duplex soils. Soft tree fern is a feature of the lower vegetation strata over virtually the whole area.

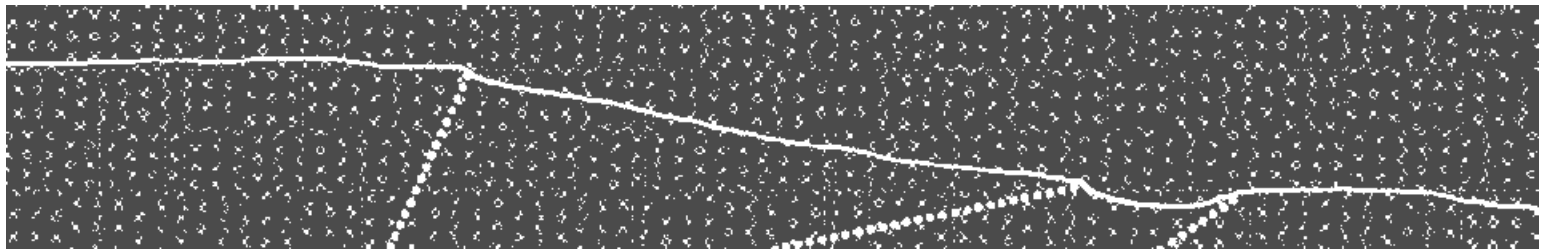
Much of the natural vegetation has now been cleared to make way for grazing. Forestry is the other major land use and as well as the native forests, areas north of Nietta have been planted to pine.

The main hazard within the system is waterlogging of soils in the poorly drained depressions.

LAND SYSTEM

724231

Nietta



COMPONENT	1	2	3	4
PROPORTION %	30	40	10	20
CLIMATE	Average Annual Rainfall 1 500-2 000 mm			
GEOLOGY	Cambrian greywacke turbidite sequences			
TOPOGRAPHY Land form	Low hills			
Position	Crests	Sideslopes	Poorly drained depressions	Footslopes, flowlines
Average Sideslope °	4	7	5	10
NATIVE VEGETATION Structure	Open forest			Tall closed forest
Association	Stringybark, black peppermint, *Acacia mucronata*, lancewood, cutting grass	Gum-topped Stringybark, stringy-bark, silver wattle, bracken, soft tree fern	Stringybark, *Juncus* sp., cutting grass, mountain pepper, soft tree fern	Myrtle, sassafras, soft tree fern, Stringybark, gum-topped stringy-bark, silver wattle
SOIL	Brownish yellow (10 YR 6/6) to strong brown (7.5 YR 5/8) duplex soil	Gravelly, yellowish red (5 YR 4/8) gradational soil, fine structure	Gravelly, mottled pale grey (10 YR 7/1), strong brown (7.5 YR 5/8) gradational soil	Gravelly, friable, strong brown (7.5 YR 5/6) clay soil, uniform texture
Surface Texture	Fine sandy clay loam	Clay loam	Peaty clay loam	Gravelly clay loam
Permeability	Moderate	High	Low	High
Average Depth m	0.7	1.4	1.8	0.5
PRESENT LAND USE	Forestry, grazing			
HAZARDS	Low sheet erosion		High waterlogging	Low sheet, gully erosion