

484132

MORIARTY

Moriarty land system comprises an area of low hills developed on Tertiary non-marine deposits and basalt rock. Its only occurrence in Region 3 is in the north-east, east of Devonport, and this same body extends into Region 4.

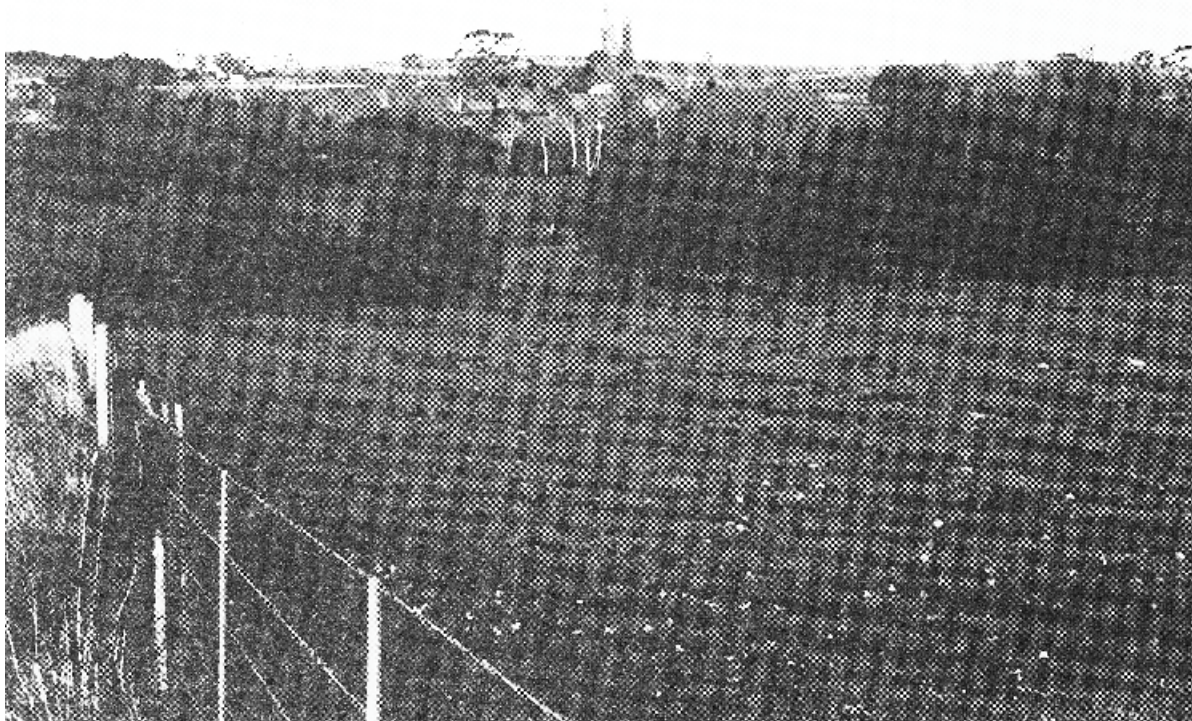
The highest parts of the land system are consistently occupied by deep, red basaltic soils, which have excellent drainage characteristics. Elsewhere the pattern of soil types is rather confused by an apparently haphazard distribution of sandy, gravelly and clay parent materials. Hence the sporadic occurrence of waterworn gravel and the highly variable proportions of sand and clay in the various soil horizons. Sands, sandy gradational, duplex and gradational profiles were observed. Colours recorded for soils on the sideslopes included browns, yellowish browns and brownish

yellow, whereas, along the creek flats various shades of grey predominate with different amounts of mottling. The scattered patches of sand vary in colour from grey through to red.

The original vegetation on the basaltic soils of the crests and upper slopes was probably a tall forest dominated by stringybark. The finer textured soils on the lower slopes and creek flats supported a closed community dominated by swamp gum and white gum with a dense understorey of mainly paperbark. Black peppermint and, to a lesser extent, stringybark are the principal species on the sandier soils with heath and *Casuarina monilifera* being typically found in the shrub layer.

The more productive soils have largely been cleared for grazing and cropping.

Waterlogging is the principal soil conservation constraint to land development.

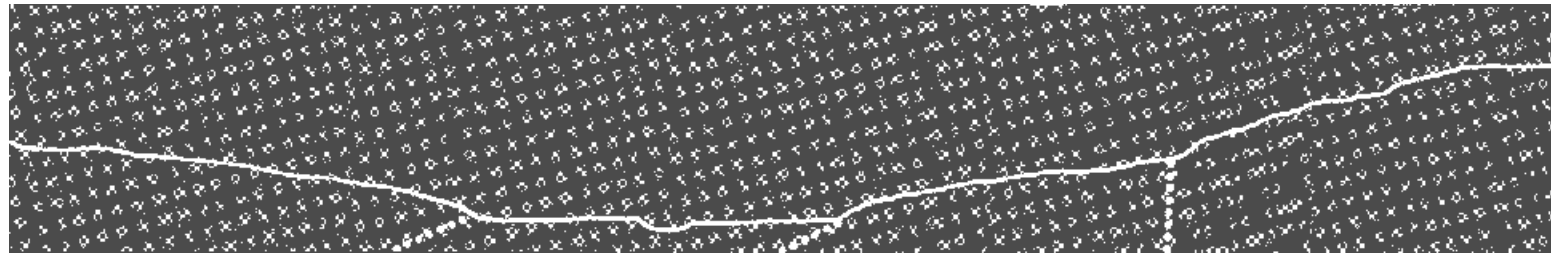


Component 4 in the foreground gives way to the creek flats and then the gentle footslopes

LAND SYSTEM

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Moriarty



COMPONENT	1	2	3	4
PROPORTION %	30	25	20	25
CLIMATE	Average Annual Rainfall 750-1 000 mm			
GEOLOGY	Tertiary non marine sands, gravels, clays			Tertiary basalt
TOPOGRAPHY				
Land form		Low hills		
Position	Areas of sandy soils	Creek flats	Gentle footslopes	Crests, upper slopes
Average Sideslope °	3	<1	2	5
NATIVE VEGETATION				
Structure	Open forest	Closed forest and scrub		Tall open forest
Association	Black peppermint, stringybark, heath, <i>Casuarina monilifera</i>	Swamp gum, white gum, blackwood, paperbark, cutting grass		Strmgybark
SOIL	Complex	Mottled grey (10 YR 5/1), yellowish brown (10 YR 5/8) sandy gradational and duplex soils	Yellowish brown (10 YR 5/4) gradational soil	Red (2 5 YR 4/6) gradational sod
Surface Texture		Sandy loam	Clay loam	
Permeability		Low		Moderate
Average Depth m		1 9	1 6	>1 8
PRESENT LAND USE	Grazing, cropping, light industry			
HAZARDS		High waterlogging	Moderate waterlogging	Low sheet erosion