## 782221

## HAMPSHIRE

Hampshire is one of several land systems within Region 3 derived from remnants of Tertiary basalt. It has a scattered distribution across the north from around Mawbanna in the west to the River Forth in the east. The basalt mantle has been eroded in the west by the upper tributaries of the Arthur River and in the east by the Leven and Forth drainage lines. The mantle is also interrupted by steeply dipping Ordovician strata and by emplacements of granite.

There is a gradual boundary between Hampshire and Guildford land system in the south but there is a more or less well defined scarp separating it from the steeper topography of Highclere land system to the north. This scarp runs approximately parallel with the coast and is situated about 28 km inland. Hampshire land system forms a gently sloping plain rising from 450 m along its northern edge to 600 m at its southern margin. Small scattered monadnocks with plateau crests are a feature of the plain. The major soil has a stony, yellowish red gradational profile which is very well drained and has a high permeability. Soils are darker but friable on the plateau scarps and change to a strong brown on the plateau tops. Along the creek flats soils are only slowly permeable.

A mixed forest of stringybark with rainforest species initially covered most of the area, while along the creek flats, swamp gum and woolly teatree are prominent.

Areas have been cleared for grazing by mainly beef cattle, but forestry is the main land use. As well as the native timber, exotic softwoods are increasing in importance. A considerable proportion of country now under pines was formerly cleared for grazing. The predominant plantation species is Monterey pine (*Pinus radiata*) but Douglas fir (*Pseudotsuga douglasii*) is also being tested.

Moderate sheet erosion is likely on the monadnocks but there is only a low erosion hazard elsewhere. Tunnel erosion has been reported from an area in the upper Dip River. (J. D. Colclough, pers. comm.)



Scattered small monadnocks with plateau crests are a feature of the undulating plain.

LAND SYSTEM	
782221	
Hampshire	
Transponde	

COMPONENT	1	2	3	4	
PROPORTION %	10	5	80	5	
CLIMATE	Average Annual Rainfall 1 500-2 000 mm				
GEOLOGY	Tertiary basalt				
TOPOGRAPHY					
Land form	Undulating plain				
Position	Plateaux	Scarps	Lower slopes	Creek flats	
Average Sideslope °	2	10	4	2	
NATIVE VEGETATION					
Structure		Closed forest			
Association	Stringybark, myrtle, sassafras, blackwood, dogwood, soft tree fern Swamp gum, woolly tea-tree, Junct sp.				
SOIL	Strong brown (7-5 YR 5/6) grada- tional soil	Stony, friable, dark reddish brown (5 YR 3/4) gradational soil	Stony, gravelly, yellowish red ( 5 YR 4/6) gradational soil	Olive grey (5 Y 5/2) gradational soil	
Surface Texture		Loam			
Permeability	Moderate	High		Low	
Average Depth m	1.6	0.3+	0.8	0.3	
PRESENT LAND USE	Softwood forestry, grazing, nature conservation				
HAZARDS	Moderate sheet erosion		Low sheet erosion		