

# 738351

## TIGER RANGE

Folded Ordovician sediments including sandstone, mudstone, siltstone and quartzite are the major rock types that underlie these north-south trending mountains. The land system is situated immediately west of the Florentine Valley. For a detailed description of the geology in the area see Corbett and Banks (1974).

Soils vary markedly reflecting the different sediments from which they are derived. Uniform loamy sands are found on sandstone with clays and clay loams on mudstone and siltstone. Sandstone scree deposits, which occur on eastern and western slopes, have rocky loamy sand to sand mineral horizons with a surface of sandy black fibrous peat. A podzolic soil (sandy A<sub>1</sub> and A<sub>2</sub> horizons with a prominent iron rich layer over a brown clay loam B horizon) examined on the eastern slopes of the Gordon Range had been recently logged and although there were scattered *Eucalyptus obliqua* juveniles the area was

dominated by *Phebalium squameum* seedlings. Podzols are often quite acidic, deficient in several nutrients, have limited moisture supply during dry periods (Stace et al 1972) and have pan formations which can limit root penetration. They are also particularly vulnerable to rill, gully and sheet erosion especially on steep, long slopes. The podzol description does not occur on the land system diagram.

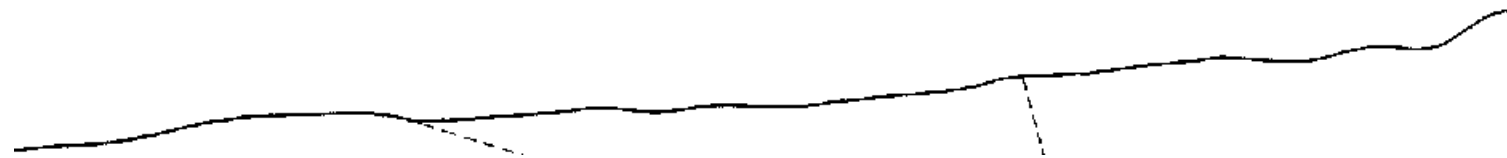
Exposed western slopes on sandy soils support shrubland dominated by *Eucalyptus nitida*. Species such as *Pteridium esculentum*, *Aotus ericoides*, *Libertia pulchella* and *Amperea xiphoclada* are typical on these sandy soils. In marked contrast to this vegetation tall open forest occurs on more protected aspects with deeper, more clayey or loamy soil profiles. Mixed forest is characteristic on these sites with *Eucalyptus regnans*, *Atherosperma moschatum* and *Nothofagus cunninghamii*. On more sandy sites *Eucalyptus viminalis* and *E. johnstonii* replace *E. regnans*.

Forestry is the main land use at present. Rill, gully and sheet erosion are major degradation problems on steep, sandy slopes.

LAND SYSTEM  
TIGER RANGE

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Area (ha): 12850



ALTITUDINAL RANGE (m)	600-900	APPROXIMATE ANNUAL RAINFALL (mm) 1500-2000	
SITE NO. /ALTITUDE (m)/ASPECT	97/600/W	160/600/N	161/720/W
TOPOGRAPHY	North - south trending mountain ranges		
Position	Exposed western slopes on sandstone scree	Protected slope on mudstone and siltstone	Slope on sandstone
Typical Slope( )	10-20	10-20	10-20
Proportion(%)	25	40	35
GEOLOGY	Ordovician sandstone, mudstone, siltstone and quartzite. Sandstone and quartzite scree on western slopes		
NATIVE VEGETATION Structure	Tall shrubland	Tall open forest (mixed forest)	Open forest to tall open forest
Floristic Association (See Appendix 1 for common names)	Eucalyptus nitida Leptospermum scoparium Monotoca glauca Oxylobium ellipticum Aotus ericoides Pteridium esculentum Boronia citriodora Hibbertia procumbens Libertia pulchella Pimelea drupacea	Eucalyptus regnans Atherosperma moschatum Nothofagus cunninghamii Trochocarpa gunnii Dicksonia antarctica Histiopteris incisa Cenarrhenes nitida	Eucalyptus viminalis E. johnstonii Phyllocladus aspennifolius Nothofagus cunninghamii Atherosperma moschatum Phebalium squameum
SOIL Surface(A or P horizon)Colour (moist) and texture	Sandy, black (7. 5 YR 2/0) fibrous peat	Reddish black (10 R 2. 5/1) fibrous peat over very dark greyish brown (10 YR 3/2) clay loam	Reddish black (10 R 2. 5/1) fibrous peat
Subsoil (or B horizon) colour (moist) and texture	Pale brown (10 YR 6/3) loamy sand to sand with cobbles and rocks. Occasional iron rich B horizon	Gravelly, dark yellowish brown (10 YR 4/4) silty clay over a yellowish brown (10 YR 5/8) clay loam	Gravelly, rocky dark greyish brown (10 YR 4/2) or yellowish brown loamy sand
Primary Profile form	Uniform	Gradational (complex)	Uniform
Depth surface horizon(m)	0. 15	0. 45	0. 40
Typical total depth(m)	0. 60	1. 60	2. 00
Permeability	High	Moderate	High
LAND USE		Forestry	
HAZARD	High rill, gully and sheet erosion		