

821251

ROSEBERY

Rosebery land system comprises an extensive belt of mountainous terrain in the southern part of Region 3. It represents a major part of the Dundas Trough (see geology chapter) and from the southern boundary of the Region it stretches 90 km north to the Que River and Middlesex Plains. This belt of country averages about 12.5 km wide, but its distribution is interrupted by areas of Tullah and Henty land systems. It consists mainly of Cambrian volcanic rocks but a feature of the area is the scattered occurrence of periglacial deposits, resulting from the last ice age.

Besides the brownish yellow soils on the steep sideslopes, there are in places greyish brown, yellowish brown and strong brown profiles. Similarly, in the second component, although pale brown soils predominate they are sometimes even paler and gravelly. Soils found on the peaks and those derived from periglacial parent materials appear quite similar, both being highly permeable and dark in colour. However, the periglacial deposits are mainly fragments of Ordovician con-

glomerate, which is more siliceous than the Cambrian rocks. There are also isolated patches of deep, stony and friable, yellowish red soils, which have formed on granitic rock.

Myrtle, sassafras and celery-top pine dominate the closed forest vegetation found on the first two components. Smithton peppermint is subdominant while manuka and leatherwood are important understorey species. Stringybark is locally dominant in areas of open forest which tend to occur on the infrequent patches of yellowish brown and strong brown soils. The dark coloured soils on the peaks and those formed from periglacial material support a markedly different plant community. Here, shrubs and sedges constitute an open heath and sedgeland dominated by tea-trees, button grass, *Sprengelia incarnata* and *Leptocarpus tenax*

This extensive belt of rugged mountainous terrain mainly serves as a zone of nature conservation. However certain centres have been more or less affected by mining operations.

Due to the long steep slopes and the erodible nature of many of the soils, there is a high erosion hazard throughout the system.

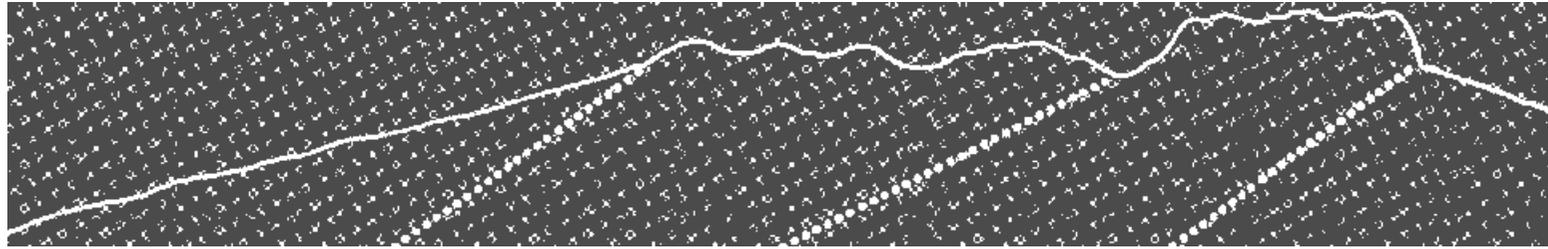


Peaks shrouded in mist must be a frequent site in Rosebery land system during winter In the bottom right is part of the Wilhamsford mining settlement

LAND SYSTEM

821251

Rosebery



| COMPONENT | 1 | 2 | 3 | 4 |
|---------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| PROPORTION % | 40 | 30 | 20 | 10 |
| CLIMATE | Average Annual Rainfall 2 000-2 500 mm | | | |
| GEOLOGY | Cambrian acid and intermediate volcanic rocks | | | Quaternary periglacial deposits |
| TOPOGRAPHY | Mountainous | | | |
| Land form | Mountainous | | | |
| Position | Steep sideslopes | Crests, upper slopes | Peaks | Sideslopes |
| Average Sideslope ° | 30 | 15 | 20 | 18 |
| NATIVE VEGETATION | Closed forest | | Open heath and sedgeland | |
| Structure | Closed forest | | Open heath and sedgeland | |
| Association | Myrtle, sassafras, celery top pine, manuka, leatherwood, Smithton peppermint, stringybark, horizontal, hard water fern | | Honeysuckle, manuka, <i>Leptospermum nitidum</i> , button grass, <i>Sprengelia incarnata</i> , <i>Leptocarpus tenax</i> , <i>Restio</i> sp, Smithton peppermint, <i>Melaleuca squarrosa</i> | |
| SOIL | Gravelly brownish yellow (10 YR 6/6) gradational soil | Pale brown (10 YR 6/3) gradational soil | Gravelly dark grey (10 YR 4/1) gradational soil | Gravelly, dark, organic sandy clay loam soils |
| Surface Texture | Peat | Clay loam | Peat | |
| Permeability | Moderate | | | High |
| Average Depth m | 0.3 | 0.5 | 0.3 | |
| PRESENT LAND USE | Nature conservation, mining, residential | | | |
| HAZARDS | High sheet and rill erosion | | | |