

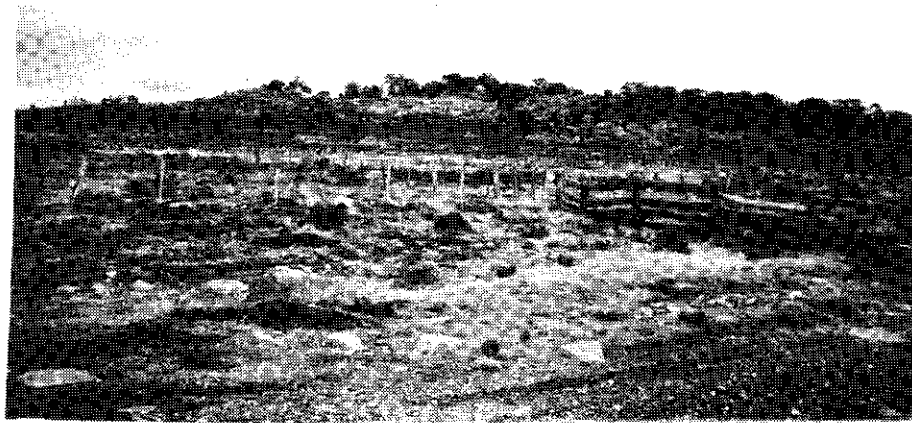
## Miena

Extending from Great Pine Tier and Lake Fergus in the west to the southern shores of the Great Lake in the east is an area of undulating terrain with low hills forming the Miena land system. Jurassic dolerite is widespread although small areas of basalt occur in the vicinity of Skittleball Hill. Many of the components are covered with rock debris which probably developed under Pleistocene periglacial conditions. Rock outcrop is common on slopes and crests.

Soils display brownish red gradational profiles with thin surface (A) horizons. These are often overlain by a 5 to 10 cm deep litter layer. Peat soils occur in poorly drained positions such as valley flats and swamps, but occasionally (e.g. upper reaches of the Little Pine River) they extend onto slope components. The vegetation typical of swamps and valley flats extends onto these slopes. It consists of a floristic mosaic of bolster moorland.

Slope components have the greatest variation in vegetation reflecting variation in topographic exposure and cold air drainage. Taller forests often grow in protected positions such as the eastern slopes of Barren Tier while on westerly aspects woodlands occur. Taller forests are dominated by Eucalyptus delegatensis and E. dalrympleana with E. coccifera, E. pauciflora and occasionally E. gunnii dominating exposed situations. The effects of cold air drainage from the higher plateau surface are obvious in the upper valley of the Little Pine River where heathland replaces woodland on lower slopes. Here, (the relatively cold sensitive ash) E. delegatensis is often established on slope positions where cold air does not settle. The most exposed areas on crests and plateaux support woodlands of E. coccifera and cold tolerant shrubs such as Orites spp. The area between Great Pine Tier and Lake Fergus is probably the most exposed part of the land system. Scattered individuals of E. coccifera occur although tussock grassland and open heath also dominate in places.

Land uses in this land system include grazing, forestry and recreation. Shack development has taken place at the southern end of the Great Lake. Land degradation hazards include sheet erosion on drier sites and waterlogging in swamps. Sheet erosion is likely to be the greatest threat on the drier locations (e.g. in components 5) where *Poa* grasslands occur west of Lake Fergus. Four wheel drive vehicles have caused severe channeling in peats immediately north of Little Pine Lagoon on the track to Lake Fergus. Rill erosion has extended into the mineral horizon although 'armouring' by a rocky layer, often prevents further erosion. Here a rocky layer at the top of the mineral soil (immediately below the peat) protects the profile from further degradation.



*Sheet eroded flats with open heath and tussock grassland. Rocky crest component in background with Eucalyptus coccifera woodland.*

# LAND-SYSTEM

M i e n a

4 7 2 4 4 3

Area (ha):  
21272

## COMPONENT

PROPORTION (%)

RAINFALL (mm)

## GEOLOGY

## TOPOGRAPHY

Position

Typical Slope(°)

NATIVE VEGETATION  
Structure

Floristic  
Association  
(See Appendix 1  
for common  
names)

## SOIL

Surface(A)Texture

B Horizon(subsoil)  
Colour (wet)  
Texture and  
primary profile  
form

Permeability

Typical depth(m)

Depth(A)Horizon(m)

## LAND USE

## HAZARDS

	1	2	3	4	5
	10	10	35	10	35
	Approximate Annual Rainfall: 750-1000				
	Jurassic dolerite with areas of basalt				
	Undulating terrain with low hills				
	valley	Flats/Swamps	well Drained Flats	Rocky Slopes	Rocky Crests
	0-1	1-3	5-15	7-10	3-7
	Tussock Grassland/ Sedgeland/Heathland	Open Heath/ Tussock Grassland	Low Open Forest	Low Open Woodland	Open Woodland to Low Open Woodland, Tussock Grassland in Places
	<u>Poa sp.</u> <u>Restio australis</u> <u>Lepidosperma filiforme</u> <u>Empodisma minus</u> <u>Carpina alpina</u> <u>Astella alpina</u> <u>Richea scoparia</u> <u>Epacris gunnii</u> <u>Abrotanella forsterioides</u> <u>Pterygopappus lawrencii</u>	<u>Helichrysum hookeri</u> <u>Richea acerosa</u> <u>Epacris gunnii</u> <u>Lissanthe montana</u> <u>Hakea epiglottis</u> <u>Poa sp.</u>	<u>Eucalyptus coccifera</u> <u>E. pauciflora</u> <u>E. dalympheana</u> <u>E. delegatensis</u> <u>Hakea lissosperma</u> <u>H. epiglottis</u> <u>Coprosma nitida</u> <u>Lissanthe montana</u> <u>Helichrysum ledifolium</u> <u>Trochocarpa thymifolia</u> (Valley bogs occur in places with vegetation very similar to that of the swamps)	<u>Eucalyptus coccifera</u> <u>Orites revoluta</u> <u>Pultenaea juniperina</u> <u>Cyathodes parvifolia</u> <u>Helichrysum ledifolium</u> <u>Lissanthe montana</u>	<u>Eucalyptus coccifera</u> <u>Orites revoluta</u> <u>Cyathodes parvifolia</u> <u>Pultenaea juniperina</u> <u>Helichrysum ledifolium</u> <u>Poa sp.</u>
	Peat	Organic Silty Clay Loam	Organic loam/loam	Organic loam	Organic loam
	Gravelly, yellowish brown (10 YR 5/4) clay. Organic.	Stony, dark brown (7.5 YR 3/4) light clay. Gradational.	Gravelly, stony, light clay to clay loam. Wide variety of colours ranging from strong brown (7.5 YR 5/6) to red (2.5 YR 4/6). Gradational.	Gravelly, stony, dark brown/ brown (7.5 YR 4/4) to dark reddish brown (5 YR 3/2) light clay to clay loam. Gradational.	Gravelly, stony, dark brown/brown (7.5 YR 4/4) to strong brown (7.5 YR 5/8) light clay to clay loam. Gradational.
		Moderate	Moderate	Moderate	Moderate
	>0.50	0.40	>0.50	>0.50	>0.50
	0.30-0.40	0.05	0.05-0.10	0.05-0.10	0.10-0.155
	Shack development, forestry, grazing, recreation				
	Waterlogging, rilling	I			Moderate sheet erosion