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Alma Pass

The Alma Pass Land System includes an area of high country between the Lagoon of Islands and Lake Sorrel. It is an undulating, exposed, hilly area which probably receives slightly higher precipitation than surrounding regions due to its elevated position. Winter snowfalls are also more frequent than on adjoining lower country. Country rock is Jurassic dolerite which often outcrops as rocky ridges. Fragments are dispersed through soil profiles which is probably a result of Pleistocene periglacial solifluction events.

Although a number of components have stony yellowish brown gradational soils typical of much of the Central Plateau, most contain stony brown or reddish brown gradational soils. Accurate depth measurements were difficult to obtain due to the predominance of rocky fragments in the profile. The presence of open to tall open forest in protected situations on well drained loamy soils suggests relatively high fertility. *Eucalyptus delegatensis* is the dominant species but *E. pauciflora* and *E. coccifera* are also present. An open heath understorey dominated by *Cyathodes parvifolia*, *Pultenaea juniperina* and *Lissanthe montana* is frequently found. The most exposed positions on crests have low open woodlands of *Eucalyptus coccifera*. *Eucalyptus subcrenulata* which tolerates poor drainage conditions co-dominates with *E. coccifera* on organic soils associated with poorly drained crest situations. This former species may also occur on organic soils around watercourses where thickets of *Leptospermum lanigerum* scrub predominate. *Leptospermum lanigerum* is relatively frost sensitive and may be killed in areas susceptible to cold air drainage, during very cold snaps.

This land system is presently utilised for grazing and forestry. The greatest land degradation threat is on exposed crests where sheet erosion is most evident. Revegetation is limited by frost heave which uproots seedlings. Waterlogging is a potential hazard on areas covered by organic soils.

LANDSYSTEM

Alma Pass

4 7 2 4 4 2

Area (ha) -
6 4 5 2

COMPONENT	1	2	3	4	5	6
PROPORTION (%)	20	20	10	20	20	10
RAINFALL (mm)	Approximate Annual Rainfall: 750-1000					
GEOLOGY	Jurassic dolerite					
TOPOGRAPHY	Hilly country with rock outcrop in places					
Position	Rocky Lower Slope	Rocky Mid Slope	Watercourse	Rocky Upper Slope	Hell Drained	Poorly Drained Crest
Typical Slope (%)	3-5	5	0-1	5-7	1-3	1-3
NATIVE						
Structure	(Tall) Open		(Tall) Open Forest	(Tall) Open Forest	Low Open Woodland	Low Open Woodland
Floristic Association (See Appendix 1 for common names)	Eucalyptus delegatensis E. pauciflora Acacia dealbata Cyathodes parvifolia Lissanthe montana Olearia phlogopappa Acaena novae-zelandiae Poa	Eucalyptus subcrenulata Leptospermum lanigerum Cyathodes parvifolia Lissanthe montana Juncus pallidus	Eucalyptus delegatensis Cpromosa nitida Cyathodes parvifolia Pultenaea juniperina Lonatia tinctoria Lissanthe montana Poa sp.	Eucalyptus delegatensis Acacia dealbata Hakea lissosperma Cyathodes parvifolia Pultenaea juniperina Lissanthe montana Poa	Eucalyptus coccifera E. subcrenulata Epacris gunnii Restio australis Poa sp.	
SOIL-Surface(A)Texture	Silty Loam	Loam	Peat	Loam	Loam	Peat
B Horizon(subsoil) Colour (wet) Texture and primary permeability	Dark reddish brown (5YR 3/2) clay loam. Gradational.	Stony, gravelly, dark yellowish brown (10 YR 3/4) silty clay loam. Gradational.	Stony, gravelly, brown/dark brown (10 YR 4/3) soil. Organic.	Stony, gravelly, dark yellowish brown (7.5 YR 3/4) sandy clay loam. Gradational.	Stony, gravelly, dark reddish brown (5 YR 3/4) sandy clay loam. Gradational.	Stony, gravelly, dark grey (10 YR 4/1) to yellowish brown (10 YR 5/6) soil. Organic.
Permeability	High-Moderate	High-Moderate		Moderate	Moderate	
Typical Depth (m)	>0.50	>0.50	>0.30	>0.30	>0.30	>0.40
Depth(A)Horiz	0.15	0.10	0.20	0.05	0.05	0.20
LAND USE	Forestry, grazing					
HAZARDS	Low sheet erosion		Waterlogging	Moderate sheet erosion		Waterlogging