

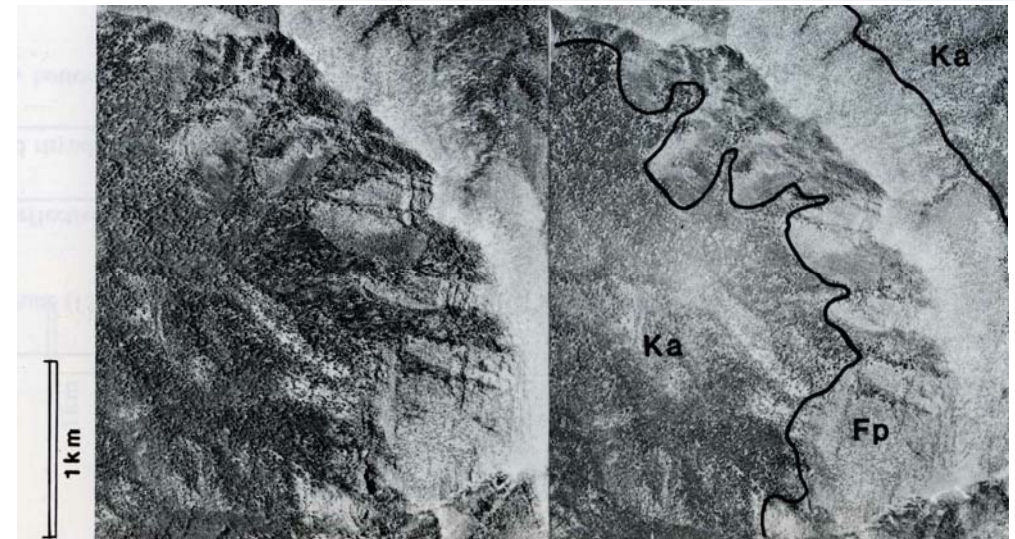
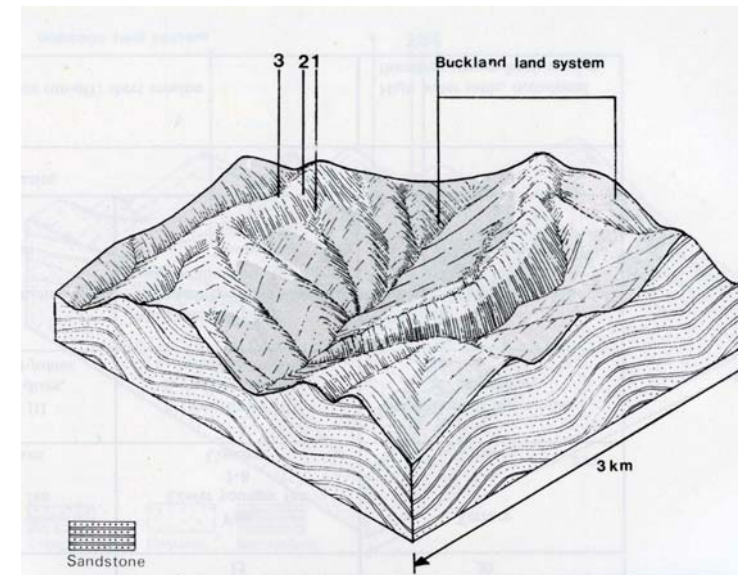
7.10 Feathertop land system

This land system is an extension of the map unit of that name from the Kiewa area study (Rowe 1972). Because of its high elevations, the dominant ecological influences are low temperatures and winter snow, and the rock type has less importance. The land system includes a number of different rocks: Ordovician sedimentary rocks predominate, but Carboniferous sedimentary rocks, granodiorite and small areas of basalt such as the one near Burnt Hut Knob are included. Annual precipitation is high, with much of it falling as snow in winter. Summers are mild to cool, and winter temperatures are low to very low. Most areas are also subject to severe winds.

The soils are mainly organic loam soils, with stony loam soils also very common. The warmer areas at lower elevation may have friable brown gradational soils.

Native vegetation is usually low woodland to open scrubland of *Eucalyptus pauciflora*, with shrubs of *Oxylobium alpestre*, *Daviesia ulicifolia* and *Bossiaea foliosa* and ground cover of *Poa australis* and herbs.

These areas are commonly included in summer grazing areas, and both cattle and bushwalkers use the ridge-tops as major access routes. The soils are very prone to wind and water erosion and, where soil cover is damaged, revegetation can be slow because of the climatic extremes.



FEATHERTOP LAND SYSTEM Area 49 sq km

CLIMATE Rainfall, mean (mm) Temperature, mean (°C) Seasonal growth limitations	Annual 1500+; lowest January (100), highest June-August (250); winter snow Annual 4.5; lowest July (-2), highest January (11) Temperature – less than 10°C (av): March – December Precipitation – months less than 50% frequency of effective rain: nil		
GEOLOGY Age, lithology	Varied: mainly Ordovician greywacke, sandstone, siltstone, shale, mudstone; Lower Carboniferous conglomerate, sandstone, siltstone, shale; Devonian granodiorite; Tertiary basalt		
PHYSIOGRAPHY Landscape Elevation range (m) Relative relief (m)	Steep upper slopes and ridge crests 1400-1800 500		
LAND COMPONENT Percentage of land system	1 65	2 25	3 10
PHYSIOGRAPHY Land form Position on land form Slope range (%) Slope shape	Mountain slope Lower slope below about 1700 m 25-35 Linear	Mountain slope Upper slope above about 1700 m 30-40 Linear	Ridge crest Exposed, above about 1700 m 15-25 Convex
NATIVE VEGETATION Structure Dominant species	Low woodland to open shrubland <i>E. pauciflora</i>	Open heathland to low shrubland <i>Hovea longifolia, Grevillea australis, Oxylobium alpestre</i>	Herbfield <i>Celmisia asteliifolia, Poa australis</i>
SOIL Parent material Description Surface texture Permeability Depth (m)	Colluvial mantle over bedrock Organic loam soils Loam High 0.7	Colluvial mantle over bedrock Organic loam soils Loam High 0.5	<i>In situ</i> weathered bedrock Organic loam soils Loam High 0.3
LAND USE	Uncleared: summer grazing; recreation – bushwalking, winter skiing		
SOIL DETERIORATION HAZARD Critical land features, processes, forms	Organic loams have very loose consistence and are readily eroded by wind or water where bare soil is exposed; severe frosts and short growing season cause revegetation problems; highly permeable soils and high rainfall could cause nutrient decline; nutrient reserves in the soils are concentrated in surface few centimeters.		