



Landscape— Very steep to precipitous mountains on metasediments in the Brindabella Range, in the SW of the ACT. Slopes ~70%, local relief ~250 m, elevation 1490 - 1760 m. Mostly uncleared open-forest.

Soils— Shallow to moderately deep (<50 - 150 cm), moderately well-drained Chernic Leptic Tenosols (Lithosols and Alpine Humus Soils) and Organosols (Acid Peats).

Qualities and limitations— widespread shallow soils, widespread periodically frozen soils, localised soil fire hazard, widespread steep slopes, localised rock outcrop hazard, localised rockfall hazard, localised mass movement hazard, localised foundation hazard, widespread recharge zone, localised wind erosion hazard, localised gully erosion hazard, localised sheet erosion hazard.

LOCATION AND SIGNIFICANCE

Steep to precipitous mountains >1500 m altitude on metasediments of the Brindabella Range, including Mount Franklin and Mount Ginini. This landscape is essentially the top of the Picadilly (pis) soil landscape and has been mapped separately due to the significantly different soils (high organic content) found at this altitude. Type location is the summit of Mount Ginini (MGA grid reference 660920E, 6066840N, grid zone 55).

Variants

None.

Included landscapes

None.

LANDSCAPE

Landform

Very steep to precipitous mountains on metasediments. Slopes are moderately long (150 - 250 m), waxing and steep to precipitous (~70%), whilst local relief is ~250 m and elevation ranges between 1490 - 1760 m. Landform elements include crests and upper slopes. Rock scree are common on the steeper slopes and drainage depressions.

Geology

Ordovician metasediments of the Adaminaby Group, comprising turbiditic sequence; sandstone, mudstone, shale; quartzite, quartz phyllite, phyllite, slate. Also includes the Tidbinbilla Quartzite, comprising Silurian, massive to thinly-bedded quartz sandstone and quartzite, with minor shale and basal coarse gritstone, and a few other minor lithologies.

Source: DMR 2002.

Vegetation

Shrubby woodland dominated by *Eucalyptus pauciflora* (snow gum) and *E. delegatensis* (alpine ash).

Land use

Wholly contained within the Namadgi National Park. Past uses include several small ski runs cleared on Mount Ginini and Mount Franklin, which are now regenerating.

Land degradation

The ski runs were cleared of snow gums but are slowly regenerating. Otherwise land degradation is minimal.

Erosion hazard

Land use	Non-concentrated flows	Concentrated flows	Wind
nature conservation	slight	slight	slight

SOILS

Soil variation and distribution

Soils are dominated by shallow to moderately deep (<50 - 150 cm), moderately well-drained Chernic Leptic Tenosols (Lithosols and Alpine Humus Soils) and Organosols (Acid Peats).

Rock screes and summit surfaces have very shallow and stony loamy soils. Humus-rich soils of variable depth occur on the slopes. In protected areas the depth of the organic material can be up to 50 cm deep, in less protected areas the organic material is intermixed with the rocky parent material. The humic-rich topsoil is important for its interaction with water both as a store and a slow release mechanism, and is also a significance influence on biodiversity.

QUALITIES AND LIMITATIONS

Land capability

Urban Capability	D (E)	Soil Regolith Class	R1
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Limitations to land use

Grazing	very high to extreme	Cultivation	very high to extreme
Urban	very high to extreme		

Landscape

Steep slopes	widespread	Mass movement hazard	localised
Rock outcrop	localised	Rockfall hazard	localised
Foundation hazard	localised	Complex terrain	not observed
Productive arable land	not observed		

Soils

Shallow soils	widespread	Complex soils	not observed
Poor moisture availability	not observed	Non-cohesive soils	not observed

Hydrology

High run-on	not observed	Poor drainage	not observed
Permanently high watertables	not observed	Permanent waterlogging	not observed
Seasonal waterlogging	not observed	Flood hazard	not observed

Erosion

Wind erosion hazard	localised	Wave erosion hazard	not observed
Gully erosion hazard	localised	Sheet erosion hazard	localised
Streambank erosion hazard	not observed		

Salinity

Recharge zone	widespread	Discharge zone	not observed
Salinity hazard	not observed	Seepage scalds	not observed
Salt stores	low		

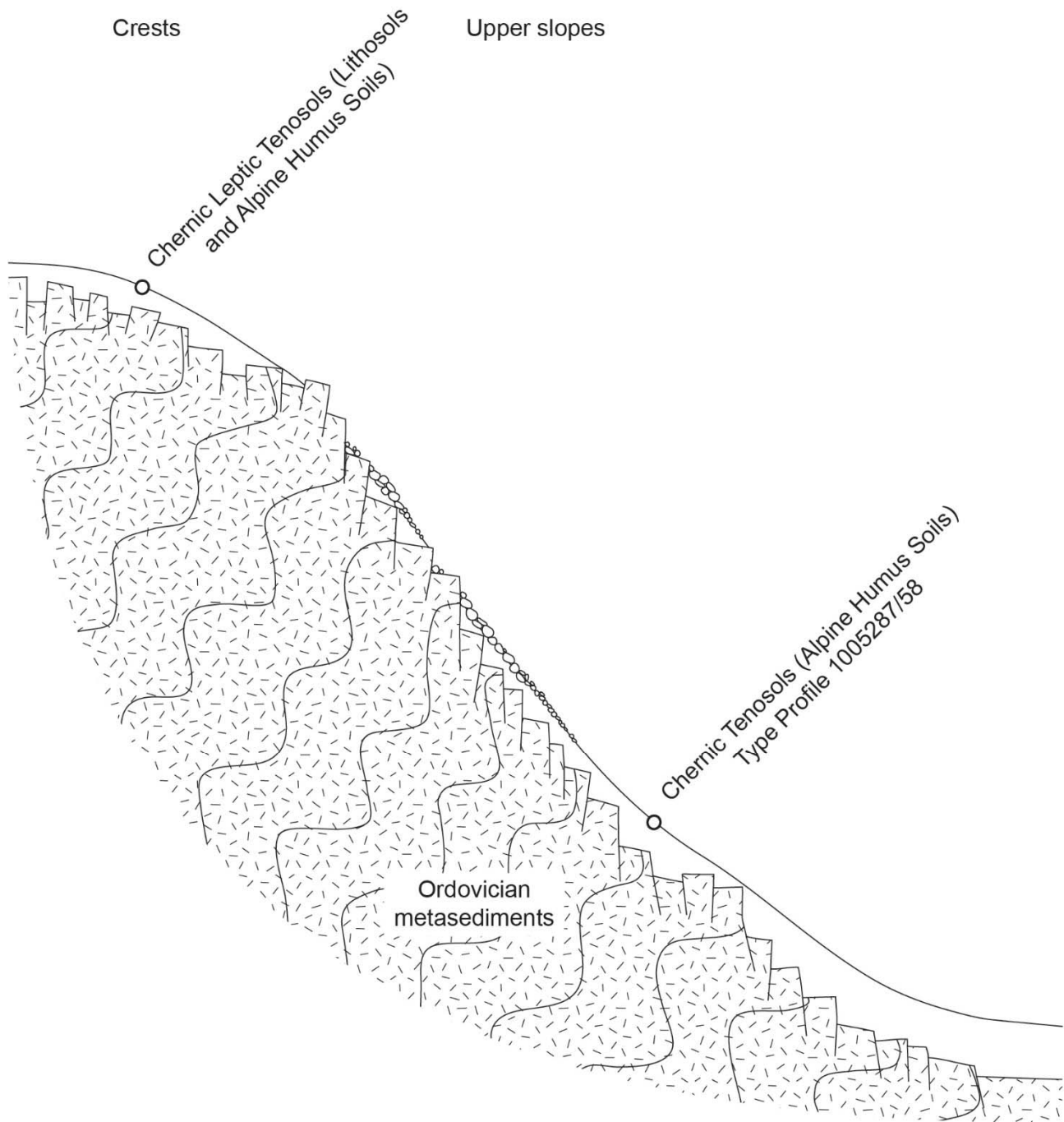
FACETS

qin(1)— Crests

Soils	Shallow (<50 cm), moderately well-drained Chernic-Leptic Tenosols (Lithosols and shallow Alpine Humus Soils).
Type Profile(s)	No Type Profile recorded
HGL Reference	Typically corresponds with: HGL 19 (Picadilly) MA 1.

qin(2)— Upper slopes

Soils	Moderately deep (50 - 150 cm), moderately well-drained, Chernic Tenosols (Alpine Humus Soils). Locally organic matter can accumulate up to 50 cm and the soil is then classified as an Organosol (Acid Peat).
Type Profile(s)	Chernic Tenosol (Alpine Humus Soil): ACT Soil Landscapes (1005287) profile 58 (Master Type Profile)
HGL Reference	Typically corresponds with: HGL 19 (Picadilly) MA 2/3.



Schematic cross-section of the Ginini (gin) soil landscape, showing facets and soil types

REFERENCES

DMR 2002. New South Wales Statewide Geology coverage – 1:250 000 scale. Department of Mineral Resources, Sydney.

NOTES

(1) This report describes reconnaissance soil landscape information mapped at 1:100,000 scale and does not negate the need for site assessment at a scale suitable to the land use or development under consideration.

(2) 'Not observed' means unlikely to be found. 'Localised' means observed to a level considered significant for land management. 'Widespread' means prevalent and significant over most of the landscape. 'None recorded' means no occurrence has been recorded. 'Not assessed' means no result has been recorded for this attribute and it may or may not be present in the soil landscape.

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