## MHI Mount Hill Land System

**Area:** 41.7 km<sup>2</sup>

Landscape: Undulating rises underlain by Tertiary sediments, extensively covered by windblown Lowan

Sands which have been reworked into jumbled sandhills draped over the main landscape.

**Annual rainfall:** 340 – 420 mm average

Main soils: Lowan - H3 (Basic, Arenic, Bleached-Orthic Tenosol)

Thick bleached sand with a thin organically darkened surface layer, grading to a yellowish

sand (often with darker lamellae), continuing below 150 cm.

Red brown earth (sandy) - **D5** (Sodic, Calcic, Red Chromosol)

Medium to thick hard sandy loam with a massive sandy clay loam A2 layer, over a weakly

prismatic red clay grading to alluvial sediments.

<u>Heggaton</u> - **G3** (Calcic, Brown Chromosol)

Thick sand to loamy sand with a bleached A2 layer, abruptly overlying a weakly structured

brown sandy clay to clay, calcareous with depth, grading to Tertiary sediments.

Minor soils: Skeletal ironstone soil - J3 (Petroferric, Leptic Tenosol / Rudosol)

Variable ironstone gravelly loamy sand to sandy clay loam over massive ironstone at depths

usually less than 50 cm.

Moornaba shallow - **G1** (Lithocalcic, Brown Chromosol)

Thin to medium thickness sand to loamy sand over a brown sandy clay loam with abundant

rubbly or fine carbonate at shallow depth.

**Summary:** Undulating slopes overlain by jumbled sandhills. On the predominant deep sands and sand

over clay soils, low fertility, wind erosion, water repellence and restricted water holding capacity limit cropping potential. Larger sandhills are non arable. About a third of the area has

heavier loamy sand to sandy loam soils with clayey subsoils. These are more fertile and less

prone to erosion.



## Soil Landscape Unit summary: 4 Soil Landscape Units (SLUs) mapped in the Mount Hill Land System:

SLU	% of area	Component	Main soils	Prop #	Notes
GXC	slopes Shallow L Moornaba  Ironstone crests Skeletal c ironstone	Undulating sandy	Heggaton	E	Undulating slopes overlain by jumbled sandhills. Low fertility, wind erosion, water repellence and restricted water holding capacity limit cropping potential. Larger sandhills are non arable. Soils are:
		slopes	Shallow	L	
			Moornaba		
		Ironstone crests	Skeletal	С	
			ironstone		
		С	Lowan Very low fertility, high wind erosion		
OsH OsI	11.8	Sandy / sandy loam	Heggaton / RBE	Е	potential, water repellence and acidity.  RBE sandy Sandy loam over well structured clay - moderately fertile and deep, but susceptible to water erosion.  Heggaton Low fertility, moderate wind erosion potential, water repellence and acidity.  Skeletal ironstone Shallow and stony - semi arable  Shallow Moornaba Low fertility wind erosion prone sandy soil with limited waterholding capacity.
		swales	sandy		
		Moderate sandhills	Lowan	E	
		Ironstone crests	Skeletal	С	
			ironstone		
	0.9	Sandy loam swales	RBE sandy	V	
		High sandhills	Lowan	Е	
	60.3	Moderate sandhills	Lowan	Е	
		Sandy swales	Lowan	E	
		Sandy loam swales	RBE sandy	Е	

<sup>#</sup> PROPORTION codes assigned to Soil Landscape Unit (SLU) components:

- D Dominant in extent (>90% of SLU)
- V Very extensive in extent (60–90% of SLU)
- E Extensive in extent (30–60% of SLU)

- C Common in extent (20–30% of SLU)
- L Limited in extent (10–20% of SLU)
- M Minor in extent (<10% of SLU)

**Further information:** <u>DEWNR Soil and Land Program</u>

