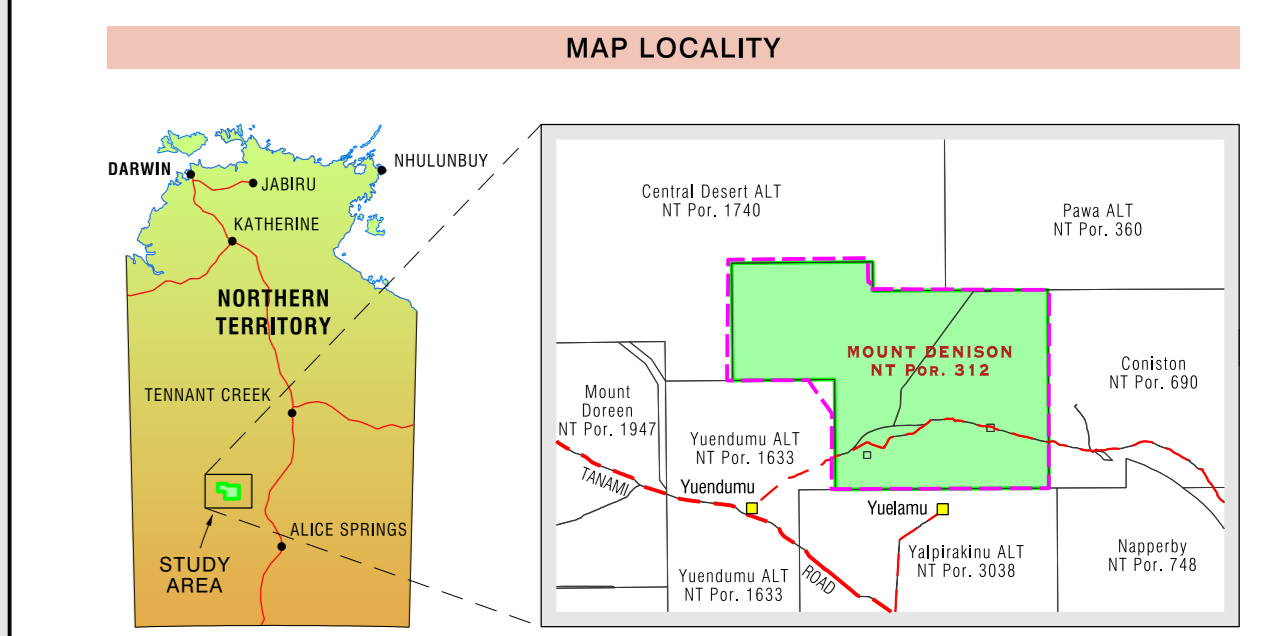
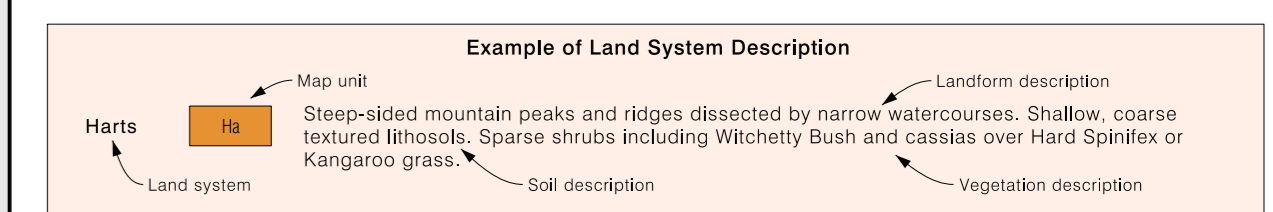


### LAND SYSTEM DESCRIPTIONS

Land System	Description
<b>MOUNTAINS</b>	
Devenport	Rugged mountain ridges and butts with steep slopes, or prominent strike ridges with steeply inclined faces. Drainage pattern absent or very poorly developed. Shallow, coarse textured lithosols. A sparse cover of Hard Spineflex and scattered low shrubs.
Harts	Steep-sided mountain peaks and ridges dissected by narrow watercourses. Shallow, coarse textured lithosols. Sparse shrubs including Wilchety Bush and cassias over Hard Spineflex or Kangaroo grass.
<b>HILLS</b>	
Bond Springs	Bold rocky hills and ridges, and prominent quartz reefs. Lower slopes have gentle grades and are drained by small creek channels. Pockets of coarse textured lithosols, with gritty brown alluvial soils along creek tracts. A sparse cover of Wilchety Bush, Mulga and low shrubs over pockets of Woollyat grass and Mulga grass. Tallies and other.
Napperby	Low ranges, hills and outcrops (tors and domes), characterized by boulder-strewn slopes. Bare summits, limited drainage developments. Shallow, gritty lithosols amongst rock outcrops. Sparse Wilchety Bush with occ. Mulga, Bloodwood, Bean Tree and Ghost Gum over pockets of Woollyat, Native Panic, Cotton Panic, Kangaroo and Buck Wandoo grasses. Blue-leaf Cassia and other low shrubs, with Curly Windmill grass common on lower slopes.
<b>RISES</b>	
Warburton A	Broad low rises with gentle slopes. Defined drainage channels are absent. Shallow, gritty red earths, consisting of acid sandy loams grading to slightly heavier textures over decomposing granites. Soil depth is less than about 0.4 metres. An open cover of Mulga, Whitewood, Bloodwood and Wilchety Bush with low shrubs including Green-leaf Cassia over Wire, Mulga, Kerosene and Woollyat grasses.
<b>PLAINS</b>	
Aileron	Extensive gentle-undulating plains with broad ridge crests and poorly-defined drainage tracts. Sandy red earths, consisting of acid sandy loams over sandy clays at depth. Heavier textured red earths occur in the drainage depressions. Vigorous termite activity is widespread. Sparse Bloodwood and occasional Whitewood or Dogwood over Soft Spineflex, Hard Spineflex and some Kerosene grass. The drainage depressions support sparse Bloodwood and Ghost Gum over spineflex, Kerosene and Silky Brometop grasses.
Boen A	Very broad flats with gentle slopes. The landscape drains by surface flow and does not have defined drainage routes. Deep red earths, consisting predominantly of sandy clay loams over light clays. Ironstone gravel is often present, and the underlying rock occasionally outcrops. Dense stands of groved Mulga with Wilchety Bush and occasionally Bloodwood. Groundcover species include Wire grass, Kerosene grass, Mulga grass and Mulga Mitchell grass. Mulga and Woollyat grasses are restricted to areas where ironstone accumulates.
Boen B	Very broad flats with gentle slopes. The landscape drains by surface flow and does not have defined drainage routes. Surface features are masked by a sandplain deposit. Deep sandy red earths. A very sparse tree cover of Whitewood, Dogwood, Mulga and Black Glycya over spineflex.
Pularo A	Broad ridge crests of low relief and plains at the foot of granite ranges. Drainage channels absent. Red earths, consisting of gritty sandy loams at the surface over light clays and decomposing granites at about 0.5 metres. Open shrubland of groved Mulga with occasional Whitewood, Wilchety Bush, Cottonwood or Bloodwood, over Mulga and Woollyat grasses. Umbrella, Curly Windmill and Native Panic grasses grow amongst the tree cover. Silky Brometop, Desert Bluegrass and Queensland Bluegrass are present in depressions.
Pularo B	Broad valley floors with little relief and very gentle slopes, usually drained by shallow watercourses. Texture-contrast soils, extensively scabbed in the lower and mid reaches of the valley tracts. They consist of gritty and slightly acid yellowish-red sandy loams overlying hard-setting reddish-brown sandy clays. Open shrubland cover of Cottonwood with perennial grasses incl. Curly Windmill, Umbrella and Navarrel grasses with scattered annuals and Copberturps. Sparse shrubs of Whitewood, Cottonwood and Dead Finish, Frankia and Samperia are present on saline soils.
Singleton	Sandy depressions extending northwards, often extending to a broad sandplain beyond upland areas. Earthy sands, consisting of deep sandy loams. Open shrublands of Blue Mulga or Redbank Bore.
Warburton B	Broad valley floors with little relief and very gentle slopes, drained by shallow tributary depressions. Red earths, consisting of slightly acid sandy loams over sandy clays. Decomposing granites occur at about 0.6 metres. Slightly heavier soil textures occur in drainage depressions, and red calcareous earths on the outcrops of calcare. Widely-spaced groves of Mulga aligned with drainage depressions, interspersed with scattered Whitewood and occasionally Picky Wattle, over Mulga, Woollyat, Umbrella, Curly Windmill and Cotton Panic grasses and sedes.
Weldon	Alluvial fans and gravelly terraces flanking quartzite mountain ridges. The fans are closely dissected by minor watercourses. Slimy red earths with large cobbles of quartzite. An open shrubland of Mulga over spineflex or Wire grass, with dense Mulga along watercourses.
<b>ALLUVIAL PLAINS</b>	
Kanandra	Sandy alluvial plains formed as fans where the main watercourses flood out from the ranges. Also mapped to include sandy alluvial deposits west of Cockatoo Creek. Coarse textured brown alluvial soils, consisting of deep sandy loams. Sandy red earths predominate along the western margin of Cockatoo Creek, consisting of coarse sandy clay loams grading to light clays at 0.4 metres. Alluvial soils support open woodland of Whitewood and Ironwood with Supplejack, Wilchety Bush and Mulga over Kerosene, Mulga, Woollyat, Oak, Katoona, Silky Brometop and Golden Beard grasses. The sandy red earths support an open cover of Whitewood, Mulga, Wilchety Bush, Ironwood and Bloodwood over a dense shrub of Bromebush or Green-leaf Cassia over Mulga, Woollyat, Silky Brometop and Curly Windmill grasses and Liversea Burr.
<b>Drainage Systems</b>	
Bushy Park	Featureless alluvial tracts with a very slight slope. Indistinct drainage depressions carry run-off from adjacent floodplains or floodouts. Deep red earths, comprised of slightly acid sandy clay loams at the surface, overlying light clays at depth. Dense shrublands of Mulga with occ. Wilchety Bush, Bloodwood, Ironwood and Black Glycya over Mulga, Woollyat, Katoona and Eight-day grasses with scattered Silky Brometop and Cotton Panic grasses and Liversea Burr, Potato Bush and other forbs.
Sandover	Sandy floodplains and levees bordering major stream channels. The floodplains are typically narrow and sometimes discontinuous. They occasionally feature frequently inundated claypans and low sand dunes. Coarse textured alluvial soils occur on the levees and floodplains, consisting of slightly acid sandy loams, grading to sandy clay loams at depth. Floodplains and levees with open woodlands of Whitewood or Ironwood with Bloodwood, Supplejack, Mimosa Bush and Corkwood over Woollyat, Mulga, Kerosene and Curly Windmill grasses. Verbena and other forbs. Claypans with Native Couch, Navarrel, Nardoo, mixed short grasses or forbs and fringed by River Red Gum. The loamy sands along the Lander River with sparse Bloodwood or Mulga over spineflex and some Verbena.



### GENERAL FEATURES

Land unit boundary	Water Bore	18 Mile Bore
Limit of mapping	Dam	Kiel Dam
Property boundary	Stock Yard	White Hill Yard
Main road: unsealed	Tower	A
Minor road: unsealed	Drainage	
Local road: track	Waterhole / Soak	Brookes Soak
Fence	Claypan	Claypan
Cleared Line	Relief Feature	Abutment
Aboriginal Community	Range or Plain	Maui Hills
Pastoral Homestead	Mount Denison HS	Spot height
Buildings	Relief ridge	885
Landing Ground	Sand ridges	885

### Limitations of use

Land Resource information has been derived from aerial photograph interpretation and field data collection describing landform, soil and vegetation. Mapping has been collected at a nominal scale of between 1:100 000 and 1:250 000. Enlarging this map beyond this scale will not provide further detail and is not recommended.

Final mapping is presented at a scale of 1:100 000.

When assessing specific areas within the mapping it is recommended that a site inspection be undertaken to establish unmappped variations and to confirm the mapping accuracy on the ground.

**Please Note:** This report is generally not available. Access requests should be directed to Arid Zone Research Institute Library in Alice Springs. Email: azri.library@nt.gov.au

**Bibliographic Reference:** Grant, R. (1983) Range Condition assessment report: Mt Denison Station. Department of Primary Production, Alice Springs, Northern Territory.

**Cartography by:** Ralf Koberslein - Geospatial Services  
Department of Environment, Parks and Water Security  
Northern Territory of Australia.

**General features data sources:** Cadastre, roads, place names: Department of Infrastructure, Planning and Logistics, Northern Territory of Australia.  
Pastoral Infrastructure: Department of Environment, Parks and Water Security, Northern Territory of Australia.  
Hydro features: Commonwealth of Australia (Bureau of Meteorology) 2014  
Spot heights: Geoscience Australia, 2007. Geocada topo 250K. Series 3.

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Geospatial Information: https://terragis.nt.gov.au

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Black numbered lines are 10 000 metre intervals of the Map Grid of Australia (MGA), Zone 53 - Transverse Mercator Projection  
Horizontal Datum: GDA 94 Vertical Datum: AHD (metres)

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**NORTHERN TERRITORY GOVERNMENT**

# LAND RESOURCES of MOUNT DENISON STATION