# Hard gibber and ironstone country



### **General description**

Flat to gently undulating plains and low hills and scarp slopes, generally with gidgee stone sitting on top of a dense ironstone pavement. Stone generally appears wind polished. Seasonally variable ephemeral forbland confined to drainage lines and run-on areas, with minor areas of barley Mitchell in gilgais and drainage lines.

Landform

Flat to gently undulating plains, low hills and scarp slopes.

**Woody vegetation** 

Mimosa bush, Georgina gidgee and mineritchie may occur along drainage lines.

Expected pasture composition

\* Denotes non-native "Expected Pasture Composition" species.

# Denotes non-grass species that are important to grazing and land condition values in annually dominated land types.

Preferred

Limited occurrences of barley Mitchell grass, katoora.

Intermediate

Limited occurrences of knottybutt grass, short wiregrasses, five-minute grass, bottlewasher grasses.

Non-preferred

Annual grasses

Kerosene grass (non-preferred).

Common forbs

Predominantly saltbushes# and copperburrs#, but including desert riceflower (pimelea), pigweed, pink mulla-mulla#, sida.

Suitable sown pasture

Not suitable for sown pastures.

**Introduced weeds** 

None

Soil

Moderately deep to deep, and some shallow, desert loams with thick ironstone or gibber stone cover.

Description

**Surface**: Hard-setting to crusting with abundant ironstone or gibber stone cover, **Surface texture**: clay loam, soft powdery clay and occasionally fine sandy loam, **Subsoil texture**: medium clay.

**Features** 

Salt crystals occur throughout the profile. Lime and gypsum may also occur in the profile. Mantled pediments, fresh rock and deeply weathered rock and clay plains.

Water availability

Low, increasing to very high at depth.



## Rooting depth

Shallow to moderate.

Infiltration

Low initially on a dry soil profile, slowing to very low levels after 5 mm of rain as topsoil is saturated. High run-off following 10 mm of rain. Estimates based on low to moderate intensity storm rain. Run-off contributes to total water availability in run-on and drainage areas which comprise up to 5% of the land type.

**Fertility** 

Very low, increasing to moderate within run-on areas and drainage. Available nitrogen is the major limitation.

Salinity

Crusted soils are medium to very highly saline and very highly saline at depth, other soils have very low salinity at the surface increasing to very high at depth.

Sodicity

Very strongly sodic.

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Slightly acid to neutral to at the surface and slightly acid to alkaline at depth.

# Long-term carrying capacity information (A condition)

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 151 – 233 mm				
Pasture type	Median tree cover	Median annual pasture growth	Safe annual utilisation pasture growth	LTCC
	(TBA m²/ha) (FPC %)	(DM kg/ha)	(%)	(ha/AE)
Native species	0 TBA/FPC	70 - 230	15%	85 - 278
	2 TBA 5 FPC	20 - 60	15%	325 – 974

### **Enterprise**

#### Breeding

# Land use and management recommendations

Suitable for seasonal grazing of native pastures.

- Rotational wet season spelling to maintain perennial pasture composition.
- Avoid disturbing stone cover to minimise erosion risk.

#### Land use limitations

- Low productivity overall due to dense stone cover. Best pasture growth from run-on areas, such as shallow drainage lines. Pasture availability is strongly seasonal with limited perennial carryover. However, responds quickly to rainfall, tending towards forbs in winter and annual grasses in summer.
- Poisonous plants, especially pimelea, can limit animal performance.
- Where very low, phosphorous can limit plant growth and animal performance.
- Highly dispersive clays susceptible to sheet and gully erosion and scalding if stone cover is disturbed.
- Susceptible to erosion along stockpads, fencelines, roads and near water points.

## Conservation features and related management

- Some localised sheet erosion.
- Some Georgina gidgee dieback in areas.
- Habitat for threatened fauna including kowari.

### Regional Ecosystems

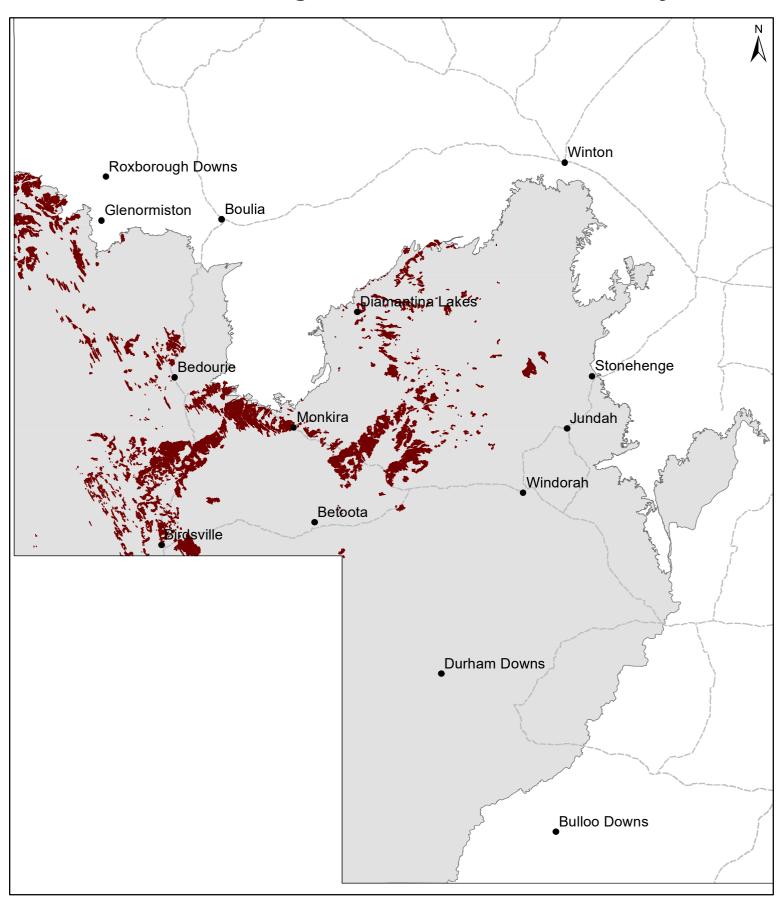
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WARLUS Part Land systems

I II III IV V VI P1, P2, P3



## **CC11 Hard gibber and ironstrone country**



Area of land type in region: 3%

Median rainfall (region): 151 – 390 mm Average rainfall (region): 187 – 429 mm

Area of land type with FPC: 6%

Median FPC: 5% Median TBA: 2 m2/ha

