

Mountain coolibah open woodland



Landform

Undulating rises and low hills.

Woody vegetation

Mountain coolibah open woodland with grassy understorey. Localised areas of basalt uplands of poplar box grassy woodland with Moreton bay ash can be found east of Dalby along the Nungil Road and south to Oakey and Charlton.

Expected pasture composition

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

Preferred

Kangaroo grass, Queensland bluegrass, forest bluegrass, brigalow grass, early spring grass and satintop.

Intermediate

Pitted bluegrass, curly windmill grass, tall chloris, yabila grass and barbwire grass.

Non-preferred

Rough speargrass, dark wiregrass, western rat's tail grass, limestone bottlewashers, comb chloris and green couch.

Common forbs and legumes

Blue crowfoot, rhyncosia, glycine and trefoil. Non-preferred species include malvastrum, zinnia and sedges

Suitable sown pastures

Green panic, Gatton panic, Bambatsi, Angleton bluegrass (Floren), Rhodes grass (Katambora types) and creeping bluegrass (Bisset). Lucerne, desmanthus, leucaena, medics (barrel and spineless burr) and Caatinga stylo.

Introduced weeds

Lantana, African boxthorn, tree pear, tiger pear, mother-of-millions and prickly pear

Soil

Moderately deep to very deep (75 – 180 cm) dark greyish brown and brown cracking clays or clay loams. Linear gilgai microrelief may be evident (vertisol).

Description

Surface: Coarse, sometimes fine, self-mulching; **Surface texture:** heavy clay; **Sub-soil texture:** heavy clay with some carbonate nodules.

Water availability

High; plant available water capacity (PAWC) 100–250 mm in root zone.

Rooting depth

Effective rooting depth 50 – 150 cm.

Fertility

Moderate to high organic carbon, nitrogen and available phosphorus; low to medium zinc.

Salinity
Sodicity
pH

Very low to low at surface; increasing to medium saline subsoils.
Non-sodic at surface; occasionally sodic subsoil at depth.
Neutral at the surface; increasing to slight alkalinity down profile.

Long-term carrying capacity information (A condition)

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 582 – 729 mm				
Pasture type	Median tree cover (TBA m ² /ha) (FPC %)	Median annual pasture growth (DM kg/ha)	Safe annual utilisation pasture growth (%)	LTCC (ha/AE)
Native species	0 TBA/FPC	7060 - 7140	30%	1.4 – 1.4
	11 TBA 27 FPC	1780 - 4000	30%	2.4 – 5.5
Sown			35%	

Enterprise

Mixed farming — cropping (forage and grain); breeding herds and finishing.

Land use and management recommendations

- Soil is prone to gully head development by undercutting when runoff is concentrated.
- Soil erosion can be controlled with broad based contour banks, waterways and conservative methods such as stubble mulching on slopes <8%.
- Grassed waterways should be maintained to provide ideal flow conditions and avoid erosion or excessive siltation.
- Maintaining effective ground cover and conservative stocking practices (spelling pastures, flexible stocking rates) are important to minimise the risk of sheet, rill and gully erosion, and reduce runoff.
- If dense regrowth is limiting pasture growth control by burning every 3 – 5 years.
- Fertilising with phosphorus and sulphur will improve production.

Land use limitations

- Small seeded sown pasture species may be difficult to establish on coarse and heavy clay soils.
- Timber regrowth can limit productivity.
- As soil depth decreases, so does pasture productivity.
- Persistent overgrazing results in wiregrass dominance.

Conservation features and related management

- These woodlands provide important habitat for arboreal mammals and birds.
- A number of rare and threatened flora (austral toadflax, Australian anchor plant, native thistle and native hawkweed) are associated with this land type.
- Maintaining timbered areas can allow connectivity of remnants through habitat corridors and greatly increase the value of these areas of land to wildlife and the overall health of the system.
- Maintaining ground cover and using soil conservation practices in these areas is important to minimise soil erosion and help protect the wildlife habitat.

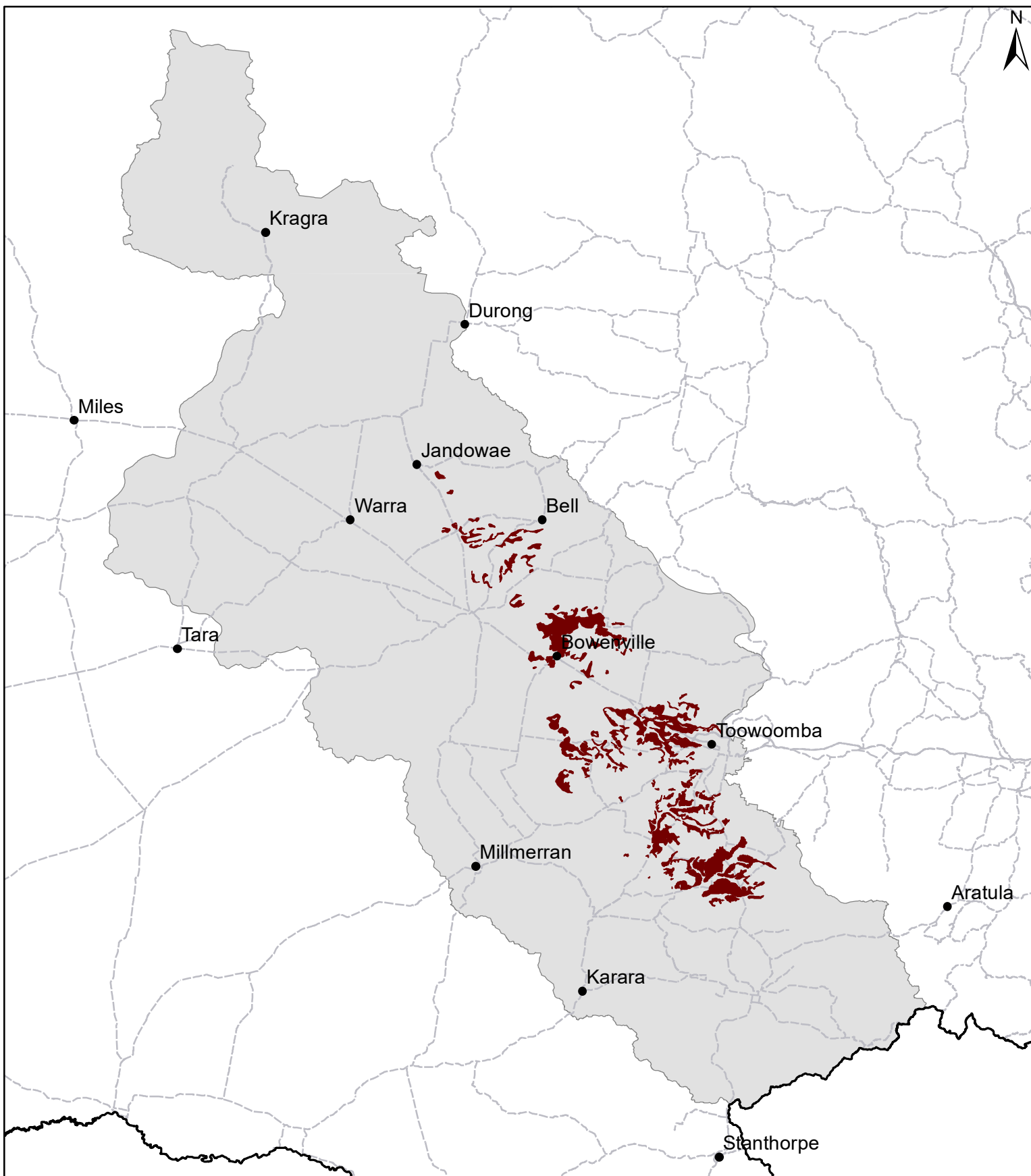
Regional Ecosystems

11.8.11, 11.8.15

Land units; Agricultural management unit; Soil associations

Central Darling Downs Land Management Manual: 7a, 7b (*Aberdeen, Charlton, Craigmore, Irving, Nungil, Purrawunda*). Land Inventory and Technical Guide Eastern Downs Area: (*Charlton, Craigmore, Irving, Purrawunda*); Description and Management of the Soils of the Eastern Darling Downs Queensland: (*Charlton, Craigmore, Irving, Purrawunda*).

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Area of land type in region: 2%
Median rainfall (region): 580 – 909 mm
Average rainfall (region): 585 – 927 mm
Area of land type with FPC: 5%
Median FPC: 27%
Median TBA: 11 m²/ha



Queensland
Government