

Mountain coolibah and ironbark rises on shallow, stony soils



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|-------------------------------------|---|
| Landform | Upper slopes, benches and broad flat-topped ridges of basalt. |
| Woody vegetation | Mountain coolibah and narrow-leaved ironbark or silver-leaved ironbark woodland with Moreton Bay ash and rough-barked apple. May have softwood scrub understorey. |
| Expected pasture composition | * Denotes non-native "Expected Pasture Composition" species. |
| Preferred | Forest bluegrass, Queensland bluegrass, brigalow grass and early spring grass. |
| Intermediate | Pitted bluegrass, cotton panic, curly windmill grass, yabila grass, tall chloris and barbwire grass. |
| Non-preferred | Green couch, limestone bottlewasher, foxtail, white speargrass, western rat's tail grass, dark wiregrass and many-headed wiregrass. |
| Common forbs and legumes | Trefoil, rhynchosia, malvastrum and blue crowfoot. Non-preferred species include Mayne's pest, zinnia* and sedges. |
| Suitable sown pastures | Green panic, Gatton panic, Rhodes grass (Katambora types), creeping bluegrass (Bisset) and digit grass. Medics (barrel, spineless burr), Caatinga stylo and woolly pod vetch. |
| Introduced weeds | Lantana, African boxthorn, tree pear, tiger pear, prickly pear and mother-of-millions. |
| Soil | Shallow to moderately deep stony, red to brown loam to clay loam on basalt (ferrosol, dermosol). |
| Description | Surface: Abundant basalt gravel and cobbles (floaters) with some rock outcrop; Surface texture: Red to brown clay loam; Subsoil texture: clay loam sometimes grading to clay with depth. |
| Water availability | Low to moderate; plant available water capacity (PAWC) 50 – 150 mm. |

Rooting depth
Fertility
Salinity
Sodicity
pH

Shallow effective rooting depth (5 – 30 cm).
Low fertility; responds to nitrogen, phosphorus and sulphur.
Very low.
Non-sodic.
Weakly acidic at the surface; neutral to slightly alkaline in subsoils.

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 | 5620 - 5630 | 25% | 2.1 – 2.1 |
| | 13 TBA 32 FPC | 3120 - 4420 | 25% | 2.6 – 3.7 |
| Sown | | | 25% | |

Enterprise

Breeding.

Land use and management recommendations

- Shallow, soils with stone and gravel throughout profile.
- Large amounts of stone near the soil surface may cause problems with cultivation and crop establishment.
- Susceptible to moderate sheet and rill erosion depending on the amount of stone; erosion is more severe if the stone is removed.
- Sulphur required to maintain sown pasture species.
- Good source of gravel.
- Good bee and nature conservation country.
- Ironbark can be a good source of millable timber.

Land use limitations

- Non-arable due to shallow soil depths, low water availability and large amounts of stone.
- Not suitable for constructing waterways or contour banks due to shallow soil depth.
- Timber and wattle regrowth can limit productivity.

Conservation features and related management

- Extensive areas of these forests and woodlands, particularly areas of softwood scrub and/or white box, have been cleared.
- The woodlands provide habitat for insectivorous and nectivorous birds and mammals and a number of rare and threatened flora (lobed bluegrass, finger panic grass, Bailey's indigo, native hawk weed, austral toadflax, native thistle).
- Softwood scrub remnants are threatened by weed invasion (lantana) and fire on the margins. Fire breaks and cool season burns reduce this risk.
- Maintaining timbered areas can allow connectivity of remnants and habitat corridors, encourage habitat diversity, and greatly increase the value of these areas of land to wildlife and the overall health of the system.

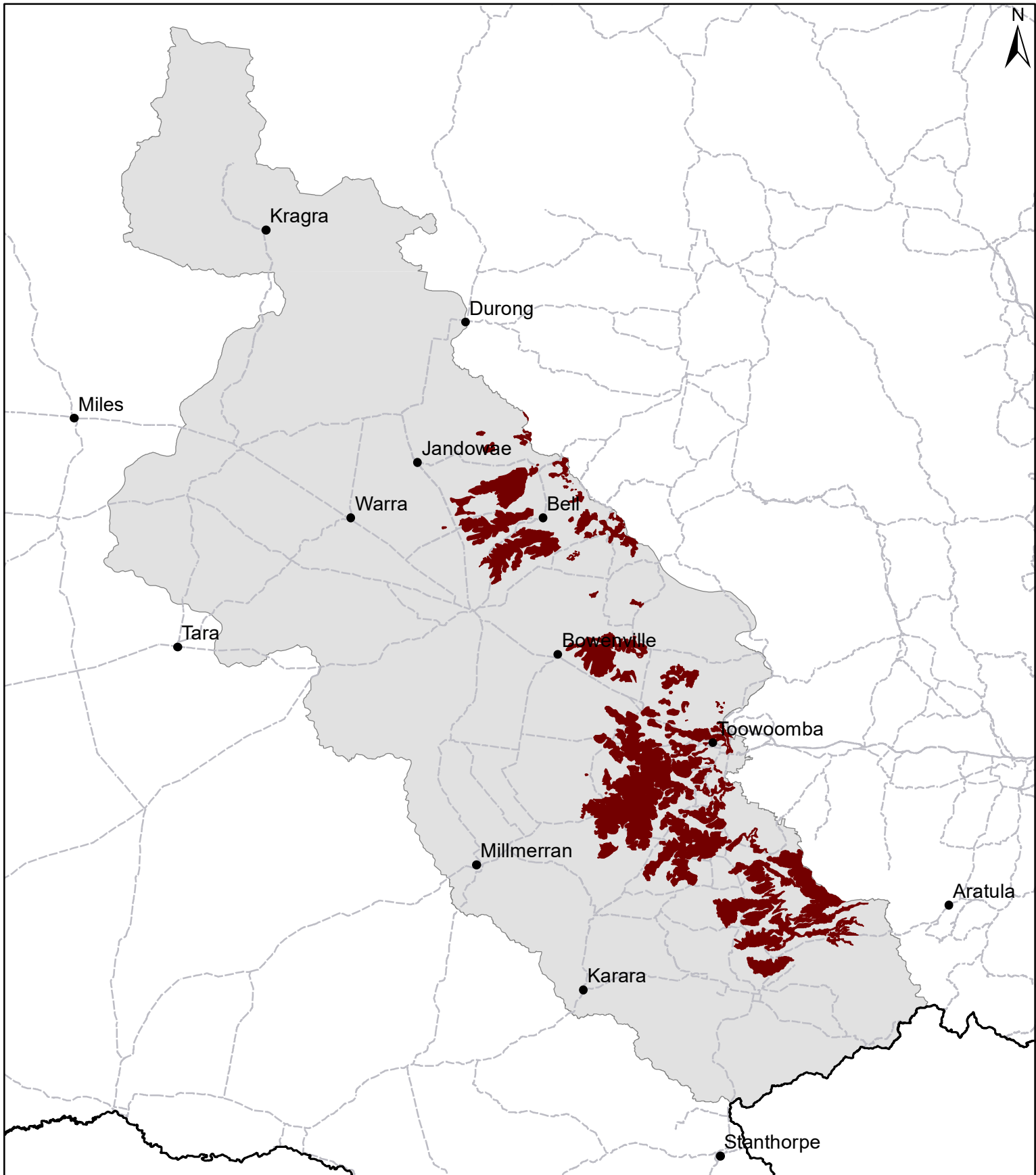
Regional Ecosystems

11.8.2a, 11.8.4, 11.8.5, 11.8.9

Land units; Agricultural management unit; Soil associations

Central Darling Downs Land Management Manual: 7c (*Aubigny, Kenmuir, Mallard, Southbrook*); Land Inventory and Technical Guide Eastern Downs Area: Description and Management of the Soils of the Eastern Darling Downs Queensland (*Kenmuir, Southbrook*); Description and Management of the Soils of the Eastern Darling Downs Queensland: (*Kenmuir, Mallard, Southbrook*).

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Area of land type in region: 7%
Median rainfall (region): 580 – 909 mm
Average rainfall (region): 585 – 927 mm
Area of land type with FPC: 31%
Median FPC: 32%
Median TBA: 13 m²/ha



Queensland
Government