

# Open downs



<b>Landform</b>	Undulating downs.
<b>Woody vegetation</b>	Treeless plains with occasional mountain coolibah, bloodwood, silver-leaved ironbark, brigalow, black tea tree (in some drainage lines) and wattles.
<b>Expected pasture composition</b>	* Denotes non-native "Expected Pasture Composition" species.
Preferred	Queensland bluegrass, king bluegrass, curly, bull and hoop Mitchell grass, umbrella grass, satintop grass.
Intermediate	Native millet, yabila/star grass, curly windmill grass.
Non-preferred	White speargrass, feathertop wiregrass, fairy grass, coolibah grass, bottlewasher grasses.
Annual grasses	Flinders grass, liverseed grass, weeping lovegrass.
<b>Suitable sown pastures</b>	Purple pigeon grass, Angleton grass, Bambatsi panic, leucaena (on deeper soils >100 cm), butterfly pea (>90 cm), Desmanthus, Caatinga stylo.
<b>Introduced weeds</b>	Parthenium, mimosa, prickly acacia.
<b>Soil</b>	Black or brown cracking clay (black or brown vertosol).
Description	<b>Surface:</b> Strong and fine self-mulching; <b>Surface texture:</b> medium to heavy clay; <b>Subsoil texture:</b> medium to heavy clay.
Water availability	Moderate to high.
Rooting depth	Usually around 75 cm, occasionally shallow (45 cm).
Fertility	Low to moderate total nitrogen; low to moderate phosphorus.
Salinity	Low to high (depending on landscape position).

Sodicity

pH

Non-sodic

Strongly alkaline.

### Long-term carrying capacity information (A condition)

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 521 – 653 mm				
Pasture type	Median tree cover (TBA m <sup>2</sup> /ha) (FPC %)	Median annual pasture growth (DM kg/ha)	Safe annual utilisation pasture growth (%)	LTCC (ha/AE)
Native species	0 TBA/FPC	2730 - 3800	30%	2.6 - 3.6
	8 TBA 20 FPC	1430 - 2200	30%	4.4 – 6.8

### Enterprise Land use and management recommendations

Finishing

- Suitable for cropping on soils deeper than 45 cm and on slopes less than 4%.
- Tea tree should not be cleared (to minimise saline seepages).
- Maintain surface cover to minimise erosion.
- In open areas, fire is only useful to remove older (rank) grass. Burning should occur only after adequate rainfall as a dry, hot fire could kill the grass.
- This land type has some potential for pasture improvement.

### Land use limitations

- Soil erosion hazard when cultivated.
- Rooting depth (in some shallow soils).
- Some rockiness.
- Low fertility.
- Establishment problems with some small seeded plants and pastures.
- High water tables in tea tree drainage lines.

### Conservation features and related management

- These grasslands provide vital habitat for a diverse range of plants and animals including the rare and threatened species king bluegrass (*Dichanthium queenslandicum*) and the daisy *Trioncinia retroflexa*.
- Any existing patches of downs on the edges of a cultivated area are important wildlife refuges.
- Grass owls can be found in ungrazed areas such as road reserves.
- The grass tussocks and deep cracking clay soils provide a critical habitat for grassland dependent birds (e.g. brown quail, golden-headed cisticola), and have historically provided habitat for the presumed extinct legless lizard – Allan’s lerista.
- Good grass cover helps protect soils from erosion, salinity and they improve water quality by reducing runoff and stream sediment.
- Avoid burning during dry months. As a rule of thumb, introduce ‘cool’ burns after heavy rain. Burn bluegrass pastures approximately every five to ten years.
- These grasslands are readily infested with parthenium, especially when ground cover becomes too low.
- Spell degraded bluegrass pastures during summer months and allow them to seed before re-stocking the paddocks.
- Where bluegrass pastures are in good condition maintain the existing management practises.

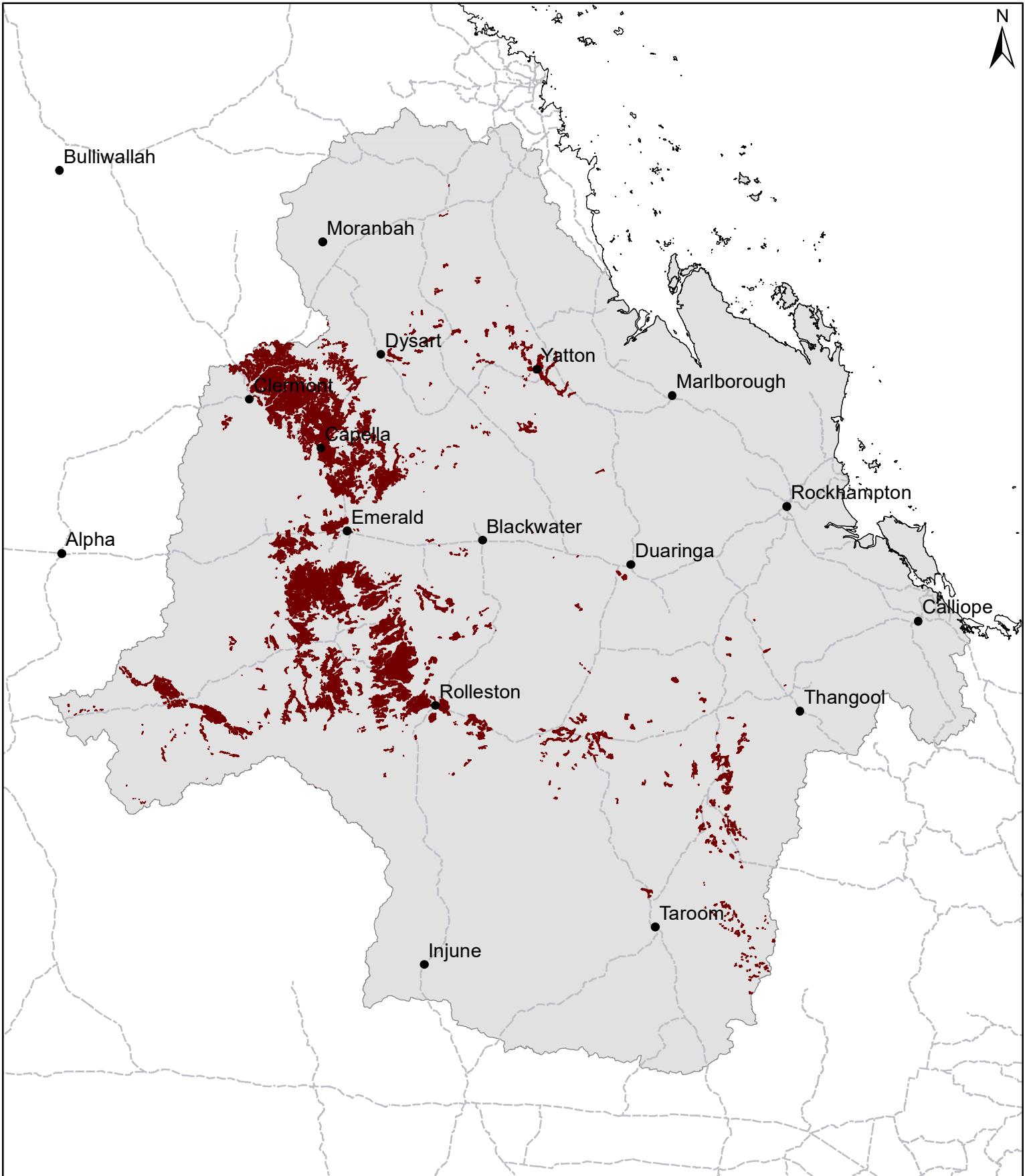
### Regional Ecosystems

11.3.21, 11.4.4, 11.8.11, 11.8.11a, 11.9.3, 11.9.3a, 11.9.12, 11.11.17, 11.12.2c.

### Land units; Agricultural management unit; Soil associations

Land units (Gunn *et al* 1967; Story *et al* 1967) Avon 1, funnel 2, Kinsale 5, Mantuan 2, Oxford 2 and 3, Waterford 2, Racecourse 3; AMU (DPI 1993) Orion, Kia-Ora; Soil Associations (Shields *et al* 1993; Burgess 2003) May, May shallow phase, Mt Stuart, Russell, Diamond, Falkner.

# FT23 Open downs



Area of land type in region: 4%  
Median rainfall (region): 494 – 830 mm  
Average rainfall (region): 560 – 869 mm  
Area of land type with FPC: 10%  
Median FPC: 20%  
Median TBA: 8 m<sup>2</sup>/ha



**Queensland**  
Government