

# Open downs



<b>Landform</b>	Gently undulating plains (slopes up to 2%) associated with rolling downs in the north east.
<b>Woody vegetation</b>	Predominantly treeless open Mitchell grass tussock grasslands with some short grasses and forbs. Boree may occur occasionally as scattered trees, and mimosa bush, gundabluie, myall and boonaree may occur as low shrubs. In some areas whitewood, boonaree, ironwood, eastern dead finish tall open shrublands occur on rubbly outcrops; with mimosa bush and needlewood along drainage lines.
<b>Expected pasture composition</b>	<i>* Denotes non-native "Expected Pasture Composition" species.</i>
Preferred	Mitchell (hoop, curly, bull) grasses, satin top, desert bluegrass, buffel grass* (naturalised), Queensland bluegrass, early spring grass, umbrella/blowaway grass, neverfail, silky browntop.
Intermediate	Bottleswasher grasses, curly windmill grass, native millet, yabila, katoora, fairy/yakka grass, five-minute grass.
Non-preferred	Wiregrasses (e.g. curled, feathertop, white speargrass).
Annual grasses	Native couch grass, comb chloris, button grass, weeping lovegrass, red and small Flinders grass, pepper grass, small burr grass.
Common forbs	Red spinach, saltbushes, ruby saltbush, burrs, black roly poly, soft roly poly, down's nutgrass, caustic weed, silky goodenia, rhynchosia, sidas (e.g. high, pin).
<b>Suitable sown pastures</b>	Buffel grass, old man saltbush, Turanti barley Mitchell, Yanda curly Mitchell.
<b>Introduced weeds</b>	Prickly acacia, parkinsonia.
<b>Soil</b>	Moderately deep to deep, occasionally shallow, grey and brown cracking clays.
<b>Description</b>	<b>Surface:</b> Occasional scattered deposits of sandstone or ironstone pebble; strong self-mulching soils, possibly with thin surface crust; <b>Surface texture:</b> medium to heavy clays <b>Subsoil texture:</b> heavy clays; lime and gypsum are usually present.
<b>Features</b>	Strongly self-mulching.

Water availability

Very high.

Rooting depth

Moderately deep (>75 cm), sodicity and salinity may reduce effective depth.

Infiltration

High when dry, becoming rapidly less as soils become saturated.

Fertility

Low to fair nitrogen and carbon; low to fair phosphorus at surface.

Salinity

Low to very low at surface increasing with depth.

Sodicity

Non-sodic at surface becoming sodic to strongly sodic at depth.

pH

Commonly neutral to slightly alkaline; alkalinity increasing 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 461 – 531 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	2020 - 2060	20%	7.1 – 7.2
	5 TBA 13 FPC	1140 - 1360	20%	11 – 13

### Enterprise

Mixed cattle and sheep breeding.

### Land use and management recommendations

- Generally highly productive and stable lands if native pastures maintained and conservatively stocked.
- Suitable for continuous winter and summer cropping in more easterly areas that receive reliable rainfall.
- Use of broad-based contour banks, maintenance of naturally grassed waterways and conservation cropping techniques are needed to control soil runoff and erosion.

### Land use limitations

- Drought grazing capacity of these lands is low due to a lack of alternate fodder sources (e.g. top-feed).
- Due to low levels of organic matter cultivated soils are prone to water erosion on slopes >1%.
- Coarse-surface structure may limit germination of pasture species, summer crops and small-seeded crops.

### Conservation features and related management

- These grasslands provide potential habitat for endemic (Spencer's goanna) and rare and threatened fauna species (kultarr or marsupial mouse, Julia Creek dunnart, Collett's snake and the skink, *Ctenotus schevilli*).
- Deep soil cracks provide important refuges for mammals (e.g. striped faced and fat-tailed dunnarts, narrow-nose planigale) and reptiles (e.g. earless dragons and soil-crack skink), whilst grassy ground cover is important for birds such as the brolga and bustards.
- Maintenance of ground cover in grasslands is important to minimise risk of sheet and gully erosion, reduce runoff, improve water quality and protect the wildlife habitat.
- Some areas are being degraded by weed infestation (e.g. prickly acacia).
- Vigilance in controlling weed and feral animals can help prevent the degradation of these areas.

### Regional Ecosystems

4.9.1, 4.9.20.

## MU07 Open downs



Area of land type in region: 0.02%  
Median rainfall (region): 253 – 504 mm  
Average rainfall (region): 299 – 533 mm  
Area of land type with FPC: 9%  
Median FPC: 13%  
Median TBA: 5 m2/ha



**Queensland**  
Government