

Brigalow and brigalow belah



Landform	Gently undulating relict alluvial plains and higher lying level plains, and most slope positions on undulating low rises (slopes 1% to 4%).
Woody vegetation	Brigalow and brigalow belah open forest in association with wattles, wilga and softwood scrub.
Expected pasture composition	Brigalow pastures. <i>* Denotes non-native "Expected Pasture Composition" species.</i>
Preferred	Brigalow grass, Queensland bluegrass, hooky grass, leafy panic.
Intermediate	Slender chloris, slender rat's tail grass.
Non-preferred	Dark wiregrass, purple lovegrass.
Legumes	Woolly glycine, glycine pea.
Suitable sown pastures	Green panic, Gatton panic, creeping bluegrass, Angleton grass, Rhodes grass, buffel grass, Caatinga stylo, butterfly pea, siratro, leucaena, Desmanthus.
Introduced weeds	
Soil	Brown and grey clays generally deep (>100–150 cm).
Description	Surface: Hard-setting to self-mulching; Surface texture: light medium to medium clay; Subsoil texture: medium to heavy clay.
Features	Weak gilgai may occur. Some quartz gravel but mostly stone free.
Water availability	Moderate PAWC (brown clays) to high PAWC (grey clays).
Drainage	Imperfect (grey clays) to moderately drained (brown clays).
Rooting depth	Effective rooting depth 60 cm (grey clays), >100 cm (brown clays).
Fertility	Moderate to high; low to high nitrogen, low phosphorus, high to very high potassium.

Salinity	Very low throughout profile (brown clays); moderate to high below 50 cm (grey clays).
Sodicity	Sodic (below 60 cm brown clays) to strongly sodic (below 20 cm grey clays).
pH	Alkaline at surface (pH 7.5–8.0); strongly alkaline below 60 cm (9.0–9.5).
Utilisation	30%
Enterprise	Breeding herds, fattening.
Land use and management recommendations	<ul style="list-style-type: none"> • Suitable for mixed farming cropping (forage and grain). • Suitable for grazing of native and improved pastures (grey clays) and for most field and forage crops (brown clays). • Use of runoff control structures (contour banks, waterways); use minimum tillage and maintenance of effective ground cover (>50%) and conservative stocking practices (spelling pastures, flexible stocking rates) are important to retain organic matter, maintain soil structure, reduce runoff and minimise risk of sheet, rill and wind erosion. • Control regrowth if limiting pasture growth by burning every 3–5 years. • Retain timber in ridges and at changes of slope at base of hills to lower the watertable and control salinity.
Land use limitations	<ul style="list-style-type: none"> • Shallow effective rooting depth due to impermeable and saline subsoils. • Hard-setting surfaces affect workability. • Sodic subsoils impede internal drainage and restrict crop root development. • Minor occurrences of salinity in drainage lines. Narrow moisture range for successful cultivation. • Moderate to high risk of erosion; high risk of gully erosion where water is concentrated. • Control regrowth if limiting pasture growth by burning >6 years.
Conservation features and related management	<ul style="list-style-type: none"> • Extensively cleared for pasture and cropping. • Only very small areas remain and these are used by migratory birds such as yellow robins, grey fantails, varied trillers and rufous fantails. • These scrubs are important habitat for bush turkeys and black-striped wallabies. • Remnants are threatened by weed invasion and fire on their margins. • The use of fire breaks and cool season burns reduce this risk. • The ideal scenario for conservation would be to fence these unique areas off from grazing.
Regional ecosystems	12.8.23, 12.12.26, 12.12.26a.
Land resource area	Undulating Plains; Relict Alluvial Plains.