

# Brigalow belah +/- melonholes



## Landform

Gently undulating to flat plains.

Occurring throughout the middle of the region (e.g. Commoron, Wandalli, Calingunee, Wycanna and Talwood).

## Woody vegetation

Tall open forests of brigalow, belah and the occasional poplar box, mallee box, mollybox and yapunyah. Understory of wilga and false sandalwood, and, in damper areas around gilgais, black tea tree.

Most of the brigalow-belah land types were cleared of woody vegetation in the 1950s for prime cropping land.

## Expected pasture composition

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

### Preferred

Queensland bluegrass, brigalow grass, curly windmill grass, Warrego summer grass.

### Intermediate

Early spring grass, slender panic, fairy grass, gilgai grass, water couch.

### Non-preferred

Lovegrasses (weeping, dainty, woodland).

### Annuals

New Zealand spinach, twinleaf, budda pea, stinkgrass\*.

### Common forbs

Saltbushes.

## Suitable sown pastures

Bambatsi panic and angleton bluegrass will stand some waterlogging, and purple pigeon grass on the heavier brigalow clays. Creeping bluegrass, digit grass, tall finger grass, Gatton panic, Rhodes grass, and buffel grass on the belah type clay/loams.

Snail, barrel and burr medics, Caatinga stylo, *Desmanthus*, leucaena (soils >120 cm).

## Introduced weeds

Prickly pear, velvet tree pear, lippia, harrisia cactus, mother-of-millions.

## Soil

Self-mulching, grey to dark cracking clays (vertosols) with melonholes.

### Description

**Surface:** Moderately to strongly self mulching +/- gilgai; **Surface texture:** medium clay; **Subsoil texture:** heavy clay.

### Water availability

Medium; effective rooting depth 90 cm in mound, 100 cm in depression; PAWC 130 mm in mound, 140 mm in depression.

### Fertility

Low in mounds; medium in depressions.

### Salinity

Non-saline at the surface with high to very high salinity below 40 cm.

### Sodicity

Non-sodic surface; sodic from shallow depths (below 20 cm) to strongly sodic at depth.

### pH

Slightly alkaline surface to upper subsoil, moderately acidic at depth.

## Utilisation

30%

## Enterprise

Growing and finishing.

## Land use and management recommendations

- Suitable for grazing of native and sown pastures; dryland cropping and forages.
- Rotate crops and legumes, or nitrogen fertiliser, to maximise production of high protein grain.
- Retain stubble on dryland crop fallows using minimum tillage.
- Testing of subsoils should be undertaken before levelling melonholes.
- Manage grazing pressure to maximise ground cover to maintain pasture vigour, encourage desirable grasses, and suppress woody weed growth.

## Land use limitations

- Melonholes can cause difficulties with uneven relief, variability in surface condition and depth to subsoil, and sodicity, salinity or acidity near the surface.
- Melonholes restrict tillage and trafficability.
- Subsoils under mounds are usually very sodic and dispersible with high levels of salinity.
- Susceptibility to waterlogging and ponding (particularly in melonhole depressions).
- Woody weed regrowth (limebush, prickly pear).

## Conservation features and related management

- Extensively cleared or thinned for cropping and pasture, with remaining brigalow and/or belah or other understorey *Acacia* species often forming small clumps.
- As appreciable areas of native pastures or natural dense woodlands are rare, these clumps of brigalow and/or belah are managed primarily as conservation reserves.
- Habitat for rare and threatened species including the nomadic painted honeyeater *Grantiella picta*. This species feeds on mistletoe fruits that grow on eucalypts and acacias.

## Regional Ecosystems

11.4.3a.

## Land Resource Areas; Land types; Soil associations

Land Resource Area (Thwaites and Macnish 1991) Commoron, Bungunya north. Soils associations (Lloyd 1977, 1980) F12, CC20 Melonhole Brigalow, MM1, 2 Red Belah country soils.