

# Brigalow with melonholes



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| <b>Landform</b>                     | Higher lying level plains, and mid slopes and crests of broad low rises.  |
| <b>Woody vegetation</b>             | Brigalow, black tea tree belah open forest.   |
| <b>Expected pasture composition</b> | <i>Brigalow pastures.</i><br><i>* Denotes non-native "Expected Pasture Composition" species.</i>  |
| Preferred                           | Brigalow grass, Queensland bluegrass, silky browntop.   |
| Intermediate                        | Native millet, spring grass, umbrella canegrass, slender chloris.   |
| Non-preferred                       | Wiregrasses (e.g. dark), tall chloris.  |
| Legumes                             | Woolly glycine, rhynchosia.   |
| <b>Suitable sown pastures</b>       | Creeping blue grass, Rhodes grass, green panic, buffel grass, Angleton grass, Bambatsi panic, Caatinga stylo, Desmanthus.                           |
| <b>Introduced weeds</b>             |   |
| <b>Soil</b>                         | Generally deep (>150 cm) brown and grey medium to heavy clays, weakly to strongly gilgaied.   |
| Description                         | <b>Surface:</b> Self-mulching and cracking; <b>Surface texture:</b> light to medium heavy clay; <b>Subsoil texture:</b> medium heavy to heavy clay. |
| Features                            | Variable gilgai microrelief.  |
| Water availability                  | Moderate to high PAWC.  |
| Drainage                            | Poor  |

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| <b>Rooting depth</b>                                | Effective rooting depth 40–60 cm.  |
| <b>Fertility</b>                                    | Moderate to high; moderate to high nitrogen, low to moderate phosphorus, high potassium.   |
| <b>Salinity</b>                                     | Highly saline below 50–60 cm on mounds; moderate in depressions.   |
| <b>Sodicity</b>                                     | Non-sodic at the surface. Sodic to strongly sodic below 30–50 cm.  |
| <b>pH</b>   | Slightly to moderately alkaline (pH 7.0–8.0) at surface; increasing alkalinity at depth (pH 9.0).  |
| <b>Utilisation</b>                                  | 30%  |
| <b>Enterprise</b>                                   | Fattening  |
| <b>Land use and management recommendations</b>      | <ul style="list-style-type: none"> <li>• Suitable for grazing of native and improved pastures, some short term only cropping.</li> <li>• Use of minimum tillage and maintenance of effective ground cover (&gt;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 erosion.</li> <li>• Retain timber on ridges, in drainage lines and at changes of slope at base of hills to lower watertable and control salinity.</li> <li>• Burning is recommended not more frequently than every 6 years to control regrowth (brigalow, black tea tree) and to enhance preferred pasture species.</li> </ul>  |
| <b>Land use limitations</b>                         | <ul style="list-style-type: none"> <li>• Waterlogging, uneven wetness, restricted trafficability and tillage caused by gilgai microrelief. Narrow moisture range for successful cultivation.</li> <li>• Sodic subsoil impedes internal drainage and restricts crop development.</li> <li>• Possibility of salinity outbreaks in drainage lines.</li> <li>• Low erosion hazard due to moderate erodibility and moderate slopes.</li> </ul>  |
| <b>Conservation features and related management</b> | <ul style="list-style-type: none"> <li>• As there are very few areas of this land type remaining they are of high value. It is an ecosystem where the higher drier parts of the melonholes are heavily grazed and depressions, which become water-logged in the wet, provide for a unique and very specific suite of plants.</li> <li>• In its natural state this land type offers limited grazing value but a high ecological value.</li> <li>• Brigalow melonholes can be prolific breeding sites for frogs and are an attractant for species such as the vulnerable ornamental snake that feeds almost exclusively on frogs.</li> <li>• These areas are very readily degraded because of their uneven wetness and plant composition.</li> <li>• The ideal scenario for conservation would be to fence these unique areas off from grazing.</li> </ul> |
| <b>Regional ecosystems</b>                          | 11.9.5.  |
| <b>Land resource area</b>                           | Relict Alluvial Plains.  |