

# Tall open forests on steep hills and mountains



<b>Landform</b>	Steep mountains and hills.
<b>Woody vegetation</b>	Grassy open forest of wide range of species including grey gum, stringybark, blackbutt, tallowwood, spotted gum, narrow-leaved ironbark and scattered rainforest.
<b>Expected pasture composition</b>	<i>* Denotes non-native "Expected Pasture Composition" species.</i>
Preferred	Black speargrass, barbwire grass, kangaroo grass, tambookie grass, Rhodes grass*, creeping bluegrass*.
Intermediate	Pitted bluegrass, bottlewasher grasses, lovegrasses.
Non-preferred	Wiregrasses, reedgrass, blady grass, slender chloris.
Legumes	Emu-foot, woolly glycine, rhynchosia, creeping tick trefoil.
Annual grasses	Small burr grass.
<b>Suitable sown pastures</b>	Rhodes grass, creeping bluegrass, Shrubby stylo, fine stem stylo, Caatinga stylo, siratro.
<b>Introduced Weeds</b>	Lantana.
<b>Soil</b>	Texture contrast soils of brown loamy sands overlaying red or yellow well structured clays; or very shallow soil overlying weathering rock.
<b>Description</b>	<b>Surface:</b> Loose to hard-setting, sometimes gravelly or very shallow; <b>Surface texture:</b> sandy loam, occasionally sandy clay loam to clay loam; <b>Subsoil texture:</b> medium to heavy clay; weathered rock.

<b>Features</b>	Sub-surface may be paler but generally not bleached. Well structured and friable clays. Sometimes mottled. Very shallow soils (<0.3 m) have variable amounts of stone and gravel.
<b>Water availability</b>	Very low to low, PAWC <50–100 mm in root zone.
<b>Rooting depth</b>	Effective rooting depth <0.3 m (lithosols) to <1.5 m (podzolics).
<b>Fertility</b>	Low nitrogen; very low phosphorus; variable (very low to very high) potassium; low to medium zinc; low to high copper.
<b>Salinity</b>	Very low to low.
<b>Sodicity</b>	Non-sodic
<b>pH</b>	Soil surface strongly acid (5.2) to slightly acid (6.5) (podzolics) to medium acid (6.0) to neutral (lithosols 6.6); podzolic subsoils very strongly acid (5.0) to slightly acid (6.5), occasionally neutral to mildly alkaline (up to 7.8).
<b>Utilisation</b>	25%
<b>Enterprise</b>	Breeding and growing.
<b>Land use and management recommendations</b>	<ul style="list-style-type: none"> <li>• Suitable for grazing of native and improved pastures.</li> <li>• Do not clear steep slopes or areas with very shallow soils.</li> <li>• Maintain maximum surface cover at all times.</li> <li>• Spell pastures when flowering and seeding.</li> <li>• Burn every 4–6 years to help control weeds and regrowth (lantana, wattles).</li> </ul>
<b>Land use limitations</b>	<ul style="list-style-type: none"> <li>• Highly erodible, with high risk of landslips on over-cleared steeper slopes.</li> <li>• Prone to sheet erosion and wind erosion on bare, exposed slopes.</li> <li>• Generally very low nutrient status, particularly nitrogen and phosphorus.</li> <li>• Root development and nutrient uptake may be impeded in very shallow soils or more acid subsoils.</li> <li>• Surface stone can be a problem.</li> <li>• Red clays generally well drained, yellow clay subsoils poorly drained that can result in water logging after heavy rain.</li> </ul>
<b>Conservation features and related management</b>	<ul style="list-style-type: none"> <li>• Habitat for rare and threatened flora including <i>Persoonia</i> spp. and cycads.</li> <li>• Relatively uncleared, these land types provide valuable resources for forest dependent fauna such as possums, gliders, forest owls, microbats, insectivorous birds and arboreal and ground dwelling reptiles.</li> <li>• Retaining adequate numbers of habitat trees is important in providing food and shelter resources for these species.</li> <li>• Frequent fire regimes can reduce the shrubby understorey that contributes to the structural complexity of the habitat so important for a number of fauna.</li> </ul>
<b>Regional ecosystems</b>	12.11.16, 12.11.2, 12.11.20, 12.11.23, 12.11.24, 12.11.25, 12.11.26, 12.11.28, 12.11.3, 12.11.3a-b, 12.12.15, 12.12.2, 12.12.20, 12.12.23, 12.12.2a-b, 12.12.6, 12.5.6, 12.8.20, 12.8.25, 12.9-10.1, 12.9-10.13, 12.9-14, 12.9-14a-b, 12.9-10.17d, 12.9-10.20, 12.9-10.20, 12.9-10.23, 12.9-10.24.
<b>Land resource area</b>	Metamorphic Hills, 4 (Noble, 1996).

