Ironbark on granite

Landform	Rolling hills and mountains.
Woody vegetation	Narrow-leaved / grey ironbark and silver-leaved ironbark woodland. Pink bloodwood, spotted gum, wattles and red ash may also occur.
Expected pasture composition	** Denotes non-native "Expected Pasture Composition" species.*
Preferred	Forest bluegrass, black speargrass, kangaroo grass, tambookie grass.
Intermediate	Pitted bluegrass, silky umbrella grass, golden beard grass, barbed wire grass, red Natal grass*, couch grass*, mat grass*.
Non-preferred	Wiregrasses, reedgrass, slender chloris, blady grass, windmill grasses, native rat's tail grass.
Legumes	Glycine pea, Birdsville indigo, rattlepod.
Annual grasses	Small burr grass, feathertop Rhodes grass.
Suitable sown pastures	Rhodes grass, creeping bluegrass, digit grass, pangola, seca stylo, Wynn cassia, siratro, vigna.
Introduced weeds	Lantana, giant rat's tail grass, African lovegrass, fireweed.
Soil	Predominantly deep sandy soils showing very little texture change with depth (earthy sands); or sandy loams overlying red or yellow strongly structured clays (podzolics) with some areas of sandy solodics, soloths, yellow earths and lithosols.
Description	***Surface*:** Loose to hard-setting; ***Surface texture:*** coarse loamy sand (tenosols - earthy sands), sandy loam (kandosols - sandy solodics, yellow earths), sandy loam to clay loam (chromosols - podzolics); ***Subsoil texture:*** clayey sand (earthy sands), sandy clay loam to light clay (yellow earths) or medium to heavy clay (podzolics, sandy solodics, soloths).
Features	Hard-setting surface on earthy sands, podzolics, sandy solodics; podzolics have blocky subsoil, yellow podzolics & yellow earths may be mottled. Sandy solodics and soloths have strongly sodic & dispersible subsoils.
Water availability	Very low (sandy solodics, soloths); low (earthy sands, yellow podzolics, yellow earths); low to medium (red podzolics).
Rooting depth	Effective rooting depth < 0.4m (sandy solodics, soloths) to >1 m (earthy sands, yellow earths) and < 1.5 m (podzolics).

Fertility

Very low-low nitrogen; very low phosphorus; variable (very low to high) potassium; low to medium zinc; low to medium copper.

Salinity

Very low in all soils except sandy solodics where salinity can be high below 0.5m.

Sodicity

Non-sodic (earthy sands, podzolics, yellow earths) and sodic to strongly sodic (sandy solodics, soloths)

pH

Soil surface strongly acid (5.0) to slightly acid (6.5) for podzolics, sandy solodics, soloths or neutral (earthy sands 7.0); yellow podzolics, yellow earths, soloths have acid subsoils (5.6-6.5), earthy sands slightly acid to neutral, red podzolics neutral to slightly alkaline and sandy solodics have alkaline subsoils.

Long-term carrying capacity information (A condition)

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 744 – 815 mm				
Pasture type	Median tree cover (TBA m2/ha) (FPC %)	Median annual pasture growth (DM kg/ha)	Safe annual utilisation pasture growth (%)	Long term carrying capacity (ha/AE)
Native species	24 TBA 55 FPC		30%	
Sown pastures	24 TBA 55 FPC		30%	

Enterprise

Breeding and stores.

Land use and management recommendations

- Suitable for grazing of native and oversown pastures, timber reserves.
- Scattered areas of low slope and deeper, fertile, stable soils will support horticulture and limited cropping. Do not cultivate on slopes >8%. Maintain high levels of surface cover (>90%) at all times to reduce erosion.
- Maintain safe utilisation rates, conservative stocking matched to seasonal forage availability and use routine spelling in growing season to allow desirable pastures to recover, flower and seed, to maintain good land condition.
- Burn every 3-6 years to maintain healthy grassy woodland and help control weeds and regrowth. Implement low intensity burns on good soil moisture, to create mosaic pattern of burnt/unburnt country.

Land use limitations

- Plant available water capacity is low (even considering deep rooting depth).
- Nutrient status is low, especially phosphorus and nitrogen.
- Highly erodible on slopes if groundcover is inadequate.
- Some areas (sandy solodics & solodics) have sodic to strongly sodic subsoils, which are highly dispersive and should not be disturbed to prevent erosion.
- Hard-setting soils inhibit seed germination, infiltration and increase runoff.
- Root development and nutrient uptake may be impeded in more acid subsoils.

Conservation features and related management

- Extensively cleared for native pasture in some areas; whilst other areas on steeper slopes and mountains are relatively intact.
- These are generally grassy woodlands that provide habitat for a range of reptiles, birds and marsupials.
- Potential habitat for a number of threatened species including *Callitris baileyi, Cycas megacarpa, Paspalidium distans* and the vulnerable Koala.
- Hollow bearing habitat trees are important nesting sites for birds and arboreal mammals.
- Landscape health can be enhanced through appropriate fire regimes, grazing management and allowing regrowth to develop into effective wildlife corridors.

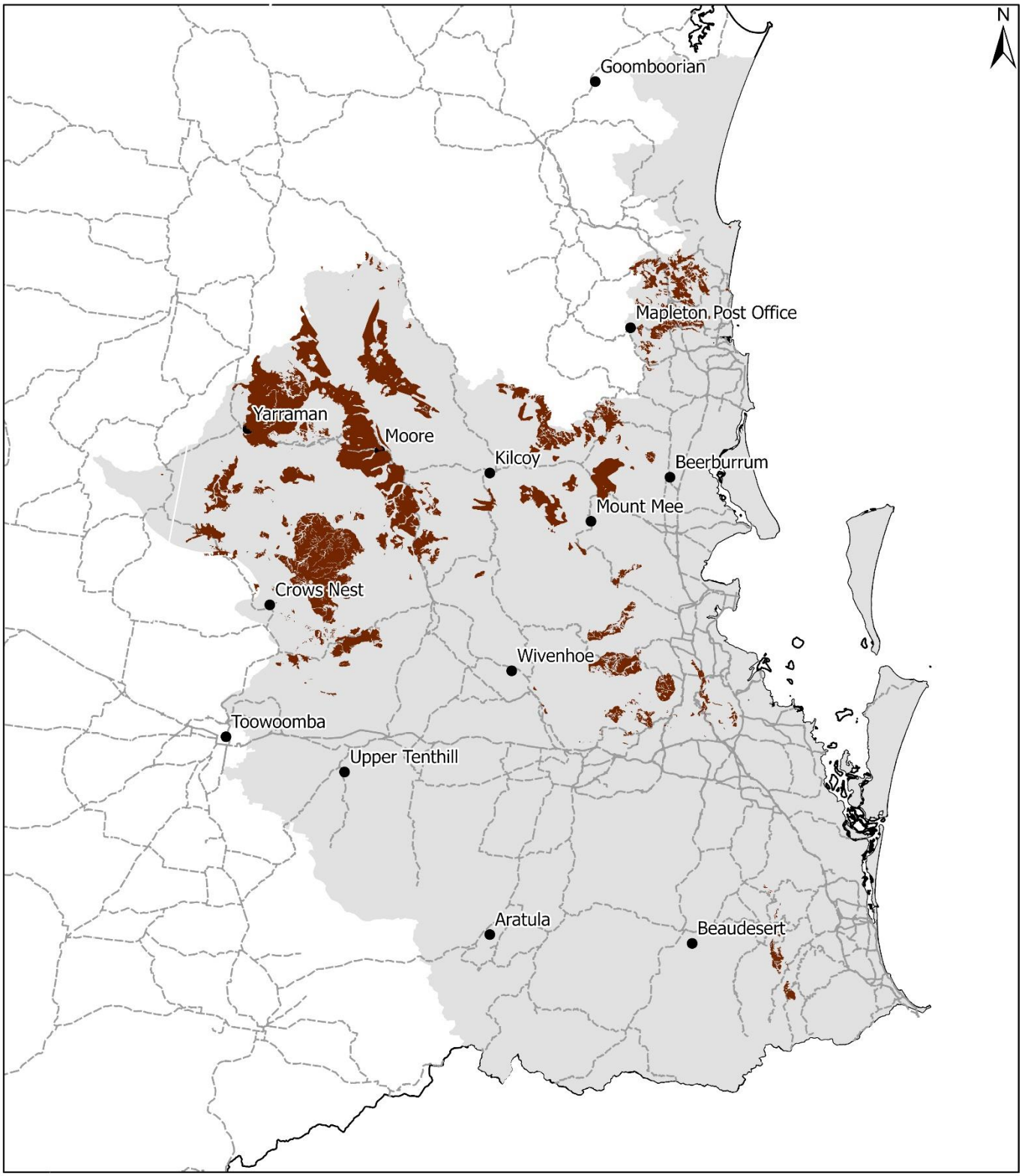
Regional Ecosystems

12.12.12, 12.12.15, 12.12.15a, 12.12.15b, 12.12.2, 12.12.24, 12.12.2a, 12.12.2b, 12.12.3, 12.12.3a, 12.9-10.7.

Land resource area

Granite Hills, 5 (Noble, 1996).

SEQ08 Ironbark on granite



Area of land type in region: 7%
Median rainfall (region): 752–1672 mm
Average rainfall (region): 763–1766 mm
Area of land type with FPC: 32%
Median FPC: 49%
Median TBA: 21 m2/ha