# Tall open forest on snuffy soils

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|---|---|
| **Landform** | Upper slopes and crests of plateau remnants and some low rises. |
| **Woody vegetation** | Closed softwood scrub associated with open forest of narrow-leaved ironbark, grey gum, tallowwood, Gympie messmate and Yarraman ironbark with occasional bloodwoods, spotted gums and understorey of wattles and red ash. |
| **Expected pasture composition** | *Southern black speargrass pastures.*<br>** Denotes non-native "Expected Pasture Composition" species.* |
| Preferred | Black speargrass, Queensland bluegrass, kangaroo grass, hooky grass, leafy panic. |
| Intermediate | Slender chloris, slender rat's tail grass. |
| Non-preferred | Wiregrasses (e.g. dark), purple lovegrass, reedgrass. |
| Legumes | Woolly glycine, glycine pea. |
| **Suitable sown pastures** | Rhodes grass, creeping bluegrass, green panic, digit grass, tall finger grass, leucaena, shrubby stylo, Caatinga stylo, Wynn cassia. |
| **Introduced weeds** | Lantana. |
| **Soil** | Generally deep (>120 cm) reddish brown gradational clay loams soils (krasnozem). |
| Description | ***Surface:*** Snuffy, loose to moderately hard-setting*;* ***Surface texture:*** sandy loam to light clay; ***Subsoil texture:*** light to medium clay. |
| Features | Surface becomes water repellent when dry and powdery (snuffy). Ironstone gravel frequently present. Stone free. |
| Water availability | Low PAWC. |
| Drainage | Well drained. |

**Rooting depth**

Effective rooting depth >100 cm.

**Fertility**

Moderate to high; moderate to high nitrogen; low phosphorus; moderate to high potassium.

**Salinity**

Non-saline

**Sodicity**

Non-sodic

**pH**

Acid soil reaction trend (pH 5.0–6.5).

## Long-term carrying capacity information (A condition)

| Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day | | | | |
|---|---|---|---|---|
| Median annual rainfall 663 – 754 mm | | | | |
| Pasture type | Median tree cover (TBA $m^2$/ha) (FPC %) | Median annual pasture growth (DM kg/ha) | Safe annual utilisation pasture growth (%) | LTCC (ha/AE) |
| Native species | 0 TBA/FPC | 5080 - 5480 | 30% | 1.8 – 1.9 |
| | 17 TBA<br>41 FPC | 1990 - 2530 | 30% | 3.9 – 4.9 |

## Enterprise

Breeding and fattening.

## Land use and management recommendations

- Suitable for grazing of native and improved pastures and cropping.
- Maintenance of effective ground cover (>70%), use of minimum tillage 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.
- Retain timber on ridges and in drainage lines to lower watertable and control salinity.
- Burning is recommended every 4–6 years to control regrowth (spotted gum, ironbarks, wattles) and to enhance preferred pasture species.

## Land use limitations

- Low PAWC will restrict dryland crop growth.
- Surface dries out easily, particularly when cultivated, becoming powdery and water repellent which may affect crop establishment and growth.
- Disturbed soils are particularly prone to wind erosion.
- Moderate to high erosion hazard.

## Conservation features and related management

- This land type has been moderately developed for grazing in some areas but there are many intact remnants in steeper country. These provide valuable corridors through the landscape for transitional and migratory birds and mammals and are an important source of timber. These remnants support sugar gliders, arboreal marsupials, smaller macropods, hollow breeding birds, birds of prey and microbats.
- Retention of ground litter provides important habitat for ground dwelling reptiles and is important in preventing erosion on the snuffy red soils.

## Regional Ecosystems

12.5.1,12.5.6c.

## Land resource area

Red Tablelands.

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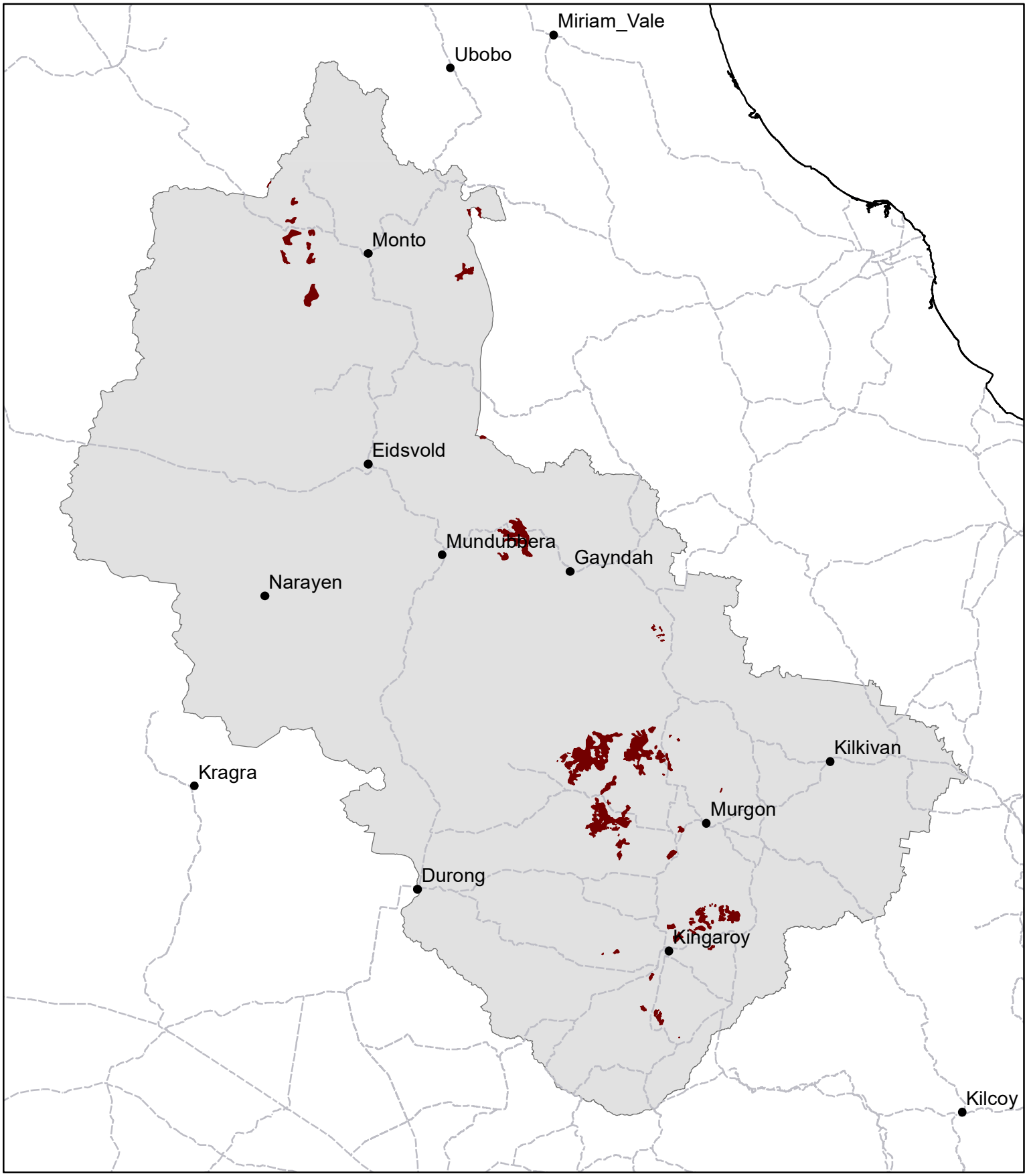


Area of land type in region: 1%
Median rainfall (region): 529 – 1018 mm
Average rainfall (region): 560 – 1070 mm
Area of land type with FPC: 76%
Median FPC: 41%
Median TBA: 17 m2/ha

Queensland Government