



Assemblages of Roe River rainforest swamp

Summary description

The known occurrence of the community is located within the Roe River area of the Prince Regent National Park in the northern Kimberley. The rainforest canopy is 16m high. Tree species include *Aglaia elaeagnoidea* (priyangu), *Alphitonia excelsa* (red ash; priority 2), *Alstonia actinophylla* (white cheesewood), *Antidesma ghaesembilla* (yangu), *Bombax ceiba* (kapok tree), *Carallia brachiata*, *Cryptocarya cunninghamii*, *Ficus hispida*, *Lophostemon grandiflorus*, *Melaleuca viridiflora* (broadleaf paperbark), *Melastoma affine*, *Memecylon pauciflorum*, *Nauclea orientalis* (Leichhardt pine), *Monoon australe*, *Sersalisia sericea* (nangi), *Syzygium angophoroides*, *Syzygium forte* subsp. *potamophilum*, *Timonius timon*, *Trema tomentosa* and *Vitex acuminata*. The camaenid land snail assemblages in rainforest communities of the Kimberley Region can be used to distinguish patches from similar rainforest communities elsewhere in northern Australia. The community was originally described in McKenzie, Johnston and Kendrick (1991).



Distribution

The community is known from one 26ha occurrence within Prince Regent National Park.

Department of Biodiversity, Conservation and Attractions (DBCA Region): Kimberley
DBCA District: East Kimberley

Local Government Authority: Shire of Wyndham-East Kimberley

Habitat requirements

The rainforest patch occurs on a spring-fed swamp on a small floodplain behind a tidal mudflat at the mouth of a sandstone valley in the estuary of the Roe River. It occurs in a very high rainfall area, experiencing 1200mm annual rainfall. The lithology is alluvium (soils left by flowing water) deposited in the Quaternary (from 2.588 million years ago to the present) and King Leopold Sandstone/Hart dolerite. The seasonally inundated soils are free draining and subsurface soil is very dark grey sand. Leaf litter depths of 5cm have been recorded.

Indigenous interests

Traditional owner group: Wunambal

The Kimberley Land Council represents the Traditional Owners and is the native title representative body for the Kimberley region.

Conservation status

State: Listed as a vulnerable ecological community under the *Biodiversity Conservation Act 2016*. Threatened ecological communities are declared environmentally sensitive areas under the *Environmental Protection Act 1986*.

National: The community occurs within the West Kimberley National Heritage listed place, protected under the *Environment Protection and Biodiversity Conservation Act 1999*.

Threatening processes

The main threats to the community include grazing by introduced herbivores (cattle and pigs), weed invasion, and altered fire regimes (late season severe fires and return cycle of fire).

Recovery actions

Development of a recovery plan is recommended for this community. Priority actions include developing and implementing a monitoring plan and using results to guide management, and surveying for other occurrences. Consistent monitoring and management of fencing, cattle impact and fires is recommended.

Key references

Kenneally, K. F., Keighery, G. J., & Hyland, B. P. M. (1991). Floristics and phytogeography of Kimberley rainforests, Western Australia. In N. L. McKenzie, R. B. Johnston, & P. G. Kendrick (Eds.), *Kimberley Rainforests of Australia* (pp. 93–131). Surrey Beatty & Sons.

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