



Assemblages of Theda Soak rainforest swamp

Summary description

The known occurrence of the community comprises a patch of rainforest around a spring-fed soak (Theda Soak) on a floodplain in the east Kimberley. Trees grow to 20m high and include *Albizia lebeck* (lebbeck tree), *Antidesma ghaesembilla* (yangu), *Bombax ceiba* (kapok-tree), *Garuga floribunda*, *Glochidion disparipes* (cheese tree), *Ficus aculeata* (sandpaper fig), *Ficus racemosa* var. *racemosa* (cluster fig tree), *Litsea glutinosa*, *Melaleuca leucadendra* (weeping paperbark), *Sesbania formosa* (white dragon tree), *Sterculia quadrifida* (orange-fruited kurrajong), *Syzygium nervosum* (Daly River satinash) and *Terminalia microcarpa* (damson plum). The camaenid land snail assemblage distinguishes this community. The community was originally described in McKenzie, Johnston and Kendrick (1991).



Distribution

Known from a single location by a tributary of the Morgan River in the east Kimberley.

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

Local Government Authority: Shire of Wyndham-East Kimberley

Habitat requirements

The community occurs 0.5km from a tributary of the Morgan River on a moderate slope. The lithology is alluvium (soils left by flowing water) deposited in the Quaternary (from 2.588 million years ago to the present) and the subsurface soil is a very dark grey sandy loam.

The community is a spring-fed soak and is dependent on a constant supply of fresh groundwater.

Indigenous interests

Traditional Owner group: Ngarinyin (Wilinggin)

The land is subject to the Wanjina-Wunggurr Wilinggin native title determination held by the Wanjina-Wunggurr Aboriginal Corporation for members of the Wanjina-Wunggurr Community. 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

Historically, decline was observed from the impact of cattle. The boundary fence was upgraded in 2019, and the threat from cattle damage is currently minimal. Potential threats include damage by feral pigs, late season fire, weed invasion and inferred future changes to the hydrologic regime associated with groundwater abstraction.

Recovery plan

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 fences, 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.

McKenzie, N. L., Belbin, L., Keighery, G. J., & Kenneally, K. F. (1991). Kimberley rainforest communities: Patterns of species composition and Holocene biogeography. In N. L. McKenzie, R. B. Johnston, & P. G. Kendrick (Eds.), *Kimberley Rainforests of Australia* (pp. 423–452). Surrey Beatty & Sons.

McKenzie, N. L., Johnston, R. B., & Kendrick, P. G. (Eds.). (1991). *Kimberley rainforests of Australia*. Surrey Beatty & Sons in association with the Department of Conservation and Land Management and Department of Arts, Heritage and Environment.

Solem, A. (1991). Land snails of Kimberley rainforest patches and biogeography of all Kimberley land snails. In N. L. McKenzie, R. B. Johnston, & P. G. Kendrick (Eds.), *Kimberley Rainforests of Australia* (pp. 145–245). Surrey Beatty & Sons.

Disclaimer: The information contained in this document is current as at September 2023. The State of Western Australia and its employees do not guarantee that this publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence that may arise from you relying on any information in this publication.

For more information see the department's website www.dbca.wa.gov.au



Department of Biodiversity,
Conservation and Attractions