



Black Spring organic mound spring community

Summary description

The community occurs in the East Kimberley and the known occurrence consists of a raised central mound supporting a forest of *Melaleuca viridiflora* (broadleaf paperbark), *Ficus* spp., *Timonius timon* and *Pandanus spiralis* (screwpine) over *Colocasia esculenta* (taro) and ferns, including *Cyclosorus interruptus* (swamp shield-fern). The tall *Phragmites karka* (tropical reed) dominates the outer edge of the mound and the entire mound is ringed by a moat of water supporting sedges and grasses. The springs contain a rich assemblage of aquatic invertebrate fauna. The community consists of raised peaty soaks or wetlands that occur on saturated peaty black clay soil with high organic content.



Distribution

The community is known from a single mapped occurrence in the North Kimberley bioregion, on a small area of Crown reserve.

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 is dependent on maintenance of hydrological processes including continuous flow of freshwater seepages to support the peaty springs.

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 critically endangered 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 major threats to the community are hydrological change, grazing and trampling by cattle and pigs, too frequent and intense fire, and weeds including *Passiflora foetida* (stinking passion flower) and *Mangifera indica* L. (mango).

Recovery plan

Development of a recovery plan is recommended for this community. Priority actions include mapping and control of high priority weeds, implementing an appropriate fire regime, investigating hydrological processes that support the community, and regular monitoring.

Key references

Halse, S. A. (2001). *Comments on Kimberley Springs sampled by Sally Black* [Unpublished report]. Department of Conservation and Land Management.

Shanahan, A. & Coote, M. (2008). *A report on the application of draft criteria for identification of High Conservation Value Aquatic Ecosystem (HCVAE) on mound springs in Western Australia*. Produced for the Aquatic Ecosystem Task Group, Department of Environment, Water, Heritage and the Arts. Department of Environment and Conservation.

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