Organic mound spring sedgeland community of the North Kimberley bioregion

TEC Description

The community is comprised of sedgelands and grasslands that are almost completely devoid of trees and shrubs due to a waterlogged seepage zone, and can also include boggy fernlands. At the margins are associated woodlands. The community encompasses vegetation that is affected by the hydrology of each mound spring. The community is distinguished in particular by the invertebrate biota that inhabit them, and also the sedgelands or grasslands that typify the core seepage zones of the springs. Most of the sedges present on these mound springs are restricted to the periphery of wetlands and creeks, or broad drainage depressions on sandier soils where grasses are dominant. Seven plant species are considered useful indicators of these mound springs, since their occurrence is almost entirely restricted to them or their margins: *Cyperus unioloides* (papyrus sedge), *Eleocharis ochrostachys* (spike rush), *Eriocaulon inapertum* (pipewort), *Lobelia leucotos* (blue lobelia), *Rhynchospora gracillima* (thin beaksedge), *Spiranthes sinensis* (austral ladies tresses) and *Utricularia circumvoluta* (bladderwort). Eight other plant species found in this mound spring community have priority conservation status in Western Australia: *Cyperus unioloides* (priority 1), *Eleocharis ochrostachys* (priority 3), *Eriocaulon inapertum* (priority 1), *Lobelia leucotos* (priority 1), *Rhynchospora gracillima* (priority 1), *Rhynchospora rubra* (priority 3), *Spiranthes sinensis* (priority 1) and *Utricularia circumvoluta* (priority 1).

Distribution

Department of Biodiversity, Conservation and Attractions (DBCA Region): Kimberley
DBCA Districts: East Kimberley
Local Government Authority: Shire of Wyndham-East Kimberley.

Habitat Requirements

The spring sedgelands contains a diffuse discharge area (core seepage zone) up to about 200m in diameter with strong microrelief across the whole surface. Surface water to a depth of 20cm has been recorded in the core areas that can include up to about 1% cover of open water. Surface flows also occur in some areas. The core seepage zones comprised black peaty loam with dense sedges and grasses to 1.4m high, and can be covered in vines, with a total cover of almost 100%.

Indigenous Interests

The Traditional Owners are the Wunggurr. There are no known registered sites listed in the Department of Aboriginal Affairs Aboriginal Heritage Sites Register that occur within or close to the community.

Conservation Status

Listed as vulnerable under WA Minister Environmentally Sensitive Areas list in policy.

Threatening Processes

All known occurrences of this community are subject to the impacts of cattle. The condition of springs surveyed in 2016 had greatly improved following fencing.

Recovery Actions

A recovery plan is recommended to outline the recovery actions required to reduce the threats and to maintain or improve the overall condition of the community in the known locations. Recommended actions include developing and implementing a monitoring plan and using results to guide management, and surveys for other occurrences. Consistent monitoring and management of fences, cattle impact and fires is recommended.

Citation

Department of Biodiversity, Conservation and Attractions. (2020). Recovery plans and interim recovery plans *https://www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities/wa-s-threatened-ecological-communities*

Key References

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