

Sensitive Vegetation in the Northern Territory

Sandsheet Heath

What is sandsheet heath?

Sandsheets have acidic infertile soils overlaying an impermeable deposit of clay or laterite, and are flooded during the wet season.

Heath is the term used to describe the community of plants found on the sandsheet.

Sandsheet heath has a mix of species, typically with a diverse understorey of herbs and sedges and an overstorey of small trees or shrubs such as *Grevillea pteridifolia*, *Banksia dentata*, *Verticordia cunninghamii* and *Melaleuca nervosa*.

These seasonally saturated wetlands are important habitat for almost all of the carnivorous *Utricularia* species (bladderwort herbs) found in the Darwin region.

Sandsheet Heath is also frequently associated with monsoon rainforests, other wetlands and riparian vegetation. These are all restricted vegetation types in the Territory and hotspots for biodiversity.

Why is sandsheet heath significant?

Sandsheet heath is a rare vegetation type present in the Darwin region, covering 56 km². Although not formally listed as threatened, seasonally-saturated sandsheets supporting a heathland or wet herbfield are highly restricted and are identified as an ecosystem at risk within the Darwin region.

Many plant and animal species have adapted to, and are largely or entirely restricted to this habitat type, including the Howard River Toadlet (*Uperoleia daviesae*).

The Howard River Toadlet was discovered in 2000, and although little is known about the species it appears to be confined to these seasonally flooded sandy-plains. The Toadlet is the only Territory frog that is listed as threatened.

Bladderworts

Bladderworts (genus *Utricularia*) are a fascinating group of small carnivorous plants which have specialist traps for capturing and digesting small insects. These plants are well adapted to life in a low-nutrient environment.

The Top End is among the richest places in the world for Bladderworts and their diversity is highest on the sand plain habitats in the Darwin rural area. At least 26 Bladderwort species occur here, especially along the Howard River and Adelaide River flood plains. Seven of these are officially recognised under NT legislation as 'Vulnerable' or 'Near Threatened'.

Other threatened Sandsheet Heath plant species include orchids and the herb *Typhonium taylori*.



Sandsheet Heath

Threats

Land clearing for mineral extraction and rural or agricultural expansion is currently the most significant management issue affecting the conservation values of the sandsheet heath.

Vegetation fragmentation and hydrological change in the catchment are also likely to be affecting susceptible wetland and rainforest habitats.

As land use intensifies near Darwin, there is a high likelihood that increased nutrient flows from nearby areas will have a detrimental impact on the plants and animals which are adapted to the low nutrient environment of the sandsheets.

Recreational misuse of these sensitive environments is increasingly apparent as the population of Darwin continues to grow. This includes fire-bug activity in the region, leading to increased frequencies of fires in some areas.

Exotic grasses are becoming more widespread and fuelling hotter and more destructive fires. Recreational use of vehicles in these sandy areas leaves deep ruts which affect the local hydrology.

References and Further Reading

Land Clearing Guidelines

www.lrm.nt.gov.au/natveg/guidelines

Sites of Conservation Significance

www.lrm.nt.gov.au/conservation

Threatened Species

www.lrm.nt.gov.au/threatenedspecies

Northern Territory Planning Scheme

www.lands.nt.gov.au/planning/planning-scheme

Other Fact Sheets in this series

Monsoon Rainforest

Mangrove Forest

Old-Growth Forest

Riparian Vegetation

Further Information

Department of Land Resource Management

Ph. 08 8999 3631

www.lrm.nt.gov.au/natveg



Calochilus caesius



Utricularia holtzei



Utricularia hamiltonii

What can we do to conserve sandsheet heath?

- Ideally for conservation, development should be excluded from areas where threatened and rare species are known to be concentrated.
- Investigate establishing conservation agreements on areas of private land containing sandsheet heath or developing other forms of reservation.

You can make a difference by:

- Spreading the word about the importance of sandsheet heath areas. They are sensitive to disturbance and contain threatened species.
- Preventing fire-bug activity in these areas. Reduce the frequency of fires.

- Preventing the spread of exotic grasses, especially mission grasses and gamba grass, into new areas in the Darwin region. Have an active weed management plan for your property.
- Reducing exotic grasses in areas with high conservation value such as the Howard sandsheets, or where fires threaten properties.
- Retaining native vegetation patches, buffers and corridors within the horticultural and rural lands around and to the east of Darwin.
- Preventing recreational activities, such as four wheel driving and quad bike riding, in these sensitive areas.