

# Threatened species of the Northern Territory

## Tassel sedge

### *Carex fascicularis*

#### Conservation status

##### Australia: Not listed

Environment Protection and Biodiversity Conservation Act 1999

##### Northern Territory: Vulnerable

Territory Parks and Wildlife Conservation Act 1976

#### Description

*Carex fascicularis* is an erect densely tufted perennial sedge to 1 m with trigonous culms and short rhizome. Leaves with blade 6–11 mm wide; sheath yellow-brown; ligule acute. Inflorescence spreading, 6–25 cm long, with 3–6 spikes solitary at nodes. Spikes are male or female, long-pedicellate (2.5–7 cm long) and drooping when mature. Nut is obovoid, trigonous in cross section, yellow-brown in colour<sup>1</sup>.

Flowering: records for May, June and November.

Fruiting: records for June, August–September.

#### Distribution

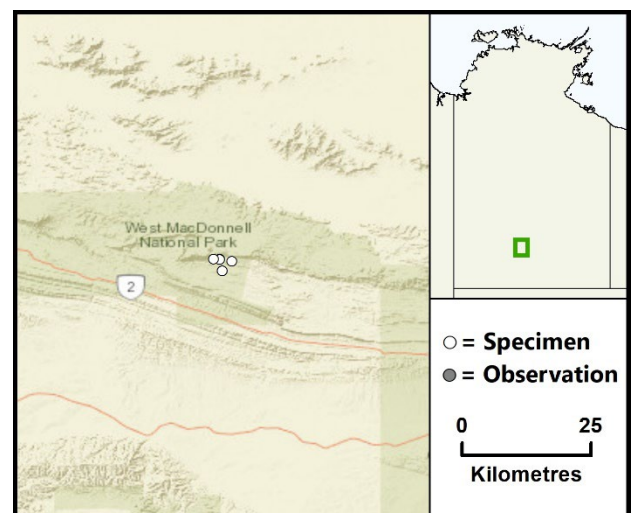
The species occurs in all Australian states and is common in south-eastern Australia. In the Northern Territory (NT) however, it is known from a single population located at Giles Yard Spring in the West MacDonnell Ranges. This site is the largest permanent spring in the Chewings Range. The springs in the Chewings Range are well surveyed, and the species has not been detected elsewhere.



Credit: D. Albrecht

It is considered unlikely that *Carex fascicularis* occurs elsewhere in Central Australia.

NT conservation reserves where reported: West MacDonnell/Tjoritja National Park



Caption: Known locations of the Tassel Sedge in the NT ([nrmmaps.nt.gov.au](http://nrmmaps.nt.gov.au))

## Ecology and life-history

This species is intrinsically rare in the NT most likely due to the near absence of suitable habitat. Throughout its continental range, the species is closely associated with swampy areas in mesic/sub-coastal regions<sup>2</sup>. Very little is known about the population dynamics or reproductive ecology of the NT population.

## Threatening processes

Given its small size and restricted distribution, the NT population of *Carex fascicularis* is highly vulnerable to the effects of stochastic processes such as disease. Currently its habitat is effectively weed free, however invasion by exotic grasses, Buffel Grass or Couch Grass, would represent a significant threat to this species. The site is naturally protected from fire. However increased fire incidence at the site as a result of exotic grass invasion of neighbouring areas would severely compromise the integrity of *Carex fascicularis* habitat. Changed rainfall and temperatures associated with climate change may cause decline in this species.

## Conservation objectives and management

The maintenance of this species in the NT is contingent on the effective management of the Giles Yard Springs site. Currently, access is highly restricted and this arrangement should stay in place. Monitoring of habitat quality and population changes (especially weed occurrences) should also remain a priority. Fire protection through control burning on park is another important aspect of the management of this species.

## References

- <sup>1</sup> Wilson, K.L. 1993. Cyperaceae. P. 390, in G.J. Harden (ed.) Flora of New South Wales V. 4. New South Wales University Press, Sydney.
- <sup>2</sup> White, M., Albrecht, D., Duguid, A., Latz, P., and Hamilton, M. 2000. Plant species and sites of botanical significance in the southern bioregions of the Northern Territory. Volume 1: significant vascular plants. A report to the Australian