

Threatened Species of the Northern Territory

Minuria tridens (D.A. Cooke) Lander (ASTERACEAE)

MINNIE DAISY

Conservation status

Australia: Vulnerable

Northern Territory: Vulnerable



Description

Minuria tridens is a perennial subshrub to 30 cm high. The ray florets have lilac ligules, the disc florets are yellow.

Flowering: February to March, May to October, and December.

Fruiting: February to March, May, July, September and December.



Minuria tridens (flowers)

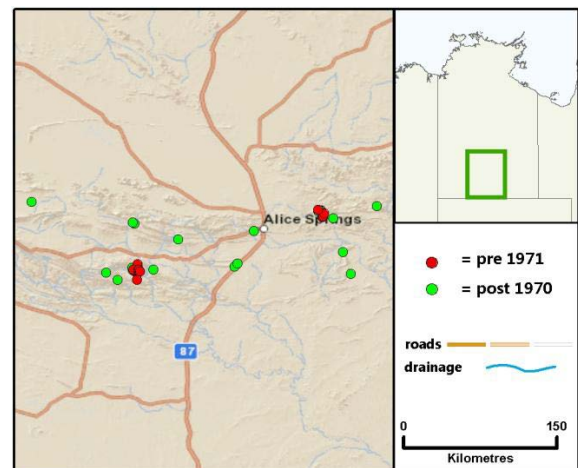
Distribution

Apart from a single occurrence in the Murchison Bioregion of Western Australia (Lander 1987), *Minuria tridens* is restricted to the arid southern region of the Northern Territory (NT). The majority of records are

from the MacDonnell Ranges Bioregion, with one other in the Simpson-Strzelecki Dunefields Bioregion.

In the NT, the latitudinal range of this species is 71 km and the longitudinal range is 310 km. Its western limit is on Haasts Bluff Aboriginal Land Trust and its eastern limit is on Loves Creek Pastoral Station. The known NT distribution of *M. tridens* extends approximately 200 km west of Alice Springs and 100 km east of Alice Springs. The total area of occupancy in the NT is estimated to be <math>< 2\,000\text{ km}^2</math>.

Conservation reserves where reported: Finke Gorge National Park, Trepshina Gorge National Park and West MacDonnell National Park.



Known locations of *Minuria tridens*

Ecology

This daisy occurs on dolomite, limestone and calcrete impregnated sandstone hills, rises and ranges. It is typically found on southerly aspects in low shrublands dominated by species such as *Acacia kempeana*, *Senna artemisioides* and/or *Indigofera leucotricha*. *Triodia* species are absent from most locations. Low seed set is characteristic of most populations studied.

Conservation assessment

Minuria tridens is classified in the NT as **Vulnerable** (under criterion B2ab(iii)) based on:

- area of occupancy estimated to be <2 000 km² and;
- Subpopulations are severely fragmented; and
- There is continuing decline in (iii) area, extent or quality of habitat.

Threatening processes

Minuria tridens is threatened by Buffel Grass (*Cenchrus ciliaris*) invasion into core habitat areas. The Alice Springs Municipality sites are most severely affected.

Many of the *M. tridens* populations were burned by wildfire in 2002. While *M. tridens* has some resprouting capacity, its overall fire response is poorly known. This species is potentially facing increased levels of fire exposure with ongoing incursions of Buffel Grass into its habitat.

Populations of *M. tridens* in the Alice Springs municipality are potentially threatened by urban and rural development. Increased disturbance associated with house and road construction will potentially facilitate the spread of Buffel Grass into *M. tridens* habitat.

Minuria tridens is also potentially threatened by a range of processes associated with stock production on pastoral land. Trampling of seedlings and soil disturbance by cattle are potential concerns.

Conservation objectives and management

A national recovery plan has been developed for this species (Nano & Pavey 2008). The specific objectives are:

- carry out targeted surveys for additional populations within the MacDonnell Ranges;
- mapping of subpopulations;
- negotiate conservation agreements to secure significant subpopulations on unreserved lands;
- carry out population and habitat monitoring at selected sites;
- implement management strategies for key threatening processes as required;
- undertake research on fire ecology, reproductive biology, and seed storage potential;
- store seeds from different subpopulations in seed-banks;
- determine the degree of genetic differentiation using molecular techniques;
- engage Indigenous people in the management of the species; and
- community and stakeholder education and information.

Complied by

Catherine Nano
Raelee Kerrigan
David Albrecht
[updated December 2012]

References

- Nano, C. and Pavey, C. (2008). National Recovery Plan for *Olearia macdonnellensis*, *Minuria tridens* (Minnie Daisy) and *Actinotus schwarzii* (Desert Flannel Flower). Department of Natural Resources, Environment, the Arts & Sport, Northern Territory
- 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 Heritage Commission. (Arid Lands Environment Centre, Alice Springs.)