

Threatened Species of the Northern Territory

RAINBOW VALLEY FUSCHIA BUSH

Eremophila prostrata

Conservation status

Australia: Vulnerable

Northern Territory: Near Threatened



Description

Eremophila prostrata (formally *E. sp.* Rainbow Valley) is a prostrata perennial shrub. The flower (corolla) is purple with white in the throat, has a two-lobed upper lip, and a three-lobed lower lip. The corolla is occasionally white. The fruits are one centimetre in diameter.

Flowering: recorded for January - April and August - December

Fruiting: recorded for January - April and August - December.



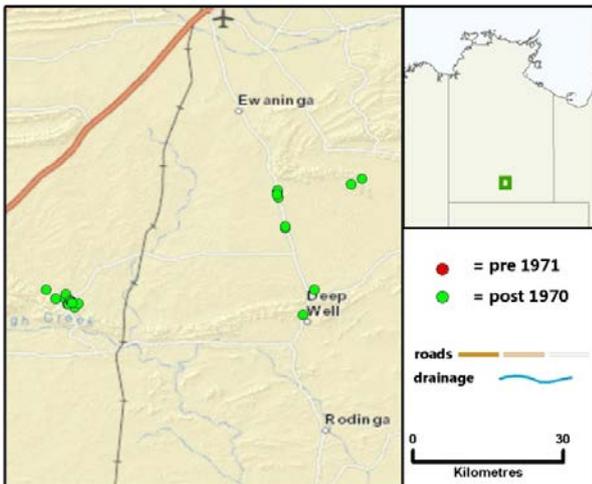
Flower of *Eremophila prostrata*

Distribution

Eremophila prostrata is endemic to the Northern Territory (NT), with a latitudinal range of 25 km and longitudinal range of 61 km. It is presently known from seven populations: two from the Mt. Ooraminna area, four from between Deep Well and Mt Ooraminna and another from the Rainbow Valley area (Eldridge 1996; White *et al.* 2000).

The total area occupied by the species is less than 50 ha. Five of the seven populations are small and have fewer than 50 individuals recorded. Until 2002, the largest known population was to the East of Mt Ooraminna. Many hundreds of plants were present at this site in 1998. In 2002, very large numbers of seedlings were observed to have recruited in an area burnt during fire management activities in and adjacent to Rainbow Valley Conservation Reserve (J. Barnetson *pers. comm.*). This population numbered tens of thousands of individuals at its peak (A. Duguid *pers. obs.*).

Conservation reserves where reported:
Rainbow Valley Conservation Reserve.



Known locations of *Eremophila prostrata*.

Ecology

Eremophila prostrata occurs on sandplains and lower dune slopes that characteristically support hummock grasses (*Triodia basedowii*) and a variety of shrubs and trees including *Grevillea*, *Hakea*, *Acacia*, and Desert Oaks. Known populations are concentrated near the base of rocky ranges and probably receive additional moisture after rain via run-on from adjacent slopes.

Field observations indicate that the species can resprout after fire and after short-term drought (Eldridge 1996; A. Duguid unpublished data).

Quantitative life-history data are lacking, but field observations suggest that the species is relatively short-lived, with a life-span of somewhere in the order of two to ten years.

Eremophila prostrata experiences a flux of individuals between different life stages as a result of time-since-disturbance (mainly fire) effects. This species has a persistent seed bank that is stimulated by disturbances (fire, flooding, mechanical effects), and adult plants may die out prior to the next fire event due to a short life span. Thus the absence/low abundance of standing plants at a site does not necessarily signify decline; and sub-populations persist at a site by virtue of their long-lived and dormant soil-stored seed bank.

Conservation assessment

The conservation status of the species approaches Vulnerable (under criteria B1/2a; D2) based on:

- extent of occurrence <20,000 km²;
- area of occupancy <20 km²; and
- severely fragmented or known to exist at no more than ten locations

But there is no evidence of a population decline and there are presently no known threats that could drive this species to extinction. The species is classified in the NT as **Near Threatened**.

Threatening processes

There are no known threats that could drive this species to Endangered or worse in a very short time.

Conservation objectives and management

Future survey work should aim to further document the geographic extent and population size of this species.

Compiled by

Raelee Kerrigan

David Albrecht

Angus Duguid

Catherine Nano

[updated December 2012]

References

- Eldridge, S.R. (1996) *A Preliminary Survey of the Distribution, Status and Basic Ecology of Eremophila (prostrata)*. Report to the Australian Heritage Commission NEGP programme, National Threatened Species Network.
- 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)