Threatened species of the Northern Territory

Tjilpi wattle

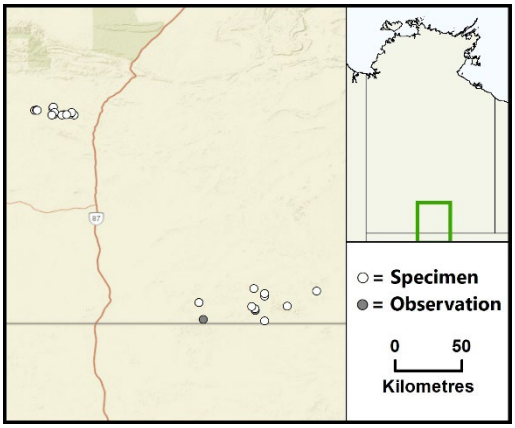
Acacia latzii

Conservation status

Australia: Vulnerable
Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Vulnerable
Territory Parks and Wildlife Conservation Act 1976

Credit: S. Ward



Caption: Known localities of *Acacia latzii* in the NT (nrmaps.nt.gov.au)

Description

Acacia latzii is a small tree or shrub to 4 m high with thick rough bark. The flowers are in globular heads and the pods are linear.

Flowering: April-October; December-January.

Fruiting: May-November.

Distribution

Acacia latzii is endemic to the Finke Bioregion, of the Northern Territory (NT) and South Australia (SA), where it is restricted to two areas, 200 km apart[1]. The Bacon Range population (Henbury Station) has a longitudinal range of 28 km, and a latitudinal range of 11.5 km giving an extent of occurrence of 322 km^2. The Beddome Range population, along the eastern edge of the NT-SA border, has a continuous distribution from Coglin Creek (New Crown Station) in the east to the main Tieyon Station access road in the west. The longitudinal range is c. 65 km and the latitudinal range is c. 35 km. The extent of occurrence is 275 km^2 including the NT and SA portions; and 963 km^2 including the NT portion only[2].

In addition, there is an outlying occurrence on Mt Cavanagh Station in SA, c. 40 km west of the main population. Future survey may increase the known distribution of this species.

NT conservation reserves where reported: None

Ecology and life-history

The habitat of *A. latzii* is characterised by silcrete-capped mesas and low stony hills derived from mainly shale and siltstone. This species is often concentrated along minor creeks and on low hill slopes. Soils are sandy clay-loams and are often highly alkaline at depth. The ground layer comprises mainly short grasses and chenopod subshrubs[2].

The northern and southern populations of *A. latzii* have a very similar demography, with age structure being highly skewed towards the older age classes[2].

Acacia latzii has a life history profile typical of many desert tree species, characterised by long-lived and drought tolerant adults and infrequent regeneration[3]. Though rare, recruitment is likely to be sufficient for stand replacement where disturbance remains low. Available information suggests that this species has low tolerance of fire[2].

Threatening processes

Increased fire exposure associated with Buffel Grass invasion and climate change would directly threaten this species. Available information suggests that this species is incapable of withstanding repeated fire exposure[2].

Cattle and feral herbivore impacts on *A. latzii* were found to be low in the 2008 survey of the stands[2]. However, seedling loss during a recruitment phase due to animal browsing and trampling represents a potential threat to this species.

Acacia latzii is inherently vulnerable to decline from stochastic events by virtue of its small population size and fragmented distribution. Altered rainfall patterns and hotter summers associated with climate change may affect adult survivorship and increase the rarity of recruitment events.

Conservation objectives and management

The national recovery plan for threatened arid zone Acacias[1] has expired and a Conservation Advice Document is in preparation for this species.

Actions 1, 3 and 8 of the National Recovery Plan for this species have been implemented[2]. Targeted surveys have increased the known extent of this species and the NT populations are now mapped. A monitoring programme is established to quantify population and threat trends. Indigenous ecological knowledge has been documented and Indigenous people have expressed a strong desire to be involved in the conservation management of this species.

References

[1] Nano, C., Harris, M., and Pavey, C.R. 2006. *Recovery plan for threatened Acacias and Ricinocarpos gloria- medii in central Australia, 2006-2011*. (NT Department of Natural Resources Environment and the Arts, Alice Springs.)

[2] Nano C., Nano T., Gibson J. and Pavey C. 2008. Recovery action implementation for threatened arid acacias: distribution, monitoring and Indigenous ecological knowledge of *A. peuce*, *A. undoolyana*, *A. pickardii* and *A. latzii*.

[3] Nano C., Jobson, P. and Wardle G. 2017. Arid Shrublands and Open Woodlands of Inland Australia. In D.A. Keith (ed) Australian Vegetation (3rd edition). Pp. 626-650. Cambridge University Press, NY.