

THREATENED SPECIES OF THE NORTHERN TERRITORY



WADDY-WOOD

Acacia peuce

Conservation status

Australia: Vulnerable.

Northern Territory: Endangered.

Description

Acacia peuce is usually an erect tree able to reach heights of up to 18 m. The foliage can be variable; pale yellow flowers are solitary and often inconspicuous; and pods are large (up to 5x20 cm) and flattened. The bark is grey-brown and fibrous, and the timber is very dense with dark red heart-wood. Under laboratory conditions, *A. peuce* germinates readily after most seed-coat treatments (Pryor 1967).

Flowering and the consequent seed set may be seasonal and correlate with large rainfall events.

Flowering: Oct-March.

Fruiting: Dec-June.



Acacia peuce (whole plant).



Acacia peuce (leaves and pods).

Distribution

With northerly migration of the Simpson Desert dunefields and the consequent expansion of unsuitable habitat from the south, Waddy-wood has retracted to three disjunct populations on the fringes of the Simpson Desert (Deveson 1980; Chuk 1982). Two populations in the east, 300 km apart, occur at Boulia and Birdsville in Queensland. The third and smallest population is 400 km west in the Mac Clark (*Acacia peuce*) Conservation Reserve, 230 km south-east of Alice Springs (Schabort 2000).

While all three populations are restricted in area, the NT population is the smallest with a geographic range of around 20 km but occupying about 10 km². The locations of stands within the known NT population have been mapped but not accurately georeferenced.

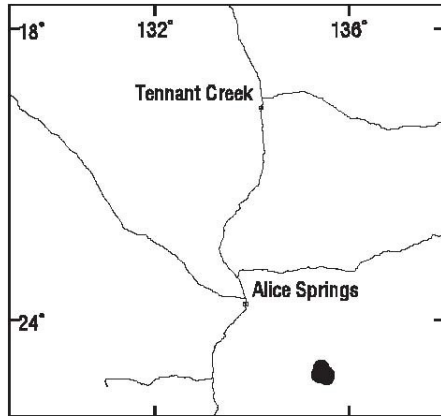


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Conservation reserves where reported:
Mac Clark Conservation Reserve.



Known locations of *A. peuce*.

Ecology

Acacia peuce is slow growing and is estimated to live for 500 years or longer. Germination and seedling establishment in *A. peuce* are periodic phenomena that culminate over short periods within cycles of above average rainfall.

It occurs on stony flats or gibber, alluvial flats or low rocky rises.

Conservation assessment

In the NT the species has been classified as **Endangered** (under criteria B1ab(iv,v)+2ab(iv,v)) due to:

- area of occupancy < 500 km²;
- extent of occurrence < 5000 km²;
- reduction in population size over the last 10 years through a decline in area of occupancy and quality of habitat;
- severe fragmentation and decline of subpopulations; and
- a continuing decline of mature individuals.

Threatening processes

Fire, cattle impact through grazing and trampling, and rubbing, and lightning strikes are causes of recent deaths.

Conservation objectives and management

All stands of *Acacia peuce* in Mac Clark Conservation Reserve and adjoining Andado Pastoral Lease have recently been fenced to protect them from feral and native herbivores.

A national recovery plan for threatened arid zone Acacias has been prepared by NRETA together with other state agencies (Nano *et al.* 2006). The plan covers *Acacia peuce*. Recovery actions identified for *A. peuce* in the Northern Territory include to:

- carry out population and habitat monitoring to assess trends in population size and assess the impacts of threatening processes;
- implement management strategies for key threatening processes as required;
- undertake research on fire, seed and reproductive biology;
- collect and store seeds from all populations in recognized seed-banks;
- assess genetic population structure; and
- engage indigenous ecologists to provide input into the recovery process.

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References

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