

## Approved Conservation Advice for *Acacia eremophiloides*

(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

This Conservation Advice has been developed based on the best available information at the time this Conservation Advice was approved; this includes existing plans, records or management prescriptions for this species.

### Description

*Acacia eremophiloides*, Family Mimosaceae, is a resinous shrub with slender branchlets, growing up to 2.5 m high. Phyllodes are linear, slightly curved, 4–6 cm long with a prominent midrib and margin (Leverington et al., 2006). *Acacia eremophiloides* flowers in August and September, with mature fruits occurring in November. Approximately 30 golden flowers are produced in globular heads. Pods are linear, raised over the seeds and 8 cm long by 3.5 cm wide (DERM, 2009). The species is an obligate seeder. Plants reach reproductive maturity at three to four years and live for 8–12 years (Leverington et al., 2006).

### Conservation Status

*Acacia eremophiloides* is listed as **vulnerable**. This species is eligible for listing as vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, prior to the commencement of the EPBC Act, it was listed as vulnerable under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). *Acacia eremophiloides* is also listed as vulnerable under the *Nature Conservation Act 1992* (Queensland).

### Distribution and Habitat

*Acacia eremophiloides* is restricted to a small area (less than 10 km: Pedley and Forster, 1986) in the Burnett pastoral district of south-eastern Queensland, on a property formerly used for grazing. This land was acquired in 2004 for conservation purposes and is currently managed by the Queensland Department of Environment and Resource Management as Beeron national park. There are at least 10 known discontinuous populations containing more than 5000 plants (Leverington et al., 2003).

*Acacia eremophiloides* grows on exposed rocky granite ridges in shallow, sandy, well-drained, weakly acidic soils (Pedley and Forster, 1986). This species occurs within the Brigalow Belt Bioregion and the Fitzroy Natural Resource Management Region.

The distribution of this species is not known to overlap with any EPBC Act-listed threatened ecological community.

### Threats

*Acacia eremophiloides* occurs in a rugged, remote locality that is unsuitable for grazing and is protected from disturbance, weed invasion and soil degradation. A potential threat to the species may be inappropriate fire regimes (Leverington et al., 2006). Although fire can cause the death of individual plants in fire-adapted native species, populations may require disturbance before senescence reduces seed production. Fire can provide this disturbance. However a fuel load build-up sufficient to carry a fire across the granite areas where *Acacia eremophiloides* occurs can take up to five years, limiting the efficiency of fire as a propagation tool (Leverington et al., 2006).

## Research Priorities

Research priorities that would inform future regional and local priority actions include:

- Undertake survey work in suitable habitat and potential habitat to locate any additional populations.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.

## Regional and Local Priority Actions

The following priority recovery and threat abatement actions can be done to support the recovery of *Acacia eremophiloides*.

### Fire

- Develop and implement a suitable fire management strategy for the habitat of *Acacia eremophiloides*
- Implement an appropriate fire management regime for local populations.

### Enable Recovery of Additional Sites and/or Populations

- Investigate options for linking, enhancing or establishing additional populations.
- Implement national translocation protocols (Vallee et al., 2004) if establishing additional populations is considered necessary and feasible.

This list does not necessarily encompass all actions that may be of benefit to the Midlands Acacia, but highlights those that are considered to be of highest priority at the time of preparing the Conservation Advice.

## Information Sources:

Department of Environment and Resource Management (2009). *Acacia eremophiloides* Species Information Sheet, viewed 8 December 2009, <http://www.epa.qld.gov.au/UAT/wetlandinfo/site/MappingFandD/WetlandMapsAndData/SummaryInfo/SpeciesDetail.jsp?TaxonID=9565&Archive=true>

Leverington A, Edgar R and Gordon G (2006). Draft Multi-species recovery plan for *Acacia eremophiloides*, *Acacia grandifolia*, *Acacia porcata*, *Bertya granitica* and *Newcastelia velutina*. Report to the Department of Environment and Heritage, Canberra. Queensland Parks and Wildlife Service, Brisbane.

Pedley L and Forster PI (1986). *Acacia eremophiloides* (Mimosaceae). A new species from south-eastern Queensland. *Austrobaileya*. 2(3):277-280.

Vallee L, Hogbin T, Monks L, Makinson B, Matthes M and Rossetto M (2004). Guidelines for the Translocation of Threatened Plants in Australia - Second Edition, Australian Network for Plant Conservation, Canberra.