

A statement for the purposes of approved conservation advice
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

Approved Conservation Advice for
***Acacia brachypoda* (Western Wheatbelt Wattle)**

This Conservation Advice has been developed based on the best available information at the time this conservation advice was approved.

Description

Acacia brachypoda, Family Mimosaceae, also known as Western Wheatbelt Wattle, is a dense, rounded and slightly aromatic shrub to 2 m high. Leaves are hairless green phyllodes (flattened leaf stalks that resemble leaves) that are held erect and straight to slightly incurved. Phyllodes are circular in cross section (with four nerves) or flattened with one nerve, 2–5 cm long by 1 mm wide. Flowers are golden in colour and arranged in globular heads, two per leaf axil, each flower head on a stalk about 2–3 mm long. Pods are hairless, curved or coiled and 7–8 mm wide. Seeds are 4 mm long with a thick yellow-brown seed stalk (aril). Flowering occurs from May to June (Brown et al., 1998; Maslin, 1990, 2001).

Conservation Status

Western Wheatbelt Wattle is listed as **endangered**. This species is eligible for listing as endangered 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 endangered under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). The Western Wheatbelt Wattle is also listed as rare flora under the *Wildlife Conservation Act 1950* (Western Australia) and on the *Wildlife Conservation (Rare Flora) Notice 2006(2)* (Western Australia).

Distribution and Habitat

Western Wheatbelt Wattle is known from six populations in two main areas between the headwaters of the Darkin River and north of Brookton in Western Australia (Brown et al., 1998; DEFL, 2007). This species occurs within the Avon (Western Australia) Natural Resource Management Region. Surveys for Western Wheatbelt Wattle have identified approximately 5000 plants. Currently only one population is recorded from a conservation reserve (Wandoo Conservation Park) and the other populations are from roadside and railway reserve remnants (DEFL, 2007).

Western Wheatbelt Wattle is found in low-lying, winter-wet swamps in sandy loam or sandy clay soils in open scrub or on low sandy loam rises in open Wandoo (*Eucalyptus wandoo*) woodland adjacent to slightly saline flats. The species is associated with *Eucalyptus wandoo*, or in open areas with *Allocasuarina* sp., *Callistemon phoneciceus*, *Hakea varia*, *Leptospermum* sp. and *Melaleuca* sp. (Brown et al., 1998; Durell & Beuhrig, 2001; Maslin, 2001).

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

Threats

The main identified threats to Western Wheatbelt Wattle include the risk of rising salinity and water-logging (Brown et al., 1998; Durell & Beuhrig, 2001). This threat results from the geographic limitation of the range of Western Wheatbelt Wattle to two known areas and its habitat preference for low lying, potentially salt-prone localities.

The main potential threats to Western Wheatbelt Wattle include its susceptibility to extinction via stochastic events, due to the small number of individuals and limited geographic

distribution. Other potential threats to Western Wheatbelt Wattle include infrastructure or development activities, weeds, fire and improper land use.

Research Priorities

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

- Undertake survey work in suitable habitat and potential habitat, especially on adjacent conservation reserves, to locate any additional populations/occurrences/remnants,
- Investigate the basic reproductive strategy of Western Wheatbelt Wattle, including the species response to disturbance (fire re-sprouter and/or obligate seeder), seed set, germination studies and presence of soil seed bank, and
- Establish the salinity tolerance or otherwise of Western Wheatbelt Wattle.

Regional Priority Actions

The following regional priority recovery and threat abatement actions can be done to support the recovery of Western Wheatbelt Wattle.

Habitat Loss, Disturbance and Modification

- Identify populations of high conservation priority.
- Manage threats to areas of vegetation that contain populations/occurrences/remnants of Western Wheatbelt Wattle.
- Manage any changes to hydrology that may result in changes to the water table levels, increased run-off, sedimentation or pollution.
- Investigate formal conservation arrangements such as the use of covenants, conservation agreements or inclusion in reserve tenure.

Conservation Information

- Raise awareness of Western Wheatbelt Wattle within the local community.

Enable Recovery of Additional Sites and/or Populations

- Investigate options for linking, enhancing or establishing additional populations.
- Implement appropriate national translocation protocols (Vallee et al., 2004) if establishing additional populations is considered necessary and feasible.
- Undertake seed germination trials to enhance likelihood of successful establishment.

Local Priority Actions

The following local priority recovery and threat abatement actions can be done to support the recovery of Western Wheatbelt Wattle.

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Minimise adverse impacts from land use at known sites.
- Manage any disruptions to water flows.

Invasive Weeds

- Identify and remove weeds in the local area, which could become a threat to Western Wheatbelt Wattle, using appropriate methods.
- Manage sites to prevent introduction of invasive weeds, which could become a threat to Western Wheatbelt Wattle, using appropriate methods.

This list does not necessarily encompass all actions that may be of benefit to Western Wheatbelt Wattle, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

Existing Plans/Management Prescriptions that are Relevant to the Species

- Declared rare and poorly known flora in the Narrogin District, Western Australian wildlife management program no. 30 (Durell & Beuhrig, 2001).

Information Sources:

Brown, A, Thomson-Dans, C & Marchant, N 1998, *Western Australia's Threatened Flora*, Department of Conservation and Land Management, Como.

DEFL 2007, *Threatened (Declared Rare) Flora Database (DEFL)*, Department of Conservation and Land Management, Perth.

Durell, GS & Beuhrig, RM 2001, *Declared rare and poorly known flora in the Narrogin District, Western Australian wildlife management program no. 30*, Department of Conservation and Land Management, WA.

Maslin, BR 1990, 'Acacia miscellany 4. Three new Western Australian species with affinities to *A. wilhemiana* (Leguminosae: Mimosoideae: section *Plurinerves*) from Western Australia', *Nuytsia*, vol. 7, pp. 221-228.

Maslin, BR 2001, *Acacia brachypoda*, in *Flora of Australia*, vol. 11B, Eds Orchard AE & Wilson JG, CSIRO Publishing, Melbourne, pp. 12-13.

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.