

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

Approved Conservation Advice for
Acacia pubifolia

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 pubifolia, Family Mimosaceae, also known as Velvet Wattle and Wyberba Wattle, is a low shrub or small tree growing to 8 m high, with dark fibrous bark. Branches are angular and covered with velvety hairs. The leaf-like phyllodes are straight or slightly curved, 2–10 cm long, 8–30 mm wide, with prominent veins, rounded tip and covered in velvety hairs. Flowers are golden yellow in colour and arranged in spikes 2–5 cm long. Pods are linear, slightly constricted between seeds and up to 8 cm long by 4 mm wide. Seeds are rectangular, about 4 mm long, black with a small seed stalk (aril). Flowering occurs during September and October (Pedley, 1978; Tindale & Kodela, 2001; DECC, 2005a).

Conservation Status

Acacia pubifolia 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 pubifolia* is also listed as endangered under the *Threatened Species Conservation Act 1995* (NSW) and vulnerable under the *Nature Conservation (Wildlife) Regulation 2006* (Queensland).

Distribution and Habitat

Acacia pubifolia is known from two sites in NSW, one north of Emmaville in the Torrington State Recreation Area and the other on private property near Warrabah National Park, and from near Wyberba in Queensland (Tindale & Kodela, 2001; DECC, 2005a). This species grows in dry scrubby woodland on granite, sandy, stony, loam and metasediment soils. It occurs within the Border Rivers-Gwydir, Namoi, Northern Rivers (NSW), and Border Rivers Maranoa-Balonne Natural Resource Management Regions.

The distribution of this species overlaps with the “White Box-Yellow Box-Blakely’s Red Gum Grassy Woodland and Derived Native Grassland” EPBC Act-listed threatened ecological community.

Threats

The main identified threats to *Acacia pubifolia* include an inappropriate fire regime where fires are too frequent (less than 5 years), the duration between fires too long (greater than 30 years), or not hot enough for seed germination; grazing by domestic stock and feral goats (*Capra hircus*); and habitat destruction, clearing and fragmentation for agriculture, development, mining and roads (DECC, 2005a).

Research Priorities

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

- Design and implement a monitoring program or, if appropriate, support and enhance existing programs.

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- More precisely assess population size, distribution, ecological requirements and the relative impacts of threatening processes.
- Investigate seed viability, germination, dormancy and longevity in the field and storage (DECC, 2005b).
- Map known populations of *A. pubifolia* (DECC, 2005b), and undertake survey work in suitable habitat and potential habitat to locate any additional populations/occurrences.

Regional and Local Priority Actions

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

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats (DECC, 2005b).
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Identify populations of high conservation priority.
- Ensure road widening and maintenance activities (or other infrastructure or development activities) involving substrate or vegetation disturbance in areas where *A. pubifolia* occurs do not adversely impact on known populations.
- Control access routes to suitably constrain public access to known sites on public land.
- Suitably control and manage access on private land.
- Investigate formal conservation arrangements such as the use of covenants, conservation agreements or inclusion in reserve tenure, especially *A. pubifolia* populations near Warrabah National Park (DECC, 2005b).

Trampling, Browsing or Grazing

- Develop and implement a stock management plan for roadside verges and travelling stock routes.
- Manage known sites to ensure grazing regimes do not adversely affect this species.
- Prevent grazing pressure at known sites through exclusion fencing or other barriers (DECC, 2005a, b).
- Manage threats at known sites in reserve areas to control introduced pests such as goats (EA, 1999; DECC, 2005b).

Fire

- Develop and implement a suitable fire management strategy for *A. pubifolia*, including determining if and/or where an ecological burn is required (DECC, 2005b).
- Consider the location of known *A. pubifolia* populations in regional fire plans and hazard reduction burn planning (DECC, 2005b).
- Provide maps of known occurrences to local and state Rural Fire Services and land managers and seek inclusion of mitigative measures in bush fire risk management plans, risk register and/or operation maps.

Conservation Information

- Encourage landholders with existing populations of *A. pubifolia* to manage populations appropriately (DECC, 2005b).
- Raise awareness of the species within the local community by involving local Landcare groups in the management of *A. pubifolia*.

Enable Recovery of Additional Sites and/or Populations

- Establish an ex-situ collection from a single provenance in collaboration with the Botanic Gardens Trust (DECC, 2005b).
- Investigate options for linking, enhancing or establishing additional *in-situ* populations (DECC, 2005a).

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- 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 *A. pubifolia*, 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

- NSW Priority Action Statement for Velvet Wattle (DECC, 2005b), and
- Threat Abatement Plan for Competition and Land Degradation by Feral Goats (EA, 1999).

These prescriptions were current at the time of publishing; please refer to the relevant agency's website for any updated versions.

Information Sources:

Department of Environment & Climate Change New South Wales (DECC) 2005a, *Velvet Wattle – Profile*, viewed 16 May 2008, <<http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/profile.aspx?id=10024>>.

Department of Environment & Climate Change New South Wales (DECC) 2005b, *Velvet Wattle – Priority actions (New South Wales Threatened Species Priority Action Statement)*, viewed 16 May 2008, <http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/pas_profile.aspx?id=10024>.

Environment Australia (EA) 1999, *Threat Abatement Plan for Competition and Land Degradation by Feral Goats*, Biodiversity Group, Environment Australia, viewed 16 May 2008, <<http://www.environment.gov.au/biodiversity/threatened/publications/tap/goats/index.html>>.

Pedley, L 1978, 'A revision of *Acacia* Mill. in Queensland', *Austrobaileya*, vol. 1, no. 2, pp. 75–234.

Tindale, MD & Kodala, PG 2001, '*Acacia pubifolia*', Orchard, AE & Wilson, AJG (Eds.), *Flora of Australia*, vol. 11B, ABRIS/CSIRO Publishing, Melbourne, p. 267.

Vallee, L, Hogbin, T, Monks, L, Makinson, B, Matthes, M & Rossetto, M 2004, *Guidelines for the Translocation of Threatened Plants in Australia* (2nd ed.), Australian Network for Plant Conservation, Canberra.