

**Approved Conservation Advice for
Acacia pycnostachya (Bolivia Wattle)**

(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 pycnostachya, Family Mimosaceae, also known as the Bolivia Wattle, is an erect shrub or spreading tree, 3–15 m high with strongly angled or flattened, glabrous, pruinose branchlets, and firm, grey-green phyllodes 6–10 cm long and 15–30 mm wide (Harden, 1991). The golden flower spikes are 3–6 cm long (Harden, 1991; Orchard and Wilson, 2001). Flowering occurs in spring or from July to October and fruits are borne October to November (DECCW, 2005).

Conservation Status

Bolivia Wattle 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). The Bolivia Wattle is also listed as vulnerable under the *Threatened Species Conservation Act 1995* (New South Wales).

Distribution and Habitat

Bolivia Wattle is restricted to New South Wales where it is known from only three locations on the New England Tablelands: Bolivia Hill, Bluff Rock south of Tenterfield and a site on private land west of Tenterfield. The locations span a distance of approximately 50 km. This species is known from only four populations. In 1994–95 populations located at Bolivia Hill were estimated to have more than 2000 plants in good health and more than 500 plants in very poor health, with plants dead or stressed from drought. The population in the Back Creek area north-west of Tenterfield was estimated at 200–500 plants (DECC, 2005). According to the NSW Scientific Committee (2008), the total population estimate for this species is now 30 000 individuals with the majority of the two largest populations occurring within conservation reserves.

This species grows in dry sclerophyll forest amongst granite outcrops, on hillsides at altitudes of 700 to 900 m. Soil types range from sandy and skeletal soils on exposed outcrops, to shallow sandy loams in less exposed sites. It often grows in stands in areas sheltered from fire. Generally plants appear to dominate the understorey or tall shrub stratum below an open canopy of taller shrubs or trees. Associated species include *Eucalyptus prava*, *E. andrewsii*, *E. campanulata*, *Callitris* species including *C. endlicheri*, *Acacia adunca*, *A. neriifolia*, *Leptospermum brevipes*, *Stypandra glauca* and *Notelaea microcarpa* (DECCW, 2005).

This species occurs within the New England Tablelands and Nandewar Bioregions and the Northern Rivers and Border Rivers-Gwydir Natural Resource Management Regions.

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

Threats

The main identified threats to Bolivia Wattle relate to the unreserved population on private property and include clearing of habitat for agriculture, road, powerline and railway maintenance and grazing (NSW Scientific Committee, 2008).

The main potential threats to Bolivia Wattle include browsing by feral animals, particularly goats during drought conditions, and inappropriate fire regimes (a fire frequency greater than every 15–20 years may kill adult plants and deplete the soil seed bank: DECCW, 2005).

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.
- More precisely assess population size, distribution, ecological requirements and the relative impacts of threatening processes.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations.
- Undertake seed germination and/or vegetative propagation trials to determine the requirements for successful establishment.
- Identify optimal fire regimes for regeneration (vegetative regrowth and /or seed germination), and response to other prevailing fire regimes.

Regional Priority Actions

The following regional priority recovery and threat abatement actions can be done to support the recovery of Bolivia 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.
- Ensure there is no anthropogenic disturbance in areas where Bolivia Wattle occurs, excluding necessary actions to manage the conservation of the species/ecological community.
- Investigate formal conservation arrangements, management agreements and covenants on private land, and for crown and private land investigate and/or secure inclusion in reserve tenure if possible.
- Manage any other known, potential or emerging threats.

Trampling, Browsing or Grazing

- Develop and implement a management plan for the control or eradication of feral goats in the region.

Fire

- Develop and implement a suitable fire management strategy for the habitat of Bolivia Wattle.
- Ensure all known occurrences and new records of the species are entered into the NSW Wildlife Atlas to ensure up to date data is available for impact assessment and fire planning

Conservation Information

- Raise awareness of Bolivia Wattle within the local community.

- Engage with private landholders and land managers responsible for the land on which populations occur and encourage these key stakeholders to contribute to the implementation of conservation management actions.

Enable Recovery of Additional Sites and/or Populations

- Undertake appropriate seed collection and storage.
- 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.

Local Priority Actions

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

Habitat Loss, Disturbance and Modification

- Control access routes to suitably constrain public access to known sites on public land.
- Suitably control and manage access on private land and other land tenure.
- Minimise adverse impacts from land use at known sites.
- Manage any disruptions to water flows.
- Protect populations of the listed species through the development of conservation agreements and/or covenants.

Trampling, Browsing or Grazing

- Where appropriate, manage total grazing pressure at important/significant sites through exclusion fencing or other barriers.

Fire

- Implement an appropriate fire management regime for local populations.

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

Information Sources:

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