

Approved Conservation Advice for
***Boronia repanda* (Repand Boronia)**

(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

Boronia repanda, Family Rutaceae, also known as the Repand Boronia, Border Boronia or Granite Rose, is a low, single or multiple stemmed shrub that grows to a height of 1.5 m (Hunter and Bell, 2006). Leaves are opposite, 3–18 mm long and 1–3 mm wide, with conspicuous oil dots, and are aromatic when crushed. Petals are pink (occasionally white), 6–9 mm long and persistent in fruit. The oblong, hairy fruits are laterally flattened and approximately 5 mm long (Stanley and Ross, 1983; Duretto, 1999).

Conservation Status

The Repand Boronia 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 Repand Boronia is also listed as endangered under the *Nature Conservation Act 1992* (Queensland) and endangered under the *Threatened Species Conservation Act 1995* (New South Wales).

Distribution and Habitat

The Repand Boronia is known from nine populations on the Stanthorpe Plateau in the Darling Downs and granite belt area of south-east Queensland and one population in New South Wales. All populations occurring in Queensland are within a 20 km area, and occur on private freehold, state forest and council roadside. Total number of individuals in Queensland populations is approximately 1000 individuals (Donatiu, 2006). The New South Wales population occurs close to the border and contains an estimated 10 000 to 12 000 plants (Hunter and Bell, 2006).

This species occurs within the New England Tableland Bioregion and the Border Rivers Maranoa-Balonne Natural Resource Management Region.

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

Threats

The main threats to Repand Boronia include vegetation clearing, removal of undergrowth for fire reduction purposes, quarrying and inappropriate fire regimes (Hunter and Bell, 2006). The small number of populations and limited number of individuals within subpopulations may lead to localised extinction as a result of stochastic events. The loss of a single population has the potential to significantly impact on the species' distribution and extent of occurrence. This problem is compounded because no populations are actively managed in conservation reserves (Hunter and Bell, 2006).

As Repand Boronia is one of the rarest Boronias in eastern Australia, inappropriate collection of seeds and cuttings for propagation material is another possible threat to the species (Qld DNR, 2000).

Research Priorities

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

- 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.
- Monitor progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.

Regional Priority Actions

The following regional priority recovery and threat abatement actions can be done to support the recovery of the Repand Boronia.

Habitat Loss, Disturbance and Modification

- Investigate formal conservation arrangements, management agreements and covenants on private land, and for crown and private land investigate inclusion in reserve tenure if possible.
- Monitor known populations to identify key threats.
- Identify populations of high conservation priority.
- Ensure there is no disturbance in areas where Repand Boronia occurs, excluding necessary actions to manage the conservation of the species.

Conservation Information

- Raise awareness of Repand Boronia within the local community.

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.

Local Priority Actions

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

Habitat Loss, Disturbance and Modification

- Protect populations of the species through the development of conservation agreements and/or covenants.
- 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.

Fire

- Implement an appropriate fire management regime for local populations.

This list does not necessarily encompass all actions that may be of benefit to Repand Boronia, 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

- Donatiu, P. (2006). Stanthorpe Plateau Threatened Flora Recovery Plan 2007–2011. Toowoomba: Queensland Murray-Darling Committee; Canberra: Department of Environment and Heritage.
- NSW National Parks and Wildlife Service (NSW NPWS) (2002). Recovery Plan for *Boronia granitica* (Granite Boronia). Hurstville: NSW National Parks & Wildlife Service.

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 and Resource Management Queensland (2009). *Boronia repanda* Species Notes. Available on the Internet at:

<http://www.epa.qld.gov.au/UAT/wetlandinfo/site/MappingFandD/WetlandMapsAndData/SummaryInfo/SpeciesDetail.jsp?TaxonID=17841&Archive=true>

Donatiu P (2006). Stanthorpe Plateau Threatened Flora Recovery Plan 2007-2011, Queensland Murray-Darling Committee. Toowoomba.

Duretto MF (1999). Systematics of *Boronia* section *Valvatae sensu lato* (*Rutaceae*). *Muelleria* 12(1): 1-132.

Hunter JT and Bell D (2006). Field baseline surveys of the threatened flora species *Boronia repanda* and *Acacia altox*. Unpublished report to the New South Wales Department of Environment and Conservation.

New South Wales National Parks and Wildlife Service (NSW NPWS) (2002). Recovery Plan for *Boronia granitica* (Granite Boronia). Hurstville: NSW National Parks & Wildlife Service. Available on the Internet at:

<http://www.environment.gov.au/biodiversity/threatened/publications/recovery/b-granitica/index.html>

Queensland Department of Natural Resources (Qld DNR) (2000). Species Management Manual. Queensland Department of Natural Resources. Forest and Fauna Conservation and Ecology Section.

Stanley TD and Ross EM (1983). Flora of south-eastern Queensland: Volume One. Brisbane: Qld Department of Primary Industries.

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.