

This Conservation Advice was approved by the Minister / Delegate of the Minister on: 3/07/2008.

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

**Approved Conservation Advice for**  
***Leucopogon confertus***

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

**Description**

*Leucopogon confertus*, Family Ericaceae–Styphelioideae, also known as the Torrington Beard-heath, is a small shrub with hairy stems. Its bristly, toothed leaves are 5–7.5 mm long and 0.8–1.4 mm wide, sometimes with hairy edges, and clasp the stem towards the ends of the branches. The underside of the leaves is striped and finely hairy. The white flowers have long, soft, weak or shaggy hairs (DECC, 2005).

**Conservation Status**

*Leucopogon confertus* 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 species is also listed as endangered under Schedule 1 of the *Threatened Species Conservation Act 1995* (NSW).

**Distribution and Habitat**

*Leucopogon confertus* is known from only one collection along Silent Grove Road, near Torrington, in the NSW Northern Tablelands (Harden, 1992; L Copeland, 2002, pers. comm.). The 1998 records of this species from Torrington State Recreation Area were discovered to be stunted plants of the common species *Leucopogon attenuatus*. Repeated searches of the original collection location have not revealed any more plants, and the species could be extinct (L Copeland, 2002, pers. comm.). Little is known of the habitat of *L. confertus*, but it may occur in open forest or woodland in rocky granite areas (DECC, 2005). This species occurs within the Border Rivers–Gwydir (NSW) Natural Resource Management Region.

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 threats to *L. confertus* have not been identified, but potential or likely threats along Silent Grove Road include occasional roadworks and grazing/digging by feral goats (*Capra hircus*) and pigs (*Sus scrofa*). However, this species was most likely very rare prior to the introduction of these potential threats (L Copeland, 2002, pers. comm.). Clearing of habitat for agriculture; mining; and inappropriate fire regimes are other potential threats to this species (DECC, 2005).

*Leucopogon confertus* occurs in areas that have had infestations of dieback caused by *Phytophthora cinnamomi*, and may be at risk from this threatening process (DECC, 2002; DECC, 2005).

**Research Priorities**

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

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- Determine whether *Leucopogon confertus* still occurs at its original collection site.
- If so, design and implement a monitoring program.
- 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/occurrences/remnants.
- Undertake seed germination and/or vegetative propagation trials to determine the requirements for successful establishment.

### **Regional and Local Priority Actions**

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

#### Habitat Loss, Disturbance and Modification

- Monitor known population to identify key threats.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Monitor threats to vegetation around Silent Grove Road, such as clearing and mining (DECC, 2005).
- Ensure road widening and maintenance activities (or other infrastructure or development activities as appropriate) in areas where *Leucopogon confertus* may occur do not adversely impact on the species.
- Manage any changes to hydrology that may result in changes to the water table levels, increased run-off, sedimentation or pollution.
- Manage any disruptions to water flows.
- Investigate formal conservation arrangements such as the use of covenants, conservation agreements or inclusion in reserve tenure.

#### Trampling, Browsing or Grazing

- Develop and implement a management plan for the control and eradication of feral pigs and goats in the local area and Torrington State Conservation Area (DECC, 2005).

#### Fire

- Develop and implement a suitable fire management strategy for *L. confertus*.
- Identify appropriate intensity and interval of fire to promote seed germination and/or vegetation regeneration.
- Provide maps of known occurrences to local and state rural fire services and seek inclusion of mitigative measures in bush fire risk management plans, risk register and/or operation maps.

#### Diseases, Fungi and Parasites

- Develop and implement suitable hygiene protocols to protect known sites from outbreaks of dieback caused by *Phytophthora cinnamomi*.

#### Conservation Information

- Raise awareness of *Leucopogon confertus* within the local community, especially among landholders.
- Report any new records of *Leucopogon confertus* to relevant agencies (DECC, 2005).

#### 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.

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This list does not necessarily encompass all actions that may be of benefit to *Leucopogon confertus*, 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**

- Threat Abatement Plan for Predation, Habitat Degradation, Competition and Disease Transmission by Feral Pigs (DEH, 2005),
- Threat Abatement Plan for Competition and Land Degradation by Feral Goats, (Environment Australia, 1999),
- Threat abatement plan for Dieback caused by the Root-rot Fungus *Phytophthora cinnamomi* (Environment Australia 2001), and
- Torrington State Conservation Area Plan of Management (NPWS NSW, 2003).

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

### **Information Sources:**

Copeland, L (University of New England), Personal communication, 2002.

Department of the Environment and Climate Change (DECC), 2002, *Infection of native plants by Phytophthora cinnamomi - key threatening process listing, NSW Scientific Committee final listing*, viewed 26 March 2008, <<http://www.environment.nsw.gov.au/determinations/PhytophthoraKTPListing.htm>>

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Department of the Environment and Heritage (DEH), 2005, *Threat Abatement Plan for Predation, Habitat Degradation, Competition and Disease Transmission by Feral Pigs*, viewed 26 March 2008, <<http://www.environment.gov.au/biodiversity/threatened/publications/tap/pig/pubs/feral-pig-tap.pdf>>

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Harden, GJ (Ed) 1992, *Flora of New South Wales, Volume Three*, University of NSW Press Kensington, NSW.

National Parks and Wildlife Service (NPWS) NSW 2003, *Torrington State Conservation Area: Plan of Management*, viewed 26 March 2008, <<http://www.environment.nsw.gov.au/resources/parks/pomfinaltorrington.pdf>>

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