

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

Approved Conservation Advice for
***Ozothamnus reflexifolius* (Reflexed Everlasting)**

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

Ozothamnus reflexifolius, Family Asteraceae, also known as Reflexed Everlasting, is a small shrub to 1.3 m high with slender, spreading branches. Leaves are bright green, closely spaced, arranged alternately, without stalks, the lower third fused to the stem. Mature leaves are strongly reflexed (bent sharply downwards), parallel to the stem. The whole leaf is 1.0–2.2 mm long and 1.0–1.4 mm wide, the reflexed portion 0.7–1.2 mm long. Flower heads are cream to yellowish, hemispherical, without stalks, grouped in small clusters of five to eight at the ends of the branches, overtopped by the branches immediately below the inflorescences. Fruits are small and dry with a tuft of barbed bristles at the apex. Flowering occurs from November to March (Leeson & Rozefelds, 2003).

Conservation Status

Reflexed Everlasting 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, in 2004, the Minister considered the Threatened Species Scientific Committee's (TSSC) advice under section 189 of the EPBC Act and amended the list under section 184 to include Reflexed Everlasting. The TSSC determined that this species met criterion 4 of their eligibility criteria (TSSC, 2004a). Reflexed Everlasting is also listed as vulnerable under the *Threatened Species Protection Act 1995* (Tasmania).

Distribution and Habitat

Reflexed Everlasting is known from a single site in the Meehan Range in south-east Tasmania. It occurs on a steep west to north-west facing dolerite slope, with plants occurring in either *Allocasuarina* woodlands, open heath, or emerging from crevices of sheer dolerite slabs (DPIWE, 2004). The population of 4000–5000 mature plants has an extent of occurrence of 4–5 ha, with an area of occupancy of approximately 2 ha (TSSC, 2004a). Reflexed Everlasting is reserved within the Mount Direction Conservation Area (DPIWE, 2004) and the Meehan Range Nature Recreation Area (TSSC, 2004a). This species occurs within the South (Tasmania) Natural Resource Management Region.

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

Threats

The main identified threats to Reflexed Everlasting are landslide and fire and, to a lesser extent, physical disturbance from trampling and grazing (TSSC, 2004a). The species occurs in inaccessible, rocky terrain and appears to be protected from many threats by natural topographic barriers to disturbance. The localised distribution of the species makes it susceptible to a stochastic risk of elimination (DPIWE, 2004).

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/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 Reflexed Everlasting.

Habitat Loss, Disturbance and Modification

- Protect the only known population from direct physical disturbance (TSSC, 2004b).
- Incorporate measures for the protection of the species and its habitat in the Management Plan for the Meehan Range Nature Recreation Area (TSSC, 2004b).
- Monitor the 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.
- Manage threats to areas of vegetation where Reflexed Everlasting occurs.

Trampling, Browsing or Grazing

- Prevent grazing and trampling pressure at known sites through exclusion fencing or other barriers.

Fire

- Develop and implement a suitable fire management strategy for Reflexed Everlasting.

Conservation Information

- Raise awareness of Reflexed Everlasting within the local community and national park users.

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.

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

Information Sources:

Department of Primary Industries, Water and Environment, Tasmania (DPIWE) 2004, 'Threatened Flora of Tasmania – *Ozothamnus reflexifolius* Notesheet', viewed 17 June 2008, <[http://www.dpiw.tas.gov.au/inter.nsf/Attachments/SLen-5PB42B/\\$FILE/Ozothamnus%20reflexifolius.pdf](http://www.dpiw.tas.gov.au/inter.nsf/Attachments/SLen-5PB42B/$FILE/Ozothamnus%20reflexifolius.pdf)>.

Leeson, KE, Rozefelds, AC 2003, 'A new endemic *Ozothamnus* species (Asteraceae) from Tasmania, Australia', *Australian Systematic Botany*, vol. 16, No. 3, pp. 317-322.

Threatened Species Scientific Committee (TSSC) 2004a, 'Commonwealth Listing Advice on Reflexed Everlasting (*Ozothamnus reflexifolius*)', Department of the Environment, Water, Heritage and the Arts, viewed 17 June 2008, <<http://www.environment.gov.au/biodiversity/threatened/species/o-reflexifolius.html>>.

This Conservation Advice was approved by the Minister / Delegate of the Minister on:
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Threatened Species Scientific Committee (TSSC) 2004b, 'Commonwealth Conservation Advice on Reflexed Everlasting (*Ozothamnus reflexifolius*)', Department of the Environment, Water, Heritage and the Arts.

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.