

A statement for the purposes of approved conservation advice  
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

**Approved Conservation Advice for**  
***Olearia cordata***

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

**Description**

*Olearia cordata*, Family Asteraceae, is an aromatic, slender shrub growing to 2 m, with leaves alternately scattered along the stem. The stems and leaves are densely covered with hairs and glands, making the plant slightly rough and sticky to the touch. Flowers are daisy-like and mauve to deep blue with yellow centres (Lander, 1992).

**Conservation Status**

*Olearia cordata* 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 species is also listed as vulnerable under the *Threatened Species Conservation Act 1995* (NSW).

**Distribution and Habitat**

*Olearia cordata* occurs within the Hawkesbury–Nepean and Hunter–Central Rivers (NSW) Natural Resource Management Regions. It is generally restricted to the southwestern Hunter and eastern Colo Plateau, with southern outliers recorded in the far northwest of the Hornsby Plateau, near Wisemans Ferry and South Maroota, and one record near Sackville, adjoining the Hawkesbury–Nepean River. Most populations occur in areas managed by the NSW National Parks & Wildlife Service (NPWS, 2000).

The species inhabits woodland on exposed Hawkesbury Sandstone ridges. It grows in shallow or skeletal soils that are neutral to slightly acidic. It is recorded at altitudes from 150–500 m on steep to gentle slopes (NPWS, 2000).

The distribution of this species overlaps with the following EPBC Act-listed threatened ecological communities:

- Shale/Sandstone Transition Forest,
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland,
- Cumberland Plains Woodlands, and
- Turpentine-Ironbark Forest in the Sydney Basin Bioregion.

**Threats**

The main identified threats to *Olearia cordata* include competition from weeds and altered fire regimes. As many populations are located close to roads, road maintenance, changed drainage patterns and dust from dirt roads are also threats to this species.

**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, and
- Design and implement a monitoring program.

### **Regional Priority Actions**

The following regional priority recovery and threat abatement actions can be done to support the recovery of *Olearia cordata*.

#### **Habitat Loss, Disturbance and Modification**

- Manage threats to areas of native vegetation that contain populations of *Olearia cordata*.
- Ensure chemicals or other mechanisms used to eradicate weeds do not have a significant adverse impact on *Olearia cordata*.
- Ensure road widening and maintenance activities in areas where *O. cordata* occurs do not adversely impact on known populations.
- 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.

#### **Invasive Weeds**

- Develop and implement a management plan for the control of weeds in the local region.

#### **Fire**

- Develop and implement a suitable fire management strategy for *Olearia cordata*. NSW NPWS recommends a fire interval of 12–15 years to allow rootstock to develop fire resistance (NPWS, 2000).
- 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.

#### **Conservation Information**

- Raise awareness of *O. cordata* within the local community, including among road maintenance and council workers.

#### **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 *Olearia cordata*.

#### **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.
- Control access routes to suitably constrain public access to known sites on public land.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations.

#### **Invasive Weeds**

- Identify and remove weeds in the local area, which could become a threat to *O. cordata*, using appropriate methods. The Wisemans Ferry Historic Site should be prioritised for weed management recovery actions (NPWS, 2000).
- Manage sites to prevent introduction of invasive weeds, which could become a threat to *O. cordata*, using appropriate methods.

This list does not necessarily encompass all actions that may be of benefit to *O. cordata*, 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 *Olearia cordata* (DEC, 2005).

**Information Sources:**

Department of Environment & Conservation NSW (DEC) 2005, *Olearia cordata* - Priority actions (NSW Threatened Species Priority Action Statement), viewed 11 March 2008, <[http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/pas\\_profile.aspx?id=10576](http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/pas_profile.aspx?id=10576)>.

Lander, NS 1992, *Olearia cordata* Lander PlantNET - The Plant Information Network System of Botanic Gardens Trust, Sydney, Australia, viewed 11 March 2008, <<http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&showsyn=&dist=&constat=&lvl=sp&name=Olearia~cordata>>.

National Parks and Wildlife Service (NPWS) 2000, *Olearia cordata*, Threatened species profile, NPWS, Sydney.

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.

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