

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

**Approved Conservation Advice for**  
***Symplocos baeuerlenii* (Small-leaved Hazelwood)**

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**

*Symplocos baeuerlenii*, Family Symplocaceae, also known as Small-leaved Hazelwood and Shrubby Hazelwood, is a tall shrub or small tree growing to 7 m. Bark is smooth and dark-brown, with vertical fissures. Buds and branchlets are finely hairy. Leaves are thin, 2.5–7 cm long, 0.7–2 cm wide, lance-shaped, and have a fine tip. Leaf margins are toothed, with 4–8 pairs of irregular teeth. Small cream flowers are clustered in racemes, and grow to red, fleshy oval-shaped fruit (drupes) (Harden, 1993; DECC, 2005a).

Nooteboom (1981) included *Symplocos baeuerlenii* within the broadly defined *Symplocos cochinchinensis* as a synonym under *S. var. montana*. *Symplocos baeuerlenii* is currently accepted as a distinct species alongside *S. cochinchinensis* (CHAH, 2005).

**Conservation Status**

*Symplocos baeuerlenii* 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). *Symplocos baeuerlenii* is also listed as vulnerable under the *Threatened Species Conservation Act 1995* (NSW) and vulnerable under the *Nature Conservation (Wildlife) Regulation 2006* (Queensland).

**Distribution and Habitat**

Small-leaved Hazelwood occurs in NSW and Queensland. In NSW, it occurs in Nightcap National Park (NP), Mount Jerusalem NP, Mount Warning NP, Numinbah Nature Reserve, Nullum State Forest, and the Tweed and Brunswick Valleys. In Queensland, it occurs in the Gold Coast Local Government Area, Mount Cougal NP, and Natural Arch NP (Briggs and Leigh, 1995).

Small-leaved Hazelwood grows in subtropical and warm temperate rainforest on less fertile soils derived from rhyolite (Harden, 1993; DECC, 2005a). This species occurs within the Northern Rivers (NSW) and South East Queensland Natural Resource Management Regions.

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

**Threats**

The main identified threats to Small-leaved Hazelwood are localised extinction due to small populations; timber harvesting activities; inappropriate fire regimes; and clearing of warm temperate rainforest for agriculture and other development (DECC, 2005a).

**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.

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- Identify critical factors limiting the recovery of Small-leaved Hazelwood (DECC, 2005b).
- More precisely assess population size, distribution, ecological requirements, fire ecology, and the relative impacts of threatening processes.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations/occurrences/remnants.
- Ensure Small-leaved Hazelwood is adequately considered in statutory plans relevant to its distribution (DECC, 2005b).

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

The following regional and local priority recovery and threat abatement actions can be done to support the recovery of Small-leaved Hazelwood.

#### **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.
- Identify populations of high conservation priority.
- Ensure road widening and maintenance activities (or other infrastructure or development activities) involving substrate or vegetation disturbance in areas where Small-leaved Hazelwood occurs do not adversely impact on known populations (DECC, 2005b).
- Investigate formal conservation arrangements, management agreements and covenants on private land, and for crown and private land investigate inclusion in reserve tenure if possible.
- Minimise adverse impacts such as timber harvesting, clearing, and development from land use at known sites (DECC, 2005b).

#### **Fire**

- Develop and implement a suitable fire management strategy for Small-leaved Hazelwood.
- 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 Small-leaved Hazelwood within the local community by encouraging people to participate in detecting new locations and rehabilitation projects (DECC, 2005b).

#### **Enable Recovery of Additional Sites and/or Populations**

- Undertake appropriate seed collection and storage.
- Investigate options for expanding and reconnecting warm temperate rainforest remnants and 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 Small-leaved Hazelwood, 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 Small-leaved Hazelwood (DECC, 2005b), and
- Parks and Reserves of the Tweed Caldera – Plan of Management (NSW NPWS, 2004).

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

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### **Information Sources:**

Briggs, JD & Leigh, JH 1995, *Rare or Threatened Australian Plants 1995 revised edition*, CSIRO Publishing, Collingwood.

Council of Heads of Australian Herbaria (CHAH) 2005, *Australian Plant Census, IBIS database*, Centre for Plant Biodiversity Research, viewed 22 May 2008, <<http://www.anbg.gov.au/cgi-bin/apclist>>.

Department of Environment & Climate Change (DECC) New South Wales 2005a, *Small-leaved Hazelwood – Profile*, viewed 22 May 2008, <<http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/profile.aspx?id=10790>>.

Department of Environment & Climate Change (DECC) New South Wales 2005b, *Small-leaved Hazelwood – Priority actions (New South Wales Threatened Species Priority Action Statement)*, viewed 22 May 2008, <[http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/pas\\_profile.aspx?id=10790](http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/pas_profile.aspx?id=10790)>.

Harden, GJ 1993, 'Symlocos', In: Harden GJ (Ed.) *Flora of New South Wales*, vol. 3, University of New South Wales Press, Sydney.

Nooteboom, HP 1981, 'A revision of the Australian species of *Symlocos* (Symlocaceae)', *Brunonia*, vol. 4, no. 2, pp. 309-326.

NSW National Parks & Wildlife Service (NSW NPWS) 2004, *Parks and reserves of the Tweed Caldera – Plan of Management*, Department of Environment and Climate Change.

Vallee, L, Hogbin, T, Monks, L, Makinson, B, Matthes, M & Rossetto, M 2004, *Guidelines for the Translocation of Threatened Plants in Australia* (2<sup>nd</sup> ed.), Australian Network for Plant Conservation, Canberra.