

Approved Conservation Advice for *Persoonia hirsuta*

(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

Persoonia hirsuta, Family Proteaceae, also known as the Hairy Geebung, is a spreading shrub growing to 1 m tall. It is best distinguished from other geebungs by its hairiness, having long coarse hairs on flowers and branchlets and short stiff ones on the leaves. Its leaves are small, from 6 - 12 mm long, oblong to narrow in shape and crowded along the stems; they are curled under at the edges. Groups of flowers grow into a leafy shoot. The tubular flowers are yellow or orange and about 1 cm long and also hairy (Harden, 2002; DECCW, 2005).

Conservation Status

Persoonia hirsuta 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). *Persoonia hirsuta* is also listed as endangered under the *Threatened Species Conservation Act 1995* (New South Wales).

Distribution and Habitat

Persoonia hirsuta has a scattered distribution around Sydney. This species is distributed from Singleton in the north, along the east coast to Bargo in the south and the Blue Mountains to the west (DECC, 2007). The species has been recorded from twenty-one populations (DECC, 2007). Populations mostly consist of fewer than 10 individuals and are isolated by large distances of cleared land and urban areas. The total number of *Persoonia hirsuta* individuals is unknown (DECC, 2007). It inhabits various tenures across its range including conservation reserves, Crown land and private land. Nine of the known populations occur wholly or partly on conservation reserves (DECC, 2007).

Persoonia hirsuta is found in sandy soils in dry sclerophyll open forest, woodland and heath on sandstone. It is usually present as isolated individuals or very small populations. It is probably killed by fire (as other *Persoonia* species are) but will regenerate from seed (DECCW, 2005).

This species occurs within the Southern Basin and Southern Easter Highlands Bioregions and the Southern Rivers 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 potential threats to *Persoonia hirsuta* include inappropriate fire regimes; habitat fragmentation and destruction through clearing for urban and small-rural-lot development; the European honey bee (*Apis mellifera*) may be a factor in the rarity of Bargo Geebung and several other Geebungs. This is because although *A. mellifera* is able to collect pollen, its method of pollen transport makes effective pollination of Geebungs unlikely. Many

Persoonia species are killed following infection by Cinnamon Fungus *Phytophthora cinnamomi* (DECCW, 2005; Rymer 2005).

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, age classes, recruitment, 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.

Regional and Local Priority Actions

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

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 there is no disturbance in areas where *Persoonia hirsuta* occurs, excluding necessary actions to manage the conservation of the species.
- Investigate formal conservation arrangements, management agreements and covenants on private land, and for crown and private land investigate and/or secure inclusion in reserve tenure if possible.
- Manage any other known, potential or emerging threats.
- Identify the optimal fire regime for regeneration (vegetative and/or seed germination), and response to other prevailing fire regimes.

Fire

- Develop and implement a suitable fire management strategy for the habitat of *Persoonia hirsuta*.
- Ensure new records and known occurrences within NSW are provided to NSW DECCW for entry into the NSW Wildlife Atlas to ensure up to date data is available for impact assessment and fire planning.

Conservation Information

- Raise awareness of *Persoonia hirsuta* within the local community.
- Engage with private landholders and public land managers responsible for the land on which populations occur and encourage these key stakeholders to contribute to the implementation of conservation management actions.

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.

Existing Plans/Management Prescriptions that are Relevant to the Species

- Draft Recovery Plan for *Persoonia hirsuta* (DECC, 2007).

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

Information Sources:

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