

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

Approved Conservation Advice for
***Lambertia echinata* subsp. *echinata* (Prickly Honeysuckle)**

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 subspecies.

Description

Lambertia echinata subsp. *echinata*, Family Proteaceae, also known as Prickly Honeysuckle, is a prickly shrub growing to 1 m with many spreading branches and hairy stems. Leaves are to 4 cm long, and are medium green to bluish-green, tapering towards the stem and divided into 3–5 lobes terminating in long sharp points, and have prominently raised surface veins. Trumpet-shaped flowers occur from July to November, are up to 5 cm long, and are arranged in sevens. An outer floral whorl of four orange-red to pink perianth segments unite to form a long tube 5 cm wide. Woody fruit are beaked, shiny, grey, and up to 2 cm long. Prickly Honeysuckle differs from other closely related subspecies *L. echinata* subsp. *citrina* and Western Prickly Honeysuckle (*L. echinata* subsp. *occidentalis*) in having flowers that are deep pink to red, rather than yellow (Dixon, 1997; Keighery, 1997; Brown et al., 1998; Craig & Coates, 2001; Monks et al., 2001; DEC, 2008).

Conservation Status

Prickly Honeysuckle is listed as **endangered**. This subspecies 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 subspecies is also listed as declared rare flora under the *Wildlife Conservation Act 1950* (Western Australia). The Western Prickly Honeysuckle (*L. echinata* subsp. *occidentalis*) is also listed as endangered under the EPBC Act.

Distribution and Habitat

Prickly Honeysuckle is known from three fragmented populations occurring exclusively within the Cape le Grand National Park area, east of Esperance, Western Australia (Monks et al., 2001). The extent of occurrence is approximately 8 km² and only one of the three populations has area of occupancy recorded, which totals 100 m². There has been decline in both the extent and quality of suitable habitat for Prickle Honeysuckle resulting from the effects of pathogens, such as *Phytophthora cinnamomi* (Monks et al., 2001). Related subspecies occur to the west of Cape le Grand National Park (Western Australian Herbarium, 1998). This subspecies occurs within the South Coast (Western Australia) Natural Resource Management Region.

Prickly Honeysuckle inhabits sandy loams over granite and laterite sheeting on windswept coastal slopes (Brown et al., 1998), and occurs amongst coastal heath with *Eucalyptus lehmannii*, *Hakea ruscifolia*, *Melaleuca striata*, *Allocasuarina trichodon*, *Leucopogon apiculatus*, *Agonis obtusissima*, *Dryandra armata*, and *Calothamnus* spp. (Brown et al., 1998; Monks et al., 2001).

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

Threats

The main identified threats to Prickly Honeysuckle are disease; poor recruitment; limited genetic diversity; and inappropriate fire regimes (Monks et al., 2001). This species is highly susceptible to canker fungus and dieback caused by *Phytophthora cinnamomi*.

Potential threats may also result from drought; disturbance; or recreational activities (Craig & Coates, 2001; Monks et al., 2001; DEC, 2008).

Research Priorities

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

- Determine Prickly Honeysuckle's health response to phosphite treatment with varying concentrations and application frequency (Monks et al., 2001).
- Undertake genetic analyses to assess current gene flow and identify populations with low genetic diversity that might benefit from artificial introduction of genetic material from other populations.
- Design and implement a monitoring program or, if appropriate, support and enhance existing programs.
- Conduct research into reproductive strategies, pollinators, seed production, dispersal vectors, phenology and seasonal growth of Prickly Honeysuckle (Monks et al., 2001).
- Investigate possible insect predation of flowers and fruit (Monks et al., 2001).
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations/occurrences/remnants.

Regional and Local Priority Actions

The following regional and local priority recovery and threat abatement actions can be done to support the recovery of Prickly Honeysuckle.

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.
- Ensure infrastructure or development activities involving substrate or vegetation disturbance in areas where Prickly Honeysuckle occurs do not adversely impact on known populations.

Fire

- Develop an appropriate fire management strategy for Prickly Honeysuckle and determine a regime that would encourage regeneration in aging populations reaching senescence (Monks et al., 2001).
- 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

- Implement suitable hygiene protocols to protect known sites from further outbreaks of dieback caused by *Phytophthora cinnamomi*.
- Install dieback signs on tracks into infected areas (Monks et al., 2001).

Conservation Information

- Raise awareness of Prickly Honeysuckle within the local community through local naturalists, Wildflower Society members, and Esperance Herbarium volunteers.

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Enable Recovery of Additional Sites and/or Populations

- Maintain appropriate collection of seed and cutting material for storage.
- 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 Prickly Honeysuckle, 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 Subspecies

- Threat Abatement Plan for Dieback Caused by the Root-Rot Fungus *Phytophthora cinnamomi* (EA, 2001), and
- Declared rare and poorly known flora in the Esperance District (Craig & Coates, 2001).

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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Monks, L, Stack, G, Evans, R & Brown, A 2001, *Prickly Honeysuckle (Lambertia echinata subsp. echinata) Interim Recovery Plan 2001-2004, Interim Recovery Plan No. 97*, Department of Conservation & Land Management, Western Australia.

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.

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