

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

Approved Conservation Advice for
Trachymene scapigera

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

Trachymene scapigera, Family Apiaceae, also known as Mountain Trachymene, is a robust, perennial herb growing to 50 cm high (Harden, 2002). Three to five-lobed leaves occur as a basal rosette. A 12–35 cm long stem bears an umbel which carries between 20–50 white to pinkish flowers which appear from December to March (Harden, 2002). The ripened small fruit appear in April (NPWS, 1999).

Some authors have placed *Trachymene scapigera* within *T. saniculifolia* (DECC NSW, 2005a). However, *T. saniculifolia* occurs in the Philippines, Borneo and the Solomon Islands and differs in bearing leafy stems arising from the basal rosettes (Hart & Henwood, 2006).

Conservation Status

Trachymene scapigera 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). The species is also listed as endangered (as *T. saniculifolia*) under the *Threatened Species Conservation Act 1995* (NSW).

Distribution and Habitat

Trachymene scapigera is known from Kanangra Boyd National Park (NP) and Gurnang State Forest, 200 km west of Sydney, NSW (Mackenzie, 1996; DECC NSW, 2005b). This species occurs within the Hawkesbury–Nepean, Lachlan and Murrumbidgee (NSW) Natural Resource Management Regions.

Trachymene scapigera was known only from the type specimen collected in 1899 near Jenolan Caves, west of Sydney, and was presumed extinct (Harden, 1992) until rediscovered growing along the banks of the Boyd River in Kanangra Boyd NP in the 1980s (DECC NSW, 2005a). There are two known populations in Kanangra Boyd NP, approximately 4 km apart (Mackenzie, 1996; NPWS, 1999). Due to the plant's rhizomatous growth habit, site populations are hard to assess (Hart & Henwood, 2006). Twenty specimens were examined for the review of Australian *Trachymene* (Hart & Henwood, 2006).

Trachymene scapigera is restricted to flat or gently sloping ground in the riparian zone. Habitat type is variable. At one site, the species is distributed along a *Leptospermum* thicket, bordering the bank of a river, within eucalypt woodland. At the other site, individuals grow on a gravel patch situated beside the river (Mackenzie, 1996).

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

Threats

The main identified threat to *T. scapigera* is vulnerability to human disturbance. The main population of this species is divided into two sub-populations, dissected by a heavily used

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camp ground and access road, thus rendering the plants vulnerable to human disturbance. Grazing may contribute to lower rates of establishment (NPWS, 1999).

The main potential threats to the species include inappropriate fire regimes and disturbance by feral pigs (*Sus scrofa*) (DECC NSW, 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.
- 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.
- Undertake management focussed ecological research (particularly the impacts of herbivory on establishment rates, and fire response in terms of vegetative recovery and seedling recruitment) (DECC NSW, 2005a).

Regional and Local Priority Actions

The following regional and local priority recovery and threat abatement actions can be done to support the recovery of *T. scapigera*.

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.
- Undertake targeted bush regeneration works, where required.
- Identify populations of high conservation priority.
- Ensure road widening and maintenance activities (or other infrastructure activities) involving substrate or vegetation disturbance in areas where *T. scapigera* occurs do not adversely impact on known populations.
- Control access routes to suitably constrain public access to known sites on public land.
- Prepare and implement a species management plan for the site that is located within Gurnang State Forest (DECC NSW, 2005b).

Trampling, Browsing or Grazing

- Implement a management plan for the control and eradication of the feral pigs in the region.
- Fence off known populations to minimise trampling.

Fire

- Develop and implement a suitable fire management strategy for *T. scapigera*. The NSW Rural Fire Service recommends no fire for this species (NSW RFS, 2004).
- 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 *T. scapigera* within the local community, especially National Park users.

Enable Recovery of Additional Sites and/or Populations

- Undertake appropriate seed collection and storage.

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- 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 *T. scapigera*, 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

- Threat Abatement Plan for Predation, habitat degradation, competition and disease transmission by feral pigs (DEH, 2005),
- Kanangra–Boyd National Park Plan of Management (NPWS, 2001), and
- Threatened species hazard reduction list (NSW RFS, 2004).

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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