

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

Approved Conservation Advice for
Fontainea venosa

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

Fontainea venosa, Family Euphorbiaceae, also known as Bahrs Scrub Fontainea, is a shrub or tree growing to 18 m high. This species is dioecious, with separate male and female plants. The leaves are 5–9.5 cm long, 2–4.5 cm wide, leathery, with 7–9 pairs of secondary veins and the leaf base tapers gradually to a point. The leaf stalks (petioles) are slightly swollen at the base and 3–13 mm long. The flowers have short hairs on the outside and lack hairs on the inside. Male flowers have 20–24 stamens and a disc 0.7 mm high. Female flowers have a disc 0.7 mm high, styles 0.5 mm long and a hairless (glabrous) ovary. Fruit are almost globular, 2–2.6 cm long, 1.7–2.6 cm wide, firm-fleshy and yellow. The endocarp is 1.5–2.4 cm long and 1.2–1.7 cm wide, with 3–4 ridges at the sutures; the intersutural faces are smooth with scattered vascular foramina (Jessup & Guymer, 1985). Prior to 1985 this species was called *Fontainea* sp. Bahrs Scrub (CHAH, 2005).

Conservation Status

Fontainea venosa 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). *Fontainea venosa* is also listed as vulnerable under the *Nature Conservation Act 1992* (Queensland).

Distribution and Habitat

Fontainea venosa occurs south west of Beenleigh near Brisbane, along the Koolkooroon Creek in the Boyne Valley, and near Littlemore, in Queensland (Jessup & Guymer, 1985; BRI collection records, n.d.). The total population size is 200 plants across five stable populations (Queensland CRA/RFA Steering Committee, 1997). This species occurs in Araucarian microphyll vine forest with a mean annual rainfall of 1000 mm on alluvial soil along creeks. Associated species include *Backhousia citriodora*, *Actephila lindleyi* and *Bosistoa medicinalis* (BRI collection records, n.d.). The extent of occurrence of *Fontainea venosa* is unknown. This species occurs within the Fitzroy, Burnett Mary 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 community.

Threats

The main potential threats to *Fontainea venosa* include stochastic events due to restricted and fragmented distribution, changed fire regimes and invasion by exotic weeds (ANRA, 2007).

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.

This Conservation Advice was approved by the Minister / Delegate of the Minister on: 16/12/2008

- 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.

Regional and Local Priority Actions

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

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 infrastructure or development activities involving substrate or vegetation disturbance in areas where *F. venosa* 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.
- Control access routes to suitably constrain public access to known sites on public land.
- Suitably control and manage access on private land.
- Minimise adverse impacts from land use at known sites.
- Investigate formal conservation arrangements, management agreements and covenants on private land, and for crown and private land investigate inclusion in reserve tenure if possible.

Invasive Weeds

- Identify and remove weeds in the local area, which could become a threat to *F. venosa*, using appropriate methods.
- Manage sites to prevent introduction of invasive weeds, which could become a threat to the species, using appropriate methods.
- Ensure chemicals or other mechanisms used to eradicate weeds do not have a significant adverse impact on *F. venosa*.

Fire

- Develop and implement a suitable fire management strategy for *F. venosa*.

Conservation Information

- Raise awareness of *F. venosa* within the local community.
- Establish and/or maintain partnerships with private landholders and managers of land on which populations occur to ensure appropriate conservation.

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.

This Conservation Advice was approved by the Minister / Delegate of the Minister on:
16/12/2008

This list does not necessarily encompass all actions that may be of benefit to *F. venosa*, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

Information Sources:

Australian Natural Resources Atlas (ANRA) 2007, *Biodiversity Assessment – South Eastern Queensland – Species at risk and the Threatening Process*, Department of the Environment, Water, Heritage and the Arts viewed 5 August 2008, <<http://www.anra.gov.au/topics/vegetation/assessment/qld/ibra-seq-species-threats.html>>.

BRI collection records (undated), Queensland Herbarium specimens.

Council of Heads of Australasian Herbaria (CHAH) 2005, *Australian Plant Census, IBIS database*, Centre for Plant Biodiversity Research, viewed 5 August 2008, <<http://www.anbg.gov.au/cgi-bin/apclist>>.

Jessup, LW & Guymer, GP 1985, 'A revision of *Fontainea* Heckel (Euphorbiaceae-Cluytieae)', *Austrobaileya*, vol. 2, no. 2, pp. 112–125.

Queensland CRA/RFA Steering Committee (1997). *Forest taxa at risk, threats, conservation needs and recovery planning in south-east Queensland*. Queensland Government & Commonwealth of 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.