

**Approved Conservation Advice for  
*Philotheca wonganensis* (Wongan Philotheca)**

(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**

*Philotheca wonganensis*, Family Rutaceae, also known as the Wongan Philotheca, is an erect shrub growing to 1 m high, with a number of erect branches arising from the base. Branches are slender. Leaves are scattered, slender, 5–10 mm long and somewhat flattened above. Flowers are solitary and white, except for pink outer medial strip. Seeds are black and oblong-kidney shaped (Wilson, 1982).

### **Conservation Status**

Wongan Philotheca 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 Wongan Philotheca is also listed as declared rare flora that is rare or likely to become extinct under the *Wildlife Conservation Act 1950* (Western Australia) and managed as endangered by the Western Australian Government.

### **Distribution and Habitat**

Wongan Philotheca is known from four extant populations and five locations in the Shire of Wongan-Ballidu and one presumed extinct population in the Shire of Chapman Valley. All extant Surveys in 2000 and 2001 recorded 2350 mature plants and all populations were reported to be in healthy condition at this time (Stack et al., 2006).

The species grows in red soil over fractured or schistose greenstone in dense shrubland 3–5 m tall with sparse ground cover and open woodland with shrubland understorey. Associated species include *Eucalyptus ebbanoensis*, *Eucalyptus loxophleba*, *Allocasuarina acutivalvis* and *Allocasuarina campestris* (Stack et al., 2006).

This species occurs within the Avon Wheatbelt and Geraldton Sandplains Bioregions and the South West and Northern Agricultural 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 identified threat to Wongan Philotheca is lack of recruitment, as many populations appear to be old, possibly single stage and surveyors recorded a lack of recruitment across populations (Stack et al., 2006).

The main potential threats to Wongan Philotheca include inappropriate fire regimes and grazing by stock (Stack et al., 2006).

### **Research Priorities**

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

- The highest priority is to undertake seed germination and/or vegetative propagation trials to determine the requirements for successful establishment.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations.
- 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.

### **Regional and local Priority Actions**

The following priority recovery and threat abatement actions can be done to support the recovery of Wongan Philotheca.

#### 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.
- Ensure there is no disturbance in areas where Wongan Philotheca occurs, excluding necessary actions to manage the conservation of the species/ecological community.
- Investigate formal conservation arrangements, management agreements and covenants on private land, and for crown and private land investigate inclusion in reserve tenure if possible.
- Control access routes to suitably constrain public access to known sites on public land.
- Suitably control and manage access on private land and other land tenure.
- Manage any other known, potential or emerging threats.

#### Trampling, Browsing or Grazing

- Where appropriate, manage total grazing pressure on private land, at important/significant sites through exclusion fencing or other barriers.

#### Fire

- Develop and implement a suitable fire management strategy for the habitat of Wongan Philotheca.
- Identify appropriate intensity and interval of fire, if required, to promote seed germination.
- Where appropriate provide maps of known occurrences to local and state Rural Fire Services and seek inclusion of mitigative measures in bush fire risk management plan(s), risk register and/or operation maps.

#### Conservation Information

- Raise awareness of Wongan Philotheca within the local community.
- Frequently engage with private landholders and 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 recover of Additional Sites and/or Populations

- Investigate and implement reproduction and recruitment enhancement strategies (Stack et al., 2006).
- Undertake appropriate seed collection and storage.
- Investigate options for linking, enhancing or establishing additional populations.

This list does not necessarily encompass all actions that may be of benefit to Wongan Philotheca, 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**

- Department of Conservation and Land Management. Declared Rare and Poorly Known Flora Largely Restricted to the Shire of Wongan-Ballidu. Western Australian Wildlife Management Program No. 39. (Stack et al., 2006).

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

### **Information Sources:**

Stack G, Willers N, Fitzgerald M and Brown, A (2006). Declared rare and poorly known flora largely restricted to the Shire of Wongan-Ballidu. Department of Conservation and Land Management, Western Australia.

Wilson PG (1982). *Eriostemon wonganensis* (Rutaceae), a new species from the Wongan Hills, Western Australia. *Nuytsia*. 4. 47-50.