

**Advice to the Minister for Environment Protection, Heritage and the Arts
from the Threatened Species Scientific Committee (the Committee)
on Amendment to the list of Threatened Species
under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)**

1. Reason for Conservation Assessment by the Committee

This advice follows assessment of new information provided through the Species Information Partnership with Western Australia on:

***Scaevola macrophylla* (Large-Flowered Scaevola)**

2. Summary of Species Details

Taxonomy	Conventionally accepted as <i>Scaevola macrophylla</i> (Bentham, 1868).
State Listing Status	Listed as declared rare flora under the <i>Western Australian Wildlife Conservation Act 1950</i> . Managed as critically endangered by the Western Australian Government.
Description	An erect herb, woody at the base, which can grow to 0.4 m high. The flowers are blue or purple and the flowering period is from September to October (Bentham, 1868; Western Australian Herbarium, 2006).
Distribution	Endemic to Western Australia and known from three populations in the Cape Riche area, near Albany, approximately 480 km south-east of Perth (DEC, 2009). The species was last recorded in 1987, but is considered still to exist as soil-stored seed (DEC, 2009).
Relevant Biology/Ecology	Grows in rocky loam soil with the parent soil material being laterite. The species occurs in association with <i>Verticordia</i> (Featherflowers) and <i>Kunzea</i> (Kunzeas) species. It is thought to be a short lived species that recruits after fire, as the last recorded collection in 1987 referenced burnt country. The species may undergo extreme fluctuations in numbers immediately after fire (DEC, 2009). The species' generation length is unknown (DEC, 2009).
Threats	
<i>Past</i>	N/A
<i>Present</i>	Inappropriate fire regimes may affect the long-term viability of the species. Changes to fire frequency and intensity could mean that the species either does not have time to adequately grow and set seed before the next fire, or if the interval between fires is too long, then seed lying dormant in the soil may not be stimulated to germinate (DEC, 2009).
<i>Future</i>	N/A

3. Public Consultation

The information used in this assessment was made available for public exhibition and comment for 30 business days. No comments were received.

4. How judged by the Committee in relation to the EPBC Act criteria and Regulations

Criterion 1: Eligible for listing as critically endangered

It has undergone, is suspected to have undergone or is likely to undergo in the immediate future a very severe, severe or substantial reduction in numbers

Criterion element	Evidence
Reduction in numbers	Very severe – an observed 100% population size reduction occurred following rediscovery of the species in 1987 at Cape Riche (DEC, 2009). While the species was recorded as being locally abundant in 1987, no quantitative data on the total number of individuals was recorded. Despite a number of surveys targeting the species between 1995 and 2005, it has not been recorded since 1987. The species has undergone a very severe reduction in numbers and is considered to currently exist as soil-stored seed (DEC, 2009).

Criterion 2: Eligible for listing as critically endangered

Its geographic distribution is precarious for the survival of the species **and** is very restricted, restricted or limited

Criterion element	Evidence
Geographic distribution AND	Very restricted – as the species is considered to currently exist as soil-stored seed, the area of occupancy is unknown (DEC, 2009). However, anecdotal information suggests this species had an area of occupancy less than 1 km ² when it was last recorded in 1987 (DEC, 2009).
Geographic distribution precarious	Yes – the three populations exist at a single location. The species has not been recorded since 1987, but as this last record was from burnt country, it is assumed the species requires disturbance (e.g. fire) to germinate (DEC, 2009). Extreme fluctuations in the number of mature individuals following disturbance is likely.

Criterion 3: Not eligible

The estimated total number of mature individuals is very low, low or limited; **and either**
 (a) evidence suggests that the number will continue to decline at a very high, high or substantial rate; **or**
 (b) the number is likely to continue to decline **and** its geographic distribution is precarious for its survival

Criterion element	Evidence
Total no. of mature individuals	Very low – 0 mature plants (DEC, 2009).
AND	
Continued rate of decline	No – the total number of mature plants is 0 (DEC, 2009).
OR	
Total no. of mature individuals	Very low – 0 mature plants (DEC, 2009).
AND	
Continued decline likely	No – the total number of mature plants is 0 (DEC, 2009).
AND	
Geographic distribution precarious	Yes – see Criterion 2.

Criterion 4: Eligible for listing as critically endangered

The estimated total number of mature individuals is extremely low, very low or low

Criterion element	Evidence
Total no. of mature individuals	Extremely low – 0 mature plants (DEC, 2009).

Criterion 5: Not eligible

Probability of extinction in the wild that is at least

- (a) 50% in the immediate future; or
- (b) 20% in the near future; or
- (c) 10% in the medium-term future

Criterion element	Evidence
Probability of extinction in the wild	No data.

5. Recovery Plan

The Committee considers that there should not be a recovery plan for Large-Flowered Scaevola as the approved conservation advice for the species provides sufficient direction to implement priority actions and mitigate against key threats.

6. Recommendations

- (i) The Committee recommends that the list referred to in section 178 of the EPBC Act be amended by **including** in the list in the **critically endangered** category:

Scaevola macrophylla

- (ii) The Committee recommends that there should not be a recovery plan for this species.

Associate Professor Robert J.S. Beeton *AM FEIANZ*

Chair

Threatened Species Scientific Committee

7. References cited in the advice

Bentham G (1868). *Flora Australiensis* 4:98.

DEC (Department of Environment and Conservation) (2009). Records held in DEC's declared flora database and rare flora files. Western Australian Department of Environment and Conservation, Western Australia.

Western Australian Herbarium (2006). *FloraBase – The Western Australian Flora*.
Department of Environment and Conservation.
Available on the Internet at: <http://florabase.calm.wa.gov.au/>