

**Advice to the Minister for Sustainability, Environment, Water, Population and Communities
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:

***Banksia anatona* (cactus banksia)**

2. Summary of Species Details

Taxonomy	In 2007 <i>Dryandra</i> and <i>Banksia</i> merged into one genus (Mast and Thiele, 2007). <i>Dryandra anatona</i> is now conventionally accepted as <i>Banksia anatona</i> (A.S.George) A.R.Mast & K.R.Thiele (CHAH, 2007).
State Listing Status	Listed as Declared Rare Flora that is rare or likely to become extinct under the Western Australian <i>Wildlife Conservation Act 1950</i> . Managed as critically endangered by the Western Australian Government.
Description	Growing to 5 m tall, has a single main stem with numerous short lateral branches that are covered with felty hairs. Its leaves are hairy above when young but this surface becomes glabrous over time. The underside of the leaf has a white felty covering. The inflorescence is either terminal or on short lateral branchlets and comprises about 170 flowers (Brown et al., 1998).
Distribution	Endemic to Western Australia where it is confined to the Stirling Range National Park (Phillimore and Brown, 2001). One introduced subpopulation has also been established on private property (DEC, 2010).
Relevant Biology/Ecology	The species grows on slopes in sandy soil over gravelly shale, in thick kwongan vegetation (George, 1996). Occurs with the Declared Rare Flora species <i>Banksia brownii</i> (feather-leaved banksia), which is currently listed as endangered under the EPBC Act (critically endangered by the Western Australian Government) and within the critically endangered ecological community 'Montane Thicket of the Eastern Stirling Range'. It may take more than 5.5 years for cactus banksia to reach sexual maturity (DEC, 2010).
Threats	
<i>Known</i>	Current known threats to this species include dieback caused by <i>Phytophthora cinnamomi</i> and inappropriate fire regimes. Disease is a current threat to all populations (Phillimore and Brown, 2001; DEC, 2010).
<i>Potential</i>	Future threats to this species include dieback caused by <i>Phytophthora cinnamomi</i> and inappropriate fire regimes (Phillimore and Brown, 2001; DEC, 2010).

3. Public Consultation

Notice of the proposed amendment was made available for public 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: 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.

Not eligible

Criterion element	Evidence
Reduction in numbers	Insufficient data – Survey data from between the late 1990s to 2009 indicate an increase in total population numbers. However, while population two has increased by 100% (or 2000 plants), reductions in numbers in populations three and four of around 75% (or 1300 plants) were recorded and one population (15 plants) was recorded as extinct. Future declines can be inferred as a result of current threats to all populations, however the extent of decline is unknown (Philmore and Brown, 2001; DEC, 2010).

Criterion 2: Its geographic distribution is precarious for the survival of the species **and** is very restricted, restricted or limited.

Eligible for listing as critically endangered

Criterion element	Evidence
Geographic distribution AND	Very restricted – Extent of occurrence is estimated to be approximately 10 km ² not including the translocated subpopulation outside of the Stirling Range National Park and the presumed extinct population. Area of occupancy is estimated to be less than 0.3 km ² (DEC, 2009).
Geographic distribution precarious	Yes – Known from limited locations, four extant and one extinct population in the Stirling Range National Park and one translocated population occurs outside the Park. This species has suffered a decline in geographic distribution and number of populations, and has current known threats to all populations (DEC, 2010).

Criterion 3: 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.

Eligible for listing as endangered

Criterion element	Evidence
Total no. of mature individuals AND	Limited – 4414 mature plants (DEC, 2010).

Continued rate of decline	Insufficient data – see Criterion 1.
OR	
Total no. of mature individuals AND Continued decline likely AND Geographic distribution precarious	Limited – 4414 mature plants Yes – see Criterion 2 Yes – see Criterion 2

Criterion 4: The estimated total number of mature individuals is extremely low, very low or low.

Not eligible

Criterion element	Evidence
Total no. of mature individuals	Not low – 4414 mature plants

Criterion 5: 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.

Not eligible

Criterion element	Evidence
Probability of extinction in the wild	No data

5. Recovery Plan

There should not be a recovery plan for *Banksia anatona* 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 **transferring** from the **endangered** category to the **critically endangered** category:

Banksia anatona

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

Threatened Species Scientific Committee

1 June 2010

References cited in the advice

Brown A, Thomson-Dans C and Marchant N (1998). Western Australia's threatened flora. Department of Conservation and Land Management, Como.

Council of Heads of Australasian Herbaria (CHAH) (2007). Australian Plant Census. Available on the Internet at: <http://www.anbg.gov.au/chah/apc/>

Department of Environment and Conservation (DEC) (2010). Records held in DEC's Declared Flora Database and rare flora files. Department of Environment and Conservation. Perth. Western Australia.

George AS (1996). New taxa and a new infrageneric classification in *Dryandra* R. Br. (Proteaceae Grevilleoideae). *Nuytsia* 10: 313–408.

Mast AR and Thiele K (2007). The transfer of *Dryandra* R.Br. to *Banksia* L.f. (Proteaceae). *Australian Systematic Botany* 20(1): 63–71.

Phillimore R and Brown A (2001). Cactus dryandra (*Dryandra anatona*) interim recovery plan 2001–2004. Department of Conservation and Land Management. Perth. Western Australia.