

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

**1. Scientific name (common name)**

*Verticordia harveyi* (Autumn Featherflower)

**2. Description**

The Autumn Featherflower is a slender, spindly shrub growing to 1.5 metres high with small white to pink or purple feather flowers, showing from January to April.

**3. National Context**

The Autumn Featherflower is endemic to Western Australia. It is known from four populations in and adjacent to the Stirling Range National Park, approximately 80 kilometres north-east of Albany.

The species is not listed under the Western Australian *Wildlife Conservation Act 1950*. However, Western Australia continues to monitor the species for any change in conservation status.

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

The Committee judges the species is **not eligible** for listing under the EPBC Act. The justification against the criteria is as follows:

**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.**

The total population size of the Autumn Featherflower is approximately 150 100 mature individuals and 50 000 juveniles, known from four populations (CALM 2005). Three populations are located within the Stirling Range National Park and the fourth population occurs on private property and road reserve. The two largest populations of Autumn Featherflower, consisting of 150 000 plants, were recently discovered (one in March 1999 and the other in February 2004) at the south-east end of the Stirling Range National Park (CALM 2005).

Due a lack of historical survey information, there are insufficient data available to indicate past trends in the population size of the species.

While *Phytophthora cinnamomi* is a threatening process operating within the National Park, surveys carried out between 1999 and 2004 of known Autumn Featherflower populations found the plants were located within largely healthy habitat and in good condition. The species' susceptibility to the disease is unknown, however, it is presumed to be low to moderate based on the susceptibility of other members of the genus (Brown et al 1998).

In conclusion, there are insufficient data to determine whether there has been a past decline in the species and current evidence suggests that there is not likely to be a substantial decline in numbers in the immediate future. Therefore, the species is **not eligible** for listing under this criterion.

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

The Autumn Featherflower is known from four populations, with a total extent of occurrence estimated to be 60 km<sup>2</sup> (CALM 2005). The two largest populations of Autumn Featherflower, consisting of 150 000 plants, were recently discovered (one in March 1999 and the other in February 2004) at the south-east end of the Stirling Range National Park.

There is no known evidence to suggest the species has undergone a decline in extent of occurrence.

As discussed under criterion 1, *Phytophthora cinnamomi* is a threatening process operating within the Stirling Range National Park, but is not currently impacting on known populations of Autumn Featherflower.

One small population of the species, consisting of 80 plants and last surveyed in November 2002, is located on private property and road reserve. This population is potentially subject to disturbance from road maintenance and weed invasion. However, no known threat is currently impacting on this population.

Hence, while the geographic distribution of the Autumn Featherflower is very restricted, it is not precarious for the survival of the species. Therefore the species is **not eligible** for listing under this criterion.

**Criterion 3 – The estimated total number of mature individuals is limited to a particular degree and: (a) evidence suggests that the number will continue to decline at a particular rate; or (b) the number is likely to continue to decline and its geographic distribution is precarious for its survival.**

The total population size of the Autumn Featherflower is estimated to be 150 100 mature individuals and 50 100 juveniles (CALM 2005).

As discussed under criterion 2, the geographic distribution of the Autumn Featherflower is very restricted, but is not precarious for the survival of the species.

Therefore the species is **not eligible** for listing under this criterion.

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

There is estimated to be 150 100 mature individuals existing in four known populations of the species. Therefore the number of mature individuals is not low, very low or extremely low. The species is **not eligible** for listing under this criterion.

**Criterion 5 - Probability of extinction in the wild**

There are no data available to assess the species against this criterion.

## 5. CONCLUSION

The total population size of the Autumn Featherflower is estimated to be 150 100 mature individuals and 50 000 juveniles, known from four populations in or adjacent to the Stirling Range National Park.

There is insufficient historical survey data to indicate a past decline in the population size of the species and current evidence suggests there is not likely to be a substantial decline in numbers in the immediate future.

The geographic distribution is restricted, given that the area of occurrence is 60km<sup>2</sup>, however it is not precarious for its survival.

In conclusion, the Autumn Featherflower does not meet any of the criteria for listing as threatened under the EPBC Act.

## 6. Recommendation

The Committee recommends that the list referred to in section 178 of the EPBC Act be amended by **deleting** from the list in the **endangered** category:

*Verticordia harveyi* (Autumn Featherflower)

**Publications used to assess the nomination**

- Brown, A., Marchant and Thomson-Dans (1998) *Western Australia's Threatened Flora*. WA Department of Conservation and Land Management.
- CALM (2005) Records held in CALM's Declared Flora Database and rare flora files. WA Department of Conservation and Land Management.
- Robinson, C. & Coates, D.J. (1995) Declared Rare and Poorly Known Flora in the Albany District. Wildlife management Program No 20. Department of Conservation and Land Management, Perth Western Australia.