

# Abba bell

E n d a n g e r e d F l o r a o f W e s t e r n A u s t r a l i a

**If you think you've seen this plant, please call the Busselton District office of the Department of Conservation and Land Management on (08) 9752 1677.**

Commonly known as Abba bell, *Darwinia* sp. Williamson is an erect or sometimes spreading shrub, up to 70 cm tall by 40 cm wide, and often uses other shrubs for support. The green linear leaves, 3 to 5 mm long, are triangular in cross section, crowded at the ends of branches, and bend backwards. The flowers are enclosed by red and green bracts that are arranged in several rows and are produced in October.

Abba bell was first collected from the base of the Whicher Range by botanist Greg Keighery in November 1991. Despite intensive survey of the area where Abba bell grows (as part of the Swan Coastal Plain survey), no other populations of this attractive plant have been found.

The species-rich plant community in which Abba bell occurs, is a winter-wet shrubland on shallow red clay over ironstone. These ironstone soils are highly restricted in distribution and the plant community they support was ranked as a Critically Endangered Ecological Community in 1995. There are also six additional Declared Rare Flora (DRF), three of which are ranked Critically Endangered, that occur on the ironstone soils in the vicinity of Abba bell.

A hot fire burnt through the only known population in 1993 and resulted in the death of almost all the mature individuals. Seedlings were then located at the site of the original population during a survey in 1994, and some of these plants flowered in 1995.

Dieback disease caused by the plant pathogen *Phytophthora cinnamomi* is a serious threat to Abba bell. The species is suspected to be susceptible to the disease which is known to occur immediately uphill of, and adjacent to Abba bell. Staff from the Department of Conservation and Land Management (the Department) are spraying the site with phosphite to attempt to control the disease and prevent it from destroying the population of Abba bell.

Abba bell was ranked as Critically Endangered in 1998 and the Department, through the direction of the South West Region Threatened Flora and Communities Recovery Team, has been addressing the most threatening factors affecting its survival in the wild (see overleaf).

Abba bell is currently known from a single locality and we are eager to hear of any other populations.



Red and green bell shaped flower of Abba bell. Photo – Greg Keighery

If unable to contact the District office on the above number please contact the Department's Wildlife Branch on (08) 9334 0422.

## Recovery of a Species



The Department is committed to ensuring that Critically Endangered taxa do not become extinct in the wild. This is done through the preparation of a Recovery Plan or Interim Recovery Plan (IRP), which outlines the recovery actions that are required to urgently address those threatening processes most affecting the ongoing survival of threatened taxa in the wild and begin the recovery process.

IRPs are prepared by the Department and implemented by Regional or District Recovery Teams consisting of representatives from the Department, Botanic Gardens and Parks Authority, community groups, private landowners, local shires and various government organisations.



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## Recovery actions that are being implemented are:

**Protection from current threats:** these include control of the impact of dieback at the site by phosphite spraying; the development of a fire protection and response plan to protect the species from inappropriate fire regimes; the maintenance of dieback hygiene; and regular monitoring of the health of the population.

**Protection from future threats:** these include the collection and storage of seed; the maintenance of live plants away from the wild (ie. in botanic gardens); conducting further surveys; researching the biology and ecology of the Abba bell; enhancing plant numbers by direct propagation and translocation techniques; and ensuring that relevant authorities, land owners and Department personnel are aware of its presence and the need to protect it, and that all are familiar with the threatening processes identified in the Interim Recovery Plan.

IRPs will be deemed a success if the number of individuals within the population and/or the number of populations have increased.

This poster is sponsored by the Endangered Species Program of the Natural Heritage Trust.



Erect to spreading habit of Abba bell. Photo – Meredith Spencer



Abba bell in full flower in October. Photo – Meredith Spencer