



# ENDANGERED!



## THE BINDOON STARBUSH

The Bindoon starbush (*Asterolasia nivea*) is one of the State's rarest and most endangered plant species. It is now known from only one population north of Bindoon, where ten mature plants exist on roadside verges.

The species was first collected in 1963 near Bindoon by the late Charles Gardner, government botanist. It was not collected again until 1966 from south of the Moore River. Since then, extensive land clearing has destroyed much of its habitat. As a result, the starbush was gazetted as Declared Rare Flora in March 1982 under the Wildlife Conservation Act (1950).

This species shows an abundance of pure white, star-shaped, five-petaled flowers (August to October), growing on a straggly, multi-stemmed shrub up to 50 cm in height, with weak, slender branchlets.

In 1987 Kings Park and Botanic Gardens began shoot culture trials, and in 1988-89 seed and seed embryo culture trials were added to the

program in an attempt to achieve micro-propagation of the species. Some success was achieved in *in vitro* shoot multiplication and research is continuing into the problem of rooting of shoots.

During 1988, some 80-90 Bindoon starbush seedlings were found on a road verge. Twenty-four at risk were moved to other areas within the road reserve and to a nearby nature reserve. To ensure that the dieback fungus was not introduced into the nature reserve, samples of roadside soils were extensively tested.

On 30 July 1988, under the guidance of Kings Park Senior Horticulturalist Bob Dixon, CALM staff successfully transferred the 24 seedlings. Specially fabricated cylinders were pushed down to a depth of 30-35cm around each plant, then gently extricated with seedling and soil intact. Since planting, these seedlings have been inspected, watered and measured every 3-4 weeks during the summer.

The results are most encouraging - a 100% survival rate, maintained up to 24 November 1989. Subsequent rabbit damage to two seedlings in the nature reserve instigated the immediate placement of protective wire netting over each individual plant. An application of *in situ* leaf mulch to maintain soil moisture caused severe insect damage to nine seedlings, and ultimately death to five of them. This mulch was immediately removed.

Of the remaining 19 seedlings, 15 plants are in a good healthy condition with a 50-150% increase in growth height. The remaining four plants are in a fair condition. Although it is premature to predict success for this project, the indications are encouraging. We may achieve a 150% increase in population numbers of *Asterolasia nivea*, which could ultimately ensure the long-term conservation and preservation of this species.

LES ROBSON

# LANDSCOPE

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*In the central Kimberley, a screw-pine-surrounded creek - just one of the threatened areas in this fragile frontier. Turn to page 22.*



*Until 1984 more was known about what was underneath the Nullarbor than what was on top. But with such a vast area to study, where do we start? See page 16.*



*Public awareness and involvement is vital in the conservation of WA's rare and endangered flora. Page 49.*



*Ten WA mammal species have become extinct in the last 200 years. What can be done to ensure no more are lost forever? Page 28.*



*Forests protect our environment. They also provide timber. How do we strike a balance? Turn to page 35.*

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*Illustrated by Martin Thompson.*



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