



ENDANGERED!



THE DWARF BEE ORCHID (*DIURIS MICRANTHA*)

The dwarf bee orchid is one of Western Australia's rarest plants. This donkey orchid is so rare, and its habitat so restricted, that it remained undiscovered until 1974 when Andrew Brown and Warren Stoutemire found it in a single winter wet swamp in the Perth metropolitan area. Since then the dwarf bee orchid has been thoroughly surveyed. Western Australian Native Orchid Society members have also conducted several dwarf bee orchid forays, but no new populations have been found. Consequently, it was declared as rare flora in 1989, and in 1991 David Jones of the National Botanic Gardens named the species *Diuris micrantha*.

Seen above right with its nearest relative, the common bee orchid, *Diuris micrantha* is distinguished by its small, pale yellow flowers, and shorter labellum midlobe. It is a clump-forming species, and in early September produces up to a dozen inflorescences in a cluster.

Donkey orchids abound in winter wet areas throughout the south-west, and not surprisingly 27 species have evolved in Western Australia. But as four are rare, *Diuris micrantha* was selected to represent the genus in a joint Department of Conservation and Land Management (CALM) and Australian National Parks and Wildlife Service "Rare Orchid" project. Other species included in this project were the underground orchid (*Rhizanthella gardneri*), the glossy-leafed hammer orchid (*Drakaea elastica*), the elegant spider orchid (*Caladenia elegans*) and the Cape spider orchid (*Caladenia caesaria* subsp. *maritima*).

The rare orchids are being studied at the Western Australian Herbarium, and results show that the number of *Diuris micrantha* has decreased since its discovery. In 1987 a wildfire devastated 10 per cent of the orchid site, killing many plants, and by 1990 a further 26 per cent of the site had been destroyed by recreational motor-

cyclists. In response, CALM implemented management strategies to reduce the risk of fire, and motorcycle traffic has since been diverted from the orchid site.

Genetic studies indicate that if the present population size is maintained, *Diuris micrantha* could perpetuate itself without the need for human intervention.

Steps are being taken to make the *Diuris micrantha* site a nature reserve, but ultimately the survival of this species probably depends on land use in its immediate vicinity. If for any reason the water table drops, by only a few centimetres, *Diuris micrantha* might soon become extinct.

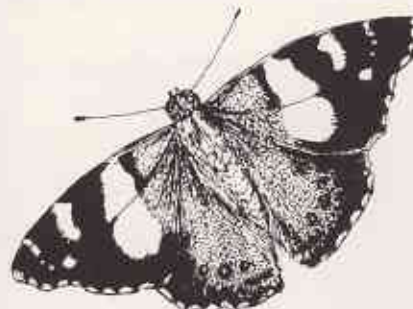
**STEPHEN A. CARSTAIRS
AND ANDREW BROWN**

LANDSCOPE

VOLUME SEVEN NO. 4 WINTER ISSUE 1992



You don't have to go far from Perth to enjoy the peace and quiet of the bush. The forest is right on our doorstep. See page 10.



Painted ladies, northern admirals, southern admirals and Western Australian skippers - not the stuff of a sailor's dream, but all members of the butterfly family. See page 23.



The increase of births in captivity for cockatoos seemed promising, but was it related to the upsurge in 'birdnapping' in the wild? To Catch a Thief explains how forensic experts unravelled the mystery. See page 28.



Our native animals are prey to introduced species. While baiting gives them a fighting chance, scientists are looking for more long-term, humane solutions. See page 16.



The bilby has many names, including ninu and dalgyte. Ninu Magic tells the story of this shy animal and its remarkable survival skills. See page 43.

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COVER

The red-tailed black cockatoo (*Calyptorhynchus magnificus*) is one of several cockatoos native to Western Australia. These spectacular birds nest in tree hollows and can be found in the woodlands and grasslands of the south-west of Western Australia.



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