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# Perth Zoo's Native Species Breeding Program

Perth Zoo's Native Species Breeding Program (NSBP) supports Threatened Species Recovery Plans by providing animals for release. The Dibbler breeding program is just one of the success stories of Perth Zoo's NSBP.

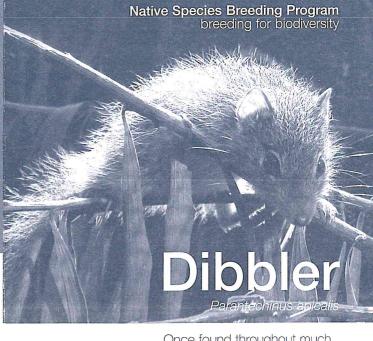
The Dibbler breeding program commenced in 1997 when two pairs were brought to Perth Zoo from Boullanger Island and two pairs from Whitlock Island. In the first year of the program, three females gave birth and 19 young were raised to adulthood. Between 1998 and 2000, 88 Perth Zoo-bred Dibblers were used to establish a new population on Escape Island in Jurien Bay, an island within their former range. Following the breeding success with island Dibblers, the focus turned to breeding animals from the Fitzgerald River National Park for release onto the mainland. 130 Dibblers were released into Peniup Nature Reserve near Jerramungup between 2000 and 2003, and releases have also recently begun into the Stirling Range National Park. By late 2004, 275 Dibblers had been provided by Perth Zoo for release into protected habitat.

CALM staff have carried out post-release monitoring of the Dibblers released at both sites. The results to date indicate that a population has now been successfully established at Peniup.

## You can help too

- Take care not to start bushfires or spread dieback when travelling through national parks, nature reserves and other bushland areas.
- Stay out of the vegetation on the islands of Jurien Bay.
- Never let your pets roam in bushland areas.
- Report all sightings of Dibblers to the CALM office in Albany by telephoning (08) 9842 4500 or email: tonyf@calm.wa.gov.au
- Support the work of Perth Zoo by adopting a Dibbler, Telephone Adoptions on (08) 9474 0350.

Further information on Perth Zoo's Native Species Breeding Program is available at www.perthzoo.wa.gov.au/conserve\_breed and information on CALM's Western Shield Program can be found at www.calm.wa.gov.au/west\_shield



Once found throughout much of the south-western corner of Australia, but now surviving in the wild at only a handful of sites, the Dibbler is an endangered species at very high risk of becoming extinct.







## A mysterious marsupial

Widespread prior to European settlement, the Dibbler was presumed extinct from the early 1900s until its rediscovery in 1967. Since 1995, Dibblers have only been found on Boullanger and Whitlock Islands in Jurien Bay and in the Fitzgerald River National Park east of Albany.

Although easily identified by its white eye-ring and tapering furred tail, the Dibbler is rarely seen in the wild due in part to its elusive nature and small size (adults weigh between 40 and 120 grams). The Dibbler is a carnivorous marsupial (Family Dasyuridae) and is most active at dawn and dusk when it travels along the ground and up through shrubs searching for its favourite foods—invertebrates, nectar and berries. Research into the favoured habitat of Dibblers has revealed that they prefer dense scrub that is rich in flowers and leaf litter.

Dibblers are sexually mature at 10 to 11 months of age and breed in autumn. Females can give birth to as many as eight tiny young and the estimated gestation period differs between mainland animals (52 days) and island animals (44 days). The reason for the difference in gestation is not yet understood, but is likely to be connected to the separation and subsequent genetic divergence of the island animals from the mainland.

# Why is the Dibbler facing extinction?

Scientists are still investigating the full range of factors involved in the decline of the Dibbler but known factors include:

### - Habitat destruction

Dibbler habitat has been lost as a result of land clearance on the mainland and trampling of nesting and foraging areas on the islands.

### - Introduced predators

Dibblers have limited defences against introduced cats and foxes, efficient predators that are known to prey on Dibblers.

#### - Fire

Extensive or frequent fires are a threat as they destroy the thick undergrowth that Dibblers favour and deplete their food supply.

#### - Plant disease

Dieback is a plant disease caused by the soil organism *Phytophthora*. It can dramatically change the flora of an affected area, posing a serious threat to Dibblers through habitat alteration. The original rediscovery site at Cheyne Beach has since been severely degraded by dieback and may no longer support a Dibbler population.

## Lending a helping hand

The Department of Conservation and Land Management (CALM), the University of Western Australia and Perth Zoo are working together to prevent this unique marsupial from becoming extinct.

In 1995, CALM began a three-year Dibbler research project to determine the range of the species and the threats it faced, and in 1997 a breeding colony was established at Perth Zoo.

The information gathered was used to develop a Recovery Plan, the objectives of which are:

- to conserve known populations;
- to discover other existing populations; and
- to establish additional populations.

The Dibbler Recovery Team, led by a CALM scientist, oversees the implementation and progress of the Recovery Plan.

# Department of Conservation and Land Management (CALM)

As part of its Western Shield program, CALM controls foxes in known Dibbler habitats and is developing baits to control feral cats. CALM also manages wildfires and dieback infection in national parks and nature reserves to prevent the loss of Dibbler habitat. CALM scientists are carrying out extensive searches along WA's south coast for other surviving Dibbler populations. They also manage and monitor the introduction of Dibblers to new sites.

## The University of Western Australia (UWA)

Postgraduate students from UWA have made a valuable contribution to our knowledge of Dibblers and have completed numerous research projects with captive-bred and wild Dibblers. Projects have investigated the genetics, reproductive biology, behaviour, and diet of the Dibbler.