

Our Diminishing Heritage

The Numbat, or banded ant-eater (*Myrmecobius fasciatus*), is a remarkable marsupial that feeds on termites. The animal has been little researched in the 130 years since its discovery by European man.

There are two subspecies of the numbat; *M. f. fasciatus* which lives in the south west of Western Australia and *M. f. rufus* which was found in the interior near the border of Western Australia, Northern Territory and South Australia. The Rufous Numbat is thought to have intergraded with the Western Numbat somewhere in the Kalgoorlie district. In the 1820s, the numbat ranged from western New South Wales to the Indian Ocean. By the 1950s its range had contracted to the South West of West Australia. Aborigines at Warburton, where the Numbat used to occur, report that they have not seen any around there in the past 30 to 40 years.

It is difficult to be sure which factors have been responsible for the numbat's decline. Certainly the clearing of land for farming has destroyed the habitat of numbats in many areas, but it is also probable that introduced predators such as the cat and Red Fox may have taken their toll. Natural predators probably include the Wedge-tail Eagle, goannas and Carpet Pythons. These latter two animals occupy hollow logs frequented by numbats. Mining activities may have also taken their toll, as strip-mining for the bauxite that frequently underlies the lateritic soil where the numbats are found, destroys their habitat. In the past the open eucalypt forest with its shrub understorey and abundant litter favoured by the numbat, was subject to infrequent, high intensity wild fires.

With the advent of a low intensity prescribed burns, these areas may be undergoing a transition to an unsuitable habitat. There has been a drastic decline in the numbers of numbats in the past 3 to 5 years and this may be due to drought and the recent increase in fox numbers.

In the south west of Western Australia, the numbat finds shelter in hollow logs, or infrequently, burrows underground. The termites that eat the heartwood of the logs also provide the numbat with its sustenance. The numbat detects its termite prey by olfactory cues, it then overturns branches and pieces of wood or excavates with its fore paws so that it can lick up the termites with its long, cylindrical tongue. The animal does not masticate its food but swallows it whole. Some ants are also found in the numbat's seats, but it is thought that these are accidentally ingested as predatory ants swarm into the termite galleries when they are opened. Only rarely can numbats break open a termite mound, generally the animal finds its food in leaf and stick litter or in the shallow feeding galleries. The numbat is one of the few diurnal marsupials, it is abroad in daylight and shelters in its log during inclement weather and at night. Perhaps in this way it escapes nocturnal predators.

The requirements of the numbat can be simply characterised as an open woodland dominated by a *Eucalyptus* species, with hollow logs, termites and an

understorey of shrubs. A particularly suitable habitat in the south west of Western Australia is the wandoo poison shrub association.

A study is currently underway on the numbat in Western Australia. This study is funded by the Wildlife Conservation Trust Fund and is being undertaken by a consultant biologist and the Wildlife Research Branch of the Department of Fisheries and Wildlife. The six-month study hopes to demarcate the present-day range in Western Australia of the numbat and estimate the population size. If possible, a captive colony will be founded and this will serve as a basis for a nutritional study. The lack of a nutritionally adequate and palatable diet that is readily and universally obtainable has prevented their being represented in zoological gardens. Of the world's zoos, only Taronga Park in Sydney has any numbats and they have only one animal, a female. The numbat has never been successfully bred in captivity. If a breeding colony could be established, re-introduction of numbats to areas where they were formerly abundant would be feasible. Indications from the current study suggest that the numbat's range has contracted considerably since the last population study (1950-1954).

Breeding Season

Mating is between December and March with the birth of a litter (commonly four) between January and May. Unlike many other marsupials, the female numbat has no pouch. The young, however, are carried by the mother attached to the teat until they begin foraging on their own in spring.

Description

The Western Numbat's pelage varies from grey-brown to red-brown while the Rufous Numbat is brick red on its back. There are several prominent white bars across the back and the flattened rump. Underneath, the numbat is almost white. Hair is short except on the tail which takes on a bushy appearance when the hair is erect. The face is elongated and the animal has a worm-like tongue which can be protruded. Teeth vary between 50 and 52 and are degenerate. The animal commonly gives voice to a low, throaty growl when disturbed and will frequently hiss rapidly when held. An adult male weighs approximately half a kilogram, has a body length close to 25 cms and a tail length of nearly 18 cms.

Distribution

Previously throughout the southern half of Australia extending from western New South Wales to the Indian Ocean and in habitats as diverse as open eucalypt woodland and desert, now the numbat is largely confined to the open eucalypt forests of the south west of Western Australia and possibly the desert regions in the north west of South Australia and the Warburton Ranges of Western Australia.



NUMBAT or BANDED ANTEATER

Myrmecobius fasciatus



A rare glimpse of the female Numbat with her litter of four. Photo taken from 16 mm movie frame.