# **Eastern Barred Bandicoot**

Perameles gunnii

nature parks nature notes

### **Eastern Barred Bandicoots**

The Eastern barred bandicoot is a small browngrey mammal with distinctive white bars or stripes across its rump. This bandicoot was originally found in southern Australia with distinct sub-species occurring in Tasmania and on mainland Australia in Victoria and South Australia. The mainland sub species is listed as endangered under the *Environment Protection and Biodiversity Conservation Act 1999*, and were classified as Extinct in the Wild under the Victorian Flora and Fauna Guarantee Act, until 2021 when they were reclassified to Endangered.

#### **Habitat**

A mixture of grasslands and woodlands provide the highly complex habitat preferred by Eastern barred bandicoots. The bandicoots use their clawed forepaws to scrape out a depression which they line with grass. These nests tucked under tussocks of grass protect the bandicoots during the day while they sleep. While they are solitary creatures, mother bandicoots will share their nests with their young.

### **Diet**

Eastern barred bandicoots are omnivorous, though primarily insectivorous. They use their strong claws and pointed nose to dig for food, leaving small cone-shaped depressions. They feed on the grubs of beetles, crickets, grasshoppers, moths, and earthworms. They have also been found to eat a small amount of onion-grass bulbs and fallen fruit. They forage at night leaving their nests within two hours after sunset with males using an average habitat of 4.0ha and females using 1.6ha. Older bandicoots will claim optimal habitat over younger ones, and males will out compete females.



### **Statistics**

Weight: 600 - 800g Length: ~400mm Life: 2-3 years

Kingdom: Animalia Phylum: Chordata Class: Mammalia

Order: Peramelemorphia Family: Peramelidae Genus: Perameles

Species: Perameles gunnii

## **Breeding**

Eastern barred bandicoots are a marsupial with a very rapid breeding cycle. Gestation is 12.5 days with 1-3 young in each litter. The young stay in their mother's pouch for 55 days before they wean, and disperse three months after birth. Females are mature at about four months of age, males at five months. Females can produce up to five litters a year. Breeding is depressed in summer and during times of drought.



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## Running out of time

Concerns were first expressed about the Eastern barred bandicoot in 1937, however the first population survey wasn't conducted until 1960. By 1972 the bandicoots were down to one wild population in Hamilton, Victoria. From this population 42 animals were taken into captivity in 1988 to form a breeding program in an effort to conserve the species. From these 42 animals, just 19 successfully contributed to the breeding program.

The captive breeding program run by Zoos Victoria hosted 15 breeding pairs, providing animals for release to reintroduction sites and cycling animals between sites to maintain genetic diversity. After running for 33 years, in 2021 the captive breeding program was ceased, as numbers in the wild reached sustainable numbers and the species was brought back from the brink of extinction.

### Re-introduction

In an effort to return the Eastern barred bandicoot to the wild, eight re-introduction sites were established on the mainland. In April 1989, the first 10 bandicoots were trial released into Woodlands Historic Park. From here further populations were introduced to Hamilton Community Parklands (1989), Mooramong (1992), Floating Island Nature Reserve (1994), Lake Goldsmith Wildlife Reserve (1994), Lanark (1994), Cobrac Killuc Wildlife Reserve (1997) and Mount Rothwell (2004). Of these eight sites only three are home to breeding bandicoots today.

### **Challenges**

There are a number of factors preventing the successful reintroduction of the bandicoots on mainland Australia, however the prevailing issue is predation by introduced red foxes. Some locations used fox proof fences to exclude the predators. Other locations used fox control programs involving baiting and hunting.

### Island ark

These fox control methods were found to be ongoing high cost and high maintenance if they were to be effective. Using islands as reintroductions sites helps to mitigate the issue of predation by foxes by providing a fox free area that is protected by a water barrier.

Churchill Island, managed by the Phillip Island Nature Parks, is fox, dog, cat and rabbit free. It provides complex habitat with a mix of native moonah forest, grassy paddocks and cottage gardens. Commencing August 2015, 8 male and 12 female Eastern barred bandicoots were released onto Churchill Island. After two years of monitoring and research, the bandicoots stabilised at over 120 individuals. This then opened the door to translocate the Eastern barred bandicoot in October 2017 to the Summerland Peninsula on Phillip Island, and in 2019 on to French Island, which are both fox free. Ongoing research has shown that their numbers and range are increasing, a promising sign for the future of this species.



