



# Burrowing Bettong

## Burrowing Bettong (*Bettongia lesueur*)

Once one of the most widespread of all Australian mammals, the Burrowing Bettong, also known as the Boodie, is only found naturally on four islands off the coast of Western Australia. It belongs to the macropod family which include kangaroos and wallabies.



Photo: Seonie Lyon

### Physical Characteristics

The largest of the bettongs, Burrowing Bettongs have short round ears and a small nose. The size of Burrowing Bettongs varies depending on which area in Australia they are found. On average they are 700mm from head to tail tip with the smallest being around 500mm. The average weight is about 1300g. They have large hind limbs similar to those of a kangaroo. The Burrowing Bettong is bipedal, meaning it jumps on its hind legs. The small forelimbs are used for digging and holding food and used for support, with the tail, when it is stationary.

Their fur is a yellow grey colour on their back and light grey on their belly. They have a fat, light grey coloured tail, which is dark at the base and often has a paler tip.

### Feeding

The Burrowing Bettong is mainly a browsing animal and at Arid Recovery it eats a wide range of foods, especially leaves, seeds and roots of long lived perennial plants. Bettongs will occasionally eat insects.

The Burrowing Bettong does not need to drink water as it gains it from its food and the dew that condenses on leaves. During dry times bettongs will eat the bark and roots of plants to obtain moisture.

### Shelter

Burrowing Bettongs construct a burrow in deep loam or sandy areas. The burrows often form warrens, which have multiple entrances. (see picture below) The floor of the warren is lined with vegetation to create nests for sleeping.

A complex warren found on Barrow Island had 120 entrances and about half that number of individuals living in it. To date at Arid Recovery warrens have up to 11 or 12 entrances. It is the only macropod to shelter within a burrow.

### Amazing Fact

A Burrowing Bettong's baby, like a kangaroo, is called a joey, and like a kangaroo, it can be looking after and feeding three joeys at the same time. One at her foot, one in the pouch and one in embryo.

If there is a drought, the mother will abandon the one at foot and in the pouch and prolong the development of the embryo, for up to 11 months, until the drought has finished. She will then continue developing the embryo when there is food again.



A Bettong warren at Arid Recovery.

Photo: Jude Carter



### Activity

The Burrowing Bettong is nocturnal. It leaves the burrow only when the sun has set and returns before it rises. Burrowing Bettongs communicate with each other using a series of hisses, grunts and squeals. Males can be extremely aggressive towards each other.

### Breeding

Burrowing Bettongs have a single baby which lives in the mother's pouch for 115 days. They are able to breed all year round and up to 3 young may be raised within one year. Breeding is only stopped if it has been a particularly dry period.

### Threats

In 1863 the Burrowing Bettong had disappeared from Victoria and by 1942 the last



*This Burrowing Bettong joey was dropped from its mother's pouch but was successfully returned.*

Photo: Tony Hepworth

specimen was collected on mainland Australia. However there are reports by Aboriginal tribes that they may have survived until the late 1950s in the desert regions of South Australia.

This disappearance happened at the same time as the widespread establishment of the fox and cat, which hunted and ate them.

Rabbits also played a part in their decline by competing with the bettong for food and shelter. Farmers also contributed to the Burrowing Bettong's extinction by shooting



*South Australian Premier Mike Rann releasing a Burrowing Bettong.*

Photo: Yvette Mooney

them because they ate their crops, and removing the bettong's habitat for pasture and crops. Burrowing Bettongs are listed as vulnerable on the national status list of Threatened Species.

### Arid Recovery

In 1999 and 2000 Arid Recovery introduced 29 Bettongs from Bernier Island and Heirisson Prong in Western Australia into the reserve. Since that date the numbers of Bettongs within the reserve have boomed and the population is estimated to be in excess of 350 - 400 animals. Bettongs are an extremely easy animal to trap and their inquisitive nature makes them an easy target for cats and foxes. Until cats and foxes are controlled outside the Arid Recovery fence it is unlikely that we will ever see this animal outside of a feral proof area.

*A Burrowing Bettong caught in a cage trap.*

Photo: Mimi D'auvergne



### What is in a name!

*The Burrowing Bettong is known by several different common names. Lesueur's Rat-kangaroo, Lesueur's Bettong, Burrowing Rat-kangaroo, Boodie and Tungoo. It also has a lot of different Aboriginal names. This is why it is important to have a scientific name that everyone knows and never changes such as *Bettongia lesueur*.*

### Did You Know?

*Bettongs favourite food is peanut butter and when they smell it, they will leave all other food to come across to eat it. Peanut Butter is like chocolate to bettongs.*

*We use peanut butter and rolled oats to catch them in traps so that we can monitor their health and numbers at Arid Recovery.*

## Find Out More

The Mammals of Australia 1995 edited by Ronald Strahan Reed Books Chatswood NSW

Website (PDF): [http://www.calm.wa.gov.au/plants\\_animals/pdf\\_files/sp\\_boodie.pdf](http://www.calm.wa.gov.au/plants_animals/pdf_files/sp_boodie.pdf)

Finlayson, G., Moseby, K., (2004), Managing confined populations: the influence of density on the home range and habitat use of reintroduced burrowing bettongs (*Bettongia lesueur*), *Wildlife Research*, **31**, pp 457-463