

BOODIES FROM BERNIER ISLAND

In 1959 several boodies were taken from Bernier Island, at North West Cape, by the C.S.I.R.O. for study purposes.

An article has been published by Eleanor Stoddart, of the Division of Wildlife Research, on the behaviour of these marsupials in an enclosure.

The *Bettongia lesueuri*, the boodie, is one of the Australian native marsupials that have apparently suffered the advent of the white man, his domestic stock, and the rabbit. Although it once was widespread on the mainland, it is now confined to several islands, and possibly in central Australia. Very little is known about this animal.

Eight boodies, 6 females and 2 males, were placed in an enclosure of $\frac{3}{8}$ acre and were observed from a hide over a period of time. The enclosure supported oats and pasture when rainfall was heavy, and an abundant supply of apples, carrots, enriched dog biscuits and hoppers of oat grain were provided. There was a continuous water supply in one trough.

The author presented her article on the boodies under a series of headings, the main points of which are set out hereunder.

Locomotion.

Their movement was always bipedal, the hindfeet being always used in unison. The forelegs were only used for support when gathering hay. The tail was never used for support.

Resting

They sometimes rested on the surface but often retired to the shelters provided, or down the burrows in the evening. In the shelters they curled up with the tail forward and head down. Before settling they arranged the hay under them by scratching with their forelegs.

Grooming

Extensive grooming was done in the nests following or preceding a rest, but occasionally some grooming was done in the open.

Feeding

Forepaws were used to pick up food and they sometimes took food from one another, starting squabbles. They were not seen to drink.

Digging

The boodies did not dig any new burrows, but used the old rabbit burrows that were in the enclosure. Modifications made to the existing burrows were one new entrance and the excavation of a channel as deep as the burrow, and up to several feet long, away from the entrance.

Nest Making

Nests were made in the boxes provided and in the burrows where they spent the day. Hay was collected in their mouths, but carried by the curled tail, as shown in the sketch. A bundle of hay about half the size of their body was collected.

Males

The males were aggressive toward one another and frequently chased one another, with occasional scuffles. They fought by laying on their sides and lashing out with their hindfeet. The chases were apt to end abruptly, for no apparent reason.

The males actively defended their females.

Females

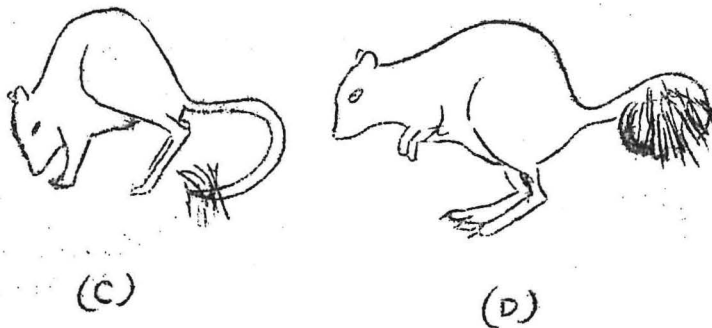
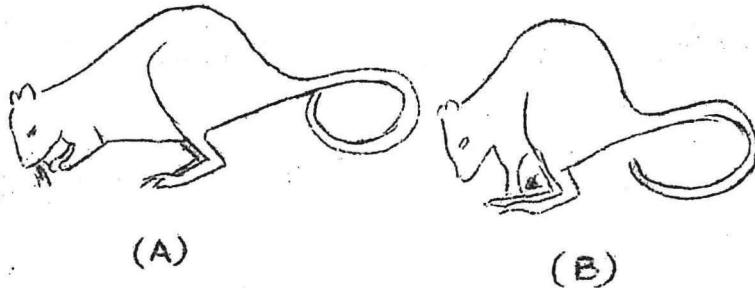
The females, generally, were communal and few chases were recorded, usually caused by one particularly aggressive female.

Conclusion

The conclusions that were drawn from the observations were :--

1. The boodies are gregarious
2. The males are aggressive
3. The females sociable and peaceful
4. The males defended their females rather than a territory in the enclosure.
5. The sexual behaviour can be compared with that of other macropod marsupials.

6. The method of locomotion contrasts with that of the large kangaroos, which use forelegs and tail for support when moving slowly.
7. The boodie carries its nesting material, hay, in a bundle by using its tail.



The above sketches show how the *B. lesueuri* gathers hay for its nest.

- (A) Picking up strands of hay in its mouth.
- (B) Pushing hay backwards with the forefeet.
- (C) Pushing it over the curled tail with the hindfeet.
- (D) Carrying the full bundle, after gathering several mouthfuls.