

# CHANGES IN THE TAXONOMY OF TINY MARSUPIALS

By Dr. A. A. Burbidge

Two recent papers by Dr Michael Archer have revised the taxonomy of some species of tiny marsupials or "Marsupial-mice". Dr Archer did most of the research for these publications while working under Dr W. D. L. Ride at the Western Australian Museum before taking up his present post of Curator of Mammals at the Queensland Museum.

Prior to Dr Archer's work there was considerable confusion in regard to which species of tiny marsupials occurred in Western Australia.

Australian marsupials fall into three main groups: the Phalangeroids, which include kangaroos, wallabies, possums, wombats and the koala; the Perameloids which include the bandicoots; and the Dasyuroids which include the mainly carnivorous species such as the Tasmanian Tiger, native cats, antechinuses, marsupial mice and the numbat. Dr Archer worked on a group of Dasyruoids known as the Pigmy Antechinuses or Planigales.

In Dr Ride's book "A Guide to the Native Mammals of Australia" four species of Pigmy Antechinuses are listed. Following Dr Archers' work it appears that there are at least six species in Australia, four of which are known to occur in Western Australia. These are:

1. *Ningau timealeyi*. Ealey's Ningau

Dr Archer described a new genus of tiny marsupials for this and the following species. Ningau is an aboriginal name given to tiny mythological beings that are hairy, have short feet and only come out at night to hunt for food all of which is eaten raw. The specific name *timealeyi* is in honour of Dr E. H. M. ("Tim") Ealey of Monash University who collected the first known specimen of this species while working for C.S.I.R.O. in the Pilbara. *Ningau timealeyi* externally looks like *N. ridei* (see plate). It occurs in the Pilbara and probably on North West Cape. It apparently inhabits spinifex country.

2. *Ningau ridei*. Ride's Ningau (Plate 1)

This, the other species of *Ningau*, was named in honour of Dr W. D. L. Ride, for many years the Director of the Western Australian Museum. When Dr Archer wrote his description it was known from only two specimens, both collected about 40 km north-east of Laverton. Since then work by the Western Australian Wildlife Research Centre has shown that it is apparently widespread in W.A. deserts. Specimens are known from Queen Victoria Spring and Neale Junction in the Great Victoria Desert, the Gibson Desert south-west and north-west of Warburton and the Little Sandy Desert near the Carnarvon Range. It also inhabits spinifex country.

3. *Planigale maculata*. Pigmy Marsupial-Mouse  
Originally described by John Gould in 1851 this species occurs in the high rainfall parts of northern New South Wales, Queensland and the Northern Territory. It has only recently been discovered in Western Australia where specimens have been collected on the Drysdale River National Park in 1975 and on Barrow Island in 1973. It is a comparatively large species, does not have a flattened head and the tail is shorter than the head-body length.

4. *Planigale ingrami*. Ingram's Planigale (Plate 2)  
This species is smaller than *P. maculata* and can be distinguished by its flattened head and its tail which is longer than the head and body. In W.A. it is known from the Kununurra region and from near Derby. In W.A. this species was formerly known as *P. substillissima*.

There may be another species of Planigale in Western Australia since there is one specimen from Tambrey in the Pilbara which Dr Archer could not assign to any other species. Because the only specimen is



Plate 1, Ride's Ningau.



[ Plate 2, Ingram's Planigale.

damaged no name will be applied until better material is available.

For those who have a copy of "A Guide to the Native Mammals of Australia" by W. D. L. Ride the following amendment can be made to the list of species on p. 120.

**PIGMY MARSUPIAL MOUSE, *Planigale maculata*.** Northern coastal N.S.W., coastal Qld., northern N.T., Kimberley of W.A., Barrow Island. Rain and sclerophyll forest, woodland, marsh (spinifex on Barrow I).

*Recognition:* rather smaller than mouse; head rather cone shaped in side view; short grey fur.

**INGRAM'S PLANIGALE, *Planigale ingrami*.** Queensland, N.T. and Kimberley Division of W.A. Savannah woodland and grassland.

*Recognition:* much smaller than mouse, head flattened, tail shorter than head-body.

**NARROW-NOSED PLANIGALE, *Planigale tenuirostis*.** N.S.W. and Qld. Savannah woodland and grassland.

*Recognition:* similar to *P. ingrami* but muzzle rather narrow making head appear less triangular when seen from above.

**GILES' PLANIGALE, *Planigale gilesi*.** Qld, N.S.W. and S.A. Arid country west of the Dividing range.

*Recognition:* similar in external appearance to *P. ingrami*.

**EALEY'S NINGAUI, *Ningai timealeyi*.** Northwest of W.A. Spinifex country.

*Recognition:* smaller than mouse, narrow hind feet.

**RIDE'S NINGAUI, *Ningai ridei*.** W.A. arid interior. Spinifex country.

*Recognition:* similar to *N. timealeyi*. Plate 35 on p. 121 of Dr Ride's book is actually an illustration of *Ningai ridei*.

Species of *Planigale* and *Ningai* are difficult to identify on external characteristics alone. Very little is known of their distribution or biology. Increasing knowledge will depend largely on interested people who might come across specimens passing them onto the Wildlife Research Centre or the Museum.

## REFERENCES

- Archer, M. 1976. *Ningai*, a new genus of tiny dasyurids (Marsupalia) and two new species, *N. timealeyi* and *N. ridei*, from arid Western Australia. *Mem. Qd. Mus.* 17 (2): 237-49.
- Archer, M. 1976. Revision of the marsupial genus *Planigale* Troughton (Dasyuridae). *Mem. Qd. Mus.* 17 (3): 341-65.
- Burbidge, A. A.; McKenzie, N. L.; Chapman, A. and Lambert P. M. 1976. The wildlife of some existing and proposed reserves in the Great Victoria and Gibson Deserts, Western Australia. *Wildl. Res. Bull. West. Aust.* No. 5.

## POSSUM PUZZLE

The W.A. Museum and the Department of Fisheries and Wildlife are puzzled over a possum which was picked up dead outside the Carnarvon Shire Council Office on November 3rd. The possum appears to have been struck by a car a short time before.

The W. A. Museum has identified it as a Northern Brush-tail Possum, the scientific name for this species being *Trichosurus arnhemensis* because it was first discovered in Arnhem Land. It is also known from the Kimberley Division and from Barrow Island off the north-west coast. The Carnarvon specimen has a coat colour similar to those from Barrow.

At present scientists do not think that this species occurs on the mainland south of the Kimberley but this Carnarvon specimen may throw new light on its distribution. They would like to know whether the Carnarvon possum is part of a population which lives in or near the town or whether it is an escaped pet.

Anyone having information is asked to get in touch with the Curator of Mammals at the Museum, with Wildlife Officer Geoff Hanley on Carnarvon 41 1135, or the Department of Fisheries and Wildlife, 108 Adelaide Terrace, Perth.

## RABBITS ON MISTAKEN ISLAND RESERVE

Following an inspection of Mistaken Island, near Albany, District Wildlife Officer R. Grayson has reported an increase in the number of rabbits inhabiting the island.

Between February and April, the Department of Fisheries and Wildlife, in co-operation with the Agriculture Protection Board, will be baiting the island using carrots as bait and 1080 as the poison.

Readers can refer to S.W.A.N.S. Vol. 5 No. 1, 1975, for further information on the use of carrot baits.