Our Diminishing Heritage

Kimberley Planigales (Planigale subtillissima) are thought to be the smallest existing marsupials; so small in fact that they are close to the lower limits of size postulated to exist for warm-blooded animals. In his book, "A Guide to the Native Mammals of Australia", Dr. W. D. L. Ride places the Kimberley Planigale with the Antechinus (marsupial mice), suggesting that they are pigmy derivatives of this genus, but pointing out that their relationship is largely a matter of conjecture at present.

They are mouse-like animals with a characteristically flattened head which is little more than a in, from base to crown. The head and body together measure $1\frac{1}{2}$ to 2 in. and the tail about 2½ inches. The general colouring of the body is grevish, the hairs being tipped with yellow near the sides of the body, and the colour becoming much lighter on the ventral surface. The ears are covered only with short hairs and appear quite transparent in strong light; the eyes are black and bulge when the animals are frightened. Tactile vibrissae ("whiskers") are a feature of the snout, and project to the width of the body; they form an integral part of the cleaning operations which follow every meal. The nostrils are set almost at the extreme tip of the snout in the same fashion as those of a dog, and a division



Note flattened head and black, bulging eyes. Whiskers extend to width of body. (Photograph: Courtesy of M. Archer.)

extends back to the mouth which contains sharply pointed sets of teeth, both top and bottom. The tail tapers evenly from the base to tip and has a uniform covering of hairs with a very small tuft at the tip.

Kimberley Planigales are mainly insectivorous, with crickets and grasshoppers being the most favoured food, but it has been found that young rodent mice and even geckos are consumed with obvious relish. They can move quickly but only in short spurts, and have been seen to jump from, and land on, all fours over short distances. However, apart from a squatting posture which is adopted while feeding, they have no other kangaroo-like habits.

For many years the species was known only from a single specimen collected by a Swedish expedition in 1913. This had been caught in a crack in the earth on a plain near Noonkambah on the Fitzroy River in the West Kimberleys. No further specimens were discovered until 1949 when a cat brought a dead specimen into the Kimberley Research Station near Wyndham, but, in the next few weeks five other specimens were caught alive. Unfortunately, although an attempt was made to breed them in captivity, none survived. During the Ord Noah rescue operation in 1971 (see story, S.W.A.N.S., Vol. 3, No. 1) a further seven specimens were collected. Two of these were already dead, having been found inside Childrens' pythons; three died subsequently, but the remaining two (both females) have been sent to La Trobe University (Melbourne), where Dr. Patricia Woolley is carrying out research on the species. The only other specimen known to science was collected by departmental research officer Jim Lane during a field trip to the Kimberleys when studying the effects of pesticides on wildlife. This Kimberley Planigale was found in the stomach of a Nankeen kestrel; this and other dead specimens are being studied at the W.A. Museum by Michael Archer.

So little research having been possible, it is hardly surprising that knowledge of the species is so scanty. They were once thought to be exceedingly rare, but recent indications are that their status may not be as precarious as was feared and that the inaccessibility and ruggedness of their habitat, rather than lack of numbers, is the main reason why so few have been taken. *Planigale subtillissima*, however, causes enough concern for the species to be listed in the I.U.C.N.'s Red Data Book.

DISTRIBUTION:

Kimberley Division, W.A.; savannah woodland and grassland.

KIMBERLEY PLANIGALE

Planigale subtillissima



(Photograph: Courtesy of M. Archer.)

LOOKS:

Much smaller than a mouse, head flattened when seen in profile. General colouring—grey, tipped with yellow. Moves rapidly, in short bursts.

LENGTH:

Overall—10-11 cm $(4-4\frac{1}{2} \text{ in.})$. Tail only —6 cm $(2\frac{1}{2} \text{ in.})$.

WEIGHT:

Full data not available at present, but weight is less than 5 g.

BREEDING:

Little data available, no young have been born in captivity.

DIET:

Mainly insects, preferably crickets and grasshoppers. Also will eat young rodent mice, geckos, etc. Usually eats a quantity of food at least equal to the volume of its body every day.

STATUS:

"It is possible that this species may not be rare, but little collecting has been done in its area of distribution."