BATTING IN SENEGAL 1991

Two species of bats were positively identified on a visit to the Niokola-Koba National Park, Senegal, during the dry season in January 1991. When an interest was expressed in bats, several roosts were found by the park guards.

The first was in a small tree in the centre of the Siminti camp, with a canopy about 25ft high, densely entwined with creeper producing a solid "roof" over the bats. This provided protection from the sun and also, as one of the guards explained, from the attentions of the bat hawk, which feeds on roosting bats during the day. Between 20-50 bats were present each day, and could be seen to be fruit bats by their large size, large eyes and white ear tufts. But how to catch them for further identification?!

The height of the tree and the thorny lower branches excluded the use of a hand net. However, it was noticed that, when they were disturbed during the day, after giving one sharp piercing call, all the bats flew en masse to a much lower tree nearby. By putting a mist net around the second tree we were able to catch several individuals, male and female, take measurements and identify them.

They were *Epomophorus gambianus*, the Gambian Epaulet bat. This is a large pale beige bat, with a wingspan of about 2ft, a cream coloured abdomen and white tufts at the back and front of small rounded ears. The face is dog-like, with large round eyes, a long tapering muzzle and nostrils on enlarged raised pads. The male is larger than the female and has large naked pouches on the cheeks and a fold of skin on each shoulder containing a tuft of pure white hair - hence the name Epaulet bat. The wings are pale coloured with claws on the first and second digits and a right-angled bend in the third digit, producing a very broad, rounded shape. In flight the bats were completely unlike the rousettus type often seen on T.V. They were very agile and manouverable in direct flight, like a small owl, and in a confined space they could twist and hover like enormous moths. The canines, incisors and premolar teeth were sharply pointed and the molars were falattened to crush fruit. The bats had a powerful bite, and thick gloves were essential when handling them! Males appeared to guard fruit trees by uttering a monotonous piercing call - all night! Females were seen in all stages of reproduction; they seemed to have no particular breeding season. Several more roosts were found inside tradional thatched huts.

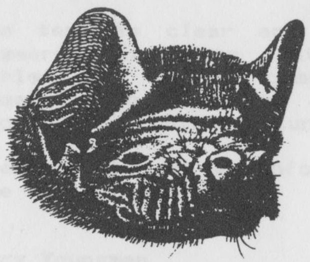
Measurements in mm.: forearm, male 85, female 80; 1st digit 25-32; 2nd digit 54-56; 3rd digit 135-142; 4th digit 105-109; 5th digit 100-106; tibia 32-36; foot 22; tail 0.

An insectivorous bat was found roosting under corrugated iron rooves in the Siminti camp and airport. Again, it was difficult to catch, very aware of the hand net and good at avoiding it by staying put or finding another exit. The mist net proved almost too successful; 30 small tangled bats in a matter of minutes were quite a job to sort out in complete darkness, but all were successfully extricated, measured and released without any mishaps. They were identified as Molossidae, free-tailed bats of the genus *Tadarida*. There is some dispute over the naming of this bat; it is known as *Tadarida gambiana*, but may be more correctly named *Tadarida pumila*. It is also called the wrinkled lipped, bulldog, mastiff or bonneted bat, which describes its curious face. The broad ears are joined by a fold of skin across the top of the head, the eyes are tiny, the lips thick and wrinkled and the jowls heavy and bristled, while the nose is pig-like and prominent. A third of the tail protrudes free from the tail membrane and is thick and rat-like, the hair short and grey-brown. The male has an orange tuft between the ears. All the bats caught were mature or young adults, none were lactating or pregnant. Flight was swift and dextrous on narrow wings. The arrangement of the incisors helped in identification. Echolocation was at 40-50Hz.

Measurements in mm.: forearm 34-36; 2nd digit 70; 3rd digit 55; 4th digit 45; tibia 11; tail 24, 16 free of membrane.

Other species were seen and heard on the bat detector at 40-60Hz. and one on a very narrow band around 110Hz. Our antics with nets and the bat detectors stimulated great interest among the park guards, who are now looking for new roosts, which we will investigate on our next visit, hopefully next year!

MOLOSSIDAE
FREE-TAILED BATS



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