

## First record of the Giant House Bat *Scotophilus nigrita* (Schreber, 1774) in Cameroon (Mammalia, Chiroptera)

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### ABSTRACT

We report the first record of the Giant House Bat *Scotophilus nigrita* (Schreber, 1774) (Mammalia, Chiroptera), from Cameroon where this species was never documented before. *Scotophilus nigrita* is one of the biggest species of Microchiropterans. Some misidentifications were noted before 1978 with *S. dingani* (A. Smith, 1833) being identified as *S. nigrita*.

### KEY WORDS

Chiroptera; *Scotophilus nigrita*; Cameroon; new record.

Received 24.01.2012; accepted 23.02.2012; printed 30.03.2012

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### INTRODUCTION

As with many animal taxa, detailed scientific information about bats and their distribution in west-central Africa is currently often lacking. Thus, most African species are only known from a scattered portion of their geographic ranges. Hence the taxonomical and distributional status of many species in this area remains enigmatic.

This is one of the principal problems facing those who want to develop conservation or recovery plans in this area (Fenton & Rautenbach, 1998). The new record of a species in an area can be explained by two hypotheses: firstly the lack of inventory in this area and secondly a low sampling effort on this area. The main problem in central Africa is the lack of bat studies.

Recent studies in this area have demonstrated that some species, which were previously considered to be absent or rare, have been regularly caught (Cosson, 1995, Sedláček et al., 2006).

This work can be useful for better understanding of this important field of zoology and promote the necessary guidelines for the protection of bats in different geographical areas of the world; we must,

indeed, discuss further research on these special mammals for a better understanding of their biological behavior.

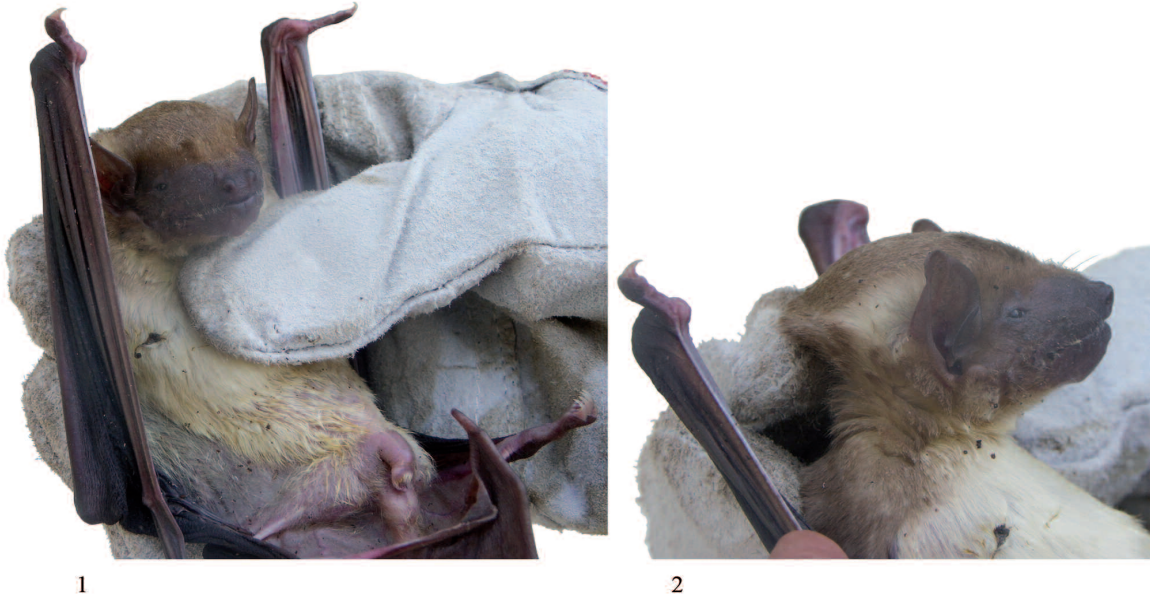
### MATERIALS AND METHODS

On 13 April 2011, during a survey in the sahelian zone of northern Cameroon, Bakwo (with Bol) captured a single reproductive adult male in Mokolo (10°43' 943''N; 13°46' 806''E; elevation: 849 m).

The specimen is deposited in the collection of the Laboratory of Zoology of the University of Maroua under the number BFEM 072.

The individual was caught in a mist net (9 x 2.8 m) set under water across a river at 21:21 hours. This zone is characterized by a Sudano-Sahelian climate with low savannah (Suchel, 1988). The climate in the area is characterized by two seasons, with major rainfall peaks generally occurring in October (Suchel, 1988).

In our specimen, the belly is whitish with no clear boundary (Fig. 1). The predominant colour of the pelage of the back is deep chestnut (Fig. 2).



Figures 1, 2. *Scotophilus nigrita*, male collected at Mokolo, on 13 April 2011 and currently in the collection of the Laboratory of Zoology of the University of Maroua.

Figure 3. Records of *Scotophilus nigrita* (red) based on published data (African Chiropteran Report, 2011) including the recent record from Cameroon (indicated by star).

The external measurements of the specimen were measured with a dial calliper (Mitutoyo) and are as follows: FA: 84.8 mm; tibia: 34.2; ear: 19.3 mm; tail: 75.7 mm.

## DISCUSSION

Based on our external measurements, we assign this specimen to the taxon *Scotophilus nigrata* (Schreber, 1774), which was not previously known from Cameroon (African Chiroptera Report, 2011). The measurements of the specimen do not exceed the variation range reported for this species given by Robbins (1978): FA: 86; and Robbins et al. (1985): FA 82.3 (77.5-88.0), tail: 78 (76-80).

The Giant House Bat, *Scotophilus nigrata* (Schreber, 1774), ranks as Near Threatened (NT) in the IUCN redlist (Monadjem et al. 2010); *Scotophilus nigrata* has been recorded as scattered records from west, east, and south-east Africa (African Chiroptera Report, 2011).

It has been reported from Senegal, Côte d'Ivoire, Ghana, Togo and Nigeria in west Africa, from central Sudan, and from western Democratic Republic of the Congo, western Kenya and Tanzania, south to Mozambique, Malawi, eastern Zimbabwe and north-eastern South Africa (Fig. 3). This species ranks among the rarest bats in Africa (Rosevear, 1965) and most information on this species is based on casual records (Happold, 1987). Most of the few records of this species in Africa have been from dry savannah sites (Happold, 1987).

The present record also comes from a savannah region and corroborates published data. However, Happold (1987) mentioned an unusual presence of this species near Lagos (Nigeria) in rainforest zone.

## CONCLUSION

*Scotophilus nigrata* is one of the biggest species of Microchiropterans. It was originally described by Schreber in 1774 from a specimen collected in Senegal (Robbins, 1978). Some misidentifications were noted before 1978 with *S. dingani* (A. Smith, 1833) being identified as *S. nigrata*.

The new record bridges the gap between the west African and the northeast and central African

distribution areas of this species (Fig. 3) and increases the number of bat species known to occur in Cameroon.

According to its previous known range, the nearest record of this species was in Lagos (Happold, 1987) i.e. about 1250 km far from Cameroon.

Further survey is needed to specify the extend of the range of this species and to determinate its conservation status.

## ACKNOWLEDGMENTS

Financial and logistical support was generously provided by the International Foundation for Science (D/4983-1).

We gratefully acknowledge valuable contribution of Mang Yannick Dimitry during the field work.

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