

Bats of the Wind Cave Nature Reserve, Sarawak, Malaysian Borneo

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ABSTRACT.— A survey of the chiropteran species at the Wind Cave Nature Reserve (WCNR) in the Bau limestone areas (BLA), Sarawak, was conducted from the 10th to 20th January 2008 and the 10th to 20th April 2009. A total of 297 and 367 (net 646) individuals, representing 14 and 11 (net 17) species from four families were captured in 2008 and 2009, respectively, from an effort of 143 each (net 286) sampling nights. This represents eight new recordings for the WCNR and approximately 85%, 45.9% and 17.7% of the total species recorded in the WCNR, BLA and Borneo, respectively. Over both years the most commonly captured species was by far *Penthetor lucasi* followed by *Hipposiderous cervinus*, which were comprised of 63% and 22% of the total (2008 + 2009) captures, respectively. Four and eight species were recorded as the new locality records for Wind Cave (WC) and WCNR, respectively, with *Rhinolopus arcuatus**, *H. larvatus**, *H. coxi**, *H. ridleyi*, *H. galeritus**, *Kerivoula pellucida*, *Tylonycteris robustula* and *T. pachypus* being new records for WCNR and those marked with an asterisk (*) being new records for WC. This documentation is of importance for forest conservation and management in future.

KEY WORDS: Chiropteran, Limestone, Conservation

INTRODUCTION

Classified in the order Chiroptera, bats can be distinguished from other mammals through their capacity of true flight (Payne et al., 1985; Koopman, 1994; Kunz and Pierson, 1994; Francis, 2008). In terms of biodiversity, they are the second largest order in the class Mammalia after rats and squirrels (Rodentia), and are highest in diversity in both the tropical and subtropical regions (Corbet and Hill, 1992; Jones et al., 2002).

As one of the widely distributed taxa, bats takes up many feeding niches, including fruits, leaves, flowers, nectar, pollen, insects, fish, other small vertebrates

and blood. They are known to roost in foliage, caves, rock crevices, hollow trees, dead bamboo and have adapted to human-made structures including buildings (Kunz and Pierson, 1994; Francis, 2008). Equally, they play a major role in ecosystem services, including seed dispersal and pollination as well as insect regulation control (Payne et al., 1985; Davidson and Zubaid, 1992; Mickleburgh et al., 1992; Pierson, 1998; Tan et al., 1998).

Caves have been long known to support large colonies of bats (Meredith and Wooldridge, 1992). Thus, caves or limestone areas have often been the main focus for researchers to assess the diversity of bats, especially in Borneo. Among the