

Small Mammals from Samunsam Wildlife Sanctuary, Sarawak, Malaysian Borneo

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ABSTRACT

Small mammal survey was conducted at Samunsam Wildlife Sanctuary (WS) from 20th until 25th October 2014. This survey aimed to assess the diversity of small mammals particularly from the order Chiroptera, Insectivora, Rodentia and Scandentia. These orders were targeted primarily to gain better understanding on the ecology and distribution of these understudied taxa in Borneo. Our survey recorded a total of 30 species of small mammals from six trapping nights. Order Chiroptera was recorded with the highest number of species (seven families; 22 species), followed by order Rodentia (two families; six species) and order Scandentia (two species). None was recorded from the order Insectivora. The most abundant species were *Rhinolophus trifoliatus* (n=6) for Chiroptera, *Maxomys whiteheadi* (n=7) for Rodentia and *Tupaia tana* (n=5) for Scandentia. Data presented here is the first comprehensive information on Samunsam's small mammals. This data can be used to gain better insights on the population trends at regional and local scale, as well as in improving the management plans of Samunsam WS. Although species diversity in Samunsam WS is comparable to other sites in western Sarawak, result presented here need to be treated with caution as this is the first comprehensive study that only cover area close to park headquarters.

Keywords: Chiroptera, diversity, Insectivora, inventory, Rodentia, Scandentia

INTRODUCTION

Sarawak is known as the state in Malaysia that has the most number of totally protected areas (TPAs), followed by Sabah. Categorically, there are three types of TPAs in Sarawak namely, National Park (NP), Wildlife Sanctuary (WS) and Nature Reserve (NR) (Thorsell, 1985). These TPAs varies in size and accessibility. NP is open to the public and this is the most visited area among the three TPAs. Similarly, NR is also open to public and serve as a recreational site but is smaller in size, usually less than 1,000 ha. Unlike the other TPAs, WSs are limited only for research and conservation where general public have limited access to these sites. Nevertheless, they play important role in promoting conservation of wildlife and habitat especially among general public.

WS was specifically established with the aim to preserve and conserve the vulnerable

ecosystems or endangered wildlife in a particular area. The establishment of WS portrays the effort from the state government in recognising the important role and the necessities to safeguard the natural environment and biodiversity. There are several WSs established in Sarawak such as Samunsam WS, Pulau Tukong Ara Tukong WS and Lanjak Entimau WS are situated in Western Sarawak, whereas Sibuti WS in Miri, Eastern Sarawak. Samunsam WS was gazetted in 1979, making it the oldest WS established in Sarawak. After the expansion of the gazetteer, this WS covers an area of about 16,706 ha (Figure 1). Samunsam WS stretches from the border of Indonesia towards 2 km of the coast, and the undulating terrain is not more than 25 m above sea level, with the Samunsam River flowing through it. The soil structure comprises of alluvium soil that can be found along the river to terrace alluvium and loamy sandstone. These soil structure and landscape provide optimum