

## CHECKLIST OF BATS IN ULU MUDA FOREST RESERVE

**Nor-Hazwani AR<sup>1\*</sup>, Shahfiz MA<sup>1,2</sup>, Faradiana NMF<sup>1</sup>, Nur-Aina-Amira M<sup>1</sup>, Kaviarasu M<sup>1,3</sup>, Manoshini A<sup>1</sup>, Muhammad-Syaridzwan MB<sup>1</sup>, Anis-Zafirah ZB<sup>1</sup> & Muhammad-Asyraff A<sup>1</sup>**

<sup>1</sup>Zoology Branch, Forest Biodiversity Division, Forest Research Institute Malaysia (FRIM) 52109 Kepong, Selangor

<sup>2</sup>Faculty of Science and Technology, The National University of Malaysia, 43600 Bangi, Selangor, Malaysia

<sup>3</sup>Faculty of Applied Sciences and Technology, University Tun Hussein Onn Malaysia (Pagoh Campus), 84000 Muar, Johor Darul Ta'zim, Malaysia

\*norhazwani@frim.gov.my

**Abstract-** Assessments on bats were conducted in Ulu Muda Forest Reserves on 19–25 September 2021 and 21 – 27 November 2021 respectively. This study aims to record and update bats' populations in this forest reserve. Active sampling was carried out within four compartments of Ulu Muda Forest Reserve, namely Compartment 127, 128, 104, and 105. A total of 10 mist nets were deployed in each compartment to capture frugivorous bats. Two harp traps were also set up in each compartment to trap insectivorous bats. In addition, a bat detector was also used to record the echolocation emitted by the insectivorous bats in the study areas. Overall, this study recorded 36 individuals of 12 species from 4 bat families. Of these, one frugivorous bat from family Pteropodidae (21 inds ; 5spp) and three insectivorous bat families which are Hipposideridae (2 inds ; 2spp), Rhinolophidae (12 inds ; 4spp) and Vespertilionidae (1 ind; 1sp). The most abundant frugivorous bat recorded are Lesser short-nosed fruit bat (*Cynopterus brachyotis*) and for insectivorous bat, Intermediate horseshoe bat (*Rhinolophus affinis*). This insight is expected to assist the stakeholders in developing a management plan for the forest to be able to serve as an important habitat for the survival of bat populations.

**Keywords:** Checklist, bats, Ulu Muda forest reserve, frugivorous bats, insectivorous bats