EVALUATING BIODIVERSITY: A CAMERA TRAPPING STUDY OF MAMMALS AND BIRDS IN THREE FOREST MANAGEMENT UNITS OF SARAWAK

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ABSTRACT

A camera trapping assessment was conducted in three Forest Management Units (FMUs) in Sarawak particularly Gerenai FMU, Gaat-Mengiong FMU and Mujong-Melinau FMU to determine the diversity of mammals and bird species. A total of 25 to 50 camera traps were installed in the FMU for a duration of three to six months. The findings recorded a rich variety of mammals and birds species including endangered and vulnerable species (RTE species) such as Clouded leopard, Sun bear, Bay Cat, Sunda pangolin, Great Argus and Bulwer's Pheasant. A total of 6581 pictures from 2663 camera traps days recorded in Gerenai FMU comprising 10 orders and 20 families, with 31 mammals, 7 birds and 2 reptiles. Meanwhile in Gaat-Mengiong FMU, a total of 8099 photos were taken over the course of 4825 camera trap days and the records consist of 14 orders and 25 families, with a total of 38 mammals, 12 birds, and one reptile. In Mujong-Melinau FMU, a total of 15568 photos were recorded over a period of 6300 camera trap days and comprises a total of 40 mammals, 22 aves, and two reptiles with a diverse range of 16 taxonomic orders and 29 distinct families. The results from this study will provide valuable insight on species diversity and species richness in selected Sarawak's FMU and underlines the importance of concentrations of biological diversity including endemic species, rare, threatened or endangered species, that are significant in an ongoing conservation effort during sustainable logging practices to minimize negative impacts on these FMU habitats, even if certain species were not detected during this assessment.

Keywords: Biodiversity, camera trapping, Forest Management Units, species richness, wildlife conservation