

Nocturnal terrestrial mammals population in Sabah Forest Industries (SFI) forest plantation, Sipitang

Abstract

Biodiversity conservation has been given a significant emphasis in recent years in forest plantation establishment. This study investigates the terrestrial nocturnal mammals in the forest plantations of *Acacia mangium*, Sabah Forest Industries Sdn. Bhd. Sipitang, Sabah under the FMU 7. The main objective of this study was to conduct a preliminary assessment of nocturnal terrestrial mammals. Two methods that were used for the study were walk spotlight counts and vehicle spotlight counts. Data was analysed using Shannon-Weiner (H') and Simpson's Index of Diversity ($1-D$). King's census method was used to calculate the population density. The study was conducted from the 1st -21st August 2015. There were no sightings during the walk spotlight counts survey. During the vehicle spotlight counts survey, three common palm civets and one smooth tooth palm civet were recorded. Results from the diversity index that was obtained from vehicle spotlight counts survey was $H'=0.56$ and $1-D=0.5$. The encounter rate with hunters during the night survey were much higher as compared to the observed terrestrial mammals. The population density of nocturnal mammals was very low in our study site. The high encounter rate of hunters during the study indicates high hunting pressure that might primarily cause the observed results. There is a need to initiate the conservation of nocturnal mammals in the site, as it contributes to the ecosystem balance in forest plantations.