Survey of the bat fauna of the University of the Philippines (UP) Arboretum

by

Sarah Beth Bendoy, Krizchelle Ching Sai, Ma. Elizabeth Enriquez,
Nelson Jose Eslao Jr., Joanna Marie Guerra, Amabel Pia Lapuebla, Jeffrey Libuit,
Ma. Rizza Mariano, Raciela Regina Ramiro, and Aaron Jefthy Yee

Institute of Biology, College of Science, University of the Philippines Diliman, Quezon City Philippines 1101

ABSTRACT

Bats were captured in the University of the Philippines (UP) Arboretum for 16 netnights to determine the bat species diversity and to provide an estimate of the population in the area. Mistnetting, using mesh monofilament mistnets, was utilized to perform the capture. Morphological measurements were taken and compared with published literature for the purpose of identification. Only two genera of bats were identified, Rousettus and Ptenochirus, indicating a very low species richness, with Rousettus having the higher abundance. The captured bats were marked to facilitate population estimate in case of recapture. Population estimates were done using the Jolly-Seber model, showing very low numbers of individuals for both species, with estimates of 7.5 individuals and 4 individuals for Rousettus and Ptenochirus, respectively. Moreover, less number of juvenile bats than adults was observed for both genera.

Species-effort curve showed that a total of eight nights was sufficient to sample the population of the bat fauna. A value of 0.278 for Shannon's index of diversity was calculated, indicating a low species diversity.