

**DIVERSITY AND DENSITY OF BIRD POPULATION IN CONSERVATION AREA,
SEGALUID LOKAN FOREST RESERVE, KTS PLANTATION SDN. BHD.**

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ABSTRACT

This study is to determine the diversity and density of bird population at KTS plantation, Segaliud Lokan Forest Reserve. There have been many previous studies that have been conducted regarding the diversity and density of bird populations but still little information about bird populations, especially in the conservation area in KTS Plantation which was logged in 2008. The study was conducted during the month of July until August 2016 using line transect method. The study was conducted over 21 days on four transect lines. Each line transect 500 m long and has 10 observation point and observation began at 06:00 am to 11:00 am daily. Plant vegetation survey conducted to identify the structure of forest vegetation was made using (10 m wide x 20 m long) x 5 = 0.1 ha plot. Two analysis was used to find the value of diversity which is Shannon-Wiener Index (H') and Simpson's Index (1-D), while DISTANCE 6.2 to find the density. After the data is analyzed, the diversity of bird species in the study area was high ($H' = 3.36$; $1-D = 0.997$) and density of bird species was 4.12 (SE= 0.3851; AIC= 2291.70; %CV=9.34). There were 306 individual birds of 46 species from 22 families were identified and recorded throughout the study. Birds of families Cuculidae, Chloropseidae, Bucerotidae, Irenidae, and Nectarinidae are a species that dominates the habitat in the study area. In conclusion, based on comparison with previous studies, diversity of bird population is high while the density of bird population is low. Secondary forest or logged forest if left without disturbances can play very important role in conservation of primary bird species and endangered bird species.