

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

**NAME: RIDHWAN BIN JUMA'AT**

**SUPERVISOR: DR. JEPHTE SOMPUD**

**PROGRAMME: FOREST PLANTATION AND AGROFORESTRY**

**2017**

**ABSTRACT**

A study of the density and diversity of mammals in the conservation area Compartment 21 Segaliud Lokan Forest Reserve, KTS Plantation, Sandakan, Sabah. The study was conducted over a period of 21 days using line transect to identify the density and diversity of species in the Compartment 21 Segaliud Lokan Forest Reserve. There are four transect lines used for each 500-meter transect line. Mammal observations made by using binoculars and rangefinder Lasertech Trimble 360B along the line transect. Over a period of 21 days, there are 56 individual mammals and 12 species are found that can be recorded in the data. Among the 12 species identified as *Callosciurus prevostii* (Prevost's squirrel), *Exilisciurus Exilis* (Plain pygmy squirrel), *Lariscus hosei* (Four-striped ground squirrel), *Macaca nemestrina* (pig-tailed macaque), *Martes flavigula* (yellow-throated martens), *Pongo pygmaeus* (Orang-utan), *Presbytis hosei* (Hose's langur), *Presbytis rubicunda* (Maroon langur), *Sundasciurus tenuis* (Slender squirrel), *Tupaia minor* (lesser shrew) and *Tupaia picta* (painted treeshrew). The density of mammals in King's Census analysis in the compartment 21 is 29.9 individuals per square kilometer. Using analytical index of Shannon-weiner and Simpsons, diversity of species can be determined by the  $H' = 2.05$  for Shannon-Wiener, while the index Simpsons 0.85. Based on these three analysis data the diversity and density of species have been identified.