Kepadatan populasi dan karakteristik habitat Macaca Tonkeana Meyer 1899 di dataran Lindu, Taman Nasional Lore Lindu, Sulawesi Tengah

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Abstrak

Sulawesi is the biggest and the most important island in Wallacea. This island has many endemic species including macaques. Seven species of macaques are recognized endemic in Sulawesi. There are Macaca maura, M. tonkeana, M. ochreata, M. brunnescens, M. hecki, M. nigrescens and M. nigra.
Compared to the other species of macaques in Sulawesi, M. tonkeana is more secure because its population decline its not as high as the others. But, the increase of human population around macaques habitat and the changing of forest structure and composition are the biggest threat for their lives.
Forest destruction and habitat loss also occured in Lore Lindu National Park, Central Sulawesi. Forest clearance for cocoa and coffee plantations are the cases which found more in that area. Besides that, exploitation of timber, especially rattan is the most common human activity. Those cases will jeopardize the population of wildlife including M. tonkeana.
Although the extinction risk of M. tonkeana is not readily evident at the moment, the increasing human activities in Lore Lindu National Park may present a serious threat to these endemic species. The main objectives in this study were to estimate the population density of M. tonkeana in two different habitats, and to know the characteristics of the habitat in that study area.
The study was conducted in Lindu Land, Lore Lindu National Park, Central Sulawesi. The two study sites including (1) forest which does not have any land clearance for agriculture but reveices human disturbance such as timber exploitation especially rattan (two transect of 2,5 km and 3 km) and (2) forest which is disturbed by agricultural clearance (two transect of 2,3 km and 3 km).
Data collection was carried out from November 2002 to February 2003. To estimate population density of M. tonkeana, replication of forest line transect were walked. These involved slow, quiet walkings, with stop every 100 meter to visually scan the forest and listen for sound. All individuals and groups sigthed were recorded, and measurements of the average visual distance on either side of transect line to provide an estimate of area covered were taken.
Vegetation study plots were established to study the composition and structure habitat of M. tonkeana. Twenty seven plots of 20 x 20 m were located in the forest and twenty six in agricultural forest. In each plot, all trees 10 cm diameter-at-breast height (DBH) were identified to species and precisely measured. Sample species were collected and identified at the Herbarium Bogoriense, Bogor. From those data, species and family important value, species diversity and similarity index were calculated.
The result indicated that supply of food for M. tonkeana in their habitat had effect on their density. Population density of M. tonkeana in the agricultural forest habitat was higher than in the forest habitat. In forest habitat, the density were 0.97 ± 0.52 groups/km2 and 8.70 ± 7.49 individuals/km2 while agricultural forest had higher estimated population of 1.36 ± 0.31 groups/km2 and 14.09 ± 5.37 individuals/km2.
Seven species of figs as keystone source for vertebrates frugivorous were found in agricultural forest with total individuals were twelve. In the forest, five figs were found in total nine individuals. The diversity index

for food trees in the agriculture forest habitat (2,4130) was higher than forest habitat (2,0591). Macaques can find more varieties of food in agricultural forest, because there were many agricultural products.

The results shows that supply of food and human activities in the habitat of macaques had an influence to the density of macaques. Forest clearance for agricultural made macaques loss their habitat and diversity of foods. Exploitation of timber especially rattan also disturbed the macaques.