ABSTRACT

WILSON NOVARINO. Long Term Dynamics of Understorey Bird Community in Sipisang, West Sumatra. Under the supervision of ANI MARDIASTUTI, LILIK BUDI PRASETYO, REVIANA WIDJAJAKUSUMA and YENI ARYATI MULYANI.

The aim of this study was to analyze long term dynamics in understorey bird in Sipisang. Field study was conducted from May 2002 to October 2004, in total 284 days which equal 51,120 net-hours. The study was conducted by using mist nets, deployed continuously on three different locations each consisted of 60 m in line. Mist nets were erected on ground level (20 cm) from 06.00 to 18.00 WIB, and were checked every two hours. Captured birds were identified, tagged, measured and weighed, photographed and then released in the vicinity of the location. Vegetation analyses was also conducted to figure out the differences between each location. In total 1061 individuals belongs to 103 species, 28 families and 9 orders were tagged during the study. Eight species are migrants and one species (Orthotomus sutorius) is a new record for Sumatra mainland. During the study there were also 759 recaptured individuals. The accumulated number of captured species tended to flatten, although the number of individuals still increased. On the guild level the dominancy was shown by the insectivore-rugivores. Species turn-over varied from 33% to 60%. Molting, breeding and juvenile recruitment were overlap and observed during the year. The peak of breeding season was recorded in June, while juvenile recruitment was in July and the peak of molting was in August. All of those activities correlated negatively with monthly rainfall average. The bird communities varied between vegetation types. The number of individuals and indexes of diversity were higher in Hutan Pongir Ladang (HPL = forest border with agricultural land) rather than other locations (461 individuals, H’ = 3.75). Bird community in HPL also has the higher index of similarity with burned forest (HBT) (Cj = 0.6) than forest in riverside (HPS) (Cj = 0.34). Negative correlation also recorded between monthly rain average with average monthly total individual captured (r = -0.38), newly captured individual (r = -0.24) and number of recapture (r = -0.14).

Key words: Long term dynamic, bird, Sumatra