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DIVERSITY AND ABUNDANCE OF UNDERSTOREY AVIFAUNA

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INTRODUCTION

A study on diversity and abundance of understorey avifauna was conducted at Fairy Cave and Wind Cave, Bau for six days, 27 July to 2 August 2003. The purpose of the study was to gather information on avifauna of the Bau Limestone Area and to compare the species diversity and relative abundance between disturbed and less disturbed areas. Disturbed areas are areas of shrubs mixed with cleared lands planted with cocoa and com. Less disturbed areas are areas with shrubs and scattered trees with no agriculture. Twenty-five mist-nets were deployed for 12 hours daily during the study period. A total of 101 birds was mist-netted comprising 33 species from 14 families. In the less disturbed area, a total of 35 birds was mist-netted representing 17 species from 11 families. The dominant species mist-netted was mossy-nest swiftlet (*Collocalia salangana*) with 11 individuals. In the disturbed area, 42 birds were mist-netted representing 23 species from 13 families. Red-eyed bulbul (*Pycnonotus brunneus*) was the dominant species mist-netted with five individuals. The statistical analysis revealed that there was no significant difference in species diversity index between disturbed and less disturbed areas. We anticipate that the number of species would increase if the study period was extended.

Keywords: diversity, abundance, understorey birds, limestone, disturbed area, less disturbed area

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Limestone forests are characterized by less tall trees and dense with a slightly impoverished but distinctive flora and fauna (MacKinnon and Phillipps, 1993). Soils on limestone forests are very thin, comprising silty or