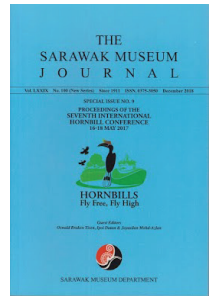




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Citation: *Sarawak Museum Journal*, LXXIX (100) (2018): 295-310**DISTRIBUTION OF HORN BILLS IN WESTERN SARAWAK AND THE WAY FORWARD FOR THEIR CONSERVATION IN SARAWAK**Philoveny Pengiran¹, Sim Lee Kheng³, Oswald Braken Tisen³,
Andrew Alek Tuen² and Jayasilan Mohd-Azlan^{1,*}¹Faculty of Resource Science and Technology,
Universiti Malaysia Sarawak (UNIMAS), 94300 Kota Samarahan²Institute of Biodiversity and Environmental Conservation,
Universiti Malaysia Sarawak (UNIMAS), 94300 Kota Samarahan³Sarawak Forestry Corporation, Lot 218, KCLD, Jalan Tapang,
Kota Sentosa, 93250 Kuching*Corresponding author. Email: azlan@unimas.my**ABSTRACT**

There are eight species of hornbills in Borneo. However, little is known on their distribution and ecology in western Sarawak. Their large size requires habitats that consist of large forest patch with large fruiting trees for feeding and nesting. They have an important ecological niche as seed dispersers throughout the tropical rainforests of South East Asia. This study briefly describes the distribution of hornbills in Totally Protected Areas (TPA) within western Sarawak based on data collected by Sarawak Forestry Corporation from 2013–2016. We discuss the hornbill species distribution and the species area relationship within western Sarawak. The Rhinoceros Hornbill (*Buceros rhinoceros*) recorded the highest occupancy value (psi) and probability of detection (p), followed by the Black Hornbill (*Anthracoceros malayanus*) and the Bushy-crested Hornbills (*Anorrhinus galeritus*). The Helmeted Hornbills (*Rhinoplax vigil*) appears to occur in fewer TPA within western Sarawak. A long-term conservation plan is required to ensure the sustainability of the hornbill population through extending protected areas and connecting forest patches. In light of this, the research and conservation needs for these species in Sarawak are highlighted to ensure their long-term survival in the wild.

Keywords: Bucerotidae, Distribution, Ecology, Totally Protected Areas, western Sarawak

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Abstract

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INTRODUCTION

Hornbills from the family Bucerotidae are generally large in size and their habitat consists of large forest patch with large fruiting trees for feeding and nesting. There are eight species of hornbills in Borneo and they are regarded as important in socio cultural and socio politics aspect