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SPECIAL ISSUE NO. 9
PROCEEDINGS OF THE
SEVENTH INTERNATIONAL
HORNBILL CONFERENCE
16-18 MAY 2017



HORNBILL
Fly Free, Fly High

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SARAWAK MUSEUM DEPARTMENT

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CONTENTS

	<i>Page</i>
Preface	ix
Message from Chief Minister of Sarawak	xi
Message from Organising Chairman, Seventh International Hornbill Conference State Level Committee	xii
Message from Former Chief Executive Officer, SARAWAK FORESTRY Corporation	xiii
 <i>Conservation Status of Hornbills – Threats, Trade and Population</i> 	
Future Outlook of Building Indonesia National Hornbill Monitoring Protocol <i>Nurul L. Winarni, Yok-Yok Hadiprakarsa and Iwan Hunowu</i>	1
Wreathed Hornbill (<i>Rhyticeros undulatus</i>) in Mount Ungaran Central Java: Status and Factors that Threaten Its Existence <i>Margareta Rahayuningsih, Nugroho Edi, Nur Rahayu Utami, Jamaludin, D. and Tsabit Azinar Ahmad</i>	17
Habitat and Conservation Status of Rufous-necked Hornbill in Jigme Singye Wangchuck National Park, Bhutan <i>Sonam Dorji</i>	25
 <i>Hornbill Biology and Husbandry</i> 	
Inset Tree Cavity Nesting Site: A Method of Cavity Creation for Oriental Pied Hornbill (<i>Anthracoceros albirostris</i>) <i>Samantha Kwan and Brian French</i>	59
Artificial Nest Boxes for Hornbill Conservation: A Case Study in Kinabatangan, Malaysia <i>Ravinder Kaur, Rosli Ramli and Marc Ancrenaz</i>	67

Great Hornbill Casque Functions as a Thermoregulatory Radiator <i>Stephen K. Slaughter and Pilai Poonswad</i>	87
Oriental Pied Hornbill (<i>Anthracoceros albirostris</i>) in west Brunei: Successful Nest Box Breeding in a Residential Environment <i>Johanna G.I. Coyajee-van Rietschoten, Iwan de Lugt, Jacqueline Henrot, Novi Dols and Hans Dols</i>	97
Cavity Management Enhanced the Allelic Distribution of Great Hornbills in Eastern Khao Yai National Park <i>Nareerat Viseshakul, Pipat Jirapiti, Kanchid Srinapawan and Pilai Poonswad</i>	109
Seasonal Variation in Hornbill Densities in Coffee Plantations in the Anamalai Hills, Western Ghats, India <i>Pooja Y. Pawar, Rohit Naniwadekar, T.R. Shankar Raman and Divya Mudappa</i>	117
<i>Habitat Fragmentation and Connectivity</i>	
Spatial Distribution and Habitat Choice of Two Sympatric Species of Hornbills in Vidarbha, Maharashtra, Central India <i>Gajanan A. Wagh, Jayant Wadkar and Raju Kasambe</i>	131
Community Structure of Hornbills in an Oil Palm Landscape in East Kalimantan, Indonesia <i>Gilang Fajar Ramadhan, Bandung Sahari and Joko Supriyono</i>	147
Sumatran Hornbills in Fragmented Forest Areas in Oil Palm Plantation in South Solok, West Sumatra <i>Fernando Dharma, Wilson Novarino and Jabang Nurdin</i>	159
Variability in Gut Passage Times of Asian Hornbills <i>Ushma Shukla, Rohit Naniwadekar, Aakanksha Rathore and Aparajita Datta</i>	167

CAMERA TRAPPING: A TOOL TO STUDY HORNIBILLS?

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Abstract

Of the 57 species of hornbills in the world, 25 species are recorded in Africa, 32 species are recorded in Asia but only eight occur in Borneo. However, due to logging, hunting and forest fragmentation, the Bornean lowland forest often does not host all the species at once. The study of using remotely triggered infrared cameras in avifauna research is commonly used for medium to large terrestrial mammals, and birds, such as pheasants. Documentation of rare and new species presence records, behavioural studies, and activity patterns could also be included in the application of camera trapping in the study of birds. From the 304 camera trapping sites distributed throughout Sarawak, two species of hornbills were photographed during the study period: the White-Crowned Hornbill *Berenicornis comatus* and Asian Black Hornbill *Anthracoceros malayanus*. These images represent approximately 0.01% (34 out of 29,618 images) of the overall independent photos from a total effort of 29,470 camera trapping nights. Although data are insufficient to support the activity overlap between these two species, some baseline information on the behaviour of hornbills has been observed.

Keywords: activity overlap, Borneo, camera trapping, hornbills

INTRODUCTION

Hornbills in Borneo are canopy-dwelling, monogamous pairs and hole-nesters (Kinnaird & O'Brien 2007; Phillipps & Phillipps 2014). They are well known for their important role in regenerating and maintaining tropical rainforest by dispersing seeds (Estrada & Fleming 1986; How 1986; Fleming & Estrada 1993; Hamilton 1999; Hubbell *et al.* 1999; Kinnaird & O'Brien 2007). Apart from regenerating tropical rainforests, hornbills are also useful indicators of forest condition and human disturbance as their habitat preference is for non-fragmented forest and forest with large fruiting trees for their feeding and nesting habit (Gale & Thongaree 2006). They are also known