

A Review of the Proboscis Monkey (*Nasalis larvatus*) in Borneo, with Reference to the Population in Bako National Park, Sarawak, Malaysian Borneo

MOHAMAD BIN KOMBI^{1,2*} AND MOHD TAJUDDIN ABDULLAH^{2,3}

¹ Forest Department Sarawak, Wisma Sumber Alam Jalan Stadium, 93060 Kuching, Sarawak, MALAYSIA

² Department of Zoology, Faculty of Resource Science and Technology, University Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, MALAYSIA

³ Centre for Kenyir Ecosystems Research, Kenyir Research Institute, Universiti Malaysia Terengganu, 21030 Kuala Terengganu, Terengganu, MALAYSIA

* Corresponding Author: Mohamad Bin Kombi (mohamadk@sarawak.gov.my)

Received: 28 August 2014; Accepted: 14 November 2015

Abstract.— The Proboscis Monkey (*Nasalis larvatus*) is endemic to the Island of Borneo. It dominates from the coastal areas to the headwaters of some major rivers. In Sarawak, its distribution occurred in coastal and swamp areas based on previous studies. The population in the Bako National Park, Sarawak is fluctuating when compared to previous studies. The total population of the proboscis monkeys is estimated about 306 individuals compared to the lowest of 111 individuals in 2005. The fluctuating numbers of *N. larvatus* population is assumed to be at the optimum carrying capacity Bako National Park. There are still large areas of habitat outside the Bako National Park that can support the increasing population size that must be secured to protect a viable population in the long term.

KEY WORDS: Bako National Park, population, distribution, *Nasalis larvatus*, proboscis monkey, Malaysian Borneo

INTRODUCTION

The total number of proboscis monkeys living in Borneo is widely believed to number in the tens of thousands and number of publications and GIS information all pointed to the fact that proboscis monkey habitats are declining at the rate of about 2% per year (Manansang et al., 2005). Population size and trend in population size have been found to be major indicators of population health and viability (Reed et al., 2003; O'Grady et al., 2004). So there is a big question about how and why particular ecological factors influence primate individuals, groups and population (Wrangham, 1980; van Schaik, 1983; Isbell 1991; Sterck et al., 1997). While primatologists have used a variety of approaches to address

these questions, the study of a particular taxon across a range of ecological conditions provides a particularly useful framework for investigating key questions about the interactions between primates and their habitats (Strum and Western, 1982; Davies, 1994; Doran et al., 2002; Morrogh-Bernard et al., 2009; van Schaik et al., 2009). Furthermore, habitat quality can have important implications for primate populations on the individual, group and population levels (Manansang et al., 2005). For example, habitat quality can influence individual reproductive success, group size, and a population's probability of persistence over the next generations.

In Sarawak, based on information of more than two decades, less than 1,000 animals are believed to be remaining in