

**Research Article**

## **Links between bushmeat species occupancy and indigenous hunting: a pilot study from Royal Belum State Park, Peninsula Malaysia**

**Lauren Pullella<sup>1</sup>, Abdul Rashid Khan<sup>2</sup>, Neil Pettit<sup>1</sup>, Peter Christiaan Speldewinde<sup>1,\*</sup>**

<sup>1</sup>*Albany Campus, University of Western Australia. PO Box 5771, Albany WA 6332 Australia*

<sup>2</sup>*Department of Public Health Medicine, RCSI & UCD Malaysia Campus, George Town, Malaysia*

*\*Corresponding Author's E-mail: peter.speldewinde@uwa.edu.au*

(Received: November 11, 2020; Revised: April 21, 2021; Accepted: July 30, 2021)

### **ABSTRACT**

Indigenous communities have been hunting bushmeat species in the tropical forests of South East Asia for over 40,000 years. Today however, many bushmeat species are threatened by unsustainable hunting compounded by the pressures of decreasing forest area and growing human populations. This pilot study aimed to investigate the relationship between the Jahai, an indigenous hunter gatherer tribe and the mammal bushmeat species which they hunt in Royal Belum State Park (RBSP), peninsula Malaysia. A wildlife triggered camera survey was conducted between early May and late June 2018, from which data was used to calculate occupancy predictions for observed Jahai hunters and bushmeat species. Four mammal species occupancy were found to be associated with Jahai hunting pressure, all of which were preferred species among Jahai communities. Species richness of bushmeat species was also found to increase with Jahai occupancy while species diversity index declined, suggesting that Jahai hunting pressure was concentrated on a select few species, even when bushmeat species richness was high. Vegetation cover and the presence of saltlicks were significant drivers of species occupancy. Based on these findings, Jahai hunting pressure should not be disregarded as a threat to bushmeat species in RBSP.

**Key words:** bushmeat species, indigenous hunting, species occupancy, tropical forests

