

Project Update: November 2019

I am delighted to inform you that I participated in the "11th Asian Raptor Research and Conservation Network" that was held in Bali, Indonesia. I took part as a poster presenter using a data of the project entitled "Eagle of the Farmlands: biology, threats and their conservation actions of the Indian Spotted Eagle (*Clanga hastata* Lesson 1831) in Lowlands of Nepal" funded by The Rufford Foundation. I was rewarded as a best poster presenter in the conference. Below are photos of the awarded certificate, the articles abstract accepted for the conference book and the poster that was presented during the conference.



Prey Item Selection and Prey Delivery of Indian Spotted Eagle during Chick-Rearing Period in Nepal

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Introduction

- Recently separated from European Lesser Spotted Eagle [1]
- Rare species, small population, Global status - Vulnerable [2]
- Could be termed as "data deficient" – poor quality and limited understanding on its breeding biology and diet of Indian Spotted Eagle
- Foraging area - open wetlands, marshy areas, within or near the deep forest
- Prey items - small mammals, amphibian, medium-large sized birds, reptiles and insects
- Beigaum, southwest of Karnataka - rodents as a major dietary
- Several diet studies - conspecific through out its distribution range
- Wider vertical breeding range has high diversity of prey items (major- small mammals other diet-birds, reptiles, amphibians, pisces and insects), Wet land (Georgia- Major dietary Frog)
- Warmer and drier place (Greece)- ratio of reptiles significantly high
- Alternative prey hypothesis- Switching main prey items (rodents) into amphibians (Frog) when major prey abundance went down
- Distribution of Indian Spotted Eagle
Largely restricted to Indian-subcontinent - Bangladesh, Cambodia, Myanmar, India, Pakistan and Nepal, up to 1000 m a.s.l

Table 3. Work partition of adult male and female

Nest	Delivery by male (%)	Delivery by female (%)	Feeding eaglet Male (%)	Feeding eaglet Female (%)	Feeding by this
Nest "A"	100	0	2.27	97.73	
Nest "B"	97.62	2.38	0	100	
Nest "C"	86.96	13.04	0	88.09	
Total (%)	94.86	5.14	0.76	88.60	

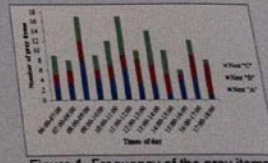


Figure 1. Frequency of the prey items

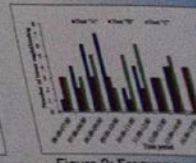


Figure 2. Frequency of the prey items



CERTIFICATE OF PARTICIPATION

This certificate of participation is given to

Sandesh Gurung

For taking part as

BEST POSTER PRESENTER

In The 11th Asian Raptor Research and Conservation Network Symposium at the Udayana University, Bali - Indonesia on 10-11 October 2019
Given this 11th day of October 2019 at the Nusantara Hall,
Agro-complex Building, Udayana University Sudirman Campus, Bali - Indonesia

Toru Yamazaki

TORU YAMAZAKI
President,
Asian Raptor Research and Conservation Network

Luh Putu Eswaryanti Kusuma Yuni

LUH PUTU ESWARYANTI KUSUMA YUNI
Chairperson of the committee,
Udayana University

POSTER PRESENTATION ABSTRACTS

Topic: Raptor ecology and climate change; Forest and raptors

Prey Item Selection and Prey Delivery of Indian Spotted Eagle during Chick-Rearing Period in Nepal

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The Indian Spotted Eagle (*Clanga hastata*) is a vulnerable species and distributed largely limited within the Indian sub-continent. This species is recently separated from Lesser Spotted Eagle (*Clanga pomarina*) and little information exists on the species' ecology and prey item selection. Here we present the first ever study on the diet of Indian Spotted Eagle during breeding season in lowlands of Nepal. In 2018, we conducted 720 hrs. observation on active nests (n = 3) during chick-rearing period (June – August) to record prey items delivery. In each day, observation was conducted from dawn to dusk that allowed us to record all deliveries of the day. We reported a total of 132 prey deliveries; frogs contributed the highest (70.3%) proportion among the selected prey items, followed by small mammals (14.41%), birds (7.58%), lizards (0.73%), and a small proportion of unidentified (6.93%) prey items. Male Indian Spotted Eagle delivered most of the prey items (94.70%) and female mostly fed the eaglets. The most preferred feeding time to the eaglet was between 16:00 – 17:00 hrs, followed by 08:00 – 09:00 hrs. Average daily delivery rate of prey was 2.21 ± 0.73 (range = 0 – 3). Binomial test showed no significant difference in the deliverance of prey items before and after the noon time among in all active nests. Although this area is rich on several species of prey items, their preference of frogs in a diet during breeding season could have two possible reasons. First, in our study area chick-rearing period of Indian Spotted Eagle occurs in the middle of monsoon season that favors the growth of frogs in the flooded fields making them easier to be hunted. Second, frogs' meat is softer than other prey items and nestlings of Indian Spotted Eagle might have preferred than others.

Keywords: Indian Spotted Eagle, Nepal, Chick-rearing period, prey items frogs



The 11th Asian Raptor Research and Conservation Network International Symposium, Bali - Indonesia | 10-11 October 2019