



### Food spectrum of Common Krait (*Bungarus caeruleus*): implications for snakebite prevention and snake conservation

Deb P. Pandey<sup>1</sup>, Pranish Bhattarai<sup>2</sup>, Ram C. Piya<sup>2,3</sup>

<sup>1</sup> South Asian Clinical Toxicology Research Collaboration, University of Peradeniya, Sri Lanka, Clinical Toxicology Research Group, University of Newcastle, Newcastle, Australia

<sup>2</sup> Department of Zoology, Birendra Multiple Campus, Tribhuvan University, Bharatpur, Nepal,

<sup>3</sup> Apex Academy, Bharatpur, Nepal.

**Objectives:** To examine food contents in the gut of dead kraits involved or not involved in snakebite to determine their most favored prey animals.

**Methods:** We examined the gut of 34 dead common kraits (*Bungarus caeruleus*) preserved in collections maintained in hospitals and museums during July 2016 to March 2017 to identify food contents in their stomach and intestine. Coarse food contents were identified comparing morphological features of the prey animals. Fine food contents were studied using hand lens and microscope and food contents were confirmed evaluating general morphological features of the food contents. Sex was confirmed by evaluating the claspers in tail region and gonads.

**Results:** Analysis of gut contents revealed frogs in two cases, non-snake prey animals in five cases (including bird (one partially digested) and rodents (juvenile and adult)), and snake (partially digested) in one case. We could not confirm prey animals using the tiny fragments of several undigested food contents in intestine. The intestine of 10 snakes contained mammalian fur/hair. The average snout-vent length of the study snakes was 739 mm (n = 34, standard deviation = 188 mm, standard error of mean = 32 mm).

**Conclusion:** The fact that the majority of snakes in this study had empty stomachs suggests that snakes entered premises due to hunger or food stimuli. The results provide conceivable reasons of encounters between kraits and people indoors. Food factors (i.e. food stimuli) may have influenced entry of kraits into residences. This information may be useful in the development of effective prevention strategies targeting deadly venomous snakebites. In addition, effective prevention strategies could lessen fear of snakes and minimise culling. Thus, this could affect biodiversity conservation.