REPTILES & AMPHIBIANS

First Record of Scavenging by a Checkered Keelback, *Fowlea piscator* (Schneider 1799) (Natricidae), in Western Maharashtra, India

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Despite the fact that nearly all snakes accept carrion in captivity (Rossi 1992) and many reported instances of scavenging in snakes over the last seven decades (e.g., Cowles 1946; Monapatra 2011; Platt and Rainwater 2011; Ayres 2012; Ghosh and Chaudhuri 2015; Deshmukh et al. 2018), scavenging by wild snakes has been neglected in much of the literature dealing with snake diets and behavior (DeVault and Krochmal 2002). Exploitation of carrion as a food source is difficult to evaluate using methods like stomach-content analyses; thus most observations of scavenging in nature are anecdotal.

Although various species of snakes have been observed scavenging, aquatic and semi-aquatic species have been reported more frequently than others (e.g., DeVault and Krochmal 2002; Lillywhite et al. 2002; Marques et al. 2017). Perhaps because scavenging depends largely on chemical cues, on which these species depend for finding food. The importance of chemical cues for finding carrion in the Brown Treesnake (*Boiga irregularis*) was demonstrated clearly by Shivik and Clark (1997) and Shivik (1999).

The Checkered Keelback (*Fowlea piscator*) is a non-venomous snake found throughout India (Whitaker and Captain 2004). These snake are closely associated with water, inhabiting ditches along roads, streams, stagnant water in paddy fields, and holes and bushes near permanent sources of water. Checkered Keelbacks are generalist predators known to feed

Fig. 1. A Checkered Keelback (*Fowlea piscator*) feeding on a road-killed Wide-spread Fungoid Frog (*Hydrophylax bahuvistara*). Photographs by Nakul Wewhare.

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on insects; fish; frogs, eggs, and larvae; and occasionally birds and rodents (Hossain 2016). Herein, we provide the first report of scavenging by a Checkered Keelback.

At 0630 h on 10 June 2021 at the edge of a road in Pali Khurd, Maharashtra, India (18.2553°N, 17.1804°E; elev. 23 m asl), we encountered a Checkered Keelback trying to swallow the road-killed carcass of a Wide-spread Fungoid Frog (*Hydrophylax bahuvistara*) (Fig. 1). The snake tried to swallow the frog for about two minutes and, when approached by an observer, carried the carcass into dense roadside vegetation. Road-killed frogs could be an abundant source of food at this site, where we observed more than 75 dead frogs along a 5-km section of the road.

The consumption of dead prey would seem to be advantageous for snakes as, unlike live prey, carrion does not fight back and can be found predictably along roads (Bhupathy et al. 2011). Indeed, roadkill-scavenging has been reported in a variety of snakes, including the Cape Cobra (*Naja nivea*; Phelps 2006), Children's Python (*Antaresia childreni*; Trembath et al. 2007), Common Kukri Snake (*Oligodon arnensis*; Pandirkar et al. 2015), Montpellier Snake (*Malpolon monspessulanus*; Ventura 2012), Banded Cat-eyed Snake (*Leptodeira annulata;* Mora-Benavides 1999), and Green Racer (*Philodryas patagoniensis*; Ucha and dos Santos 2017). We speculate that scavenging in snakes is far more common than the literature would indicate and that roads in particular can act as reliable food sources. However, if snakes use road-kills as sources of food, they increase their chances of themselves being killed by vehicles — and that could be an underestimated cause of snake mortality.

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