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Note

ROAD KILLS OF THE ENDEMIC SNAKE PERROTET'S SHIELDTAIL PLECTRURUS PERROTETII, DUMERIL, 1851 (REPTILIA: SQUAMATA: UROPELTIDAE) IN NILGIRIS, TAMIL NADU, INDIA

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ROAD KILLS OF THE ENDEMIC SNAKE PERROTET'S SHIELDTAIL *PLECTRURUS PERROTETII,* DUMERIL, 1851 (REPTILIA: SQUAMATA: UROPELTIDAE) IN NILGIRIS, TAMIL NADU, INDIA

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The increase of vehicle density and road networks throughout the world has brought about insurmountable pressures on flora and fauna (Forman & Alexandra 1998; Spellerberg 1998). Snakes are the worst affected due to road networks in comparison to other animals. The major reason for the mortality of snakes is their slow movement on a smooth road as compared to other surfaces (Bonnet et al. 1999; Roe et al. 2007). The family Uropeltidae (Muller 1832) is one of the most poorly-understood families of small, burrowing snakes restricted to the Sri Lanka—Malabar sub region of southern Asia (Rajendran 1985). Perrotet's shieldtail snake *Plectrurus perrotetii* is a snake endemic to the Western Ghats

and is common in the Nilgiris and Anamalais between 1300m and 2000 m (Smith 1943; Rajendran 1985; Murthy 2001; Whitaker & Captain 2004; Vijayaraghavan & Ganesh 2011; Kannan 2014). According to Whitaker & Captain (2004) this species is viviparous. The present note provides data on the impact of roads on the endemic



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snake Plectrurus perrotetii in and around the Nilgiris.

The Present study is an offshoot of our long term study on the ecology of Xylophis perroteti using opportunistic survey method from June 2015 to August 2015. A total of 27 road kills of Plectrurus perrotetii were recorded in Emerald and its surrounding areas in the Nilgiris. Emerald area is located from southern side of the Nilgiri District and nearest to Avalanche Reserve Forest. Among the road kills, 14 of them were females, seven were males and six were juveniles. Species and sex was identified based on the literature (Smith 1943; Rajendran 1985; Whitaker & Captain 2004). Morphometric measurements were taken using an inch tape (LC = 1mm). The length of adult females ranged between 163mm and 292mm, adult males between 154mm and 263mm and that of juveniles ranged between 72mm and 112mm. Among the road kill female specimens of this species, it was observed that seven were gravid with fully developed young. Three to six developing young ones were observed and their lengths ranged between 40mm and 90mm (Image 1).

According to Wall (1919) and Smith (1943) this species generally gives birth to 3–6 young ones at a time between July and August. This present observation

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Image 1. Road mortality of gravid female and juvenile of Plectrurus perrotetii in Nilgiris. © P. Santhoshkumar & A. Samson

corroborates earlier studies on the number of young ones. A similar observation was noted by Ciesiolkiewicz et al. (2006) on grass snakes *Natrix natrix* that more juveniles were susceptible to road mortality especially during hatching and dispersal movement. Pragatheesh & Rajvanshi (2013) mentioned that road induced loss of dispersing juveniles and consequent isolation is likely to have impact upon the gene flow across the landscape. This present finding shows that road mortality has a major impact on the snake. This is a short time observation during the field visits. Therefore a more scientific study is required to predict the population level of impact of the snake in the Nilgiris.

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