Extension of the known range of *Dryocalamus nympha* (DAUDIN, 1803), in India

The colubrid genus, *Dryocalamus* BOULENGER, 1893, currently comprises six species of Bridal/Bridled Snakes that are distributed across various regions of southeastern Asia (DE SILVA 1990; SHARMA 2004; WHITTAKER & CAPTAIN 2004). The status of five species has been assessed by IUCN (IUCN 2013). Two, namely, *D. gracilis* (GÜNTHER, 1864) and *D. nympha* (DAUDIN, 1803) are known to occur in India, Sri Lanka and Myanmar, and India and Sri Lanka, respectively (DE SILVA 1990; SHARMA 2004; WHITTAKER & CAPTAIN 2004; KARUNARATHNA & AMARASINGHE 2011; UETZ 2013). Due to their extremely rare occurrence, information about them is either sparse or unavailable (SHARMA 2003). The current paper compiles all occurrences of the species, viz., from published literature, natural sightings and unpublished reports of the yet to be assessed, *D. nympha*, and reports the first record of the species in the state of Karnataka, India, extending its known range by about 95,000 km².

The authors encountered an adult specimen of the Vellore Bridal Snake *D. nympha*, at Hampi (15°16'54.47"N, 76°29'26.58"E) in the state of Karnataka in India. The individual was discovered from the interstice between bottom rail and saddle at the outer door of the guest house at Kannada University campus at 08:14 hours local time, on July 17, 2011. Subsequently, its scales were clipped and record snapshots made to confirm its identity. The presence of 13 longitudinal series of dorsal scales, seven pairs of supralabial scales, paired subcaudal scales and a divided, anal shield matched the description of the species by BOULENGER, (1893: 370), and was consistent with the identities of type specimens at the British Museum (Natural History) BMNH 1946.1.13.69-70. On release, the snake was found to take refuge in a nearby concrete crevice instead of escaping to the dry hedges surrounding the building. Incidences and prey-seeking behavior of the species within human households has been described by DAUDIN (1803). The importance of the current record gains relevance in the backdrop of complete lack of information pertaining to range, distribution, population and ecology of the species.

WHITTAKER & CAPTAIN (2004) mention unpublished photographic records of the species from Hyderabad and Chittoor District in Andhra Pradesh, northern Kerala, Tamil Nadu and Odisha. Historically, specimens of the species were collected from Tamil Nadu only. In 2010, the catalog of the Madras museum specified two specimens collected from Palla varam, Tamil Nadu (individuals 1 and 2; plates No. 1950 and 1959) and two additional, unnumbered specimens (3 and 4) from Tam baram and Madras (GANESH & ASOKAN 2010). The aforementioned locations, ‘Pallavaram’ and ‘Tam baram’ are located very close to Madras (Chennai in Fig. 1). Recent records of the species came predominantly from the state of Tamil Nadu, viz. Tiruchirapalli (MOLUR et al. 1998), Nil giri Hills and Cardamom Hills (HUTTON 1949; WHITTAKER & CAPTAIN 2004), Mayiladuthurai (GANESH 2007), Rameshwaram (RAVICHANDRAN & SILIWAL 2010), Kalpakkam (RAMESHI et al. 2013) and Meghamalai (WHITTAKER & CAPTAIN 2004; BHUPATHY & SATISHKUMAR 2013) regions. A sole record of the species exists from Nilambur (MOLUR et al. 1998) in the adjoining state of Kerala. Additional unverified sightings exist from Guindy Snake Park, Tamil Nadu, Chengalpet, Tamil Nadu (LENIN 2010) and Peppara Wildlife Sanctuary (WLS), Kerala (unpublished sighting) (Fig. 1).

This slender snake is roughly characterized by its rounded snout, oval-shaped flat head, distinct dark eyes and a yellow transversal band on the back of the head. Additionally, the dorsal body side is covered by glossy blotches of dark brown coloration over creamy white background with a yellowish tinge in the dark-brown spotted gaps and a cream-colored underside (Fig. 2). The species is described to be nocturnal and is known to prey on lizards, geckos in particular, and other small prey (DAUDIN 1803). It is still to be assessed by IUCN, and its current population and conservation status is unknown. SMITH (1943) reported the range of the species to extend as far north as 12°30’N latitude on the western side and to
Odisha in the eastern side of India, where it occurs in the plains and hillocks at low altitudes. From the second species of Dryocalamus in India (D. gracilis, Scarce Bridal Snake), only two specimens have been recorded since 1888 (DE SILVA 2010) across its entire range.

The current documentation of the species expands the potential geographic range of D. nympha by 95,000 km², considering the area of a polygon drawn with Peppara WLS, Kerala (to the south), Chittoor district, Andhra Pradesh (to the west) and Hampi, Karnataka (to the north) as the three vertices. This record incorporates primary ‘scrub forest’ as one of the species’ habitats. This habitat of Hampi experiences a semi-arid type climate (comp. ERINJERY et al. 2015) described by hot summers (min-max temperatures from March to June, i.e., the hottest and driest period of the year: 23 °C - 37 °C) and low average annual rainfall (571.92 mm). Furthermore, this region is dominated by mounds of granite hills and boulders with an average elevation of 500 meters above sea level, outlined by vast stretches of barren plains. Given the aforementioned description of habitat and its northward continuity, the authors speculate the species to be distributed beyond Hampi.
to the state of Maharashtra, India. Future work directed at estimating the range of the species should survey the currently reported regions.

ACKNOWLEDGMENTS: The authors thank the Karnataka Forest Department for according permission and assistance during the field work, and are grateful to Dr. S. Babu for procuring supportive resources, and Mr. M. Selvanayagam and late Dr. S. Bhupathy for identifying the snake. The Indian Academy of Sciences, New Delhi is thanked for financial assistance.


Fig. 2: The Vellore Bridal Snake Dryocalamus nympha (DAUDIN 1803), illustrating its symbolic yellow band behind the head (bridal veil), and the dorsal brown blotches on cream ground coloration.

KEY WORDS: Reptilia: Squamata: Serpentes: Colubridae: *Dryocalamus nympha*, new record, extension of known range, Karnataka, India

SUBMITTED: June 13, 2014

AUTHORS: Sayantan Das (Corresponding author, <sayantaniiser@gmail.com>) 1), Saurav DUTTA 2), Anirban CHAUDHRI 3), Joseph J. ERINJERY 4) & Mewa SINGH 5)

1) Biopsychology Laboratory, Department of Psychology, University of Mysore, Mysore-570006, Karnataka, India.

2) Indian Institute of Science Education and Research-Kolkata, Mohanpur Campus, Post: BCKV Main Office, Mohanpur, Nadia-741252, West Bengal, India.

3) 211 Jodhpur Park, Kolkata-700068, West Bengal, India.

4) Biopsychology Laboratory, Department of Psychology, University of Mysore, Mysore-570006, Karnataka, India.

5) Biopsychology Laboratory, Department of Psychology, University of Mysore, Mysore-570006, Karnataka, India; Evolutionary and Organisinal Biology Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, Karnataka, India; National Institute of Advanced Studies, Bangalore, India.