

A Leucistic Lesser Black Krait, Bungarus lividus (Squamata: Elapidae), from West Bengal, India

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Snakes exhibit a variety of chromatic disorders, among which melanism, leucism, and albinism are well known (Bechtel 1995). Leucism is caused by a recessive allele (Owen and Skimmings 1992) and the affected snakes are readily recognized by a lack of integumentary pigmentation usually combined with black or blue eyes (Wareham 2005). Survival and fitness of leucistic snakes are compromised in nature (e.g., Bechtel 1995), where they fail to blend with their surroundings (Krecsák 2008) and also are subjected to various adverse effects that include inefficient thermoregulation (Kornilios 2014) and protection from solar radiation (Bechtel 1978) and possibly impaired locomotion and digestion (Stevenson et al. 1985).

The Lesser Black Krait, *Bungarus lividus* (Fig. 1), is a small to medium-sized nocturnal elapid that is found in

northeastern India (Boulenger 1890; Smith 1943), Nepal (Shah 1998), Bangladesh (Smith 1943; Khan 1992), and possibly Bhutan (Lenz 2012), where these snakes occur in dense forests but also are known to live in close proximity to humans. Very little is known about the species' natural history and no reports document a chromatically aberrant individual. We herein present the first sighting of a leucistic Lesser Black Krait from the District of Jalpaiguri in northern West Bengal, India.

On 29 August 2015, SP rescued a white snake with black eyes and no visible pattern (Fig. 2) from the backyard of a residence in the Raikatpara Area, Jalpaiguri District (26°32'12.11"N, 88°43'33.96"E). The snake appeared to be a krait; however, identification to species was difficult as three species of kraits (the Banded Krait, *Bungarus fasciatus*; Wall's



Fig. 1. A Lesser Black Krait (Bungarus lividus) from the Jalpaiguri District, West Bengal, India. Photograph by Prajjwal Ray.



Fig. 2. A leucistic Lesser Black Krait (*Bungarus lividus*) from the Jalpaiguri District, West Bengal, India. Photographs by Shyamaprasad Pandey and Prajjwal Ray (inset).

Krait, Bungarus walli; and the Lesser Black Krait, Bungarus lividus) occur in the vicinity of Jalpaiguri Town. We photographed and measured the snake and counted scales. The snake measured 95 cm from snout to tail tip, the body was not very triangular in cross section, and the tip of the tail was more or less pointed. Based on descriptions in Smith (1943), scale counts (15 dorsal scale rows, 215 ventral scales, 39 subcaudals entire throughout, 7 supralabials with the 3rd and 4th in contact with the eye, temporals 1 + 2, vertebral scales hexagonal and feebly enlarged) readily distinguished this snake from B. walli (17:17, 19:19, or 21 dorsal scale rows; 196–208 ventrals; 50-55 subcaudals) and the cross-section of the body and pointed tail distinguished it from B. fasciatus (body typically triangular in cross section with a distinct dorsal ridge, tail tip blunt and more or less swollen). We restrained the snake for only a few minutes; as soon as the scale counts were completed, it was released by the local forest department.

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Literature Cited

Bechtel, H.B. 1978. Color and pattern in snakes (Reptilia, Serpentes). *Journal of Herpetology* 12: 521–532.

Bechtel, H.B. 1995. Reptile and Amphibians Variants: Colors, Patterns, and Scales. Krieger Publishing Co., Malabar, Florida.

Boulenger, G.A. 1890. The Fauna of British India, Including Ceylon and Burma. Reptilia and Batrachia. Taylor and Francis, London, UK.

Khan, M.A.R. 1992. Bangladesher Shap [= Snakes of Bangladesh]. Bangla Academy, Dhaka, Bangladesh (in Bengali).

Kornilios, P. 2014. First report of piebaldism in scolecophidians: a case of *Typhlops vermicularis* (Squamata: Typhlopidae). *Herpetology Notes* 7: 401–403.

Krecsák, L. 2008. Albinism and leucism among European Viperinae: a review. Russian Journal of Herpetology 15: 97–102.

Lenz, N. 2012. Von Schmetterlingen und Donnerdrachen-Natur und Kultur in Bhutan. Karlsruher Naturhefte 4, Naturkundemuseum, Karlsruhe, Germany.

Owen, M. and P. Skimmings. 1992. The occurrence and performance of leucistic Barnacle Geese *Branta leucopsis*. *Ibis* 134: 22–26.

Shah, K.B. 1998. Checklist of the herpetofauna of Nepal with English and vernacular names. *Natural History Society of Nepal (NAHSON) Bulletin* 8: 26–30.

Smith, M.A. 1943. The Fauna of British India, Ceylon, and Burma, Including the Whole of the Indo-Chinese Sub-region. Reptilia and Amphibia. Vol. III.—Serpentes. Taylor and Francis, London, UK.

Stevenson, R.D., C.R. Peterson, and J.S. Tsuji. 1985. The thermal dependence of locomotion, tongue flicking, digestion, and oxygen consumption in the wandering garter snake. *Physiological Zoology* 58: 46–57.

Wareham, D.C. 2005. Elsevier's Dictionary of Herpetological and Related Terminology. Elsevier B.V., Amsterdam, The Netherlands.