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continued on the back inside cover

Cover: Long-tailed Shrike *Lanius schach* resting on a dry branch after courtship. Digital illustration on Procreate. © Aakanksha Komanduri.

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NOTE

First record of Wall's Krait *Bungarus walli* Wall, 1907 (Reptilia: Squamata: Elapidae) from Assam, and diagnostic keys to the kraits of India

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Kraits of the genus *Bungarus* Daudin, 1803 are highly venomous ophiophagous snakes belonging to the family Elapidae found in southern and south-eastern Asia across Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, China, India, Indonesia, Iran, Laos, Malaysia, Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Taiwan, Thailand, and Vietnam (Wallach et al. 2014; Midtgaard 2022; Uetz et al. 2026). The genus currently comprises 18 recognised species, nine of which are known to occur in India: *Bungarus andamanensis* Biswas & Sanyal, 1978; *B. bungaroides* (Cantor, 1839); *B. caeruleus* (Schneider, 1801); *B. fasciatus* (Schneider, 1801); *B. lividus* Cantor, 1839; *B. niger* Wall, 1908; *B. sindanus* Boulenger, 1897; *B. suzhenae* Chen, Shi, Vogel, Ding & Shi, 2021, and *B. walli* Wall, 1907 (Uetz et al. 2026).

Among these, *Bungarus walli*, commonly referred to as Wall's Krait, was originally described from Fyzabad (at present Faizabad), Uttar Pradesh, India (Wall 1907). The species is known from the Indian subcontinent, with confirmed occurrences in India, Bangladesh, Nepal, and Bhutan (Smith 1943; Lenz 2012; Wallach et al. 2014; Ahsan & Rahman 2017; Ghosh et al. 2021). Within India, *B. walli* exhibits a fragmented distribution and has been reported from a limited number of states, including Bihar, Odisha, Uttar Pradesh, and West Bengal (Figure 1) (Whitaker & Captain 2004; Bhattacharjee & Sarkar 2021). Recently, *B. walli* has been reported from Tripura, marking the first-ever record of the species from northeastern India (Deb et al. in press). In addition to distributional records, existing studies have reported aspects of the species' natural history, including habitat preference and venom effects (Sharma et al. 2013), leucism (Devkota et al. 2020), reproductive biology (Ray et al. 2020; Ray et al. 2023), and scavenging behaviour (Banik & Ray 2023).

While a few reports of *Bungarus sindanus walli*

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are present from Maharashtra State in western India (Nande & Deshmukh 2007; Deshmukh et al. 2016), they have now come to be identified as *Bungarus sindanus* complex based on a smaller number and extent of bands, yellowish supralabials among other variations, distinct from *B. walli*, which is more of an eastern Indian species. In northeastern India, six species of *Bungarus* are currently known: *B. bungaroides*, *B. fasciatus*, *B. lividus*, *B. niger*, *B. suzhenae*, and *B. walli,* of which all except *B. suzhenae* and *B. walli* have been reported from Assam (Basfore et al. 2024; Gerard et al. 2024; Deb et al. in press). The present study confirms the occurrence of the fifth species of *Bungarus* recorded from Assam, based on data of a live uncollected subadult encountered in the Raimona National Park.

The Raimona National Park is located on the northern bank of the Brahmaputra River and falls under the Kachugaon Forest Division of the Kokrajhar District in Assam, India. It lies along the Indo–Bhutan international border, with the Sonkosh River forming the western boundary and the Saralbhanga River marking the eastern extent. To the northern side, Raimona shares a contiguous landscape with the Phipsoo Wildlife Sanctuary of Bhutan, while the Buxa Tiger Reserve of West Bengal borders it to the western side. The occurrence of *B. walli* in Assam is likely attributable to its close proximity to West Bengal, a region where the species is already known to occur.

On 17 July 2025, at 2030 h, during a herpetofaunal survey, a juvenile *Bungarus walli* (Image 1), approximately 460 mm in total length, was encountered in the Western Range (26.673° N, 89.972° E; elevation: 117 m) of the Raimona National Park. The specimen was found actively foraging across a moist, semi-shaded habitat along a shallow forest stream surrounded by dense vegetation. The area is characterised by thick undergrowth dominated by climbers, shrubs, ferns, and grasses along the margins of the narrow stream. The adjoining forest is composed of tall evergreen and semi-evergreen trees with a dense canopy, creating a humid and shaded environment.

Upon encounter, the snake was photographed,

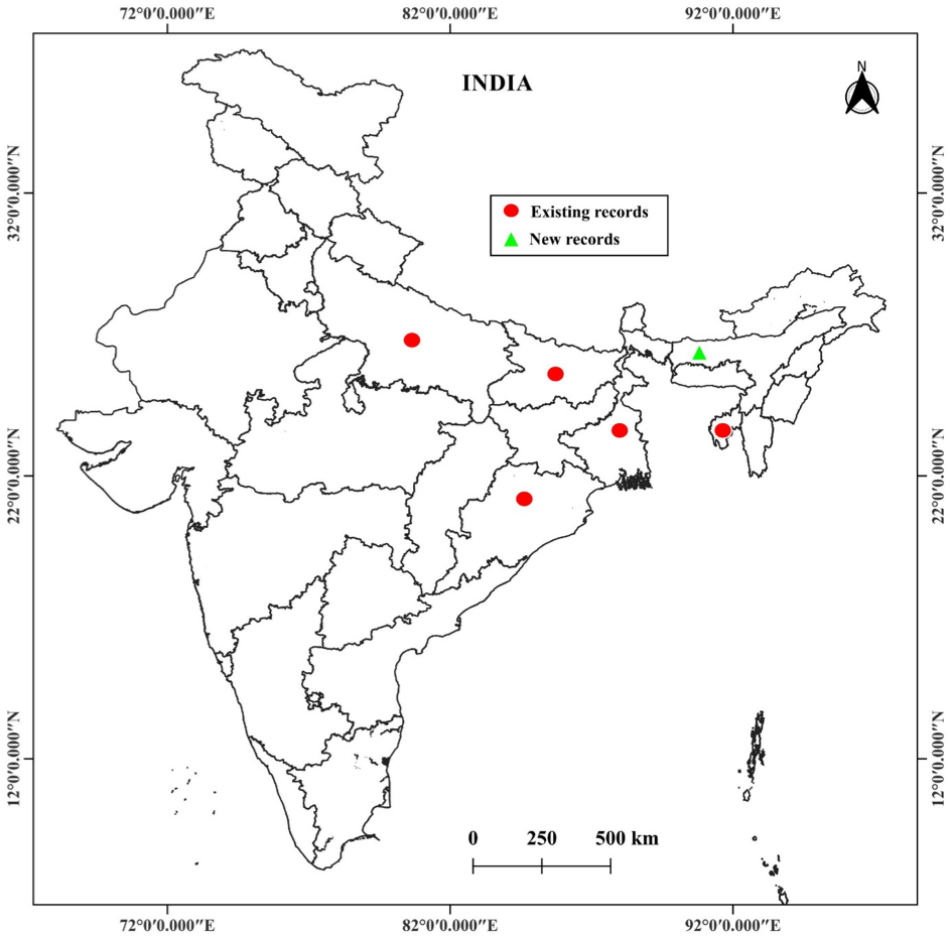

Figure 1. Updated geographical distribution of *Bungarus walli* in India.

and essential meristic and morphometric data were recorded. Identification was carried out based on the following diagnostic characters: (1) Dorsal scale rows: 19:17:17; (2) Ventrals: 207; (3) Supralabials: seven, with the 3rd and 4th touching the eye; (4) 2nd supralabial narrower than the 3rd; (5) Infralabials: four; (6) mid-body vertebral scales distinctly broader than long; (7) body distinctly compressed; and (8) glossy black colouration with 66 white, unpaired transverse bands, all consistent with existing published descriptions (Table 1).

A comparative account of the newly encountered specimen with published literature is provided in Table 1, while Table 2 presents diagnostic keys to the kraits of India. Other herpetofaunal species recorded at the site included Irawaddy Crested Lizard *Calotes* cf. *irawadi*, Eastern Bronzeback *Dendrelaphis proarchos*, Bangladesh Skittering Frog *Euphlyctis adolfi*, Northern House Gecko *Hemidactylus aquilonius*, Common House Gecko *Hemidactylus frenatus*, Flat-tailed House Gecko *Hemidactylus platyurus*, Littoral Bullfrog *Hoplobatrachus litoralis*, Bhamo Frog *Hylarana humeralis*, Cope's Assam Frog *Hylarana leptoglossa*, Theobald's Ranid Frog *Hylarana tytleri*, Nepal Cricket Frog *Minervarya nepalensis*, Pierre's Cricket Frog *Minervarya pierrei*, and Bengal Monitor Lizard *Varanus bengalensis*.

The present record of *Bungarus walli* from Assam represents a significant extension of its known geographic range, approximately 778 km east of the type locality in Uttar Pradesh (Uetz et al. 2026), about 393 km from the recent confirmed record in Tripura

Image 1. *Bungarus walli* from Raimona National Park, Assam: top–entire view; bottom–head close-up view. © Bijay Basfore.

Table 1. Comparison of *Bungarus walli* from Raimona National Park, Assam with published descriptions.

Character	Present specimen	Wall (1907)	Smith (1943)	Whitaker & Captain (2004)	Bhattacharjee & Sarkar (2021)
Total length (in mm)	460	393–1517	1640 (Male) & 1500 (Female)	1518	-
Dorsal scale rows	19:17:17	19:17:17	19 or 21: 17 or 19:17	17 or 19:17 or 19:17	17 or 19:17 or 19:17
Ventrals	207	203	196–208	196–208	192–207
Subcaudals	55	55	50–55	50–55	48–55
Cloaca	Entire	Entire	-	Entire	-
Supralabials	7 (3 & 4 touching eye)	7 (3 & 4 touching eye)	-	7 (3 & 4 touching eye)	-
2nd supralabial narrower than 3rd	Yes	Yes	-	-	-
Infralabial	4	4	-	-	-
Preocular	1	-	-	1	-
Postocular	2	-	-	2	-
Loreal	Absent	-	-	Absent	-
Temporals	1+2	1 (anterior)	-	1+2	-
Preocular spot	Absent	Absent	Absent	-	-
Vertebrals broader than long	Yes	Yes	-	Yes	Yes
Number of bands	66	-	65–80	-	-

Table 2. Diagnostic key to the Kraits of India.

Species	DSR (midbody)	VEN	SC	Dorsal pattern	Body bands	Reference
B. andamanensis	15	193–197	45–47 (undivided)	Narrow white or yellowish-white bands	39–47	Biswas & Sanyal, (1978); Smith (1943)
B. bungaroides	15	220–237	44–51 (divided)	White or pale yellow bands	46–60	Smith (1943); Das (2018)
B. caeruleus	15	200–217 (234)	33–54 (undivided)	Narrow white bands (sometimes paired)	29–65	Biswas & Sanyal (1978); Slowinski (1994); Whitaker & Captain (2004)
***B. fasciatus* sensu stricto**	15	222–228 (male) & 224–231 (female)	35–37 (male) & 32–36 (female) (undivided)	Black and yellow bands	22–27	Biakzuala et al. (2023)
B. lividus	15	209–221	35–43 (undivided)	Black or bluish-black	Absent	Smith (1943)
B. niger	15	216–231	47–57 (undivided)	Glossy black body	Absent	Wall (1908); Smith (1943)
B. sindanus	17 or 19	220–237	49–52 (undivided)	White bands	-	Boulenger (1897)
B. suzhenae	15	220–229	51–54 (undivided)	White bands	26–38	Chen et al. (2021)
B. walli	17 or 19	196–208	50–55 (undivided)	Narrow white unpaired bands	65–80	Wall (1907); Smith (1943)

(Deb et al. in press), and about 62 km from its nearest previously known record from West Bengal (Banik & Ray 2023). Thus, the present study highlights the significance of systematic herpetofaunal surveys in transboundary landscapes, having contiguous forests with countries like Bhutan, as these regions may harbour undocumented taxa. The finding also emphasises the role of Raimona National Park, a recently established protected area, as a valuable site for documenting poorly known or range-extended herpetofaunal species. *Bungarus walli* is often misidentified as *B. caeruleus* or *B. sindanus,* and as a medically important venomous snake, such misidentifications are of concern, as existing polyvalent antivenoms may exhibit variable efficacy across different *Bungarus* species (Chippaux 2017). Therefore, accurate identification and targeted inventory of herpetofauna are essential not only for conserving biodiversity but also for enhancing public health preparedness in

snakebite-prone regions, such as western Assam, where agriculture is the primary livelihood activity and brings people into frequent contact with snakes.

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