

VIII REMARKS ON SOME LITTLE
KNOWN INDIAN OPHIDIA.

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Through the courtesy of Dr. Annandale I have recently had access to the large collection of snakes in the Indian Museum, an examination of which has strengthened my convictions in many cases, and enables me to describe several new species and remark upon some rarities.

Tropidonotus xenura, Wall.

In the Bombay Natural History Society's Journal (vol. xvii, p. 616) I described and figured a new species under the above title, from a very sodden specimen submitted to me by the Bombay Society. The habitat of this was not known, and until recently it appeared to be unique.

In the Indian Museum I discovered, mixed up with several specimens of *Tropidonotus modestus*, Günther, four more examples of this species, all of which are from Cherrapunji, Khasi Hills, Assam. One of these is the No 4278 of Sclater's list.

All these specimens agree with the type except that the anal is divided in all. I think I was very probably in error in reporting this shield entire in the type, for I remember that in the sodden state of the specimen I found it difficult to decide the point to my satisfaction. In the type, again, the tail was extensively docked, but all the subcaudals present entire. In the four Indian Museum examples the subcaudals are also all entire. The ventrals and subcaudals are 161 + 107, 165 + ?, 158 + ?, 158 + 81. The tail is imperfect in two.

The divided state of the anal is remarkable. I cannot recall another snake with entire subcaudals and a divided anal.

The species bears a strong superficial resemblance to *modestus*, but is very well differentiated and distinct. The differences are as follows: (1) in *modestus* the subcaudals are all divided; (2) in *modestus* there are two præoculars, in *xenura* only one; (3) in *modestus* there is one temporal, in *xenura* two; (4) in *modestus* keels are absent in the last two or three rows in midbody, in *xenura* all the rows are keeled.

Tropidonotus chrysargus, Schlegel.

Specimen No. 12680 in the Indian Museum from Tavoy, referred by Sclater to the Japanese species *vibakari*, is an abnormal

specimen of this species. I have compared it carefully with other examples of *chrysargus*, and find it agrees perfectly in every way except as regards the temporals, which are single on both sides. The ventrals and subcaudals are 140 + 76. Anal divided.

Helicops schistosus, var. *andersonii*, var. nov.

I have examined three specimens collected by Anderson in Yunnan, which he, and subsequently Sclater, referred to *Helicops schistosus*.

In most respects extremely like *H. schistosus*, I cannot see how they can be considered as belonging to the typical form of this species in face of the fact that in all three the internasals are divided. A single internasal is stated to be one of the generic characters of *Helicops* to which all the eleven known species conform, and though I am very familiar with *schistosus* from Southern India, the United Provinces and Orissa, I have never met with one in which this shield was divided. The Yunnan form should, I think, rank as a variety of *H. schistosus*, under the title *andersonii*. I notice that, besides the condition of the internasals, all three specimens agree in having both the 1st and the 2nd supralabials touching the nasals, whereas in the typical *H. schistosus* the 1st only does so. The ventrals and subcaudals are 151 + 61?, 154 + 83, 143 + 79?. In two the tail is imperfect.

Dinodon septentrionalis, Günther.

Until recently the Indian Museum contained no specimen of this rare snake identified as such. I found, however, a very fine specimen in a bottle with specimens of *Bungarus bungaroides*. This is the No. 7741 of Sclater's list. Locality Darjiling. The scales are in 17 rows, vertebrae not enlarged, loreal present, pupil vertical, and ventrals and subcaudals 212 + 58? (tail imperfect). This specimen removes any doubt of the Eastern Himalayas as a habitat.¹ The type specimen collected by Jerdon was recorded dubiously from the Himalayas or Khasi Hills. Within our Indian dominions Boulenger has recorded a specimen from the Karen Hills (*Catalogue*, 1896, vol. iii, p. 619), and another from Mogok, Ruby Mines District, Burma (*Journ. Bom. Nat. Hist. Soc.*, vol. xvi, p. 235). I have also had a very fine specimen from the Ruby Mines measuring 3 feet 4½ inches, ventrals 217, subcaudals 82, and another from Jeypore, Assam (♀), ventrals 214, subcaudals 81. The snake is remarkably like the many-banded krait *Bungarus multicinctus* in life or when recently preserved, the rich black on the dorsum crossed with milky-white bands giving it a strikingly handsome appearance.

¹ I have recently had another specimen sent me from Phoobsering, below Darjiling (circa 5,000 feet).

Dryocalamus gracilis, Günther.

The specimen, No. 8690 from False Island, Arakan coast (?), referred by Sclater to *Hydrophobus davisoni* is, I think there can be no doubt, *Dryocalamus gracilis*. The scale rows are 15, the ventrals 236, subcaudals 85, anal divided. The loreal touches the eye and has a small præocular above. There are twenty-three whitish bands on the body, and fourteen on the tail. I think there is a good reason to doubt the locality for this specimen, as the snake is known otherwise only from Peninsular India. I have seen two specimens in life, both in Berhampore (Orissa). The ventrals and subcaudals were 243+79, and 235+87. In the former there were twenty-six bands on the body, and in the latter twenty-eight.

Ablabes gilgiticus, Annandale.

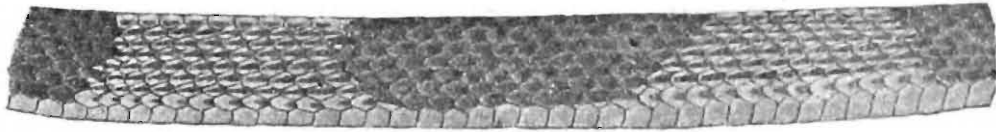
I have lately seen the type specimen of this species (described by Dr. Annandale, *J. A. S. Bengal*, 1905, p. 210) which proves to be *Trachischium fuscum* (Blyth). Dr. Annandale had already discovered the true identity of the specimen. The appearance of this species so far to the west of what had previously been known as its habitat is most interesting, and should serve to impress one with the limited knowledge we still possess of the snakes inhabiting the Himalayas although so many collectors have contributed to our knowledge of the fauna of that extensive Range. Previously the species had not been known to the west of Nepal.

Bungarus magnimaculatus, Wall and Evans.

In the *Journ. Bom. Nat. Hist. Soc.*, vol. xiii, p. 611, Captain (now Colonel) Evans and I made reference to a krait which we thought a species up to that time not described, but contented ourselves with making the type of a new variety of *B. cæruleus* under the title *magnimaculatus*. I have now seen five examples of this form, and have critically examined at the lowest computation over 200 specimens of *cæruleus*, and I am decidedly of opinion that *magnimaculatus* deserves recognition as a distinct species. Two of the five specimens I have examined are in the Indian Museum, and are the very ones remarked upon by Sclater (*J. A. S. Bengal*, lx, p. 245). As the form has never been properly described, I propose to do so now.

Description.—Rostral touches 6 shields, the rostro-nasal sutures are longer than the rostro-internasal. Internasals 2, the suture between the fellows about half that between the præfrontal fellows, half to three-fifths the internaso-præfrontal sutures. Præfrontals 2, the suture between them nearly twice the præfronto-frontal sutures; in contact with internasal, postnasal, præocular and supraocular. Frontal touches 6 shields, the fronto-parietal sutures longest. Supraoculars: length three-fourths to four-fifths frontal, breadth half or rather more than half frontal. Nasals touch the 1st and 2nd supralabials. Præocular 1. Post-

oculars 2. Temporal 1, touching the 5th and 6th supralabials. Supralabials 7, the 2nd much narrower than the 1st and 3rd; the 3rd and 4th touching the eye. Infralabials 4, the 4th largest, and in contact with two scales behind. Sublinguals 2 subequal pairs, the posterior touching the 4th only of the infralabial series. Costals two headlengths after head 15, midbody 15, two headlengths before vent 15; vertebrals as broad as long or broader in



Part of body of *Bungarus magnimaculatus*, $\frac{3}{4}$ size, showing two of the light bands.

midbody. Supracaudals in odd rows, the vertebrals enlarged. Ventrals 218 to 228. Anal entire. Subcaudals 43 to 48, all entire. Colour black with from eleven to fourteen light bands on the body and two to three on the tail. These light bands are formed of black and white streaks in the length of the snake, the vertebral white streak being specially broad. The intervening black does not extend to the belly, which is uniformly white. Some blackish mottling is present beneath the tail. A white præocular spot is more or less evident.

Habitat.—Known only from a very localised area in the Irrawaddy basin. Details of the specimens follow in tabular form.

Length.—The longest measurement is 4 feet. Nos. 4 and 5 are the specimens referred to by Sclater (*J. A. S. Bengal*, 1x, p. 245).

No. of specimens.	Ventrals.	Subcaudals.	Light bands on body.	Light bands on tail.	Locality.	Remarks.
1	226	42 ¹ ?	14	2	Monywa	} Types. No. 13244, Indian Museum. No. 13245, " "
2	218	43	11	2	"	
3	228	47	11	3	Meiktila	
4	225	48	11	3	"	
5	219	48	11	3	"	

Bungarus walli, Wall.

In the *Journ. Bom. Nat. Hist. Soc.*, vol. xvii, p. 608, I described a new krait founded on a series of eight specimens

¹ Tail very slightly imperfect.

all from Fyzabad in the United Provinces. I have lately had opportunities of examining six more examples. In the museum of St. Joseph's College, Darjiling, I found two specimens labelled *cæruleus* which had formed part of the collection of the late Dr. Vincent Richards. Here I would recall the fact that this investigator succumbed to the wounds inflicted by a krait which may have been one of these specimens. This is by no means certain, as there are also in his original collection, now at St. Joseph's College, two specimens of *cæruleus*. The Principal of the College told me that his death is attributed to one of these snakes, but could not be sure which, and I can get no further information of the fatality. One of the *walli* could not, I think, have inflicted the injury, as its mouth is full, with the caudal extremities of two slow-worms (?) (*O. gracilis* ?) protruding.

Unless the coloration of one of these specimens is due to the quality of the preservative, it must be considered a melano, as the under parts and the upper lip are black. The usual beaded, white, equidistant dorsal arches are, however, quite distinct. The localities of these two specimens are not recorded, but it is probable they were obtained from Bengal. The other four specimens alluded to are in the Indian Museum. Three of these are old, and were referred to *cæruleus*. The last is the large specimen referred to by Dr. Annandale as *sindanus* (*J. A. S. Bengal*, 1905, p. 213). I give the details of these specimens in tabular form:—

No. of specimens.	Scales two heads-lengths behind head.	Scales midbody.	Scales two heads-lengths before anus.	Ventrals.	Subcaudals.	Locality.	Remarks.
1	19	19	17	203	54	?	St. Joseph's College.
2	17	17	17	192	48	?	"
3	19	17	17	199	54	Purneah	No. 13760, Ind. Museum.
4	19	19	17	197	52	"	No. 13762, "
5	19	17	17	202	55	"	No. 13764, "
6	19	19	17	200	51	Midnapore	No. 15299, "

The largest measurement now recorded is that of the Midnapore example (5 feet 4½ inches).

Amblycephalus modestus, Theobald.

I have examined the type and only known specimen of this snake, which has only been imperfectly described, and propose to give a full description here.

Description.—Rostral in contact with 6 shields, the anterior nasal sutures greater than the internasals. Internasals: suture between the fellows two-thirds that between the præfrontal fellows, one-third the internaso-præfrontal sutures. Præfrontals:

suture between the fellows two-thirds the præfronto-frontal sutures, in contact with internasal, loreal, præocular, eye and supraocular. Frontal in contact with 6 shields, the supraocular sutures are smallest, about two-thirds the parietals, and three-fifths the præfrontals. Supraoculars half as long as and one-third as broad as the frontal. Nasals touch the 1st and 2nd supralabials, undivided. Loreal in contact with the internasals. Præoculars 2, small. Postoculars 2 on the right side, 1 on the left entirely cutting off the labials from the eye. Temporals: a single anterior shield which, however, especially on the right side, appears to be a confluence of 2—an upper and a lower. Supralabials 7, the seventh longest, none touching the eye. Sublinguals: three large pairs of broad shields with no mental groove between, followed by a very large first ventral. Costals two headlengths after head 15, midbody 15, two headlengths before vent 15. Vertebrae not enlarged. Ventrals 156. Anal entire. Subcaudals 37, divided. Body compressed. Eye large, pupil vertical. Colour uniform dark olive-black.

I can see no difference in the lepidosis between this and *macularius* except in the temporal, which is possibly aberrant. The 2nd and 3rd supralabials touch the loreal (instead of the 2nd only), but the same anomaly is seen in specimen No. 8026 in the Indian Museum from Mataban, which is one of the types of *macularius*. The only real difference appears to me to be in the colours, but the specimen may be a melanotic form of *macularius*.

Here I may say that I count the ventrals and subcaudals of the three type specimens of *macularius* 169+40, 168+48, and 170+51.
