

remaining one, *viz.*, *angusticeps* is known from Baluchistan, and the N.-W. Frontier of India (Malakand). It is one of the smallest snakes that occurs within our Indian limits. The longest record is 15 inches, and though there are a few snakes shorter in adult life I am not aware of any that are more slender excepting perhaps *Typhlops braminus* and *Callophis trimaculatus*.

Sir H. McMahon says "In life this little snake is most active and lively, and assumes a most pugnacious attitude when teased."

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DIBRUGARH, ASSAM, 28th July 1907.

NO. XVII.—NOTES ON THE INCUBATION AND BROOD OF THE INDO-BURMESE SNAKE-LIZARD OR SLOW WORM

(*OPHISAURUS GRACILIS*).

On the 10th of September a cooly in Shillong brought me a female slow worm (*Ophisaurus gracilis*) with 5 eggs with which she was reported to have been found, but knowing that the European Slow worm (*Anguis fragilis*) is viviparous in habit I was inclined to be sceptical.

The eggs, much sullied by the soil beneath which they were deposited, are probably originally white. They are soft shelled, and the investment much like white kid. The poles are isomorphous, and the dimensions of one egg typical of the rest are $\frac{19}{24} \times \frac{13}{24}$ of an inch.

One egg was opened, and a living embryo extracted which measured $4\frac{3}{4}$ inches, the tail accounting for $2\frac{7}{8}$ inches. On the 19th of September one egg hatched, the youngster measuring $4\frac{1}{2}$ inches, the tail $2\frac{3}{4}$ inches. On the 18th another of exactly similar proportions emerged, and the last which hatched appeared on the 20th and was $4\frac{3}{4}$ inches long. The hatchlings are lively little creatures betraying some timidity but making no attempt at self-defence. In colour they are very different from adults. The prevailing hue is a pinkish-buff or dove colour with a metallic sheen. A conspicuous black band originating in the lore and passing through the temporal region is continued along the side of the body to the tail tip. The nostril is black. A fine black line originating beneath the eye passes along the lower lip and extends as far back as the vent. Behind a median nuchal black spot three series of smaller black spots progressively diminishing in size pass down the dorsum, the median row being continued well on to the tail. The beautiful metallic blue dorsal marks seen in adults are conspicuously absent.

Investigation proved that these little creatures are endowed with the same means of escape from the egg as young snakes. As I had young snakes of *Tropidonotus piscator* hatching contemporaneously I was able to compare the two.

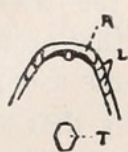


Fig 1



Fig 2

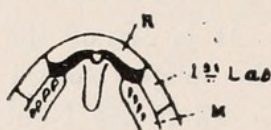


Fig 3

Fig. 1. Roof of anterior part of the mouth of *Ophisaurus gracilis* showing the foetal tooth as a white speck in the median line. (Enlarged). R=rostral. L=labials. T=the tooth shown still more enlarged.

Fig. 2. Aspect of the foetal tooth in profile in *Ophisaurus gracilis*.

Fig. 3. Roof of mouth of *Tropidonotus piscator* enlarged showing foetal tooth in situ. R=rostral. M=maxilla. T=foetal tooth enlarged.

In the slow worm the tooth in profile is seen to project more than in the snake. It also has a very decided inclination downwards, whereas in the snake there is little or no such inclination. The shape of the tooth is very different in the two creatures. In the slow worm the cutting edge is chisel-like, but in the snake a broad shallow deficiency in the median line bisects the edge, and renders it bidentate. The two are shown side by side in the accompanying figures.

I find that the oviparous habit of this lizard is not a new observation, but was elicited by Major G. H. Evans, and reported in this Journal (Vol. XVI, p. 171).

Ophisaurus gracilis is an extremely common lizard about Shillong, and frequently dislodged, as I understand from my snake collector, when overturning stones. It is a perfectly harmless creature making no attempt to defend itself when grasped, though it strives to evade capture, and often cleverly succeeds where broken ground favours its slippery tactics.

Like its European ally, its only means of defence appears to lie in the tail, which it very readily detaches, and leaves wriggling in a most uncanny fashion in the grasp of its would-be captor. The length of this appendage is considerably greater than the rest of the creature when perfect, but a very large number of specimens are brought in an imperfect condition with stunted tails in various stages of regeneration, or just recently detached.

It is eminently a denizen of hilly tracts though I notice Boulenger* records it from Eastern Bengal and Rangoon. Evans,† with a very long experience of Burma, and of Rangoon particularly, has never secured a specimen except at altitudes from 2,500 to 5,000 feet. Similarly though it is so common in the Khasi Hills I have not seen or heard of a specimen in the plains of Assam (about Dibrugarh). It is noteworthy too that the Chinese species *Ophisaurus harti* described and figured by Boulenger in 1899‡ was obtained at altitudes varying from 3,000 to 4,000 feet.

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DIBRUGARH, ASSAM, October 1907.

* Fauna, Brit. Ind. Rept. and Batrach., 1890, p. 151.

† Loc. cit.

‡ P. Z. S., p. 160.



Wall, Frank. 1908. "Notes on the Incubation and Brood of the IndoBurmese Snake Lizard or Slow Worm (*Ophisaurus gracilis*).*" The journal of the Bombay Natural History Society* 18, 503–504.

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