

NUMBER 16.

DECEMBER 15, 1915.

OCCASIONAL PAPERS OF THE MUSEUM OF  
ZOOLOGY

---

UNIVERSITY OF MICHIGAN

ANN ARBOR, MICHIGAN.

PUBLISHED BY THE UNIVERSITY.

---

DESCRIPTION OF A NEW SUBSPECIES OF *CNEMIDOPHORUS LEMNISCATUS LAURENTI*.

BY ALEXANDER G. RUTHVEN.

---

A study of a large series of specimens from Colombia and British Guiana reveals the fact that the Colombian specimens usually referred to *Cnemidophorus lemniscatus* differ from specimens from British Guiana sufficiently to merit subspecific recognition. The material studied consists of the collections of the Bryant Walker Expeditions to British Guiana and the Santa Marta Mountains, and nine specimens from the Santa Marta Mountains in the Museum of Comparative Zoology, Cambridge, Massachusetts.

*Cnemidophorus lemniscatus gaigei*,<sup>1</sup> subsp. nov.

*Diagnosis*: Similar to *Cnemidophorus lemniscatus* but differing in the following particulars: size larger; the width

---

<sup>1</sup> Named for Frederick M. Gaige, entomologist of the expedition to Colombia.

of the parietal shields as great as the width of the head measured between the superciliaries at the third supraoculars; outer parietal scales on each side in contact with the enlarged postorbital scale or separated from it by one or, rarely, two small scales. Femoral pores 16-24.

*Habitat:* Santa Marta Mountains and vicinity, Colombia.

*Type Specimen:* Cat. No. 45352, Museum of Zoology, University of Michigan; Fundacion, Colombia; August 11, 1913; Frederick M. Gaige, collector.

*Description of Type Specimen:* Male. Parietal scales five, their width equalling the width of the head between the superciliaries at the third supraoculars, the outer scale on each side separated from the enlarged postorbital scale by one small scale; supraoculars four; superciliaries five and six; dorsal scales granular, smooth; an anterior row of brachials followed by three rows of smaller scales; antebrachials proximally in two rows, distally in one; femorals in six rows, the upper much the largest; under side of tibia with two irregular rows of large scales flanked by smaller scales; anterior gular scales subequal; mesoptychium with four rows of enlarged scales separated from the edge of the collar by two rows of granules; ventral plates in eight longitudinal rows and thirty transverse rows; enlarged preanal scales seven, the three largest in a triangle flanked by a pair of smaller scales the outermost of which bears a spine; caudal scales oblique, keeled, shortly pointed posteriorly. Femoral pores 20 and 21.

The color of the sides is bluish olive spotted with dull white, and suffused with bright orange yellow behind the fore limbs. Two pale, faintly indicated lateral stripes, the lower extending backward from above the temporal region,

the upper from the occipital region, inclosing a broad, dark brown band. Dorsal region light reddish brown with a poorly defined and lighter vertebral stripe.

MEASUREMENTS.

Total length .....	327 mm.
Length of head and body .....	96 mm.
Length of head to posterior margin of ear..	27 mm.
Length of tail .....	231 mm.
Width of head .....	27 mm.

*Notes on Paratypes:* Sixty specimens of this form have been examined, and in forty-five of these the width of the parietal plates was measured. In every specimen the width of the parietal plates is equal to the width of the head between the superciliaries at the third supraocular plate, and the outer parietals on each side are in contact with the enlarged post-orbital scale or separated from it by one or rarely two scales, average in forty-five specimens 1.08. Five of the largest males vary from 88 mm. to 100 mm. in length, exclusive of tail, average 93.5 mm., and four of the largest females range from 69 mm. to 81 mm. in length, average 76.2 mm. The number of femoral pores in forty-four specimens varies from 16 to 24, average 20.2.

*Remarks:* The series of specimens from Colombia has been compared with a series of sixty-four specimens from the sand ridges on the Demerara River, about thirty-five miles from Georgetown, British Guiana, with the following result.

In forty-eight specimens from Guiana the width of the parietals is decidedly narrower, being about equal to the distance between the outer margins of the first supraorbital plates, and the outer parietal plates are separated from the enlarged postorbital scales by from two to four scales, average

3.05. Fifteen of the largest males vary from 61 mm. to 73 mm. in length, exclusive of tail, average 66.46 mm., and seventeen of the largest females vary from 51 mm. to 61 mm. in length, average 55.38 mm. The femoral pores in fifty-seven specimens vary from 23 to 29, average 26. The writer proposes to restrict the name *C. lemniscatus* Laurenti, type locality Guiana, to this form. Laurenti (Syn. Amph., 1768, p. 60) gives the locality of Seba's specimen upon which he bases his description as "Guinea" which is evidently a lapsus and so pronounced by Daudin (Hist. Nat. Rept., 1802, iii, p. 180).<sup>2</sup>

It is believed that the relative size attained by adults in the two regions is fairly revealed by the material examined, as the collections are not haphazard but were made by the writer for the purpose of determining the maximum size and the variations due to age and sex in the two regions. In the opinion of the writer, the Guianan form is a depauperate race very closely related to the Colombian form with which it will probably be found to intergrade.

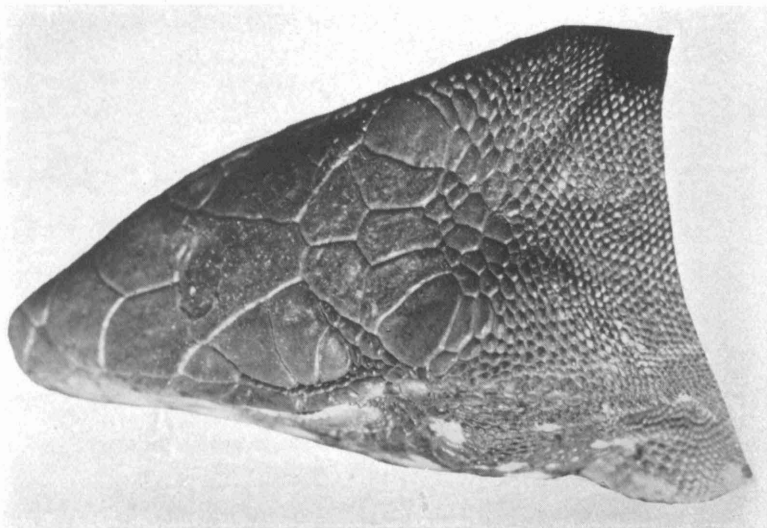
---

<sup>2</sup> It may be pointed out that if the name be credited to Daudin, as is usually done, it may still be applied to the British Guiana specimens as the type locality is then "Surinam."

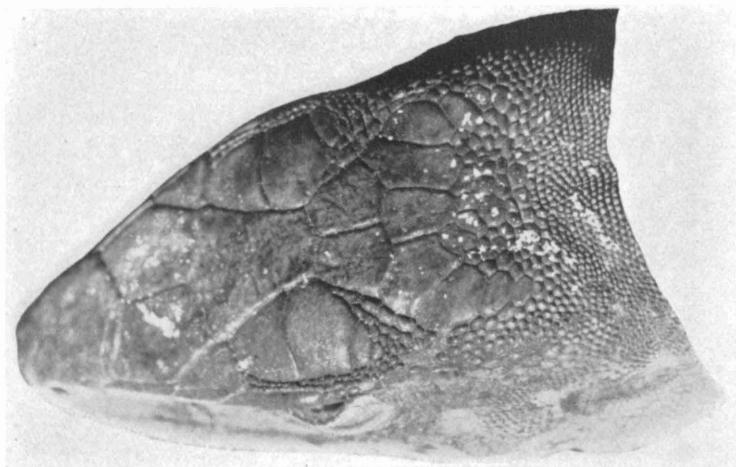
# PLATE

PLATE I.

Heads of *Cnemidophorus lemniscatus gaigei* (type) and typical *C. lemniscatus* from British Guiana (Univ. of Mich. No. 47592), showing the differences in the relative width of the parietal scales. In the specimen of *C. l. gaigei* the outer parietal scute is separated from the large postorbital scale on the angle between the parietal and temporal regions by one scale, while in the specimen of *C. lemniscatus* these scales are separated by several rows of small scales.



CNEMIDOPHORUS LEMNISCATUS GAIGÉ.  
(3.3 times natural size.)



CNEMIDOPHORUS LEMNISCATUS.  
(4.3 times natural size.)







