

4198.

JULY 20 1891

BULLETIN
OF THE
ESSEX INSTITUTE.

VOL. 23.

SALEM: JULY-DEC., 1891.

Nos. 7-12.

ON A TORTOISE FOUND IN FLORIDA AND
CUBA, *Cinosternum Baurii*.

BY S. GARMAN.

In the collections of the Museum of Comparative Zoology at Cambridge, Mass., there is a series of ten or twelve specimens of a species of *Cinosternum* that is not properly designated by any of the names heretofore in use. The lot was collected on the island Key West. Whether the type has a wider distribution in Florida will have to be determined later. On examining these specimens for identification, and on comparison with the allied species, *C. pennsylvanicum* and others, they are found to belong with a specimen from Cuba described by me in 1887 (Proceedings of the American Philosophical Society, page 286) as a possible representative of a new species, to which only the generic name was attached. The series at hand shows the characters then assigned to be valid for the purpose of distinction and in great measure dissipates the uncertainty concerning the extent of individual peculiarities. The

specifications from the Cuban example are here reproduced, to be supplemented by additional particulars furnished by the others taken on the opposite side of the gulf stream.

"A small turtle, sent by Prof. Felipe Poey, of Havana, possesses characters that separate it from both of the species *C. pennsylvanicum* and *C. leucostomum*, which it approaches most nearly. It is elongate; the snout is narrower and more pointed than that of the first mentioned species. The greatest length of the carapace is exactly four, its greatest width two and three-fourths, behind the middle, the greatest length of the plastron three and nine-tenths, and the width of the plastron across the pectoral shields is one and nine-tenths inches. Anteriorly the plastron is rounded; posteriorly it is truncate, with a shallow notch between the anal shields. The pair of pectoral shields, like the pair of preanals, meet on the median line in a suture of about three-eighths of an inch. A single pair of barbels close together under the lower jaw.

Color light yellowish-olive with darker margins to the shields. Head sprinkled with light spots. A narrow streak of light color passes around the snout on the rostral angle above the eye and along the side of the head to the neck."

There are several items from the Cuban specimen to be added to the above. The dark color of the edges of the shields occupies the free outer margins. From the nuchal scale backward there is a yellow stripe over each of the vertebral scales on the median line. At each side of this near the upper edge of the costals a similar stripe is to be seen, which may or may not be present on the hindmost costal. On adult examples the yellow line on vertebrals and costals gives the appearance of a low keel, though the only scale at all carinate is the anterior of the dorsal series. Carinae are present under the stripes on specimens just

hatched, up to the half grown. A narrow streak of light color passes from each nostril over the eyebrow, above the tympanum, to the neck; a similar line goes from the eye downward and back over the angle of the mouth, below the tympanum, to the neck; and there is yet another from each nostril downward, at each side of the symphysis, to the lower surface of the lower jaw. The top of the head is freckled with light colored small spots. The specimen is a gravid female.

Of the Key West specimens there are five adults and a series of seven young ones. Excepting that they are more olive in color, the features of the Cuban are reproduced in them. The three yellow stripes, on the vertebrae and the costals, and the lines on the head distinguish them at once from *Cinosternum pennsylvanicum*. Of the latter there are now before us about fifty specimens, of all ages and sizes and from all parts of its range. On comparing a series of young ones from the Key with another from North Carolina, the former are found to be equally dark and similarly marked with yellow near the outer edges of the plastron and on the marginal shields. The northern representatives are without the three yellow stripes on the back and the cephalic lines are behind the eye, irregular and broken; there are no traces of the dorsal markings. The individuals from the Key have the cephalic lines distinct to the tip of the snout, and in but one case, almost black, are the costal stripes much reduced. On this last specimen the marginal yellow spots are confined to the under surface.

Of the distribution of the striped tortoise there is little to be said. The specimen first described was sent us by the late Professor Poey without notice of its abundance or the exact locality from which he secured it. Several collectors have secured specimens in Key West. It was

found to be tolerably abundant in the brackish ponds, where it seemed the only tortoise, during our own collecting there. It is closely related to *C. pennsylvanicum*. In the amount of differentiation, and its character, its case bears much resemblance to that of *Scaphiopus albus* from the same locality, and it is very likely there are other species similarly modified by the same influences that have caused the mentioned forms to differ so much from their kindred of the mainland. In a study of the causes of variation or of the origin of species such cases are of the greatest importance. Whether the type originated on both islands or was carried from one to the other may not be determined from the present material. The form here described is placed on record in literature under the name of the eminent osteologist, Dr. George Baur of Clark University.

BULLETIN

OF THE

ESSEX INSTITUTE,

VOLUME XXIII.

1891.

SALEM, MASS.:

PRINTED BY THE SALEM PRESS PUBLISHING AND PRINTING CO.,

1891.