TWO NEW TERRAPINS OF THE GENUS PSEUDEMYS FROM THE SOUTHERN STATES

By C. S. Brimley

Plates 1 and 2

Having again taken up during the past two years the study of turtles, I have had to get a number of specimens from the Southern States and in the course of events two apparently new species have turned up.

The genus *Pseudemys* includes large terrapins, most of the species attaining a length of a foot or more in shell and weight of seven to fifteen pounds. The carapace is in young specimens very plentifully marked with a complicated pattern of yellow lines, which varies somewhat in the different species, but in the adults this pattern may be almost wholly lost in some species, very much reduced and altered in others, and practically persistent in its entirety in still others.

The two species described herein both belong to the *concinna* group of the subgenus *Pseudemys* Gray (*Ptychemus* Agassiz) and therefore have the lower jaw serrate, the upper jaw without notch or cusps at the symphisis, and the ridges in the masticating surface of the jaws tuberculate.

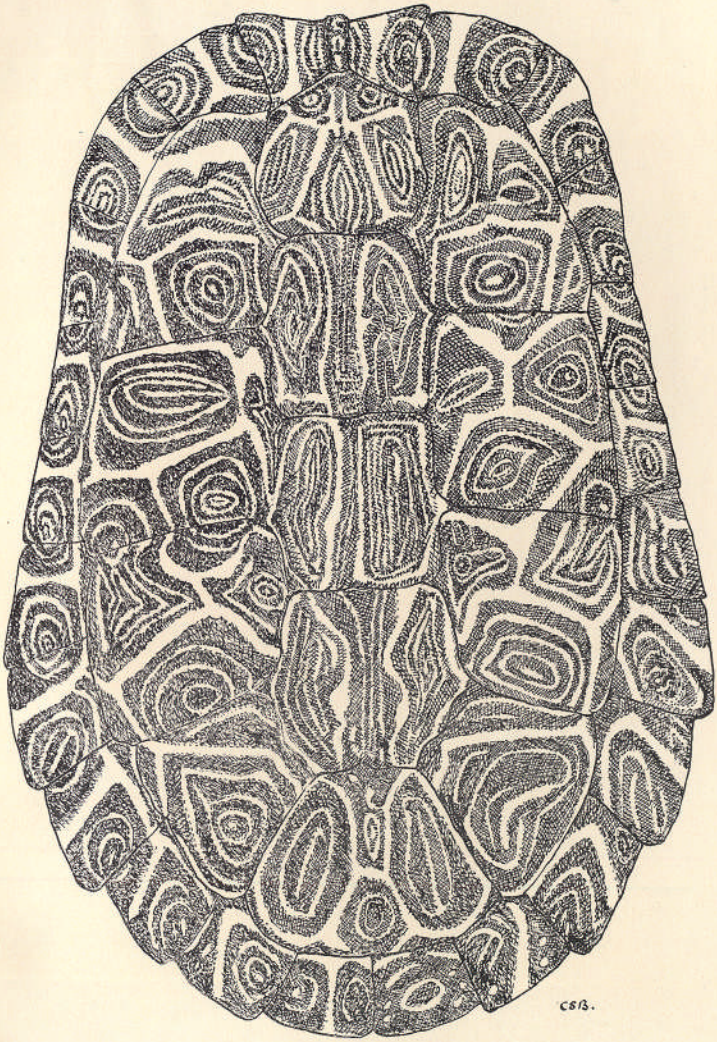
Both differ from the other forms of the group known to me by having dark markings on the plastron as well as in other characters. One is from North Carolina, the other from Louisiana.

Pseudemys vioscana n.sp. Viosca's Terrapin

Plate 2, fig. 2

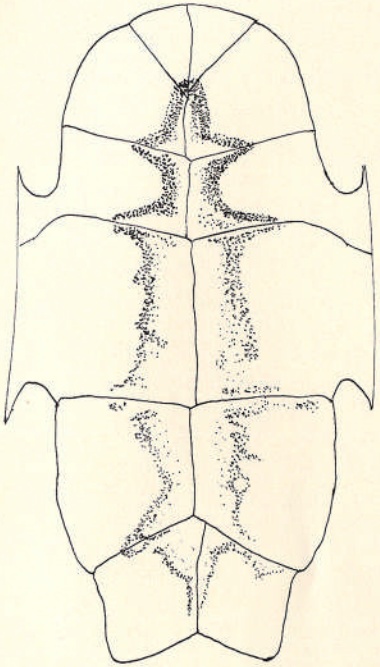
Male. Carapace dark brown with the reticulated pattern of *concinna* evident but only the larger yellow lines conspicuous, the rest obsolete or wanting; marginals with a vertical yellow line on each, the intervening concentric markings wanting; large dark blotches present on the underside of all the marginals; two longitudinal dark bands on the bridge, and dark blotches on the inguinals and axillaries; plastron with a prominent dark pattern, the dark markings mainly along the transverse sutures, forming a broad V-shaped mark on the gulars, urn-shaped figures on the humerals, a broad stripe along each transverse edge of the pectorals,

PLATE 1



PSEUDEMYS ELONAE. No. 128, ♂ Carapace. Elon College, N. C.

PLATE 2



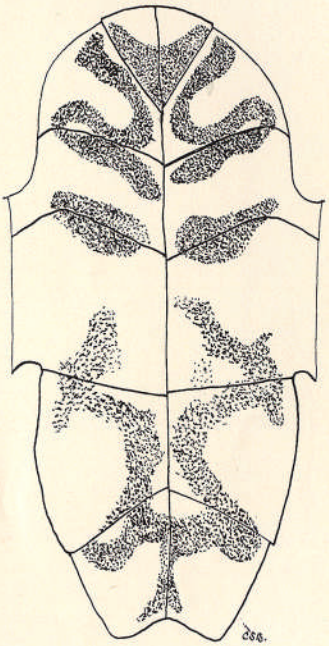


FIG. 1 FIG. 2

FIG. 1. PSEUDEMYS ELONAE ♂, No. 124, Plastron. Elon College, N. C.
FIG. 2. PSEUDEMYS VIOSCANA ♂, No. 115, Plastron. Lake Des Allemands, La.

another along the anterior edge of the abdominals, and an oblique mark on their posterior portion, a broad curved mark on each femoral, and an irregular transverse band across the subcaudals. Head and legs with yellow lines, those on the head more reduced than in *concinna*.

Shell nearly smooth with rather faint longitudinal wrinkles on the costal plates and an evident keel on the last three dorsals. Ridges in alveolar surface of upper jaw with well developed conical tooth-like tubercles in both anterior and posterior portions. Length 8¼ inches.

Other specimens ranging from 6 to 12 inches long show considerable variation in the dark markings of the plastron which, however, are always present on the four anterior plates and almost always on the posterior pair, the largest female (11 inches) has the yellow markings on the carapace still more reduced than in the type, even the vertical bars on the marginals being absent on the four posterior pairs, while the largest male (12 inches) has the pattern somewhat better developed than in the type. Smaller specimens (6 inches) have the yellow pattern much more evident, but never as clear as in *concinna*, and there are confused markings between the vertical bars on the marginals.

The shell is much higher and more arched than in *concinna* especially in the larger specimens, and in all there is an evident keel on at least the last dorsal plate and usually on the last two or three.

Type, mounted specimen No. 115, male, Lake Des Allemands, La.; paratypes, Nos. 111, 114, mounted females, 106, 107, mounted males, 112, 113, male shells with heads, 7807–7811, wet preserved specimens, eleven paratypes in all, all taken by Dr. Percy Viosca, Jr., at same place as type in April 1927.

I have also a single male (shell with head) from same locality, taken by Dr. Viosca, April 9, 1921, which has the plastron wholly without markings and which may (or may not) be the same species. It does not differ essentially from *vioscana* except as to the unmarked plastron.

Pseudemys elonae n.sp. ELON TERRAPIN

Plate 1 and plate 2, fig. 1

Male. In general similar to *Pseudemys concinna* Leconte, but differing in having a dark figure down the center of the plastron and in the alveolar ridges being less strongly tuberculate. The pattern of the carapace is black and yellow, reticulated as in *concinna*, and is very distinct. The underside of the marginals is more heavily marked with black than in my specimens of *concinna*, dark blotches being present on

most of the plates, but only those on the bridge and near it have the large round blotches on the sutures, upper surface of marginals with the usual vertical median yellow bar and concentric yellow lines around the sutures. An irregular dark longitudinal band on the bridge and dark blotches on the inguinals and axillaries. Plastron yellow with dusky markings along the central longitudinal suture, beginning a little more than half way down the gulars, extending as a single unbroken band on both sides of the suture nearly to the pectorals, then dividing into a dusky band on each side of the suture, which continue more or less distinctly to the subcaudals, where the two reunite and continue so practically to the posterior edge of the shell, a broad extension runs on each side along the sutures between the femorals and subcaudals. Head and leg markings as in *concinna*.

Upper jaw smooth edged without notch at symphisis, lower jaw strongly serrate, alveolar ridges in upper jaw without conical tubercles, in their posterior portion and with those in the anterior portion poorly developed.

Carapace nearly smooth with longitudinal grooves on the costal plates, depressed somewhat on each side of the median line on the third and fourth dorsals leaving a faint median keel between the depressions, a faint keel also on the fifth dorsal. Length of shell nine inches.

Type, a mounted specimen, No. 124, collection of C. S. Brimley, from a pond in Guilford County, North Carolina, not far from Elon College, in the Cape Fear drainage, taken in a fyke net by Messrs. D. W. Rumbold and F. J. Holl of Duke University.

Allotype female, No. 130, C.S.B., taken at same time and place, length 12 inches, weight 6½ pounds, differs but little except that the markings on the carapace are slightly less developed, and the longitudinal dusky bands on the plastron are separated for their whole length and send off branches of varying length along each side of the gular-humeral, abdominal-femoral, and femoral-subcaudal sutures, concentric yellow markings between the vertical yellow bars present on all upper marginals.

Paratype male, No. 128, C.S.B., same date and locality, has markings on carapace somewhat broken, length 9 inches, paratype female, No. 127, C.S.B., length 7¼ inches, has very heavy yellow markings almost obscuring the ground color of the carapace, dusky pattern of plastron only present on first two pairs of plates.

Besides the specimens already named, I saw several more in November 1927 that had been taken at the same time and place including two hatched that year, these last were similar to the young of *concinna* but

had traces of black at the inner angles of the gular and humeral plates. I also saw five adults caught in mid March 1928. None differed materially from those described except that two large females had the plastron almost black from a stain or deposit on the shell. The allotype female was in the same condition when I first saw it in November 1927 but the deposit had nearly worn off when it came into my possession in March 1928 and the remains were easily scraped off. Messrs. Holl and Rumbold told me they found only the remains of filamentous algae in the alimentary canal, showing the species to be a plant feeder, and this is confirmed by the fact that the alimentary canal of the allotype female was eight feet long.

I wish to express my thanks to Dr. Percy Viosca for the gift of all the specimens of *P. vioscana*, and to Messrs. Holl and Rumbold for the gift of the *P. elonae*.

The types will ultimately be placed in the United States National Museum.

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