



*Chelonura serpentina*

*Chelonura serpentina* (Schw.)  
Ag. p. 417

CHELONURA.—*Fleming*.

Genus CHELONURA.—CHARACTERS. Head large, both jaws strongly hooked; two barbels under the chin; sternum small, cruciform, immovable, covered with twelve plates; supplemental plates, three; tail very long, surmounted with a scaly or tuberculated crest; anterior extremities furnished with five nails, posterior with four.

CHELONURA SERPENTINA.—*Linnæus*.*Plate XXIII.*

CHARACTERS. Head large, snout very short, but pointed; shell oblong or sub-quadrilateral, depressed, more or less tricarinated, entire in front, deeply emarginate behind, with three points on each side of the central notch.

SYNONYMES. Testudo serpentina, *Linnæus*, Syst. Nat., tom. i. p. 351.

Testudo serpentina, *Lacépède*, Quad. Ovip., tom. i. p. 131.

Testudo serrata, *Pennant*, Arc. Zool. suppl., p. 79.

Testudo serpentina, *Schoepff*, Hist. Test., p. 28, tab. vi.

Testudo serpentina, *Gmelin*, ed. Syst. Nat. Lin., tom. i. part iii. p. 1042.

Testudo serpentina, *Shaw*, Gen. Zool., vol. iii. p. 72, pl. xix.

Testudo serpentina, *Latreille*, Nat. Hist. Rept., tom. i. p. 159.

Testudo serpentina, *Daudin*, Hist. Nat. des Rept., tom. ii. p. 98, tab. xx. fig. 2.

La Tortue serpentine, *Bosc*, Nouv. Dict. d'Hist. Nat., tom. xxii. p. 261.

Chelonura serpentina, *Fleming*, Phil. Zool., vol. ii. p. 268.

- Emys serpentina*, *Merrem*, Versuch eines Syst. der Amphib., p. 23.  
*Chelonura serpentina*, *Say*, Jour. Acad. Nat. Scien. Philad., vol. iv. p. 206-217.  
*Testudo serpentina*, *Leconte*, Ann. Lyc. Nat. Hist. N. Y., vol. iii. p. 127.  
*Chelydra serpentina*, *Fitzinger*, Neue Class. der Rept., p. 45.  
*Chelydra serpentina*, *Wagler*, Natürlich. Syst. der Amphib., p. 136.  
*Chelydra serpentina*, *Gray*, Synops. Rept., p. 36.  
*Chelonura serpentina*, *Bonaparte*, Osseer. Sul., 2nd ed. Reg. An., p. 174.  
*Chelonura serpentina*, *Harlan*, Med. and Phys. Res., p. 157.  
*Emysaurus serpentinus*, *Dumeril et Bibron*, Hist. Nat. des Rept., tom. ii. p. 350.  
Snapping Turtle, *Vulgo*, or Alligator Couta, or Cooter, by the negroes.

**DESCRIPTION.** The shell is sub-quadrilateral, smaller and entire in front, larger behind, and deeply emarginate and serrate. The first vertebral plate is octagonal, broadest in the transverse direction, pointed anteriorly, and passes into the nuchal, or intermediate, marginal plate, and is slightly notched posteriorly for receiving the second vertebral, which is nearly quadrilateral, with a point in the centre of its anterior margin and a minute notch on its posterior that fits it to the adjoining plate; the third vertebral is also nearly quadrilateral, with its posterior border slightly concave; the fourth is octagonal, with its two anterior margins meeting at an obtuse angle in front, while its posterior border presents a slight concavity for the fifth vertebral plate, which is urceolate and irregularly octagonal, narrow in front, and passing into the fourth, and broader behind, where it is joined to four marginal plates, with a prolonged angle that runs in between the supra-caudal: superiorly the shell along the vertebral line is so flat that these plates are situated nearly on an horizontal plane, the anterior dipping almost imperceptibly forwards, and the posterior dipping a little more downwards and backwards. The first lateral plate is irregularly triangular, with its external border rounded and joined to five marginal, and its internal straight where it joins the second, and concave where it is united to the third vertebral plate; the second and third lateral are very regularly quadrilateral, each with an indistinct point that runs up between two adjoining vertebral plates, and each with three articulating facets below; the fourth is very irregularly quadrilateral, narrow above and broad below, with three facets, and its inferior anterior angle prolonged: each of these plates

is surmounted with a prominent knob or tubercle; those of the vertebral range are placed at the centre of the posterior border of each plate, except the fifth, which is very prominent, and occupies the middle of the plate; these knobs present the appearance of a tuberculated carina, more or less prominent, along the vertebral line; each lateral plate has in like manner a knob or tubercle still more developed, but differently situated, here they occupy the superior and posterior corner of the plate; these tubercles make a lateral carina, which gives the shell a tricarinated appearance, differing, however, in different specimens, as the tubercles are more or less elevated. From each tubercle, lateral as well as vertebral, run, like radii, ridges and depressions, which make the shell beautifully radiated; these ridges are very distinct near the tubercles, but become less so as they approach the margin of the plates, which all have their lateral and anterior borders distinctly marked with four or five concentric ridges and depressions; the fifth vertebral plate alone has all its margins, posterior as well as lateral and anterior, thus marked, for in this plate the tubercle stands nearly in the centre. The marginal plates are twenty-five in number; the nuchal, or intermediate, is oblong-quadrilateral, with its posterior border waving, but concave in the centre for receiving the anterior point of the anterior vertebral plate; the first pair of marginal plates are elongated, narrow and pentagonal; the second, third, fourth, fifth, sixth, seventh, eighth, ninth and tenth, are elongated, quadrilateral, those in front narrow, but gradually increasing in breadth to the tenth, which is largest of all, and has its posterior and external angle projecting in a strong point; the eleventh marginal plates are very irregularly pentagonal, each with a similar strong point projecting backwards; the twelfth are in like manner very irregularly pentagonal, with their longest borders in front, and their internal borders very narrow, where they join each other, while their posterior external and posterior internal margins terminate in a strong pointed process; these points and notches give a deeply serrated border to the shell: the marginal plates are generally smooth to the ninth pair, which have concentric striæ on their superior borders; the tenth and eleventh have similar striæ, as well as additional ones on their external and internal margins.

The sternum is cruciform, narrow, rather rounded anteriorly and pointed posteriorly. The gular plate is single, and of rhomboid form, rounded in front and pointed behind, where it is received between the brachial, which are elongated and triangular, with their apices forward and truncate. The thoracic plates are largest of all, and are very regularly pentagonal, with their posterior and external border shortest where they join the abdominal plates, which are irregular in form as well as in position; they are shaped somewhat like an hour-glass, broader internally, where are two articulating facets for junction with the thoracic and femoral plates; they are narrow in the middle, and again expand at the wings to join with two supplemental plates; the femoral are similar to the thoracic in form, but are smaller and narrower on their anterior and external border, where they unite with the abdominal plates; the sub-caudal have the form of regular isosceles triangles, with their bases forward and their apices backward. There are three supplemental plates at the wings; the inguinal is broad, very irregularly four-sided, with its posterior and external angle greatly prolonged; the axillary is also broad, and is regularly quadrilateral: these two unite the abdominal with the marginal plates by means of a cartilaginous substance. The third supplemental plate is situated in front of the axillary; it is long, narrow, and pointed anteriorly, but is in no way connected with the abdominal plates.

The head is very large, yet the animal can draw it under the carapace; it is broad behind and flattened above, with the snout short, though pointed, covered posteriorly with warty integuments, and anteriorly with the same and occasional small plates at the sides, all adhering firmly to the cranium. The nostrils are anterior and near together. The eyes are large, prominent, and placed near the snout; the pupil is dusky, the iris grey, with a few specks of yellow. The upper jaw is strong, with a sharp cutting edge and a well developed hook in front, on each side of which is a depression or notch. The lower jaw is equally firm, with a similar cutting edge, an equally well developed hook in front, and is received within the upper. The neck is long, but thick, and covered both above and below with a granulated or warty skin, and occasional warts of larger size, two of which, at the chin, are of great length, like barbels.

The anterior extremities are large, and covered with a granulated and warty skin, with transverse rows of large scales both above and below, a remarkable range of which exists along the ulnar margin of the fore-arm; there are five fingers, each furnished with a strong, short, and curved nail, like those of a bird of prey. The posterior extremities are equally strong, well developed, and covered in like manner, but with larger scales beneath, and have a remarkable fold of skin along the fibular margin of the leg; there are five toes, well palmated, four only are furnished each with a strong, pointed nail, less curved than those of the anterior extremities. The tail is very long, thick at the base, but soon becomes smaller and ends in a pointed tip; it is covered about the vent with a warty and granulated skin, while along the superior border is placed a series of wedge-shaped tubercles, decreasing in size towards its tip, which gives to the tail a strongly marked serrated crest; on either side of these tubercles is a series or two of smaller spiny warts or processes, much less regular, the upper being the larger; the inferior surface of the tail behind the vent is covered with bifid plates, as in the genus *Coluber*.

**COLOUR.** The head above is dusky; the jaws are horn colour, marked with dark waving lines; the neck above is also dusky, but lighter than the head; the throat and chin are dingy yellowish-white; the shell is dusky or dark cinereous; the sternum is yellow, as well as the inferior surface of the marginal plates; the extremities and tail are dusky or dark cinereous above, and dingy yellowish-white below.

**DIMENSIONS.** Length of head,  $3\frac{1}{2}$  inches; length of neck,  $3\frac{1}{2}$  inches; circumference of neck,  $7\frac{1}{2}$  inches; length of shell, 9 inches; breadth of shell, 8 inches; elevation,  $3\frac{1}{4}$  inches; length of sternum, 7 inches; length of tail beyond the vent,  $6\frac{1}{2}$  inches; space from shell to vent, 2 inches; total length,  $24\frac{1}{2}$  inches. This was the size of the animal here described, but they not unfrequently arrive at dimensions much greater. Dr. Pickering assures me that he met with one near Salem, in Massachusetts, which from its great size he was induced to measure, and he found it to exceed four feet in length.

**HABITS.** The *Chelonura serpentina* is found in stagnant pools, or in streams where the waters are of sluggish motion. Generally they prefer deep water, and live at the bottom of rivers; at times, however, they approach the surface, above which they elevate the tip of their pointed snout, all other parts being concealed, and in this way they float slowly along with the current, but if disturbed, they descend speedily to the bottom. They are extremely voracious, feeding on fish, reptiles, or on any animal substance that falls in their way. They take the hook readily, whatever may be the bait, though most attracted by pieces of fish; in this way many are caught for market. It is, however, necessary to have strong hooks and tackle, otherwise they would be broken, for the animal puts forth great strength in his struggles to escape, both with his firm jaws and by bringing his anterior extremities across the line. When caught, they always give out an odour of musk, more or less distinct; sometimes in very old animals it is so strong as to be disagreeable.

Occasionally the *Chelonura serpentina* leaves the water, and is seen on the banks of rivers or in meadows, even at a distance from their accustomed element. On land, his motions are awkward; he walks slowly, with his head, neck, and long tail extended, elevating himself on his legs like the Alligator, which at that time he greatly resembles in his motions; like the Alligator also, after having walked a short distance he falls on his sternum to rest for a few moments, and then proceeds on his journey. In captivity, they prefer dark places, and are exceedingly ferocious; they will seize upon and bite severely any thing that is offered them, and their grasp upon the object with their strong jaws is so tenacious, that they may even be raised from the ground without losing their hold.

In many of the northern cities they are brought in numbers to market, and are esteemed excellent food, though I think they are far inferior to the Green Turtle, the Soft-shelled, or even several of the *Emydes*. They are kept for months in tubs of fresh water, and feed on such offal as may be given them, though they never become fat or increase much in weight.

**GEOGRAPHICAL DISTRIBUTION.** The *Chelonura serpentina* is found in nearly all parts of the United States, from Maine to Georgia, and from the Alleghanies far towards the Rocky Mountains.

**GENERAL REMARKS.** Although the description of the *Testudo serpentina* of Linnæus is short and incomplete, yet it doubtless refers to the animal now under consideration, which is the first trace of it, and the specific name applied by him has been almost universally adopted by naturalists. The next notice is in Pennant's *Arctic Zoology*, whose description agrees perfectly well with our animal, with the exception of the "small head;" and he alone calls it *Testudo serrata*.

To Schoepff, however, is due the merit of having first clearly described this animal, and his description is accompanied with an excellent figure.

Some naturalists, Schweigger among others, have described a *Chelydra* (*Chelonura*) *lacertina*; this I regard as only a variety of the common *serpentina*, in which the carina along the back was unusually depressed; and those excellent herpetologists, Dumeril and Bibron, are of the same opinion.



Holbrook, John Edwards. 1842. "Chelonura serpentina – Linnaeus." *North American herpetology; or, A description of the reptiles inhabiting the United States* 1, 139–145. <https://doi.org/10.5962/p.326769>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/24567>

**DOI:** <https://doi.org/10.5962/p.326769>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/326769>

**Holding Institution**

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

**Sponsored by**

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

**Copyright & Reuse**

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.