

Catalogue of American Amphibians and Reptiles.

ERNST, CARL H. 1972. *Clemmys insculpta*.*Clemmys insculpta* (LeConte)
Wood turtle*Emys pulchella* Schweigger, 1814:34. Not Schoepff. Homonym of *Testudo pulchella* (= *Emys orbicularis*).*Emys scabra*: Say, 1825:210. Misidentified and placed with *Testudo scabra* Linn.*Testudo insculpta* LeConte, 1830:112. Type locality, "inhabits the northern states"; restricted to vicinity of New York City by Schmidt (1953:92). Type and collector unstated.*Terrapene scabra*: Bonaparte, 1830:157.*Emys speciosa* Gray, 1831:26. Type locality, "New Jersey." Type and collector unstated.*Emys speciosa* var. *levigata* Gray, 1831:26. Type locality, "New Jersey." Type and collector unstated.*Emys inscripta*: Gray, 1831:26. Lapsus for *insculpta*.*Emys insculpta*: Harlan, 1835:152. In synonymy with *Emys speciosa*.*Clemmys insculpta*: Fitzinger, 1835:124. First use of this combination.*Geoclemys pulchella*: Gray, 1855:18. In synonymy with *Testudo insculpta*.*Glyptemys insculpta*: Agassiz, 1857:443.*Glyptemys pulchella*: Gray, 1869:196.*Chelopus insculptus*: Cope, 1875:53.

- CONTENT. *Clemmys insculpta* is a monotypic species.

- DEFINITION. The carapace is broad and low and each pleural and vertebral retains a pyramid of the preceding growth scutes. The carapace is keeled in most specimens and is slightly wider posteriorly with an indentation at the region of the bridge in some individuals. The posterior marginals are serrated and flared. The ground color of the carapace is brown or grayish-brown, often with black and yellow lines radiating from the upper posterior corners of the pleurals. The ventral sides of the marginals and the bridge may have dark blotches along the seams. The unhinged plastron is yellow with a pattern of oblong dark blotches on each scute. The skin is dark brown to blackish and the legs and neck often have some orange or red pigment. Adults range from 12.5 to 22.8 cm in carapace length. Males have thicker tails than females with the anal opening beyond the carapacial margin and nearer the tip. The males also have concave plastrons with a deeply notched posterior margin, longer, heavier claws, and prominent scales on the anterior surface of their forelimbs.

- DESCRIPTIONS. General descriptions are given by Babcock (1919, 1938), Pope (1939), McCauley (1945), Carr (1952), and Conant (1958) among others. More detailed descriptions are given as follows: skull, Romer (1956); shell, Parker (1901) and Zangerl (1939); seam contacts, Tinkle (1962); cervical vertebrae, Williams (1950); nasal choanae, Parsons (1960, 1968); arterial canals in the ear region, McDowell (1961); and penial morphology, Zug (1966).

- ILLUSTRATIONS. Color plates of adults are presented in Babcock (1919), Schmidt and Inger (1957), Conant (1958), and Pritchard (1967); other illustrations of adults are found in Agassiz (1857), Pope (1939, 1955), McCauley (1945), Carr (1952), and Burnley (1968). Juveniles are represented by a color photograph in Conant (1958) and an illustration of the egg is present in Agassiz (1857). The skull is shown in a drawing in Romer (1956) and the penis in a drawing in Zug (1966).

- DISTRIBUTION. *Clemmys insculpta* is restricted to eastern North America where it ranges from Nova Scotia southward through New England, New York, and Pennsylvania to northern Virginia and westward through southern Ontario and New York to northeastern Ohio, Michigan, Wisconsin, eastern Minnesota, and northeastern Iowa. The fossil record indicates a much larger range than is presently occupied. Migration and restriction to a more northern range apparently took place after the Pleistocene.

- FOSSIL RECORD. Pleistocene records are from Yarmouth deposits in Port Kennedy Cave, Montgomery County, Pennsyl-

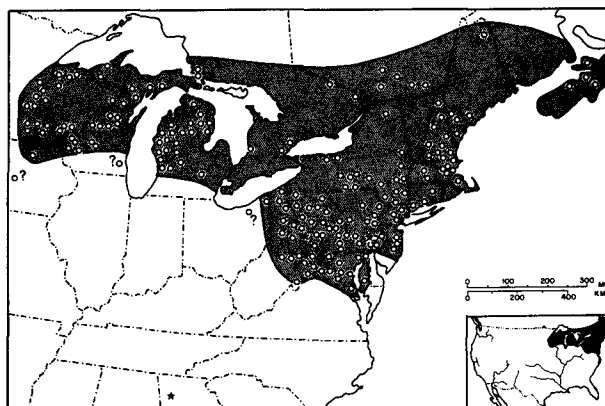
vania (Hay, 1923); Wisconsin deposits in Frankstown Cave, Blair County, Pennsylvania (Richmond, 1964); and Ladds Quarry, Bartow County, Georgia (Holman, 1967). Bleakney (1958) and Adler (1968) have reported *C. insculpta* remains from archeological sites at the Raddatz Rockshelter, Sauk County, Wisconsin, Juntunen, Mackinac County, Michigan, and the Roebuck Site, Grenville County, Ontario.

- PERTINENT LITERATURE. *Clemmys insculpta* has not been as popular an experimental animal as some other turtles and so does not have an extensive literature. The best general accounts are by Wright (1918), Babcock (1919, 1938), Pope (1939), McCauley (1945), and Carr (1952). Other important references are listed below by topics. Taxonomy: McDowell (1964). Reproduction: Rogers (1917), Fisher (1945), Finneran (1948), Allen (1955), Pallas (1960), Bleakney (1963), Evans (1967), and Powell (1967). Male combat: Dinkins (1954). Rate of travel: Woods (1945). Food and feeding: Surface (1908) and Lagler (1943). Maze learning: Tinklepaugh (1932). Shell abnormalities: Parker (1901). Neck growths: DeSola (1928). Blood components and physiology: Cohen and Strickler (1958) and Stenroos and Bowman (1968). Temperature and evaporative water loss relationships: Hutchison, et al. (1966) and Ernst (1968). Fat utilization: Brenner (1970). Habits in captivity: Clement (1958). Olfactory movements: Eglis (1962). Sound sensitivity: Wever and Vernon (1956). Parasites: Hughes, et al. (1941).

- ETYMOLOGY. The specific name *insculpta* is from the Latin *insculptus*, "etched" or "carved," and refers to the sculpturing of the carapacial scutes.

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MAP. The solid circle marks the type-locality; open circles indicate other selected localities, and stars indicate fossil localities.

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