

Catalogue of American Amphibians and Reptiles.

REYNOLDS, SAMUEL L. AND SEIDEL, MICHAEL E. 1982. *Sternotherus odoratus*.

Sternotherus odoratus (Latreille)
Stinkpot

Testudo odorata Latreille, in Sonnini and Latreille, 1802:122. Type-locality, "les eaux dormantes de la Caroline"; restricted to "vicinity of Charleston [Charleston County], South Carolina" by Schmidt (1953:87). Type specimen undesignated.

Testudo glutinata Daudin, 1802:194. Type-locality, "Etats-Unis d' Amerique"; restricted to "vicinity of Lancaster [Lancaster County], Pennsylvania" by Schmidt (1953:87). Type specimen deposited in the Mus. Natur. Hist. Nat. Paris (not examined by authors).

Emys odorata: Schweigger, 1812:313.

Emys glutinata: Merrem, 1820:24.

Terrapene boscii Merrem, 1820:27. Type-locality, "America septentrionali"; restricted to "vicinity of Philadelphia [Philadelphia County], Pennsylvania" by Schmidt (1953:87). Type specimen undesignated.

Terrapene odorata: Merrem, 1820:27.

Cistuda odorata: Say, 1825:206.

Sternotherus odorata: Gray, 1825:211. First use of combination.

Sternotherus odoratus: Bell, 1825:307.

Clemmys glutinata: Ritgen, 1828:272.

Kinosternum odoratum: Bonaparte, 1830:168. In part.

Emys odoratum: Gray, 1831a:13.

Kinosternon odoratum: Gray, 1831b:35.

Didicla odorata: Rafinesque, 1832:64.

Staurotypus odoratus: Duméril and Bibron, 1835:358.

Kinosternum guttatum LeConte, 1854:185. Type-locality, "Pennsylvania"; restricted to "vicinity of Philadelphia [Philadelphia County], Pennsylvania" by Schmidt (1953:87), however, Agassiz (1857:425) stated that the type was from "Upper Darby [Delaware County], Pennsylvania." Holotype: Acad. Natur. Sci. Philadelphia 63 (adult male, dry mount, not examined by authors).

Aromochelys odoratum: Gray, 1855:46.

Testudo glutinosa: Agassiz, 1857:425.

Ozotheca odorata: Agassiz, 1857:425.

Ozotheca tristycha Agassiz, 1857:425. Type-localities, "Osage River, in Missouri, and in Williamson County, in Texas . . . near San Antonio, . . . Medina River, in Texas"; restricted to "San Antonio [Bexar County], Texas" by Schmidt (1953:87). Syntypes: Missouri, Mus. Comp. Zool. 1576 (two adult males); Texas, Mus. Comp. Zool. 1574 (one male and three females); U.S. Nat. Mus. (juveniles) 69, 71-72, San Pedro near San Antonio, Bexar County, collected by Dr. C. B. R. Kennerly; U.S. Nat. Mus. 7890, Medina River, Texas, collected by Dr. C. B. R. Kennerly (all syntypes examined by authors).

Aromochelys guttata: Strauch, 1862:39.

Aromochelys tristycha: Strauch, 1862:39.

Cinosternum odoratum: Boulenger, 1889:37.

- CONTENT. *Sternotherus odoratus* is monotypic.

- DEFINITION. Adults of both sexes are 89-136 mm in carapace length. The olive to black adult carapace is elongate, narrow and rounded in cross section; however, it may be arched with a slight median keel, flattened middorsally or have a pair of lateral keels. The carapace margin is unserrated. There are 23 marginals including the cervical, the 10th and 11th are almost twice as high as the 9th. The yellowish to brown adult plastron has exposed skin along the interplastral seams, and a single inconspicuous hinge between the pectoral and abdominal scutes. There is a single gular scute. The bridge is covered by the axillary, inguinal and lateral extensions of abdominal scutes. The head has two white or yellow stripes on each side, extending posteriorly from the nostrils above and below the eye to the neck. These stripes may be obscure in older individuals. One or two pairs of barbels are present on the chin. The skin is grayish-olive to black and may have a mottled appearance. Males are distinguished by having a long thick tail ending in a terminal nail, two small patches

of tuberculate scales on the inner surface of each crus and thigh, extensive exposed skin between the interplastral seams, and the anal vent extended beyond the posterior edge of the carapace.

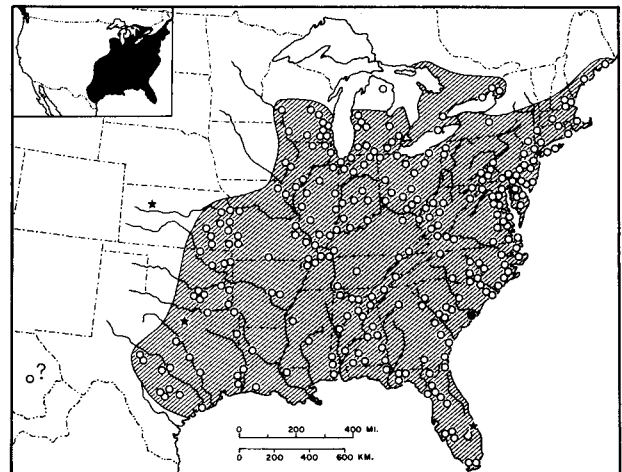
- DESCRIPTIONS. General descriptions: Carr (1952), Ernst and Barbour (1972), Conant (1975). Osteology: Williams (1950), Edgren (1960a), Albrecht (1967), Haines (1969), Zug (1971a). Shell: Adler (1960), Shah (1960), Tinkle (1962). Myology: Poglayen-Neuwall (1953), Shah (1962), Schumacher (1973). Urogenital system: Risley (1933), Fox (1977). Sexual dimorphism: Risley (1930). Egg: Thing (1918), Edgren (1949), Ewert (1979). Cranial arteries: McDowell (1961), Albrecht (1967). Penial morphology: Zug (1966). Coelomic epithelium: Risley (1934). Pharynx: Siebenrock (1899). Choanal structure: Parsons and Stephens (1968). Ear: Baird (1970). Retina: Ernst et al. (1970). Cloacal bursa: Smith and James (1958). Glands: Hebard and Charipper (1955), Cowan (1973), Ehrenfeld and Ehrenfeld (1973), Winokur and Legler (1974), Manton (1979).

- ILLUSTRATIONS. Color or black and white photographs of adults or hatchlings are in Ernst and Barbour (1972), Conant (1975), and Pritchard (1979). Eggs are illustrated in Gibbons and Greene (1979). The skull is illustrated in Siebenrock (1907) and Ernst and Barbour (1972).

- DISTRIBUTION. *Sternotherus odoratus* ranges from southeastern Canada and southern Wisconsin southward through Florida and southwest to central Texas, including eastern Iowa, Missouri, eastern Kansas and eastern Oklahoma. An old, presumably valid, record exists for Sauz, Chihuahua, Mexico (Moll and Williams, 1963), however, the present status of *S. odoratus* in Mexico needs study.

- FOSSIL RECORD. Pliocene fossils are from Clarendonian, Trego County, Kansas (Holman, 1975). Pleistocene records are from: Clear Creek local fauna, Sangamon, Denton County, Texas (Holman, 1963); Vero, Wisconsin, Indian River County, Florida (Weigel, 1962).

- PERTINENT LITERATURE. *Sternotherus odoratus* has an extensive literature which could not be comprehensively cited due to space restrictions. General accounts are provided by Carr (1952) and Ernst and Barbour (1972). Other important references are by topic. Ecology: Thomas and Trautman (1937), Tinkle (1958), Boyer (1965), Mahmoud (1969), Berry (1975). Movements and orientation: Cagle (1944), Williams (1952), Gibbons (1970a). Behavior: Groves (1972), Zug (1972), Graham and Hutchison (1979). Foods and feeding: Mahmoud (1968), Berry (1975). Parasites: Ernst and Ernst (1977, 1979). Algae: Proctor (1958). Reproduction: Risley (1930, 1933, 1938), Cagle (1937), Lagler (1941), Edgren (1942, 1956, 1960b), Tinkle (1959, 1961), Mahmoud (1967), Gibbons (1970b), Sanderson (1970), Ewert (1971, 1979), Mahmoud



MAP. Solid circle marks the type locality, open circles other localities. Stars mark Pliocene and Pleistocene fossil records. Question mark indicates unverified record.

and Klicka (1972), Iverson (1977), Ewert and Legler (1978), Moll (1979). Hybridization: Folkerts (1967). Taxonomy: Siebenrock (1907), Tinkle (1958, 1961), Frair (1972), Zug (1971b). Karyotype: Stock (1972), Killebrew (1975). Musk: Eisner et al. (1977). Morphology: Williams (1950), Zug (1966, 1971a), Dalrymple (1979). Hematology: Crenshaw (1962), Frair (1963, 1977), Goin and Jackson (1965), Hutchison and Szarski (1965), Sullivan and Riggs (1967), Dessauer (1970), Jackson et al. (1971), Klicka and Mahmoud (1971), Seidel (1980). Physiology: Root (1949), Edgren and Edgren (1955), Hutchison et al. (1966), Belkin (1968), Ernst (1968), Dunson (1979), Seidel (1980). Tissue chemistry: Klicka and Mahmoud (1970), Jackson et al. (1974). Geographic variation: Tinkle (1961).

• ETYMOLOGY. The specific name is from the Latin *odoratus*, "to have an odor," referring to the strong-scented musk producing glands.

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