

## Catalogue of American Amphibians and Reptiles.

ERNST, CARL H. 1981. *Rhinoclemmys punctularia*.***Rhinoclemmys punctularia* (Daudin)  
Spotted-legged terrapin**

*Testudo punctularia* Daudin, 1802:249. Type-locality, "Cayenne," French Guiana. Holotype, adult female, Mus. Nat. Hist. Natur., Paris 9130, collected by M. Richard, no date (examined by author).

*Emys dorsualis* Spix, 1824:11. Type-locality, "juxta flumen Solimons," Amazonas, Brazil. Holotype, not designated.

*Geoclemmys melanosterna* Gray, 1861:205. Type-locality, "Cherunha . . . Gulf of Darien," restricted to "Punta Charambirá delta del rio San Juan, Chocó, Colombia" by Medem (1958:21). Syntypes, adult female, British Mus. (Natur. Hist.) 1947.3.4.8. from Rio Buenaventura, collected by J. O. Goodridge, no date; juvenile, British Mus. (Natur. Hist.) 1947.3.5.51 from Chirambirá, Gulf of Darien, collector and date unknown (examined by author).

*Geoclemmys callocephalus* Gray, 1863a:254. Type-locality, "Unknown, perhaps China," restricted to South America (Wermuth and Mertens, 1961:94). Holotype, adult female, British Mus. (Natur. Hist.) 1947.3.5.50, collector and date unknown (examined by author).

*Rhinoclemmys bellii* Gray, 1863b:183. Type-locality, "tropical America." Holotype, not designated.

*Rhinoclemmys lunata* Gray, 1873:144. Type-locality, Surinam. Syntypes, juveniles, British Mus. (Natur. Hist.) 1946.1.22.69-70, collector and date unknown (examined by author).

*Rhinoclemmys ventricosa* Gray, 1873:145. Type-locality, "Tropical America," Surinam. Holotype, female shell, British Mus. (Natur. Hist.) 1947.3.5.49, collector and date unknown (examined by author).

• CONTENT. Three subspecies are recognized: *Rhinoclemmys punctularia punctularia*, *R. p. melanosterna*, and *R. p. diademata*.

• DEFINITION. Adults grow to 290 mm in carapace length. The domed carapace is smooth to lightly rugose, mid-dorsally keeled, posteriorly serrated, notched posteriorly, and usually widest and highest just behind the middle. The carapace is uni-colored dark brown or black in adults; juveniles may show yellow to bronze radiations on each pleural. The unhinged plastron is well developed, upturned anteriorly, and notched posteriorly; it is red-brown to black with a yellow border and seams. The bridge is yellow with two large dark blotches. The head is small with a slightly projecting snout, and a notched upper jaw. Dorsal head pattern varies from two longitudinal dorsal stripes to a broad horseshoe-like mark behind the orbits (see subspecies definitions). These markings are usually red or yellow, but may be pale green. The eyelids have a light-colored bar and stripes usually run between the orbit and tympanum and from the snout along the upper jaw to the tympanum. The iris ranges from bronze to bright yellow or white. The feet are strongly webbed. The forelimbs have large yellow or red, black spotted scales. The hindlimbs are gray laterally and yellow with black spotting medially. Males have concave plastrons and long tails with the vent beyond the carapacial margin; females are larger, with flat plastrons and shorter tails with the vent beneath the carapace.

• DESCRIPTIONS. General descriptions of adults are given by Boulenger (1889), Siebenrock (1909), Nicéforo Maria (1958), Wermuth and Mertens (1961), Medem (1962), Pritchard (1967), and Ernst (1978). Anatomical descriptions include: hyoid apparatus (Siebenrock, 1899); cervical vertebrae (Williams, 1950); choanal structure (Parsons, 1960, 1968); rostral pores and mental glands (Winokur and Legler, 1974, 1975). Goeldi (1898) described the eggs, and Bickham and Baker (1976) the karyotype.

• ILLUSTRATIONS. Pritchard (1967) shows color photographs of adults; black and white photographs and drawings of adults are in Mertens (1954b), Nicéforo Maria (1958), Wermuth and Mertens (1961), and Medem (1962). Head patterns are illustrated in Mertens (1954a), Nicéforo Maria (1958), Wermuth and Mertens (1961), Medem (1962) and Ernst (1978). Siebenrock (1899) presents a drawing of the hyoid apparatus. Sullivan and Riggs (1967) show

the hemoglobin electrophoretic patterns, and Bickham and Baker (1976) the karyotype. Medem (1962) gives a photograph of the egg.

• DISTRIBUTION. *Rhinoclemmys punctularia* occurs in southern Central America and northern South America. Three subspecies occur within the range. *Rhinoclemmys p. melanosterna* ranges from the Panama Canal Zone southward through western Colombia to northwestern Ecuador; Medem (1962) shows its range in Colombia. *Rhinoclemmys p. diademata* occurs in the Atlantic drainages of northeastern Colombia and northwestern Venezuela, generally west of the Sierra Nevada de Merida; Nicéforo Maria (1958) discussed the range in Colombia. *Rhinoclemmys p. punctularia* occurs from the Orinoco drainage in northeastern Venezuela and Trinidad southeastward through the Guianas to the Amazon delta in northeastern Brazil.

• FOSSIL RECORD. None.

• PERTINENT LITERATURE. General accounts of the biology are given by Mertens (1954b), Nicéforo Maria (1958), and Medem (1962). Other important references are listed by topic. Taxonomy and relationships: Bickham and Baker (1976), Ernst (1978). Blood studies: Frair (1963), Sullivan and Riggs (1967). Eggs: Goeldi (1898). Karyotype: Bickham and Baker (1976), Killebrew (1977). Parasites: Hughes et al. (1941), Caballero et al. (1959), Alho (1964), Ernst and Ernst (1977), Schoenecker et al. (1977).

• ETYMOLOGY. The specific name *punctularia* is derived from the Latin *punctulatus* for spotted and refers to the periorbital spots of the nominate race. Subspecific names are derived as follows: *melanosterna* from the Greek words *melas* for black and *sternon* for chest, referring to the black plastron, and *diademata* from the Greek prefix *dia* for across and the Greek *demation* for band, referring to the head pattern of this race.

**1. *Rhinoclemmys punctularia punctularia* (Daudin)**

*Testudo punctularia* Daudin, 1802:249. See species synonymy.

*Emys dorsualis* Spix, 1824:11. See species synonymy.

*Geoclemmys callocephalus* Gray, 1863a:254. See species synonymy.

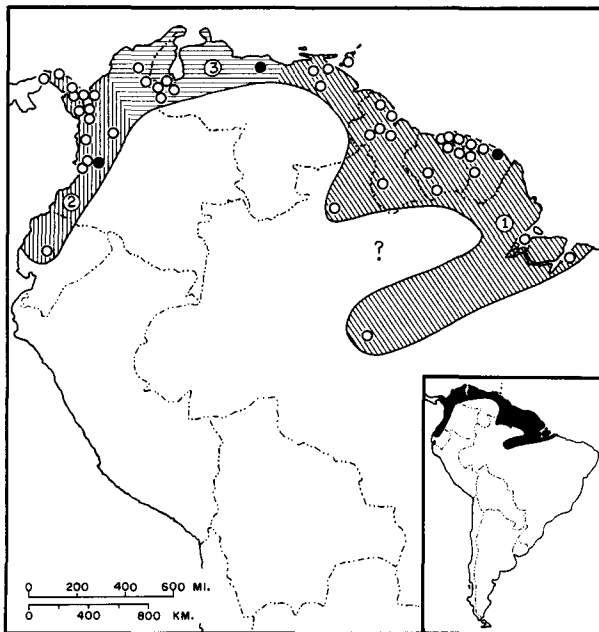
*Rhinoclemmys bellii* Gray, 1863b:183. See species synonymy.

*Rhinoclemmys lunata* Gray, 1873:144. See species synonymy.

*Rhinoclemmys ventricosa* Gray, 1873:145. See species synonymy.

*Geomyda punctularia punctularia*: Wettstein, 1934:19.

*Geomyda punctularia lunata*: Mertens, 1954a:6.



MAP. The solid circles mark the type-localities; open circles indicate other selected localities.

• DEFINITION. The dorsal head pattern on each side consists of an oblique yellow or red stripe running posteriorly from above the orbit to above the tympanum (this stripe may or may not join its mate of opposite side just behind the orbits), two light blotches on the nape, and a light spot on the snout in front of each orbit. This iris is bronze.

• REMARKS. Ernst (1978) synonymized *Rhinoclemmys lunata* Gray, 1873 with *Rhinoclemmys bellii* Gray, 1863 owing to their similar head patterns, and then showed both patterns to fall within the normal variation of *Rhinoclemmys p. punctularia*. The *bellii-lunata* type head pattern occurs commonly throughout the northern range of *R. p. punctularia*.

## 2. *Rhinoclemmys punctularia melanosterna* (Gray)

*Geoclemmys melanosterna* Gray, 1861:205. See species synonymy.

*Nicoria punctularia* var. *melanosterna*: Boulenger, 1889:124.

• DEFINITION. The dorsal head pattern has an oblique pale green, orange or red stripe on each side running posteriorly from in front of the orbit to above the tympanum (these are never transversally united) and no light spots on the snout in front of the orbits or on the nape. The iris is bright yellow or white.

• REMARKS. In Colombia, *R. p. melanosterna* from freshwater habitats have red head stripes, whereas those from brackish water have greenish stripes. Populations intermediate between the two possess orange stripes.

## 3. *Rhinoclemmys punctularia diademata* (Mertens)

*Geoemyda punctularia diademata* Mertens, 1954a:4. Type-locality, "Maracay, Venezuela." Holotype, adult female, Senckenberg Mus., Frankfurt 48141, from "Hamburg Aquarium," April 1954 (examined by author).

• DEFINITION. The dorsal head pattern consists of a large yellow horseshoe-shaped figure located medially just behind the orbit with an anterior apex and posteriorly enclosing a central dark spot, a light blotch on the snout in front of each orbit, and a unicolored nape. The iris is greenish to bronze.

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