

REPTILIA: TESTUDINES: CHELIDAE

PHRYNOPS GIBBUS

Catalogue of American Amphibians and Reptiles.

ERNST, CARL H. 1981. *Phrynops gibbus*.

***Phrynops gibbus* (Schweigger)
Keeled-back sideneck turtle**

Emys gibba Schweigger, 1812:299. Type-locality, "Patria ignota," listed as Amerique du Sud in catalogue. Holotype, Mus. Nat. Hist. Natur., Paris, 8756, an adult female collected (date unknown) by M. Castelanau (examined by author).

Emys stenops Spix, 1824:12. Type-locality, "locis aquosis ad ripam fluminis Solimoens," Brazil. Holotype not designated; present whereabouts of a juvenile mentioned in text unknown.

Rhinemys gibba: Wagler, 1830:135.

Hydraspis cayennensis gibba: Gray, 1831:42.

Platemys gibba: Duméril and Bibron, 1835:416.

Platemys miliusii Duméril and Bibron, 1835:431. Type-locality, "Cayenne," French Guiana. Holotype, Mus. Nat. Hist. Natur., Paris, 8755, an adult female collected by Baron Milius, May 1831 (examined by author).

Hydraspis (Podocnemis) gibba: Fitzinger, 1835:126.

Phrynops? miliusii: Gray, 1844:42.

Phrynops gibbus: Diesing, 1850:406.

Hydraspis miliusii: Gray, 1855:56.

Hydraspis gordoni Gray, 1868:563. Type-locality, "Trinidad, near the mountain of Tamana." Holotype, British Mus. (Natur. Hist.), 1947.3.4.18, an adult male collected (date unknown) by Arthur Gordon (?) (examined by author).

Hydraspis bicolor Gray, 1873:304. Type-locality, "Demerara Falls," Guyana. Holotype, British Mus. (Natur. Hist.), 1946.2.22.86, a juvenile, collector and date unknown (examined by author).

Mesoclemmys gibba: Gray, 1873:306.

Mesoclemmys gibba: Orces, 1949:16. *Lapsus calami*.

Mesoclemmys gibba: Donoso-Barros, 1965:6. *Lapsus calami*.

• CONTENT. *Phrynops gibbus* is a monotypic species.

• DEFINITION. Adults grow at least to 230 mm in carapace length. The ellipsoidal carapace is slightly bowed in profile, smooth to slightly rough, somewhat serrated and shallowly notched posteriorly, usually widest at the level of the eighth marginals, and highest at the level of the third vertebral. The cervical is long and narrow. The vertebrals are wider than long with the first widest, the fifth next widest, and then the second through fourth, respectively. In juveniles and subadults, the third to fifth vertebrals may each bear a small, posterior projection or a low keel. In older individuals the second and third vertebrals may be somewhat concave. The carapace color is chestnut-brown to dark gray to black. The unhinged plastron is slightly upturned anteriorly and possesses a rather long intergular scute which completely separates the gulars, but not the humerals. It is shorter than its distance from the abdominals. The pectoral and abdominal scutes are directly in contact with the marginals, and the pectoral is rather narrow. Inguinal scutes may be absent. The posterior plastral lobe curves toward the midline and the anals are deeply notched posteriorly. The plastron is red-brown to yellow with brown blotches, a narrow yellow border may occur anteriorly and posteriorly. The bridge and undersides of the marginals are brown to yellow. The head and neck are considerably shorter than the carapace. The head is covered dorsally and laterally with numerous convex scales; those between the orbit and tympanum are smaller than those on top and sides of the head. The snout protrudes; the upper jaw is not notched or serrated. The two chin barbels are shorter than the diameter of the orbit. The head and neck are red-brown to dark gray dorsolaterally and grayish ventrally, the jaw may contain dark spots, and the chin barbels are yellowish. The upper lip is often whitish with parallel black markings. The toes are heavily webbed and there is a row of enlarged scales on the outer border of the forelimbs and hindlimbs. The limbs and tail are gray-black, and the skin of the limb sockets is yellowish.

Males have thicker tails with the vent nearer the tip and a deep posterior plastral notch; females have a wide posterior plastral notch.

• DESCRIPTIONS. General descriptions of adults are presented by Gray (1855, 1868, 1873), Boulenger (1889), Siebenrock (1904, 1909), Luederwaldt (1926), Kanberg (1937), Nicéforo Maria (1952), Pritchard (1964, 1967, 1979), Medem (1973), Dixon and Soini (1977), and Duellman (1978). Other specific descriptions are: carapacial neurals (Siebenrock, 1904, 1905); head and skull (Gray, 1864; Gaffney, 1977); eggs and hatchlings (Medem, 1973); karyotype (Killebrew, 1976; Barros et al., 1976).

• ILLUSTRATIONS. Photographs of a juvenile are found in Pritchard (1967, 1979), and Spix (1824) presents a color plate of a juvenile. For other photographs or drawings of adults see Gray (1868), Siebenrock (1904), Kanberg (1937), Nicéforo Maria (1952), Wermuth and Mertens (1961), Freiberg (1972), and Pritchard (1979). The karyotype is shown in Killebrew (1976) and Barros et al. (1976). The eggs and hatchlings are illustrated in Medem (1973). Siebenrock (1904, 1905) presents drawings of the neural bones of the carapace, Gaffney (1977) the skull.

• DISTRIBUTION. *Phrynops gibbus* is restricted to northern South America where it occurs from central and northeastern Peru and southeastern Colombia (Rios Ucayali, Maranon, Meimon, Nanay, Itaya and Amazon) northward through eastern Ecuador (Rios Conamba and Suno), and eastern Colombia (Rios Apaporis, Vaupés, Orteguaza, Hacha, Muco, Meta, Güejar, and Ocoa) to southwestern Venezuela (Rio Negro). It is also found east of the Sierra Nevada de Merida in northeastern Venezuela (near the Orinoco delta) and on Trinidad, eastward through Guyana (Demerara and Kuyuwini Rivers), Surinam (New and Commewijne Rivers), French Guiana (near Cayenne) to northeastern Brazil (Para). Mittermeier et al. (1978) document the entire distribution of *P. gibbus* and Medem (1958, 1960) discusses its range in Colombia.

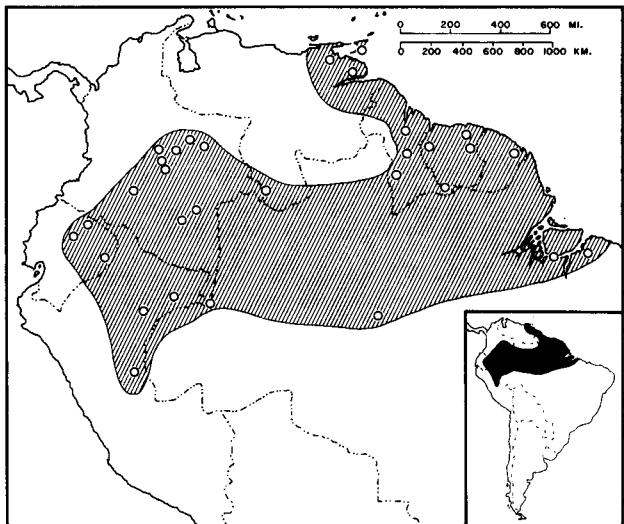
• FOSSIL RECORD. None.

• PERTINENT LITERATURE. Important references are listed by topic. Taxonomy: Medem (1960, 1973), Bour (1973). Reproduction: Nicéforo Maria (1952), Medem (1960, 1973), Mittermeier et al. (1978), Dixon and Soini (1977). Nocturnal habits: Kearney (1972). Habitat: Mittermeier et al. (1978). Parasites: Diesing (1850). Shell diseases: Kanberg (1937). Cervical vertebrae: Williams (1950). Karyotypes: Barros et al. (1976), Killebrew (1976). Blood chemistry: Frair et al. (1978), Frair (1980). Longevity: Bowler (1977).

• ETYMOLOGY. The Latin specific name *gibbus* means bent or hunched and probably refers to the carapacial profile of this turtle.

COMMENT

The original use of *Phrynops* as the genus of this species by Diesing (1850:406) was apparently by accident, as it was included



MAP. Open circles indicate selected localities. Type-locality not specific enough to plot.

as "*P. gibbus*" in a list with *Phrynos geoffroanus* and *P. miliusii*. The first actual assignment of the species to *Phrynos* was apparently by Medem (1960:350) who gave it subgeneric status, *Phrynos (Mesoclemmys) gibbus*.

Little is known of the geographical variation, behavior, and ecology of this turtle; good field studies are needed.

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