

Catalogue of American Amphibians and Reptiles.

MEYLAN, PETER A. 1985. *Heterodon simus*.***Heterodon simus* (Linnaeus)
Southern Hognose Snake**

Coluber simus Linnaeus, 1766:375. Type-locality: "Carolina"; restricted to "Charleston, South Carolina" by Schmidt (1953). Type collected by C. D. Garden. It could not be located during the preparation of this account. Edgren (1953) has suggested that Linnaeus had *Heterodon platyrhinos* in hand when this species was named (see Comments), and that the type is lost.

Heterodon simus: Holbrook, 1842:57. New combination.

Heterodon catesbyi Gunther, 1858:83 (part). Type-locality: "North America and Texas"; restricted to "Charleston, South Carolina" by Schmidt (1953). This name is based on a series of *H. simus* and *H. nasicus* (Edgren, 1953); thus Schmidt's restriction of the type-locality can be disregarded.

● CONTENT. No subspecies are recognized.

● DEFINITION. This species is the smallest member of the genus *Heterodon* (36–51 cm) and is characterized by a combination of: 25-25-21 scale rows; three or more azygous scales posterior to the rostral, rostral sharply upturned; 122 or fewer ventrals and 44 or fewer subcaudals in males, 134 or fewer ventrals, and 35 or fewer subcaudals in females. The background color is light brown. Three rows of dark brown blotches (22 to 32 in the dorsal row) are always present. The venter is cream to pale brown with subcaudals similar in color to ventrals. Juveniles are colored as adults. Color and pattern are less variable than in *Heterodon platyrhinos*.

● DESCRIPTIONS. General descriptions are given by Davis and Rice (1883), Haltom (1931), Brimley (1941), Edgren (1952b), Mount (1975), Martof et al. (1980), and Ashton and Ashton (1981), with that of Holbrook (1842) being the most complete.

● ILLUSTRATIONS. For color photographs see Behler and King (1979), Martof et al. (1980), and Ashton and Ashton (1981); for black and white photograph see Mount (1975). Holbrook (1842) provided a watercolor of an adult. Details of morphology appear in line drawings as follows: head, body, and vent scalation (Haltom, 1931; Ashton and Ashton, 1981); selected skull elements (Weaver, 1965); vertebrae (Auffenberg, 1963).

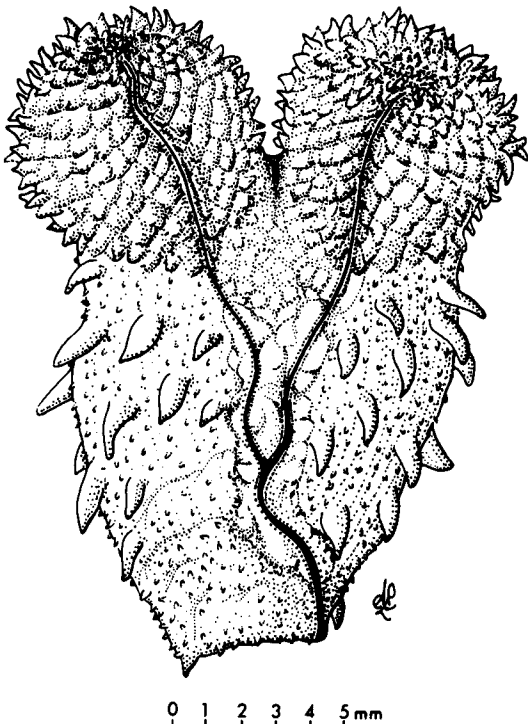


FIGURE. Sulcate view of right hemipenis of *Heterodon simus* from Wakulla Co., Florida (UF 56387).

● DISTRIBUTION. *Heterodon simus* is distributed through the southeastern United States from the vicinities of Morehead City and Raleigh, North Carolina south to Lake Okeechobee and Tampa, Florida; west to the Pearl River separating Louisiana and Mississippi; and north to Calhoun County, Alabama. Populations in the Ridge and Valley Physiographic Province of Alabama may be disjunct from those in the Coastal Plain (Mount, 1975).

● FOSSIL RECORD. All known fossils of this species are from the Rancholabrean of peninsular Florida and were summarized by Holman (1981).

● PERTINENT LITERATURE. General accounts are given by Haltom (1931), Carr (1940), Brimley (1941), Edgren (1955), Mount (1975), Martof et al. (1980), and Ashton and Ashton (1981), but that of Van Duyn (1937) is the most complete. Platt (1969) and Meylan (1982) discussed phylogenetic history. Cranial anatomy was discussed by Weaver (1965). Various aspects of the natural history of this species which have been treated include: defensive behavior (Myers and Arata, 1961), food habits (Deckert, 1918; Goin, 1947), evidence of toxicity (Kapus, 1964), aberrant mating behavior (Neill, 1951), and eggs (Price and Carr, 1943).

● ETYMOLOGY. The specific name *simus* is a Latin adjective meaning snubnosed or pugnosed and refers to the markedly upturned rostral scale found in this species.

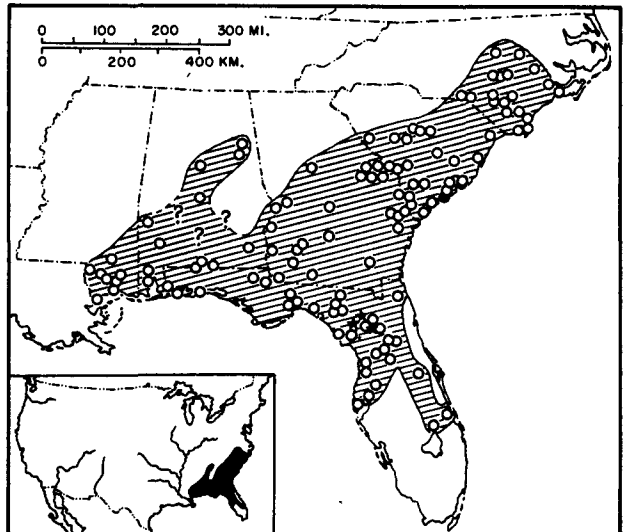
COMMENT

Records from Dade Co., Florida (USNM 85319), Indiana (USNM 4834, 2 specimens), Louisiana (UNMNH 3719), and Virginia (USNM 1187) can all be considered to be in error.

The snake Linnaeus received from Garden and described as *Heterodon simus* had a white cross on the top of the head and a black venter. Edgren (1953) stated that these are not typical of *H. simus*; he thought it unquestionable that Linnaeus had *H. platyrhinos* in hand when *H. simus* was described. To minimize confusion Edgren (1952a) applied to the ICZN to confirm the use of *H. simus* in its present connotation.

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MAP. Solid circle indicates type-locality; hollow circles indicate locality records. Stars indicate Pleistocene fossil localities. Question marks indicate a possible range hiatus in Alabama.

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