

Catalogue of American Amphibians and Reptiles.

de Queiroz, Kevin. 1990. *Ctenosaura oedirhina*.

***Ctenosaura oedirhina* de Queiroz**
Roatán Island Spiny-tailed Iguana

Ctenosaura bakeri: Barbour, 1928:56 (part). See Nomenclatural History.

Enyaliosaurus bakeri: Cochran, 1961:105 (part). See Nomenclatural History and Comment.

Ctenosaura oedirhina de Queiroz, 1987b:892. Type locality, "approx. 4.8 km (converted from 3 miles) west of Roatán on the path to Flowers Bay, Isla de Roatán, Departamento de las Islas de la Bahía, Honduras." Holotype, University of Florida (UF) 28532, an adult female, prepared as an alcoholic specimen, collected on August 19, 1969 by D. E. Hahn (examined by author).

Ctenosaura oedirhina: Villa, Wilson, and Johnson, 1988:45. *Lapsus*.

- **Content.** No subspecies are recognized.

- **Definition.** A medium-sized spiny-tailed iguana in which males are probably larger than females (few adults have been collected, but the maximum known SVL for males is 247 mm, BMNH 1938.10.4.82, while that for females is 203 mm, UF 28532). *C. oedirhina* is characterized by: modes of 24 presacral vertebrae and seven premaxillary teeth; cristae cranii forming smooth curves from the frontal to the prefrontals; parietal roof remaining deeply notched posteriorly throughout ontogeny so that the braincase is broadly exposed in dorsal view; a maximum of three cusps on the crowns of posterior marginal teeth; usually four postmentals; dewlap absent; parietal eye conspicuous externally; dorsal crest scales not strongly compressed, forming a continuous row, conforming in color and pattern with the adjacent body scales, and reaching a maximum height of ca. 6 mm in adult males; dorsal crest narrowly interrupted in sacral region; a patch of enlarged, strongly keeled scales on

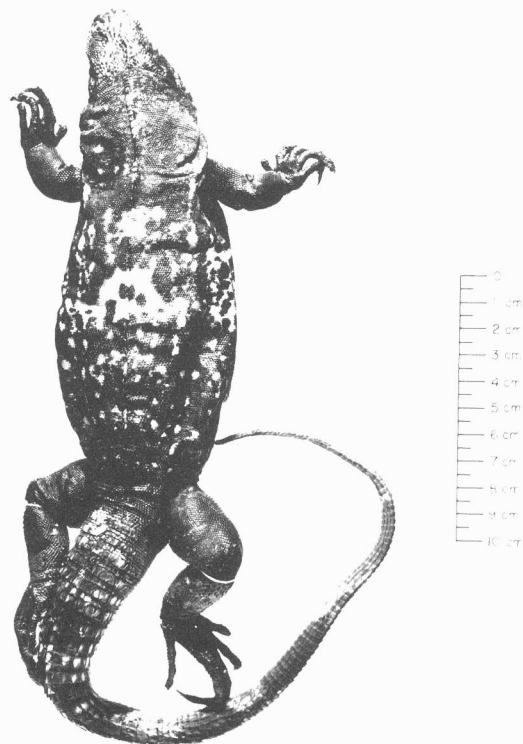
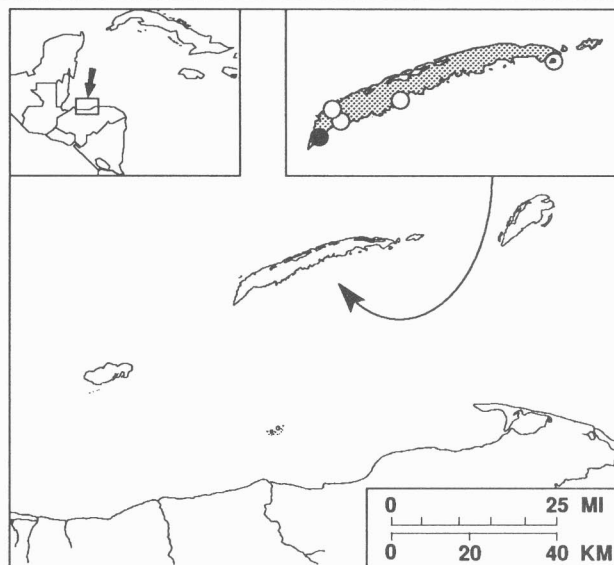


Figure. Dorsal view of the holotype of *Ctenosaura oedirhina* (UF 28532).



Map. Solid circle marks the type-locality, open circles other records.

anterodorsal surface of shank; subdigital scales at the base of pedal digit III not united at bases; tail strongly spinose proximally but not distally, longer than the body (unregenerated), and with more than 30 caudal vertebrae; anterior whorls of enlarged, spinous caudal scales separated by one or two rows of intercalary scales.

- **Diagnosis.** *Ctenosaura oedirhina* is distinguished from all other species of *Ctenosaura* by its blunt, rounded snout (in adults) resulting from inflation of the nasal capsule. *C. oedirhina* is further distinguished from *C. acanthura*, *C. hemilopha*, *C. pectinata*, and *C. similis* by the possession of enlarged, strongly keeled scales on the proximal anterodorsal surface of the shank and a smaller maximum size (<250 mm vs. >300 mm SVL). *C. oedirhina* is distinguished from *C. clarki*, *C. defensor*, and *C. quinquecarinata* by a larger maximum size (>200 mm vs. <175 mm SVL), a mode of 24 rather than 25 presacral vertebrae, possession of four rather than two postmentals, and separation of more than one of the first ten whorls of enlarged, spinous caudal scales by two rather than one row of intercalary scales. It is also distinguished from *C. palearis* by the last of these characters. *C. oedirhina* is distinguished from *C. bakeri* and *C. palearis* by the relatively slight compression of dorsal crest scales, which are continuous rather than separated by smaller scales, and the absence of a pendulous dewlap (only expressed in adults). *C. oedirhina* is further distinguished from *C. bakeri* by having the nasal and rostral scales separated by one or two rather than three scales, possession of more femoral pores (\bar{X} =22.5 vs. 16.8, total for both thighs), and more lorilabial rows below the suboculars (\bar{X} =3.0 vs. 2.1).

- **Descriptions.** Descriptions of body proportions, scalation, coloration, and skeletal morphology are in de Queiroz (1987a,b).

- **Illustrations.** Black and white photographs of the dorsum and head of the holotype are in de Queiroz (1987b).

- **Distribution.** *Ctenosaura oedirhina* is known only from Isla de Roatán and its satellite, Isla de Santa Elena, Departamento de las Islas de la Bahía, Honduras.

- **Fossil Record.** None.

- **Pertinent Literature.** Little is known about this species apart from external morphology and phylogenetic relationships. The few references include descriptions or discussions of colic anatomy (Iverson, 1980), myology (Oldham and Smith, 1983), parasites (Hudson, 1981; de Queiroz, 1987b), habitat and abundance (Wilson and Hahn, 1973; Meyer and Wilson, 1973), and zoogeogra-

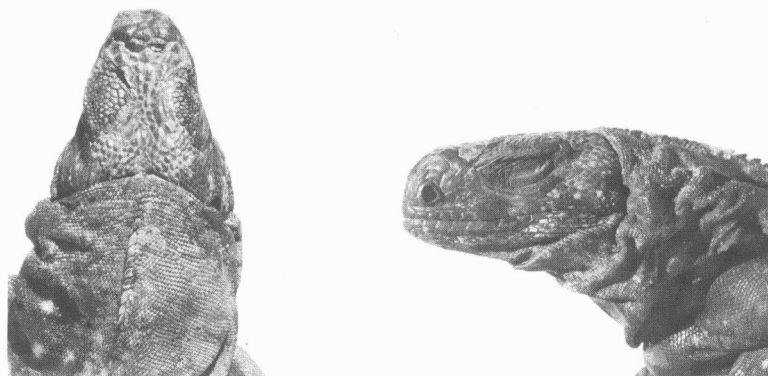


Figure 2. Dorsal and lateral views of the head of the holotype of *Ctenosaura oedirbina* (UF 28532).

phy (de Queiroz, 1987b). The species is in the Middle American checklist of Villa et al. (1988).

• **Nomenclatural History.** Spiny-tailed iguanas from Isla de Roatán were long considered to be *Ctenosaura bakeri*, the type locality of which is Isla de Utila, another of the Islas de la Bahía off the northern coast of Honduras. Bailey (1928) suggested that *C. bakeri* might also occur on "Ruatan Island" (Isla de Roatán), and Barbour (1928) discussed the scarcity and distribution of the Roatán "witchiwillys", as the spiny-tailed iguanas are called by the English-speaking Caribs of the Bay Islands, as if they were *C. bakeri*. When specimens from Isla de Roatán were collected subsequently, they were referred to *C. bakeri* (Wilson and Hahn, 1973; Meyer and Wilson, 1973). This reference was repeated (MacLean et al., 1977; Etheridge, 1982) until de Queiroz (1987a,b) pointed out the distinctiveness of the specimens from Isla de Roatán and described them as *C. oedirbina* (de Queiroz, 1987b).

• **Remarks:** No other *Ctenosaura* are sympatric with *C. oedirbina* (Wilson and Hahn, 1973). The species appears to be sexually dimorphic at least in body size.

• **Etymology.** The name *oedirbina* is derived from the Greek *oedos*, meaning "a swelling," plus *rhinos*, "nose," in reference to the profile of the snout.

• **Comment.** *Ctenosaura oedirbina* is part of a group of spiny-tailed iguanas that sometimes has been recognized as a separate genus, *Enyaliosaurus* (Cochran, 1961; Meyer and Wilson, 1973). Although monophyly of *Enyaliosaurus* is supported by a derived character (enlarged, strongly keeled or spinous scales on the anterodorsal surface of the shank), this taxon is a subgroup of *Ctenosaura* rather than a separate taxon, which is to say that recognition of *Enyaliosaurus* and *Ctenosaura* as separate genera renders the latter taxon paraphyletic (de Queiroz, 1987a,b).

Ctenosaura oedirbina appears to be rare (Wilson and Hahn, 1973). This, along with the restricted range and presence of human settlements on Roatán, poses a threat to the persistence of the species.

Literature Cited

Bailey, John Wendell. 1928. A revision of the lizards of the genus *Ctenosaura*. Proc. U. S. Nat. Mus. 73(12):1-55.

- Barbour, Thomas. 1928. Reptiles from the Bay Islands. Proc. New England Zool. Club 10:55-61.
- Cochran, Doris M. 1961. Type specimens of reptiles and amphibians in the U. S. National Museum. Bull. U. S. Nat. Mus. (220):xv + 291 p.
- de Queiroz, Kevin. 1987a. Phylogenetic systematics of iguanine lizards: A comparative osteological study. Univ. California Publ. Zool. 118:1-203.
- . 1987b. A new spiny-tailed iguana from Honduras, with comments on relationships within *Ctenosaura* (Squamata: Iguania). Copeia 1987(4):892-902.
- Etheridge, Richard E. 1982. Checklist of the iguanine and Malagasy iguanid lizards, p.7-37. In Gordon M. Burghardt and A. Stanley Rand (eds.), Iguanas of the world. Noyes, Park Ridge, New Jersey. xix + 472 p.
- Hudson, David M. 1981. Blood parasitism incidence among reptiles of Isla de Roatán, Honduras. J. Herpetol. 15(3):377-379.
- Iverson, John B. 1980. Colic modifications in iguanine lizards. J. Morphol. 163(1):79-93.
- MacLean, William P., Richard Kellner, and Howard Dennis. 1977. Island lists of West Indian amphibians and reptiles. Smithson. Herpetol. Info. Serv. (40):1-47.
- Meyer, John R., and Larry David Wilson. 1973. A distributional checklist of the turtles, crocodilians, and lizards of Honduras. Contr. Sci. Nat. Hist. Mus. Los Angeles Co. (244):1-39.
- Oldham, Jonathan C., and Hobart M. Smith. 1983. Relationships among iguanine lizards (Sauria: Iguanidae) as suggested by appendicular myology. Bull. Maryland Herpetol. Soc. 19(3):73-82.
- Villa, Jaime, Larry David Wilson, and Jerry D. Johnson. 1988. Middle American herpetology: a bibliographic checklist. Univ. Missouri Press, Columbia. xxxvi + 132 p.
- Wilson, Larry David, and Donald E. Hahn. 1973. The herpetofauna of the Islas de la Bahía, Honduras. Bull. Florida St. Mus., Biol. Sci. 17(2):93-150.

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