

Catalogue of American Amphibians and Reptiles.

Ballinger, R.E., G.R. Smith, and J.A. Lemos-Espinal. 2000.
Xenosaurus.

***Xenosaurus* (Gray)**
Knob-scaled Lizards

Cubina Gray 1856:270. Type species, *Cubina grandis* Gray 1856, by monotypy.

Xenosaurus Peters 1861:453. Type species, *Xenosaurus fasciatus* Peters 1861.

• **CONTENT.** Four species are recognized: *Xenosaurus grandis* (five subspecies), *X. newmanorum*, *X. platyceps*, and *X. rectocollaris*.

• **DEFINITION.** The species in this genus are medium-sized (maximum SVL to about 120 mm) xenosaurid lizards with flattened bodies, relatively flat and triangular heads, and short tails (shorter or only slightly longer than SVL). Dorsal scales are heteromorphic, not imbricate, and some are conical or developed into enlarged tubercles separated by small granular scales. Ventral scales are flat, quadrate, and arranged in transverse rows. Head scales are generally small, tuberculate, and sometimes conical or rugose, but may be enlarged along rostral and temporal ridges. Supraoculars also are enlarged, flattened, and in a single longitudinal row. The skin of the neck is loose and expanded, producing at least two gular folds, of which the posterior one has enlarged scales separated from the ventrals by granular scales. Preanal scales are enlarged and separated from ventrals by smaller scales.

Dorsal color is brown or black with or without lighter crossbands or irregular dark blotches. A straight, v-, or w-shaped

dark neck band is present. A subocular light stripe extends posteriorly onto and transversely across the neck. Tail markings consist of alternating dark and light rings that may or may not be complete ventrally.

• **DESCRIPTIONS.** Descriptions of species may be found in Taylor (1949), Lynch and Smith (1965), King and Thompson (1968), and Smith and Iverson (1993).

• **ILLUSTRATIONS.** Line drawings of dorsal pattern variation were given by King and Thompson (1968). Photographs of various species and forms are found in Alvarez del Toro (1960), Werler and Shannon (1961), Lynch and Smith (1965), Weigel and Holman (1967), and Smith and Iverson (1993). Illustrations of anatomy (e.g. musculature, skeleton, etc.) are detailed in each species account.

• **DISTRIBUTION.** The genus ranges from southwestern Tamaulipas, México, southward to central Guatemala. The distribution is disjunct with populations typically associated with specific mountain ranges at elevations from about 303–2121 m. Habitats vary from xerophytic tropical scrub to tropical rainforest and cloud forest.

• **FOSSIL RECORD.** No fossil record of *Xenosaurus* is known, although several descriptions of related xenosaurid taxa (three fossil genera) have been described from North America and Europe (Estes 1983).

• **PERTINENT LITERATURE.** General notes on taxonomic relationships and faunal lists that mention *Xenosaurus* include Boulenger (1885), Cope (1892, 1900), Camp (1923), Smith and Taylor (1950), Wermuth (1969), Friederich (1978), Estes et al.

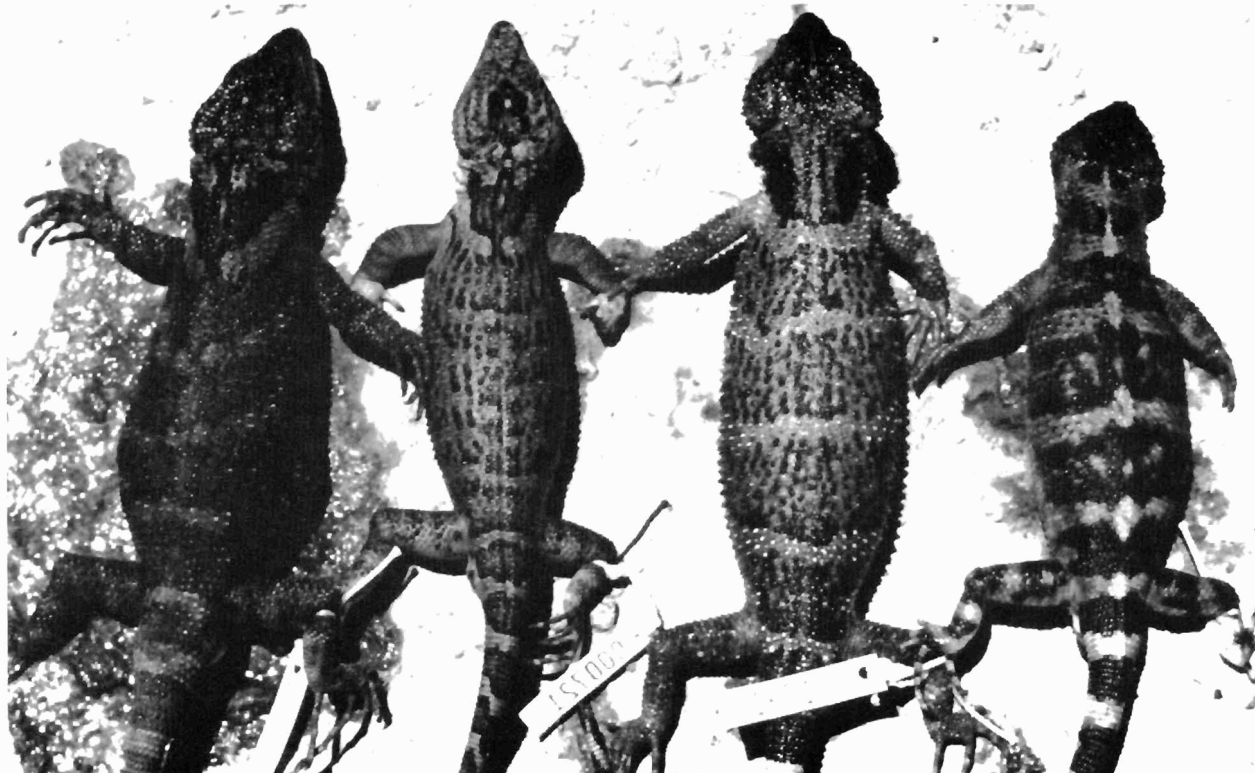


FIGURE. Preserved specimens of the four species of *Xenosaurus*: from left to right, *X. grandis* from 1 km SE Cordoba, Veracruz; *X. newmanorum* from 8 km E Xilitla, San Luis Potosi; *X. platyceps* from Ejido Altas Cumbres, at km 155 on HW 101 from Jaumave to Cd. Victoria, Tamaulipas; and *X. rectocollaris* from 2.4 km SW Veracruz/Puebla state line on HW 150, Puebla.

(1988), Etheridge and de Queiroz (1988), Flores-Villela (1993), and Liner (1994). King and Thompson (1968) provided the only review of the genus to date. Other comparisons of species are found in Lynch and Smith (1965) and Smith and Iverson (1993). Additional comparisons of the genus to other taxonomic categories include information on **anatomy** (Etheridge 1967, Lecuru 1968, Hoffstetter and Gasc 1969, Costelli and Hecht 1971, Romer 1976, Northcutt 1978, Brinkman 1980, Tanner and Avery 1982, Underwood 1984, Schwenk 1988, Harvey 1993), **reproduction** (Blackburn 1982), **fossils** (Estes 1970, 1983), **physiology** (Heath et al. 1969), and **biogeography** (Stuart 1957; Savage 1960, 1966; Muller 1973).

• **KEY TO SPECIES.** The number in parentheses following the species name refers to the Catalogue account number.

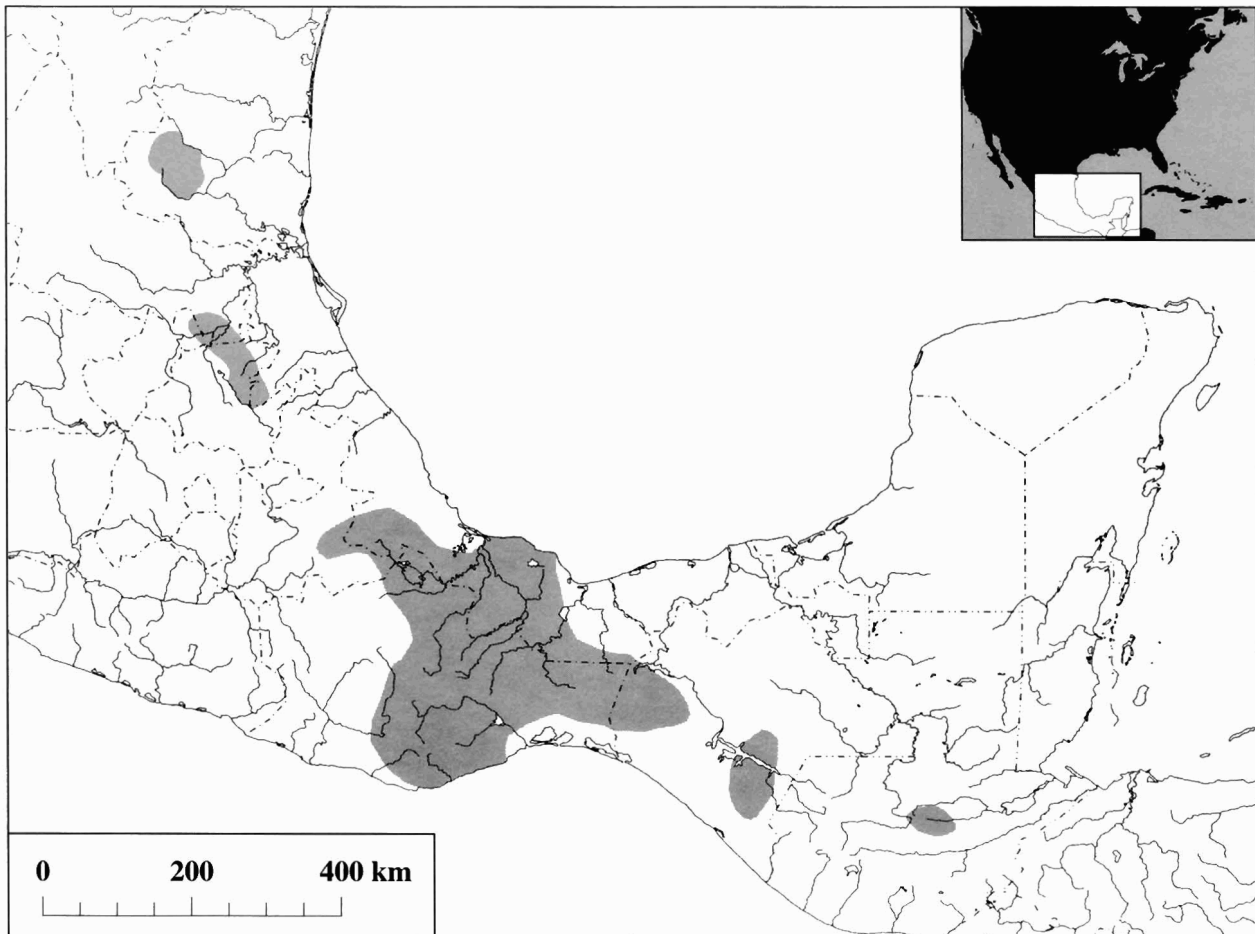
1. a. Straight dark neck band across nape .. *X. rectocollaris* (716)
b. Dark neck band is v- or w-shaped 2
2. a. Canthus temporalis present and consisting of a longitudinal series of enlarged scales that are distinct from smaller temporal scales; venter usually with dark blotches
..... *X. grandis* (713)
b. Canthus temporalis absent; venter always immaculate 3
3. a. Tuberculate dorsals prominently conical (spiny); transverse ventral scale rows 40–42 between axilla and groin; eye color yellow-orange in life *X. platyceps* (715)
b. Tuberculate dorsals not prominently conical; transverse ventral scale rows 33–37 between axilla and groin; eye greenish-yellow in life *X. newmanorum* (714)

• **ETYMOLOGY.** The name *Xenosaurus* is derived from two Greek words: “*xenos*,” meaning stranger or guest, and “*saurus*,” meaning lizard. Presumably, the name was given with reference to the strange looking lizard when initially discovered; these lizards are unusual in their appearance compared to other lizards in the area.

• **COMMENT.** These lizards tend to be locally common in isolated localities and absent from seemingly similar habitats nearby. Given their spotty distribution and the vast regions of mountainous terrain within the range of the genus, other populations and forms will likely be discovered in the future.

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MAP. Distribution of *Xenosaurus*. Shaded areas are approximations; populations are frequently disjunct (see Species Accounts).

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