

## Catalogue of American Amphibians and Reptiles.

Jennings, Mark R. 1990. *Petrosaurus*.

***Petrosaurus* Boulenger  
Rock Lizards**

*Petrosaurus* Boulenger, 1885:205. Type-species, *P. thalassinus* by original designation.

*Streptosaurus* Mittleman, 1942:111. Type-species, *S. mearnsi* by original designation.

• **Content.** Two species are currently recognized: *Petrosaurus mearnsi* and *P. thalassinus*.

• **Definition.** *Petrosaurus* is a large oviparous sceloporine lizard (adults 65-175 mm snout-vent length) characterized by a flattened head and body, 1 or 2 complete gular folds, and a single narrow black collar. The dorsal coloration is variable, but normally has 2-4 dark wavy or distinct crossbars on the body and a banded tail. The genus is characterized by 32-50 femoral pores, 12-31 interfemorals, and less than 60 gular scale rows.

• **Diagnosis.** *Petrosaurus* is distinguished from other sceloporine lizards by the presence of enlarged supraoculars in 2 or 3 rows, 8 or 9 superciliaries, 160-250 rows of smooth concave dorsal scales, more than 100 rows of smooth hexagonal ventral scales, and four sternal ribs.

• **Descriptions.** Detailed descriptions of the genus are in Boulenger (1885), Mittleman (1942), and Ballinger and Tinkle (1972). Smith (1946) presented scutellation terminology and Etheridge (1964, 1967) described the skeleton and skull. Gorman et al. (1969) and Paull et al. (1976) described the karyotype ( $2n=34$ ).

• **Illustrations.** The best comparative illustrations are in Mocquard (1899), Cope (1900), and Stebbins (1985).

• **Distribution.** *Petrosaurus* inhabits rocky areas of the Coastal Range of extreme southern California from San Geronio Pass, Riverside County, south throughout most of Baja California (except the Viscaño Desert and lowlands of the Magdalena Plain) to Cabo San Lucas at elevations from near sea level to about 1740 m. The genus is also present on the islands of Mejía, Angel de la Guarda, El Muerto, Danzante, Espiritu Santo, and Partida Sur, in the Gulf of California (Ballinger and Tinkle, 1972; Stebbins, 1985).

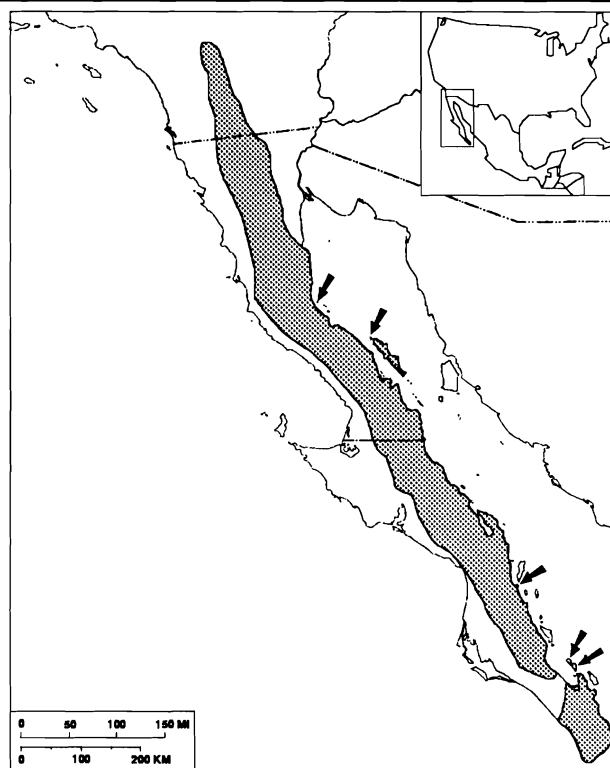
• **Fossil Record.** None.

• **Pertinent Literature.** Most literature is listed in Jennings (1990a, b) or cited above. The following are pertinent to the genus as a whole: arteries, Zug (1971); osteology, Etheridge (1964, 1967); scleral ossicles, Presch (1970), de Queiroz (1982); dentition, Olson et al. (1986); taste buds, Schwenk (1985); parietal eye, Gundy and Wurst (1976); coloration and body characteristics, Leviton (1972); parasites, Gambino and Heyneman (1960); respiratory anatomy and physiology, Wilson (1974); display behavior, Carpenter (1962, 1967), Purdue and Carpenter (1972); genetics, Murphy (1982, 1983), Aguilars-S. et al. (1988); evolution and systematics, Mittleman (1942), Lowe (1955), Savage (1958, 1960), Presch (1969), Ballinger and Tinkle (1972), Larson and Tanner (1975), Paull et al. (1976), Murphy (1982, 1983), Hall (1983), Aguilars-S. et al. (1988), Etheridge and de Queiroz (1988), and Frost and Etheridge (1989). Smith and Smith (1973, 1976) summarized the literature.

• **Key To Species.**

Single narrow black collar and 3-4 dark wavy crossbands on the body. Scales on tail strongly keeled and spinose; a well developed dermal fold ..... *P. mearnsi* (495)

Single narrow black collar and 2-3 distinct dark crossbands on the body. Scales on tail weakly keeled and smooth-edged; dermal fold absent ..... *P. thalassinus* (496)



Map. Range of *Petrosaurus*.

• **Nomenclatural History.** *Petrosaurus* was generally considered a synonym of *Uta* prior to 1942, with only Van Denburgh (1922) recognizing it as a subgenus. Mittleman (1942) re-elevated *Petrosaurus* to generic status and created a new genus, *Streptosaurus*, for *Uta mearnsi* Stejneger, 1894, and *Uta slevini* Van Denburgh, 1922. A period of confusion ensued as Stejneger and Barbour (1943), Smith (1946), Pickwell (1947), Smith and Taylor (1950), Shaw (1950), Murray (1955), Carpenter (1962, 1967), and Stebbins (1966) followed Mittleman's generic designations, while Oliver (1943), Schmidt (1953), Stebbins (1954), Savage (1958), and Hain (1965) continued to recognize only the single genus *Uta*. Lowe (1955) reduced *Streptosaurus* to a subgenus of *Petrosaurus*, maintaining the distinctness of the latter on broad ecological and phylogenetic considerations, while Savage (1958) concluded that *Petrosaurus* was a subgenus of *Uta* and there was no legitimate basis for recognizing *Streptosaurus*. Subsequent work has demonstrated the validity of the genus *Petrosaurus* as currently understood on behavioral (Carpenter, 1962), osteological (Etheridge, 1964), and phylogenetic (Ballinger and Tinkle, 1972) grounds.

• **Remarks.** Among extant forms *Petrosaurus* is considered to be closest to the ancestral stock of sceloporine lizards (Presch, 1969; Ballinger and Tinkle, 1972).

• **Etymology.** The generic name *Petrosaurus* is derived from the Greek *petra*, (rock), and *sauros*, (lizard), in reference to the rock-dwelling preference of the genus.

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**Mark R. Jennings**, Research Associate, Department of Herpetology, California Academy of Sciences, San Francisco, CA 94118.

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