

Catalogue of American Amphibians and Reptiles.

YINGLING, R. PETER. 1982. *Lichanura, L. trivirgata*.

Lichanura Cope
Rosy boa

Lichanura Cope, 1861:304. Type-species, *Lichanura trivirgata* Cope, 1861, by monotypy.

• CONTENT. A single species is recognized by most current authors. See species account.

• DEFINITION. *Lichanura* is a medium-sized (430–1120 mm total length), heavy-bodied boa with an elongated head slightly distinct from the neck and a short, tapered, slightly prehensile tail. The eye is small, with a vertical pupil and a circumocular ring of 7–11 scales. The dorsal head scutes are small, except on snout. Chin shields and a mental groove are absent. Dorsal scales are small, smooth, and in 35–45 rows. Ventrals are narrow and range from 218–244; subcaudals are single and number 39–51. The anal plate is entire. Small pelvic spurs occur in both sexes, but are larger in males. The hemipenis is simple, with a forked sulcus and a smooth apex and basal portion; the lamina are pinnate from the sulcus. The dorsal ground color varies from cream to bluish gray, beige or pale gray. Three reddish, brown, or black longitudinal stripes may be present, or the stripe color may partly to completely cover the dorsum. The venter is cream, yellowish, or gray, variously spotted with gray or brown. The young are similar, but usually lighter and with a more distinct pattern.

• DESCRIPTIONS, ILLUSTRATIONS, DISTRIBUTION, FOSSIL RECORD, PERTINENT LITERATURE. See species account.

• REMARKS. Several authors place *Lichanura* in the subfamily Boinae and tribe Erycini on the bases of visceral anatomy (Underwood, 1967) and osteology (Rieppel, 1978; McDowell, 1979); they regard the genus as structurally close to the early erycine stock. Gorman and Gress (1970) also find that *Lichanura* has the "typical" boid karyotype.

• ETYMOLOGY. *Lichanura* is derived from two Greek words, *lichanos*, the forefinger, and *oura*, tail; this may be an allusion to the body form of this snake.

Lichanura trivirgata Cope
Rosy boa

Lichanura trivirgata Cope, 1861:304. Type-locality, "the southern region of Lower California." According to Smith and Taylor (1945), the type-locality is Cape San Lucas, Baja California Sur, and the holotype is U.S. Nat. Mus. 5023, a specimen of unstated sex collected by John Xantus, date of collection unknown (not examined by author).

Lichanura roseofusca Cope, 1868:2. Type-locality, "northern part of Lower California." Holotype, Acad. Natur. Sci. Philadelphia 6699, collected by William M. Gabb (Malnate, 1971), sex and date of collection unknown (not examined by author).
Charina trivirgata Garman, 1883:131.

• CONTENT. Two species have been recognized (Klauber, 1931a; Gorman, 1965), but most current authors recognize only *L. trivirgata*, with 3 subspecies: *L. t. trivirgata*, *L. t. gracia*, and *L. t. roseofusca* (Stebbins, 1966; Cochran and Goin, 1970; Shaw and Campbell, 1974).

• DEFINITION. See generic definition.

• DESCRIPTIONS. Van Denburgh (1922) best describes the typical form, *L. t. trivirgata*. Klauber (1931a) gives the most complete discussion of all 3 forms, covering coloration, scutellation, localities, and synonymy. Wright and Wright (1957) include a generic description, bibliography, and species descriptions of the forms *roseofusca* and *gracia*.

• ILLUSTRATIONS. A color photograph of a living *L. t. trivirgata* is in Schmidt and Inger (1957). Klauber (1931a) and Wright and Wright (1957) figure whole body and sectional black and white photographs of living *L. t. gracia* and *L. t. roseofusca*. A photograph of newborn *L. t. roseofusca* is in Kurfess (1967). Line draw-

ings of the head appear in Schmidt and Davis (1941) and Wright and Wright (1957); other drawings of skull bones and snout profile are in Rieppel (1978). A drawing of the hemipenis is in Wright and Wright (1957). Chromosomes are depicted in Gorman and Gress (1970).

• DISTRIBUTION. The rosy boa occurs in chaparral and desert-edge foothills from Los Angeles County, California south to thorn forest of the Cape region, Baja California Sur. It also is found in low mountains and foothills of the Mohave and Sonoran deserts, north to the Death Valley region and south to Guaymas, Sonora, Mexico. It inhabits several Gulf of California islands: Tiburon, Mejia, Angel de la Guarda, San Marcos, and Cerralvo. There are also recent records from two Pacific Baja California Norte islands: 3 from Cedros and a tentative record from Navidad (Otley, 1978). Altitudinal range is from 0 to ca. 1200 meters.

• FOSSIL RECORD. Van Devender and Mead (1978) record *Lichanura trivirgata* from a Late Pleistocene packrat midden in the Whipple Mountains, San Bernardino County, California.

• PERTINENT LITERATURE. Gorman (1965) is the most recent taxonomic discussion. General accounts appear in Stebbins (1966) and Wright and Wright (1957). Klauber (1933), Medina (1959), and Kurfess (1967) provide notes on captive behavior and reproduction. Perkins (1955) adds a longevity record and Hensley (1959) notes an albino. Regional ecological data are supplied by Klauber (1931b), Miller and Stebbins (1964), and Lowe (1964).

• ETYMOLOGY. The specific name *trivirgata* is Latin, meaning three-striped. The subspecific names, both from Latin, are derived as follows: *roseofusca*, from *roseus*, ruddy, and *fuscus*, dusky; and *gracia*, from *gracilis*, gentle.

1. *Lichanura trivirgata trivirgata* Cope

Lichanura trivirgata Cope, 1861:304. See species account.
Charina trivirgata Garman, 1883:131. See species account.

• DEFINITION. A subspecies of *Lichanura trivirgata* with 3 serrate-edged dark brown stripes on a cream dorsum.

2. *Lichanura trivirgata gracia* Klauber

Lichanura roseofusca gracia Klauber, 1931a:307. Type-locality, "Randsburg, Kern County, California." Holotype, San Diego Society of Natural History 2995, young female collected by Lucile Rector in June, 1930 (not examined by author).
Lichanura trivirgata gracia Miller and Stebbins, 1964:189.

• DEFINITION. A subspecies of *Lichanura trivirgata* with 3 serrate-edged reddish-brown or tan stripes on a gray or tan dorsum. Little or no spotting is present between stripes.

3. *Lichanura trivirgata roseofusca* Cope

Lichanura roseofusca Cope, 1868:2. See species account.
Lichanura myriolepis Cope, 1868:2. Type-locality, "northern part of Lower California." Holotype, Acad. Natur. Sci. Philadelphia 6700, collected by William M. Gabb (Malnate, 1971); sex and date of collection not given (not examined by author).

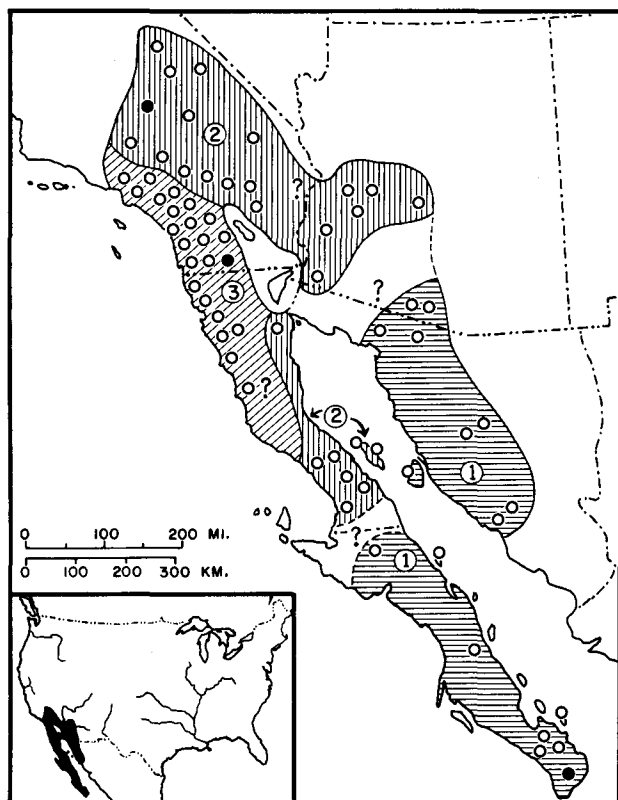
Lichanura orcutti Stejneger, 1889:96. Type-locality, "Colorado Desert, San Diego County, California," restricted by Klauber (1931a) to "east of Jacumba." Holotype, U.S. Nat. Mus. 15503, a specimen of unstated sex collected by C. R. Orcutt in April, 1889 (not examined by author).

Lichanura simplex Stejneger, 1889:97. Type-locality, "San Diego, Cal." Holotype, U.S. Nat. Mus. 13810, a specimen of unstated sex collected by Rosa Smith on March 5, 1884 (not examined by author).

• DEFINITION. A subspecies of *Lichanura trivirgata* with either 3 irregularly-edged pink to dull brown stripes on a bluish-gray dorsum, often with spotting between the stripes, or partial to total obliteration of pattern by stripe color.

COMMENT

Two species, based on Cope's (1861, 1868) descriptions, were recognized until the 1960's. Gorman's (1965) generic review followed this concept, based on the color uniformity of *L. t. trivir-*



MAP. Solid circles mark type-localities; open circles indicate other records. Question marks indicate uncertain range boundaries.

gata and the apparent lack of *trivirgata-gracia* intergrades; the possibility that *gracia* populations might be intergrades was not considered. Stimson (1969) and Bostic (1971) followed Gorman, but other authors (Soulé and Sloan, 1966; Stebbins, 1966; Cochran and Goin, 1970; Shaw and Campbell, 1974) recognized only *L. trivirgata*, without explanation. The description of *L. t. bostici* (Ottley, 1978) is a further complication. Recently, Ottley et al. (1980) reported an intermediate *trivirgata-gracia* specimen from central Baja California and described similar captive-born hybrids, concluding that *L. trivirgata* and *L. roseofusca* are conspecific. A thorough variational study is needed to refine the taxonomy of *Lichanura*; *L. t. gracia* and *L. t. bostici* are of doubtful validity.

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