

Catalogue of American Amphibians and Reptiles.

McDIARMID, ROY W. 1977. *Tantilla yaquia*.

***Tantilla yaquia* H. M. Smith**
Yaqui black-headed snake

Tantilla yaquia H. M. Smith, 1942:41. Type-locality, "Guasaremos, Rio Mayo, Chihuahua," Mexico. Holotype, Mus. Comp. Zool., Harvard Univ. 43274, female, collected by Howard S. Gentry, August 1936 (examined by author).

Tantilla bogerti Hartweg, 1944:1. Type-locality, "Acaponeta, Nayarit," Mexico. Holotype, Amer. Mus. Natur. Hist. 62259, male, collected by Charles M. Bogert, 18-19 November 1939 (examined by author).

Tantilla yaquia yaquia: Zweifel and Norris, 1955:243. First use of combination.

[*Tantilla yaquia*] *bogerti*: Zweifel and Norris, 1955:243. *T. bogerti* considered a subspecies of *T. yaquia*.

Tantilla planiceps yaquia: Tanner, 1966:135. First use of combination.

Tantilla planiceps bogerti: Tanner, 1966:135. First use of combination.

• CONTENT. Two subspecies have been recognized (Zweifel and Norris, 1955; Tanner, 1966), but currently the species is considered monotypic (McDiarmid, 1968; Hardy and McDiarmid, 1969).

• DEFINITION. A moderate-sized (to 325 mm total length) species of *Tantilla* with a uniform brown or brownish-tan dorsum and a venter white anteriorly but gradually becoming pinkish-orange beneath the tail. Individuals have a distinct dark (brown, brownish-black, or black) head cap that extends onto the nape from two to slightly more than four scales on the midline and is bordered posteriorly by a narrow (one to one and one-half scales), light nuchal collar. The dark head cap extends laterally, one-half to three scales, below the angle of the mouth. Most of supralabials 1,4,5 and 6 and the lower one-third to one-half of the anterior temporal are white and contrast sharply with the dark headcap. The tail is 21.2 to 27.4 percent of the total length in males and 17.2 to 28.5 percent of the total length in females. Pertinent scalation characteristics include: 134-157 ventrals in males and 145-165 ventrals in females; 50-73 subcaudals in males and 46-75 in females; total ventrals + subcaudals are 187 to 230 in males and 194 to 233 in females.

• DESCRIPTIONS. Specimens were described by Smith (1942, holotype of *T. yaquia*), Hartweg (1944, holotype and paratype of *T. bogerti*), Zweifel and Norris (1955), Smith and Van Gelder (1955), McCoy (1964), Fowle (1965), Tanner (1966), and Hardy and McDiarmid (1969). Wright and Wright (1957:726) thought they described the coloration of *T. atriceps*, but based their account on a specimen of *T. yaquia* from Bisbee, Arizona. McDiarmid (1968) described the variation in 33 characteristics of scalation, coloration, proportion and size for all available specimens of *T. yaquia*.

• ILLUSTRATIONS. Diagrammatic illustrations of the head of *Tantilla yaquia* can be found in Zweifel and Norris (1955), Stebbins (1966), and McDiarmid (1968). Wright and Wright (1957:fig. 212) presented photographs of the dorsal, ventral, and lateral views of the head and of an entire specimen under their account of *T. atriceps*. Clearly, these are photographs of a specimen of *T. yaquia* from Bisbee, Arizona and may have contributed to some of the later confusion in distinguishing between these two species. Fowle (1965) illustrated a specimen from Sinaloa with a black and white photograph, and Shaw and Campbell (1974) figured a dead specimen in color.

• DISTRIBUTION. *Tantilla yaquia* is distributed from southeastern Arizona southward through eastern Sonora and extreme western Chihuahua, southern Sonora, and Sinaloa into Nayarit. In the northern portions of its range *T. yaquia* generally is found above 1000 meters in evergreen and riparian woodland (Lowe, 1964) in the Chiricahua and Mule Mountains of eastern and southern Cochise County and in the Pajarito Mountains of southern Santa Cruz County, Arizona and adjacent Sonora, Mexico. In southern Sonora, Chihuahua, and northern Sinaloa, the snake often is found in deciduous short tree forest (Gentry, 1942) along the foothills and western slopes of the Sierra Madre Occidental between 500 and 1000 meters. Occasional specimens have been collected in the drier thorn woodland at lower elevations. The localities in southern Sinaloa and Nayarit are below

200 meters on the coastal plain. The vegetation in this area is tropical semiarid and dry forest (Hardy and McDiarmid, 1969). *Tantilla yaquia* is unknown south of the Rio Santiago Valley in central Nayarit, Mexico.

• FOSSIL RECORD. None.

• PERTINENT LITERATURE. As is the case with many species of black-headed snakes, very little is known about the biology of *T. yaquia*. The most complete published work on *Tantilla yaquia* is that of McDiarmid (1968), who summarized the morphological variation and distribution of the species and discussed its systematic status. In addition, notes on the habits and ecology of the species are presented. All known specimens and their localities are listed. Additional references to the morphological characteristics and systematic relationships of the species can be found in Smith (1942), Hartweg (1944), Zweifel and Norris (1955), Smith and Van Gelder (1955), McCoy (1964), Fowle (1965), Tanner (1966), and Hardy and McDiarmid (1969). Brief accounts of *Tantilla yaquia* also are included in the books by Stebbins (1966), Cochran and Goin (1970), Leviton (1972), and Shaw and Campbell (1974). Malkin (1958) included *T. yaquia* in his treatment of the ethnozoology of the Cora Indians of northern Nayarit who are aware of the local distribution, relative abundance, semifossorial habits and suspected venomous characteristics of this snake. Fowle (1965) mentioned its secretive habits and discussed its distribution in Arizona.

• NOMENCLATURAL HISTORY. There is some disagreement as to the systematic status of *Tantilla yaquia*. Hobart Smith (1942) described *Tantilla yaquia* from a single specimen from western Chihuahua. Two years later Hartweg (1944) described *T. bogerti* on the basis of two specimens from Nayarit. Zweifel and Norris (1955) considered *bogerti* a subspecies of *yaquia* on

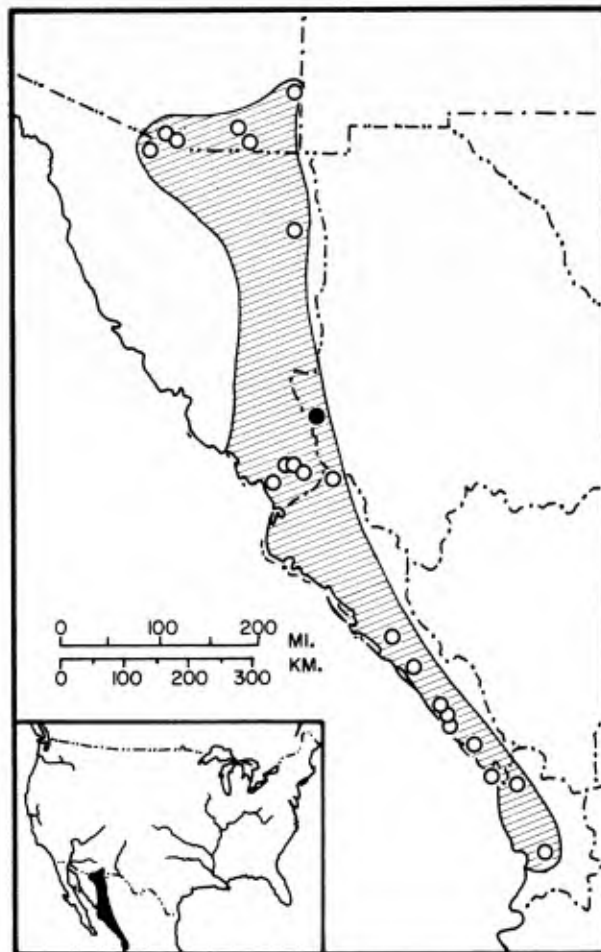


FIG. The solid circle marks the type-locality; open circles indicate other localities.

the basis of a single specimen from southern Sonora. McCoy (1964) reported two specimens from Arizona, confirmed the conspecific treatment of *yaquia* and *bogerti*, and mentioned the difficulty in assigning subspecific names to the Arizona population because of the apparent geographic inconsistencies of certain characteristics thought to separate *yaquia* and *bogerti*. In 1966 Tanner suggested that *T. yaquia*, *T. bogerti*, and *T. atriceps*, among others, were subspecies of *T. planiceps*. He recognized the subspecific status of *yaquia* and *bogerti*. Stebbins (1966), Cochran and Goin (1970), and apparently Smith and Smith (1976) followed Tanner's arrangement. In 1968 McDiarmid analyzed in detail the characteristics used by Tanner as a basis for the designation of *yaquia* and *atriceps* as subspecies of *planiceps*. He rejected Tanner's conclusions on the basis of detailed analyses of specimens of *atriceps* and *yaquia* from areas of near sympatry in southern Arizona. In addition, McDiarmid demonstrated that the characteristics used to separate *yaquia* and *bogerti* showed gradual clinal change from north to south and argued that the data were insufficient to warrant the recognition of subspecies. Accordingly he placed *T. yaquia bogerti* in synonymy with *T. yaquia*. Hardy and McDiarmid (1969) also considered *T. yaquia* to be specifically distinct from *T. planiceps* and monotypic. This arrangement was used by Fowlie (1965), and recently accepted by Leviton (1972), Shaw and Campbell (1974), and Dowling (1975).

Three common names have been used for the species. Cochran and Goin (1970) called it the Chihuahua black-headed snake. This is inappropriate because only the type has been taken in Chihuahua and that from a locality physiographically Sonoran and only a few kilometers from the Sonora border. Stebbins (1966) called the species the Yaquia black-headed snake in obvious reference to the species name. However, as the snake was named for the Yaqui Indians, it seems more appropriate to refer to the species as the Yaqui black-headed snake. This name was used by Fowlie (1965), Leviton (1972), and Shaw and Campbell (1974), and is used in this account.

• **ETYMOLOGY.** The species name refers to the Yaqui Indians, whose influence was often felt in the area of the type locality.

COMMENT

Efforts should be made to collect *T. yaquia* and *T. atriceps* in areas where woodland and desert grassland interdigitate in Santa Cruz County between the Tubac-Tumacacori area and the Pajarito Mountains in the Santa Cruz River system and between Benson and Tombstone, and Bisbee and Douglas in Cochise County, Arizona. Additional material from eastern Sonora and northeastern Sinaloa also will fill the gap in the range of this species in Mexico. Nothing is known about the reproductive biology, ecology, or food habits of this species. The hemipenis has not been illustrated.

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