

***CROTALUS PRICEI*, THE TWIN-SPOTTED RATTLESNAKE**

By: Pete Strimple, 5310 Sultana Drive, Cincinnati, Ohio 45238, U.S.A.

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HISTORICAL

The twin-spotted rattlesnake of southeastern Arizona and northwestern Mexico was first described by Van Denburgh in 1895 as *Crotalus pricei*. This description was based on a specimen collected in the Huachuca mountains, Cochise County, Arizona, and was collected by W.W. Price for whom the species was named.

In 1927, Alfranio Do Amaral placed this rattlesnake in synonymy with *Crotalus triseriatus* because he believed that the only real distinction between the two species was geographical.

Later, in 1931, Klauber divided the *triseriatus* species into subspecies, one of which was *Crotalus triseriatus pricei*. In 1940, Howard Gloyd described another subspecies of *triseriatus* as *Crotalus triseriatus miquihuanus*.

It was not until 1946 that Hobart Smith resurrected the species *pricei*, and *Crotalus triseriatus pricei* and *Crotalus triseriatus miquihuanus* became *Crotalus pricei pricei* and *Crotalus pricei miquihuanus* respectively.

HABITAT

Crotalus pricei is a montane (mountain dwelling) form of rattlesnake that can be found at elevations from 1900-2800 m or even higher. There are a couple of elevation records under 1900 m but none below 1800 m.

Twin-spotted rattlesnakes can be found in oak-pine woodlands (upper part of the Upper Sonoran Life-Zone), ponderosa pine forests (Transition Life-Zone), and fir forests (Canadian Life-Zone). Within these areas *Crotalus pricei* is typically found in or around talus rock slides, south facing rocky slopes, loose rock piles, rocky canyons and grassy or shrub covered slopes with rocky outcroppings.

FOOD

This species of rattlesnake, like other montane species, feeds chiefly upon lizards and mice. Two lizards that are frequently eaten are Yarrow's spiny lizard (*Sceloporus jarrovi*) and bunch grass lizards (*Sceloporus scalaris*).

In captivity, juvenile *Crotalus pricei* can be raised on pinkies, and can be switched from lizards to pinkies, sometimes with little difficulty.

HABITS

Crotalus pricei is a rather nervous rattlesnake, often rattling when approached. However, due to the small size of the rattle its sound can only be heard from a few feet away and can easily be mistaken for the buzz of an insect. Like other montane rattlesnakes, this species will also retreat into nearby rocks or other cover when approached.

Twin-spotted rattlesnakes typically bask in the late morning or early afternoon, after which time they generally forage for food.

Specimens of *Crotalus pricei* have been collected from March through November and are occasionally collected during rather cool temperatures. A specimen collected in March was out when the ambient temperature was 11°C. These rattlesnakes do not seem to acquire the warm temperatures often associated with most rattlesnakes, in fact they seem to prefer only moderate temperatures.

BREEDING

Breeding records for this species are typically from March-May with the young being born in July-September. females give birth to between 3-9 young which measure in total length.

THE SUBSPECIES OF *CROTALUS PRICEI*

Crotalus pricei pricei Van Denburgh (Western twin-spotted rattlesnake)

Description

This subspecies has a gray, grayish-brown, brown or bluish-gray ground color with a series of 39-63 (mean 52.1) paired brown spots. The spots are round-squarish, but sometimes they are joined to form a single bar or blotch. Usually there are also from one to three rows of lateral spots, although these are not as distinct as the main series. The ground color is often punctated or stippled with brown spots.

The ventral coloration is cream or buff at least anteriorly, and darkens posteriorly due to increased punctations of dark pigment. The outer edges of the ventral scales are usually unmarked.

The head also has a moderate punctation of brown pigment. Frequently there are two dark spots in the occipital region and another spot on the neck. There is also a dark post-ocular stripe on each side of the head that passes posteriorly above the angle of the mouth. This stripe is often bordered on its lower side by the cream color of the upper labials.

The tail is irregularly patterned with between 5-10 brown bars or blotches. The anterior rattle matrix is usually a creamish or pinkish color, although in some specimens it may be orange in color.

Scalation

Crotalus pricei pricei typically have 21 scale rows at midbody, the range being between 21-23. Subcaudal scale counts range between 21-32 (mean 24.6) for males, and between 18-27 (mean 21.5) for females. Ventral scale counts range between 149-162 (mean 157.9) for males, and between 157-171 (mean 162.6) for females.

Size

Crotalus pricei pricei is the larger of the two subspecies attaining a maximum length of 66 cm. There are several records of specimens over in total length, however most adults average around.

Range

The western twin-spotted rattlesnake has a rather limited range in the United States, being found only in three counties in southeastern Arizona. Within these counties (Cochise, Graham and Santa Cruz) there are only five mountain ranges that are inhabited by *Crotalus pricei pricei*, these are; Chiricahua Mountains, Huachuca Mountains, and the Dos Cabezas Mountains in Cochise County, the Graham Mountains in Graham County, and the Santa Rita Mountains in Santa Cruz County.

The range of this subspecies continues from southeast Arizona into Mexico. The Mexican range includes northeastern Sonora, western Chihuahua, and western Durango.

Crotalus pricei miquihuanus Gloyd (Eastern twin-spotted rattlesnake)

First described by Gloyd in 1940 from a specimen collected on August 16, 1938 at cerro Potosi near Galeana, Nuevo Leon.

Description

The ground color of this subspecies can be brown, yellowish-brown, yellowish, or reddish-brown. Dorsally, there is a series of between 43-53 (mean 49.3) brown or brownish-gray blotches or paired spots. In this subspecies there is a tendency for the paired spots to be connected, especially anteriorly, forming bars or narrow blotches. As in *Crotalus pricei pricei* this subspecies also has a moderate to heavy stippling of brown coloration.

Ventral coloration is usually a creamish-gray, darkening posteriorly due to the increase in gray pigment.

The coloration of the head is grayish-brown. There is a dark brown postocular stripe, like that found in *Crotalus pricei pricei*.

The tail has a pattern of 10 or 11 narrow bars that are brown in color. The underside of the tail is cream or buff colored with little if any of the mottling of gray color found on the ventral scales of the body. The proximal rattle matrix can be yellowish-brown, orangeish, or even pinkish in color.

Scalation

Specimens of *Crotalus pricei miquihuanus* have 21 scale rows at midbody. Subcaudal scale counts range between 26-31 (mean 27.3) for males, and there is a female specimen that has 23 subcaudal scales. Ventral scale counts range between 137-141 (mean 138.7) for males, and the female specimen mentioned above has 143 ventral scales.

Size

Of the few specimens of this rattlesnake that are available, the maximum total length is just under 53 cm. The average adult length is probably between.

Range

The western twin-spotted rattlesnake has a limited range in Mexico, being found only in southeastern Coahuila, southern Nuevo Leon, and southwestern Tamaulipas. The subspecific name *miquihuanus* is taken from Miquihuana, Tamaulipas, the locality from which the

first specimen of this rattlesnake was taken in 1898 and was described by Gloyd (as mentioned at the beginning of this subspecific account).

Note: The difference between these two subspecies are not clear cut but in general *miquihuanus* is browner, has a lower number of ventral scales and has paired spots that are more frequently confluent than does *pricei*. Although, as more specimens of *miquihuanus* are collected, only the lower number of ventral scales as a subspecific difference, appears to be consistent.