

CROTALUS ATROX BAIRD & GIRARD THE WESTERN DIAMONDBACK RATTLESNAKE

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Contents: Historical - Description - Scalation - Size - Range - Habitat - Food - Habits - Breeding.

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HISTORICAL

The Western diamondback rattlesnake was technically described first as *Crotalus cinereus* Leconte in Hallowell's 1852 description of *Crotalus lecontei*. In 1853 Baird & Girard described *Crotalus atrox* and designated the type locality as Indianola, Calhoun County, Texas. The binominal, *Crotalus atrox* has been used most often in reference to the Western diamondback since that time.

In 1952, Klauber proposed to the international commission on Zoological Nomenclature the preservation of the long-established trivial name 'atrox' by suppressing the trivial name 'cinereus'.



Foto 1: *Crotalus atrox*; foto V. Pezzano.

In the interest of preserving names that have been widely used and accepted, the Commission issued opinion 365 on 16 November 1955, and made *Crotalus atrox* the accepted name for the Western diamondback rattlesnake.

DESCRIPTION

The Western diamondback rattlesnake is a large heavy bodied rattlesnake with a large head that is noticeably distinct from the neck. The ground color is usually grey or brown, but can be reddish, creamish, yellowish, buff, or even various shades of black, as melanistic specimens have been reported.

The dorsal pattern consists of a series of between 24-25 diamond-shaped, rhombic, or occasionally hexagonal blotches that are brown grey or black in color. Their blotches are at least partially edged in white. Scattered along the dorsal surface are flecks or punctations of dark coloration that vary in intensity and number, often giving a dusky appearance. The ventral surface is typically unmarked and yellowish, creamish or white in color.

The head of *Crotalus atrox* is indistinctly marked with the exception of two light-colored stripes on each side. The anterior stripe originates in the preocular area and passes downward to the supralabial scales. The second stripe starts in the postocular area and also passes downward to the supralabials to a point in front of the angle of the jaw (in two similar species, *Crotalus scutatus* and *Crotalus viridis*, their stripe passes above the angle of the jaw).

The tail is distinctly marked with black and white rings that are of equal width. These tail rings range in number from 3-8 (mean 5.3) in males and from 2-6 (mean 4.1) in females.

SCALATION

Specimens of the Western diamondback typically have 25 scale rows at mid-body, with the range being between 23-29. Ventral scale counts for this species range between 168-193 (mean 181.9) for males, and between 174-196 (mean 184.4) for females. Subcaudal scale counts range between 21-32 (mean 25.7) for males, and between 16-24 (mean 20.1) for females.

SIZE

The maximum length of *Crotalus atrox* is a matter of some debate as some reports state a length of up to 9 feet. Probably, the most widely accepted maximum length is one of 123 cm. There are, however, apparently reliable records of 7½ feet diamondbacks from certain areas in Texas. Adult diamondbacks usually average between 4-5 feet, with large males measuring up to 6-6½ feet in total length.

RANGE

In the United States the range of the Western diamondback encompasses the following states: southeastern California; extreme southern Nevada; western and southern Arizona; southern central and eastern New Mexico; Texas west of longitudinal 95 degrees (except for the northern part of the panhandle); as well as several coastal islands; southern and central Oklahoma; central and west-central Arkansas; There are three records that are questionable and need to be substantiated before they can be accepted. These are: southeastern Colorado (Las Animas County),

extreme southeastern Kansas (Cherokee and Crawford Counties), and extreme southeastern Missouri (Butler County).

HABITAT

Within their range, Western diamondbacks are most commonly found in semi-arid and arid habitats including: deserts, rocky foothills, mesquite grasslands, dry washes, rocky cliffs and canyons, brush covered plains, and mesquite crowned sand dunes. Diamondbacks can be found from slightly below sea level up to at least 8,000 feet, but are most common below 5,000 feet.

FOOD

Crotalus atrox feeds on mammals (jack rabbits, cottontails, ground squirrels, gophers, rats, mice, etc.) birds and lizards. The latter being most frequently eaten by juvenile *Crotalus atrox*.

HABITS

Crotalus atrox are diurnal, except during the hot summer months when they become nocturnal. At this time, they are quite frequently seen crossing roads at night in search of food.

Occasionally, Western diamondbacks have been found in low shrubs a couple of feet off the ground, but they are primarily terrestrial snakes.

Western diamondbacks are, with little doubt, the most aggressive and temperamental of all the rattlesnakes in the U.S. and in Mexico. They are quick to defend themselves, and usually stand their ground instead of retreating. When fully aroused, they will raise their head and a loop of their body above the rest of their coiled body and strike repeatedly at any intruder that comes near.

Western diamondbacks are considered to be the most dangerous snake in the U.S. due to several factors including: their aggressiveness, large size, fairly potent venom and abundance throughout many parts of their range. In fact, *Crotalus atrox* are responsible for more snake bite fatalities in the U.S. than any other venomous snake.

BREEDING

Crotalus atrox typically breed in the spring from March through May. There are, however, records of breeding for August, November, January and February. Young diamondbacks are usually born in late summer, with additional birth records for September, October and December.

The young diamondbacks are 9-14 inches in total length and are patterned much like the adults, except the ground color is often lighter, and the blotches are more distinct.

Ritualistic combat between males has been recorded numerous times for this species. This is an attempt to display dominance of one male over another with the dominant male proceeding to court and breed a female.

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