

CROTALUS CERASTES, THE SIDEWINDER

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HISTORICAL

The sidewinder is a small to intermediate sized rattlesnake found in the southwestern United States and northwestern Mexico. It was first described by Hallowell in 1854 as *Crotalus cerastes*. The type specimen was collected by Dr. A.L. Heerman, with the type locality being designated as 'borders of the Mojave River, and in the desert of the Mojave (California).'

In 1944, Laurence Klauber described the first subspecies based on a specimen collected at the Narrows, San Diego County, California. Klauber named the subspecies *Crotalus cerastes laterorepens*, the Colorado Desert sidewinder. The subspecies name '*laterorepens*' is quite fitting for a sidewinder, because it is latin for 'sideways creeping.' In accordance with the rules of nomenclature, this established the nominate subspecies as *Crotalus cerastes cerastes* Hallowell, the Mojave desert sidewinder.

These remained the only two subspecies of the sidewinder until 1953, when Savage and Cliff described *Crotalus cerastes cercobombus*, the Sonora sidewinder. The subspecies name '*cercobombus*' is actually a combination of a Greek and Latin word which mean 'buzzing tail.'

HABITAT

Crotalus cerastes is primarily a desert dwelling form, whose habitats include desert flatland, sand dunes, and sand hammocks topped with creosote or mesquite bushes.

FOOD

Sidewinders feed mainly on small mammals (kangaroo rats, mice, pocket gophers, etc.) and lizards (desert iguanas, utas, whiptails, etc.). There are also records of sidewinders eating birds, and even a case of cannibalism. Usually, young sidewinders are more apt to eat lizards, generally graduating to mammals as they become adults.

HABITS

Crotalus cerastes is primarily nocturnal in habit, and is frequently found on roads at night. In some areas it is actually the most common snake found there. One of the two most notable qualities of these snakes is the 'hornlike' projections (scales) over the eyes. Their

scales are functional in that they fold down over the eyes when the sidewinder is crawling down burrows.

The sidewinding form of locomotion is undoubtedly the most distinguishing characteristic of their species of rattlesnake. This type of locomotion has two functions. First of all, it enables the sidewinder to move efficiently across the loose sandy substrate, so typical of its habitat. Secondly, since there are only two points of the snake body that are touching the ground at any one time, sidewinders can travel across the hot sand of the desert.

BREEDING

Sidewinders generally breed in the spring (April-May), but there are numerous records of fall breedings as well. Females usually give birth to between 5-18 young in July or August, and occasionally in September. At birth, sidewinders average between 16.5-20 cm in total length.

THE SUBSPECIES OF *CROTALUS CERASTES*

Crotalus cerastes cerastes Hallowell (Mojave Desert sidewinder)

Description

This subspecies usually has a fawn, tan or brown ground color, with a series of 30-43 (mean 36.3) dorsal blotches. Their blotches can be reddish brown to dark brown in color, and are usually well defined or outlined. Laterally, there is a secondary series of small blotches, alternating with the primary blotches.

The ventral coloration (like that of the other subspecies) is cream or ivory with no markings, except for gray punctuations, found occasionally on the chin and throat. The head is colored much the same as the ground color, but is often speckled with grayish flecks of color. The postocular stripe is usually brown or grayish in color. The tail is colored the same as the ground color, with from 2-6 blotches or cross-marks. The first one or two are brown, the remaining ones are usually black. The proximal rattle-matrix lobe of this subspecies is brown, readily distinguishing it from the other two subspecies.

Scalation

Crotalus cerastes cerastes normally have 21 scale rows at midbody, the range being between 19-23. Subcaudal scale counts range between 19-26 (mean 22.0) for males and between 14-20 (mean 17.2) for females. Ventral scale counts range between 132-146 (mean 138) for males and between 136-150 (mean 142.3) for females.

Size

Crotalus cerastes cerastes is the smallest of the three subspecies attaining a maximum length of 58.7 cm.

Note: It should be pointed out that *Crotalus cerastes cerastes* is the only species of rattle snake in which females typically exceed males in total length. In fact, all three maximum lengths cited in this article are for females.

Range

This subspecies occupies the northernmost range of the species, being found in southern Nevada, extreme southwestern Utah, southeast California, and adjacent west-central en extreme northwest Arizona.

Crotalus cerastes cercobombus (Sonora sidewinder)

Description

The ground color of *Crotalus cerastes cercobombus* is usually tan, light brown or buff, occasionally with a grayish tinge. There is a series of between 28-41 (mean 35.2) indistinct dorsal blotches, which are tan or dark brown in color. The secondary lateral blotches are smaller and lighter in color than the dorsal blotches, and are also rather indistinct.

The coloration and marking of the head, ventral surface and tail are the same as those of *Crotalus cerastes cerastes* listed above. The proximal rattle-matrix lobe is black in this subspecies.

Scalation

Crotalus cerastes cercobombus normally have 21 scale rows at mid-body, the range being between 21-25. Subcaudal scale counts range between 18-24 (mean 20.0) for males and between 14-19 (mean 15.9) for females. Ventral scale counts range between 132-144 (mean 139.40 for males and between 138-148 (mean 143.6) for females.

Size

The Sonora sidewinder is intermediate in size compared to the other subspecies. The largest specimen measured had a total length of 62.8 cm.

Range

In the United States, *Crotalus cerastes cercobombus* is found in south-central Arizona. In Mexico it is found in northwest Sonora, and on Tiburon island, located off the coast of Sonora.

Crotalus cerastes laterorepens (Colorado Desert sidewinder)

Description

The ground color of *Crotalus cerastes laterorepens* is variable, and can be buff, ivory, tan, grayish or even light pinkish. The number of dorsal blotches range between 30-45 (mean 36.9). The blotches are usually gray, yellow-brown or brown in color and can be rather indistinct, especially in adult specimens. The coloration and marking of the head, ventral surface and tail are the same as those listed earlier in this article for *Crotalus cerastes cerastes*. The basal segment of the rattle is black in this subspecies.

Scalation

Crotalus cerastes laterorepens typically have 23 scale rows at mid-body, the range being between 21-25. Subcaudal scale counts range between 19-26 (mean 21.7) for males and between 14-21 (mean 16.9) for females. Ventral scale counts range between 137-151 (mean 143.7) for males and between 135-154 (mean 146.2) for females.

Size

The record length for *Crotalus cerastes laterorepens* is 82.4 cm, making it the largest of the sidewinders.

Range

In the United States the Colorado Desert sidewinder is found in southeast California and the southwest of Arizona and in Mexico in extreme northwest Sonora and northeast Baja California.

KEY TO THE SUBSPECIES OF *CROTALUS CERASTES*

- 1a Basal segment of rattle **brown** in adults; ventrals in males 141 or less, in females 144 or less; scale rows at mid-body usually 21 *Crotalus cerastes cerastes*
- 1b Basal segment of rattle **black** in adults 2
- 2a Ventrals in males 141 or less, in females 145 or less; scale rows at mid-body usually 21 *Crotalus cerastes cercobombus*
- 2b Ventrals in males 142 or more, in females 146 or more; scale rows at mid-body usually 23 *Crotalus cerastes laterorepens*



Foto 1: *Crotalus cerastes*. Reptielen Zoo Uhdingen (D).
Foto: Fons Sleijpen.