

## Rattlesnakes

*Crotalus atrox* Western Diamondback

*C. viridis* Western

*C. cerastes* Sidewinder

*C. scutulatus* Mojave

*C. mitchellii* Speckled

*C. ruber* Red Diamond

Family Viperidae Viperidae



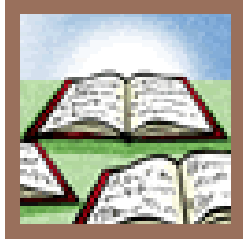
**Introduction:** The rattlesnake is a member of the pit viper family. It is the only venomous snake native to California. Six species are found in various areas of the state encompassing nearly the whole state, from below sea level to about 11000 feet. Rattlesnakes are an important part of the ecosystem, preying on rodents, birds, and other small animals, in turn they are preyed on by certain birds.



**Identification:** Adult rattlesnakes can approach 6 feet in length and 3 1/2 inches in diameter. Rattlesnakes have a distinctive triangular shaped head. This is important in identification as other non poisonous Californian snakes do not have this distinguishing feature. A less reliable means of identification is the rattle. The rattle, on the end of the tail, is composed of interlocking horny segments. Young rattlesnakes are born with this rattle. A new segment is formed each time the snake sheds its skin. Since segments can break off, the rattle is not a good indicator of age.

Similarly, just because a snake does not have a rattle does not mean it is not a rattlesnake as the rattle may have completely broken off. The diamond shaped head is the most reliable characteristic.

Rattlesnake detection is difficult because they are not easy to see or to locate in their hiding places. Be alert to their potential presence during the time of year when rattlesnakes are present in your region.



**Legal Status:** California Department of Fish and Game Regulations classifies rattlesnakes as native reptiles. California residents can take rattlesnakes on private lands in any legal manner without a license or permit.



**Damage:** Rattlesnakes can pose a danger to people, pets, and domestic animals. About 800 rattlesnake bites are reported annually in the United States. While seldom fatal they can be extremely painful and can lead to severe medical trauma.



**Range:** Range maps for the six species

[Western Diamondback](#)

[Western Rattlesnake](#)

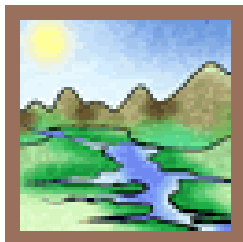
[Red Diamond](#)

[Mojave](#)

[Speckled](#)

[Sidewinder](#)

The range maps provide a general indication of where rattlesnakes can occur in California. However, rattlesnakes may be very sparse or nonexistent in some parts of their range, alternatively they can sometimes be found outside their normal range, transported there by humans or natural mechanisms such as flowing water.



**Habitat:** Rattlesnakes can be found hidden in rock crevices, under logs, in heavy brush, or in other areas where they are protected, including tall grass. They can also be found on roads, paths, and other areas where cover is limited. Be careful when moving brush, wood, logs, or other debris.

In known rattlesnake range areas, be alert when kneeling down to work in the garden and watch where you step. Rattlesnakes are often well camouflaged and wait quietly for their prey. In the wild rattlesnakes should be left alone. Rattlesnakes around the home or garden

are not acceptable to most people.



**Biology:** Western Diamondback – this is the largest and most common rattlesnake in California (*Crotalus atrox*). It is found primarily in Imperial, Riverside, and San Bernardino Counties from sea level to 7000 feet (2130m). It is probably the most dangerous rattlesnake in California because of its size and aggressive disposition.

Western Rattlesnake (*C. viridis*) - is common throughout much of California. It is not found in true desert regions or in areas of the Central Valley where irrigated agriculture has eliminated its habitat. It is generally recognized as comprising three subspecies, Northern Pacific, Southern Pacific, and Great Basin.

Sidewinder (*C. cerastes*) – is the smallest rattlesnake in the state. It is named because of its peculiar method of sideways locomotion. It is sometimes called the horned rattler because of the hornlike scales above its eyes. Sidewinders are most commonly found in sandy desert areas from below sea level to 6000 feet (1820m).

Mojave Rattlesnake (*C. scutulatus*) – ranges in the desert and foothills of southeastern California from sea level to high elevations.

Speckled rattlesnake (*C. mitchellii*) are found throughout Baja California up to Los Angeles.

Red Diamond rattlesnake (*C. ruber*) is found in the southwest corner of California from the Morongo Valley west to the coast and south along the peninsula ranges to mid Baja California.



Most rattlesnakes forage for prey in or near brush, areas of tall grass, rock outcrops, rodent burrows, around and under surface objects and sometimes in the open. Adults eat live prey, primarily rodents; the young take mostly lizards and young rodents.

To catch their prey, rattlesnakes, wait until the animal is near. The snake strikes with two large fangs that inject toxic venom to subdue the prey. The snake then swallows the paralyzed animal whole. Rattlesnakes will feed on carrion when no other food is available.

When inactive, rattlesnakes tend to seek cover in the crevices of rocks, under surface objects or beneath dense vegetation, in rodent burrows. In some areas rattlesnakes hibernate for several months in crevices in rock accumulations. Unlike most reptiles, rattlesnakes give birth to live young. Young rattlesnakes require protection and are likely to be born in abandoned rodent burrows, rock crevices or other secluded places.

Rattlesnakes are included in the pit viper family because they have small pits on each side of the head between the eye and nostril. These pits are in fact temperature sensitive organs which allow the rattlesnake to detect prey, even in total darkness. The nostrils and tongue also detect the odors of prey. Rattlesnakes have the most highly developed venom delivery system of all snakes. The snake can control the amount of venom ejected from either or both fangs. Even after its death, a rattlesnake can still, by reflex action, inject

venom for an hour or more. Caution is therefore advised when handling what appears to be a dead snake.



### Damage Prevention and Control Methods

Rattlesnakes add to our wildlife diversity and are important members of our ecosystem. They should be left alone whenever possible, especially in wildland areas.

**Exclusion:** Rattlesnakes may seek refuge beneath open buildings. Wherever there is a gap or opening they will enter and inhabit a building, just as house mice do. Sealing all cracks and other openings greater than 1/4 inch can prevent this. Gaps beneath garage doors are often large enough to permit snakes to enter, especially young ones. In the summer rattlesnakes may be attracted to cool or damp places, such as beneath buildings and in basements. Access doors on crawl holes should be inspected carefully for breaks or gaps. Use caution if you must crawl under a house or other buildings. Pump enclosures for hot tubs or swimming pools may provide cover if not well sealed. The dampness associated with ornamental water fountains, pools and fishponds may also make the surrounding area attractive to snakes.



Fences - snakes can be excluded from an area by a snake proof fence. While expensive, this is often necessary in children's" play areas. Ensure gates fit tightly and keep debris and vegetation from collecting around the fence. Snakes can climb accumulated vegetation and gain access to the top of the fence. Check the fence frequently to ensure it has not been damaged in any way.

**Habitat Modification:** An excellent way to discourage rattlesnakes around gardens and homes is to remove suitable hiding places. Heavy brush, tall grass, rocks, logs, rotten stumps, lumber piles, and other cover should be cleaned up. Keep weeds mowed close to the

ground or remove them. Since snakes often come to an area seeking prey, eliminating ground squirrels, meadow voles, deer mice, rats and house mice is an important step in modifying habitat to make it less attractive for snakes. Rattlesnakes cannot dig burrows but do frequently inhabit those dug by rodents, especially ground squirrels. After rodent control, fill in existing burrows with rocks, soil, sod and pack down firmly.

**Frightening:** No known methods

**Fumigants:** None

**Repellents:** Over the years a number of home remedies have been suggested to repel snakes, such as placing a horsehair rope around your sleeping bag or sprinkling sulfur dust or scattering mothballs around the area to be protected. Unfortunately, none of these work. Additionally, despite what you hear, no plants repel

snakes. Currently there is at least one commercially available chemical snake repellent on the market. It has not proved sufficiently effective to warrant its recommendation.

**Toxic Bait:** None registered.

**Trapping:** Not recommended. Consult a professional pest or wildlife control operator who specializes in snake removal. Or your local [Animal Services department](#).

**Other:** Some animals such as peacocks, turkeys, and dogs can be good sentinels for detecting rattlesnakes. If your dog behaves in unusual manner, excessively barking or whining, it would be wise to investigate for the possible presence of a snake.

## REFERENCES AND ADDITIONAL READING

Hygnstrom, S.E., Timm, R.M., and Larson, G.E., 1994 Prevention and Control of Wildlife Damage. Lincoln University of Nebraska, USDI and Great Plains Agr. Council and Wildlife Committee.

Salmon, T. P., D. A. Whisson, and R. E. Marsh. 2006. *Wildlife Pest Control Around Gardens and Homes*. 2nd ed. Oakland: Univ. Calif. Agric. Nat. Res. Publ. 21385.

