

## Rattlesnakes in San Diego County Parks

The Rattlesnake is an important natural element in the population control of small mammals. Nearly all of its diet consists of animals such as mice and rats. Because they are so beneficial, rattlesnakes are fully protected within County Parks.

If you encounter a rattlesnake while hiking, consider yourself lucky to have seen one of nature's most interesting animals. If you see a rattlesnake at a campsite or picnic area, please inform the park rangers. They will do their best to relocate the snake.

## Avoiding Rattlesnakes

By being alert and knowing what they look like, where they live, and when they are active, you can usually avoid rattlesnake encounters.

In parks, stay on trails. In other areas, if you plan on hiking through brush, long pants and boots are advised. At night use a flashlight.

In Southern California, snakes can be seen year-round. However, most rattlesnake sightings occur in April, May and June.

### INFORMATION



COUNTY OF SAN DIEGO  
**Department of Parks and Recreation**  
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Reservations & Information:  
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Visit us at [www.sdparks.org](http://www.sdparks.org)

## The Rattlesnakes of San Diego County

### Colorado Desert Sidewinder (*Crotalus cerastes laterorepens*)

Found only in the desert, the sidewinder prefers sandy flats and washes. Its colors are those of the desert; a cream or light brown ground color with a row of brown blotches down the middle of the back. A horn-like projection over each eye separates this rattlesnake from the others in our area. They measure 7 inches to 2.5 feet in length.

### Southwestern Speckled Rattlesnake (*Crotalus mitchelli pyrrhus*)

Most often found in rocky foothill areas along the coast or in the desert. The Southwestern Speckled's coloring looks like decomposed granite; from cream or tan to sometimes pink and yellowish, and usually with indistinct bands of salt-and-pepper speckling. They measure 8 inches to 3 feet in long.

### Red Diamond Rattlesnake (*Crotalus exsul*)

The Red Diamond Rattlesnake is a reddish-brown snake with the outline of cream-colored diamonds down its back. It usually prefers areas of brush scattered rock – chaparral along the coast, mesquite and cactus on desert slopes. It is not found high in the mountains or on the desert flats. This snake is 9 inches to 5.5 feet long.

### Southern Pacific Rattlesnake (*Crotalus viridis helleri*)

Found virtually everywhere but the desert, this greenish-brown to black snake has brown to black blotches down its back. These blotches generally have lighter edges. This snake is a subspecies of the highly variable western rattlesnake complex. The Southern Pacific Rattlesnake measures 6 inches to 5 feet in length.

## Snake Bite: First Aid

The primary purpose of the rattlesnake's venomous bite is to assist the reptile in securing its prey. After using its specialized senses to find its next meal, the rattlesnake injects its victim with a fatal dose of venom.

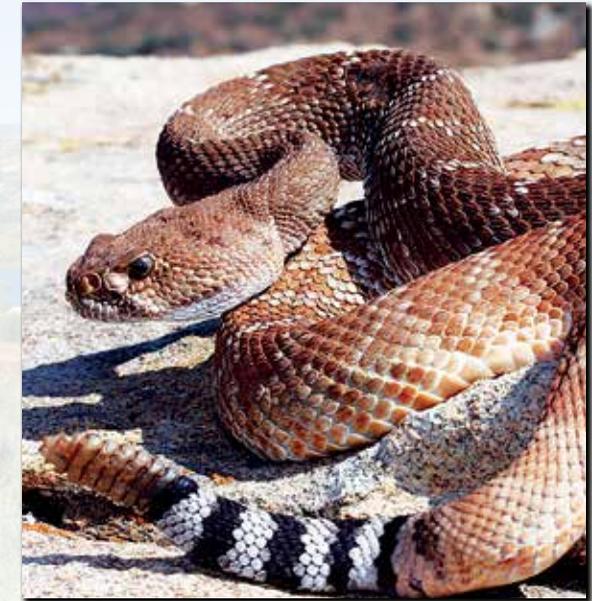
To prevent being bitten, the best advice is to leave snakes alone.

Most bites occur when someone is trying to pick up a snake, tease it, or kill it. If snakes are provided an escape route, they'll escape rather than strike. But if someone is bitten, the following first aid is suggested.



- 1. Remain calm**
- 2. Immobilize the bitten extremity**  
Do not apply a tourniquet or constriction band. Do not apply ice to the wound. Do not attempt to cut the wound or suck out the venom.
- 3. Wash the skin**  
If soap and water are available, wash the skin over the bite or use an antiseptic wipe.
- 4. Remove jewelry and tight-fitting clothing in case of swelling**
- 5. Call for help**  
If possible, send someone to telephone 911. If alone, walk at a relaxed pace to the closest telephone and call 911. Get medical attention as soon as possible.

# WHAT YOU SHOULD KNOW ABOUT RATTLESNAKES



## The Scales: A Keeled Mystery

If you encountered a snake and its tail was hidden from view, you might recognize it as a rattlesnake by its overall shape: large triangular head, narrow neck and wide body.

The rattlesnake can also be identified by looking only at its back. Each scale has a pronounced ridge, or keel, running down its middle.

These keels give the rattlesnake a rough, less shiny appearance than most snakes found in San Diego County. The function of these keels is uncertain, though some scientists believe they promote concealment.

By breaking up the light reflecting off the snake, the keels may allow it to blend in with its dull surroundings.



**Southern Pacific Rattlesnake**

## The Tongue: A Vital Part of Smell

By flicking its forked tongue, the rattlesnake is tasting the smell of the air. It picks up a scent, and then stimulates the olfactory nerve, in effect extending its nose beyond its body. When the snake pulls its tongue back in, it slides the tips into cavities on the roof of the mouth.

These organs, called Jacobson's Organs, contain branches of the olfactory nerve, the same nerve that leads to the nose.

# Rattlesnake Fun Fact

***Did you know that the rattles found on the tip of the tail are dead skin that accumulates over time?***

## The Eyes: Vision in Dim Light

The rattlesnake's pupil is a narrow vertical slit, like those in a cat's eye. This type of pupil generally indicates an eye that is highly sensitive to vision in dim light. That's also true for a rattlesnake.

Because of this sensitivity to light, the eye needs protection during bright daylight. Its vertical pupil protects it better than a round pupil because it can close almost completely.

## The Pit Organs: A Second Set of Eyes

When a rattlesnake looks at a mouse in the daylight, it senses both the reflected visual light that a human would see and the infrared light given off by the mouse's body heat. In total darkness, the rattlesnake can still find its prey by "seeing" only the mouse's body heat.



**Southwestern Speckled Rattlesnake**

How does it do this?

Rattlesnakes (and all other snakes in the pit viper group) have deep depressions, one on either side of their face between the eyes and nose.

Behind each of these pits is a chamber, which is divided by a thin membrane. Contained in this membrane is a densely packed group of nerve endings. Did you know that you have the same kind of nerve endings? They're spread across your upper face and allow you to sense warmth generated from a source of heat, such as the sun.



**Colorado Desert Sidewinder Rattlesnake**

In pit vipers, these nerves are confined to the pit organs. These nerves are different from yours in that they're linked to the vision center of the snake's brain. You could almost call the rattlesnake a heat-seeking missile, guided by a highly specialized nervous system.

## The Rattle: A Warning Sound

When alarmed, the rattlesnake vibrates its tail in an effort to warn an intruder of its presence. Other snakes may do the same thing, but only the rattlesnake has a mechanical warning system: *the rattle*.

This rattle is composed of a number of hard, dry skin, much like your fingernails. The loose, articulation of these segments – not loose beads within the segments as some people believe – results in the sound. When the snake vibrates its tail, one segment strikes the other. The buzz that results is a very effective warning.

A common belief is that the age of a snake can be determined by counting the number of segments in the rattle, one segment for each year. Not true. One segment is added each time the snake sheds its skin, and most snakes shed several times per year.