

Rattlesnake

Rattles

Thick dull body

Triangular head

REMEMBER: Snakes are an important resource in the natural environment. They are prime controlling agents of rodent, insect, and other reptile populations. They must be enjoyed and left where they are found.

It is illegal to collect, kill, or remove any plants or animals from the East Bay Regional Park District. Please help us to protect wildlife and their environment for present and future generations.

IN SNAKE COUNTRY:

1. Look at the ground ahead of you as you are walking.
2. Look carefully around and under logs and rocks before sitting down.
3. Avoid placing your hands or feet where you can't see clearly.
4. Check the immediate area around picnic tables, campsites, and barbecues before using them.
5. If you find a rattlesnake in a picnic or camp area, notify park staff. Do not disturb it.
6. If you see a rattlesnake or a snake you can't identify, give it plenty of room and leave it alone.

WHAT TO DO IF BITTEN BY A SNAKE:

1. If bitten by a rattlesnake, stay calm and send someone to **CALL 911**. The victim should remain calm by lying down with the affected limb **lower** than the heart. **DO NOT** waste precious time on tourniquets, "cutting and sucking," or snake bite kits. If you are by yourself, walk calmly to the nearest source of help: another person, a park employee, or a phone to **DIAL 911. DO NOT RUN.**
2. If bitten by any other kind of snake, leave the snake alone. Wash the wound with soap and water or an antiseptic and seek medical attention.
3. If you are not sure what kind of snake bit you, check the bite for two puncture marks (in rare cases one puncture mark) associated with intense, burning pain. This is typical of a rattlesnake bite. Other snakebites may leave multiple teeth marks without burning pain.

Gopher Snake

Slender head

Slender shiny body

Pointed tail

Visitor Centers

ARDENWOOD HISTORIC FARM
Fremont (510) 796-0663
awvisit@ebparks.org

BLACK DIAMOND MINES
Antioch (925) 757-2620
bdvisit@ebparks.org

COYOTE HILLS REGIONAL PARK
Fremont (510) 795-9385
chvisit@ebparks.org

CRAB COVE at CROWN BEACH
Alameda (510) 521-6887
ccove@ebparks.org

SUNOL REGIONAL WILDERNESS
Sunol (925) 862-2601
svisit@ebparks.org

TILDEN NATURE AREA/EEC and LITTLE FARM
Berkeley (510) 525-2233
tnarea@ebparks.org

Further Reading:

Rattlesnakes, Klauber and McClung
Western Reptiles & Amphibians, Stebbins

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This brochure is provided as a public service of the Interpretive and Recreation Services Department of the East Bay Regional Park District. For more information, call one of the visitor centers listed above.

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12/05

Common Snakes

of the
East Bay Regional Parks



 **East Bay Regional Park District**
www.ebparks.org

Snakes are an amazing group of animals. There are giant snakes longer than some buses and tiny ones that will fit in a tablespoon! Whether you are fascinated or frightened by snakes, they are sure to capture your attention when you see them. Although they are secretive in nature, every now and then you will find a snake quietly going about its business. Some, such as the Northern Pacific rattlesnake, may warn you of their presence. Others may see you and slip away before you know it. Whatever the case, it is fun to identify the snake and learn something about its life history. This brochure is designed to help you identify some of the snakes you may meet in the East Bay Regional Parks.

Spring and summer are the best seasons for observing snakes. Snakes are able to regulate their body temperature by moving in and out of shade. A warmer body allows a snake to move faster when trying to catch prey. Depending upon the kind of snake, they eat insects, slugs, frogs, birds, bird eggs, small mammals, and other reptiles.

Some snakes capture prey with their mouths and swallow them whole. Other snakes wrap their bodies around prey animals to constrict them. The jaw is expandable due to elastic muscles and ligaments in the throat and between bones in the jaw. This allows a snake to swallow prey larger than the width of its head. The snake uses its tiny hooked teeth and flexible jaws to pull an animal into its mouth. You might find a snake with a bulge indicating that it has recently swallowed a prey item.

Rattlesnakes use poison to kill their prey. Although the poison is harmful to

humans, its primary purpose is for catching food, not defense. Rattlesnakes also have temperature-sensitive organs on each side of their heads called **loreal pits**. These pits enable rattlesnakes to locate prey even in dark burrows where the scent trail can be confusing.

Snakes use their tongues to help identify (smell) food and danger by flicking them in and out. The tips of the tongue fit into an organ in the roof of the mouth, called the **Jacobson's organ**, that helps identify the chemicals in the air. Snakes rely on "tasting the air" (their sense of smell), and the movement of prey when hunting for food.

As with all reptiles, snakes have bodies covered with scales. A clear scale protects each eye. Snakes shed their skin as they grow. You may be lucky enough to find a shed skin close to a rock or log. Snakes rub against these to help peel off this colorless layer of skin. Each time a rattlesnake sheds, a new rattle forms, which may occur two to three times a year. Therefore, the number of rattles on a rattlesnake shows how many times it has shed, not how many years it has lived.

Snakes protect themselves by not moving, relying on their colors to camouflage them, or by quickly slithering away. A rattlesnake may rattle as a warning, while some other snakes might emit a foul-smelling fluid if handled. When threatened, some snakes will also bite in defense. As a **precaution**, do not put your hands or feet over rocks, logs or other places where you cannot see. The best procedure when encountering a snake is to keep a respectful distance, watch quietly – **do not try to pick it up.**

All snakes in the East Bay Regional Park District are protected. It is our responsibility to see that these animals are allowed to survive in their natural environment. Outside the Regional Parks, housing developments, new roads, and other construction projects reduce the habitat and chances for their survival. People who harm snakes or remove them from their habitat also threaten their continued survival. Fortunately, with your cooperation, our parklands will remain a refuge for wildlife and provide a place to view and enjoy these interesting creatures.

Common Snakes of the East Bay Regional Parks



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RUBBER BOA

The rubber boa is a stout-bodied snake that looks and feels like rubber. Sometimes called the "two-headed snake" because its tail is shaped somewhat like its head. It has shiny, smooth skin that can be brown to olive green on top and yellow to cream below. It is usually active at dawn and dusk, but in the spring

it is occasionally active during the day. The rubber boa is live-bearing with 2-8 young born August to November. **LENGTH:** 14-30 inches. **HABITAT:** They are found in moist grassland, woodland, and forested areas in and beneath rotting logs and where leaf litter and duff are on the ground. They burrow, swim, and climb. **FOOD:** They eat small mammals, insects, and lizards.



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ALAMEDA WHIPSNAKE

The Alameda whipsnake is a slender, fast-moving, plain black, or dark brown snake with a conspicuous yellow or orange stripe down each side. It is listed as **threatened** by the California Department of Fish and Game and the U.S. Fish and Wildlife Service. It lays an average of 6 eggs in the summer. **LENGTH:** 30-60 inches. **HABITAT:** The whipsnake is usually found in grassland, coastal scrub, or chaparral close to a water source. At present this subspecies' range is limited to Alameda and Contra Costa Counties. **FOOD:** They eat rodents, small birds, other snakes, and their primary prey, fence lizards.

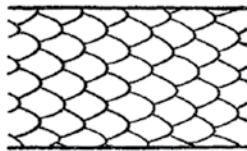


©Mike Sewell

YELLOW-BELLIED RACER

The yellow-bellied racer has large eyes and a long slender body which is olive-green, blue-gray, or tan on top with a yellow belly. This snake is extremely fast, which is essential for capturing certain prey. The young resemble small gopher snakes except for their large eyes and shiny, smooth scales. This snake lays 12-24 eggs in the early summer. **LENGTH:** 22-78 inches. **HABITAT:** Yellow-bellied racers are primarily found in foothill grasslands, brushlands, and moist environments. **FOOD:** They eat mice, fledgling birds, and lizards.

Smooth Scales



Keeled Scales
(a ridge on each scale)

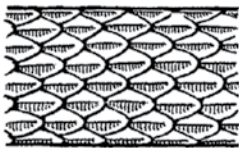


Illustration courtesy of Robert C. Stebbins



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WESTERN AQUATIC GARTER SNAKE

The coloration of the Western aquatic garter snake varies greatly depending upon the subspecies. The back is usually blotched brown to black with a dorsal stripe. This snake is live-bearing with 7-25 young born late summer to fall. **LENGTH:** 18-57 inches. **HABITAT:** Primarily aquatic, they are found in and along streams, rivers, ponds, and lakes from coastal brackish marshes to the high mountains. **FOOD:** They eat fish, frogs, salamanders, and mice. This snake is one of the few that can eat the highly toxic California newt.



©Harry Greene

WESTERN TERRESTRIAL GARTER SNAKE

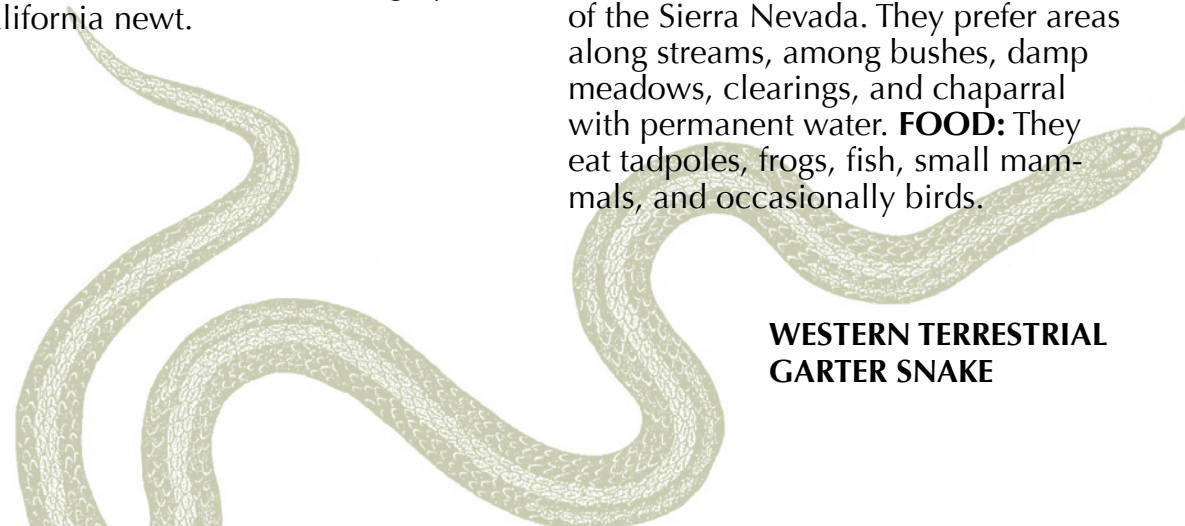
The coloration of the Western terrestrial garter snake varies greatly depending upon the subspecies. The subspecies in the East Bay has a bright yellow stripe down the middle of the back. Bright red or orange flecks or blotches usually present on belly and sides, including side stripes. The scales are keeled. This snake is live-bearing with 4-19 young born July to September. **LENGTH:** 18-42 inches. **HABITAT:** They are found throughout Northern California, the Sierra Nevada, and east of the Sierra Nevada. They prefer areas along streams, among bushes, damp meadows, clearings, and chaparral with permanent water. **FOOD:** They eat tadpoles, frogs, fish, small mammals, and occasionally birds.



©Dan Suzio

NORTHERN PACIFIC RATTLESNAKE

The general coloration of the Northern Pacific rattlesnake varies, usually matching the background soil color, with brown or black dorsal blotches. The head is broad, flat, and triangular with facial pits and vertically oriented, elliptical eye pupils. The skin is dull with keeled scales. The tail, tapering with a "rattle," is made up of interlocking pieces of dry skin. This snake is most active in spring or fall, in morning and evening or at night in warm weather, and is live-bearing with an average of 4-12 young born September to October. **LENGTH:** 15-62 inches. **HABITAT:** Rattlesnakes are found in a variety of habitats from coastal sand dunes to timberline. They prefer rock outcrops in annual grasslands, chaparral, blue oak, gray pine, and oak woodlands. **FOOD:** They eat small mammals, birds, and lizards.



WESTERN TERRESTRIAL GARTER SNAKE



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COMMON KINGSSNAKE

The common kingsnake has conspicuous alternating bands of black or dark brown with white or cream. The scales are smooth and shiny. They lay 6-12 eggs in early summer. **LENGTH:** 30-82 inches. **HABITAT:** Common kingsnakes are found under logs, lumber, and rocks outcrops in a variety of habitats throughout California. These habitats include forests, chaparral, grasslands, river bottoms, and deserts. **FOOD:** They eat other snakes (including rattlesnakes), lizards, birds, bird eggs, and mice.

The common kingsnake is becoming increasingly rare in the Bay Area and should be left alone when encountered.



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MOUNTAIN KINGSSNAKE

The mountain kingsnake is a colorful, shiny snake with black, red, and white bands and a black snout. This snake is harmless, but is often mistaken for the poisonous coral snake, which does not occur in California. Its temperament is a bit nervous and defensive. It mates from April to May and lays 4-8 eggs in the summer. **LENGTH:** 20-40 inches. **HABITAT:** It lives in moist, cool canyons of mountainous regions of California, in coniferous forests, and woodlands mixed with chaparral. This is a very rare snake in the Park District. **FOOD:** They eat lizards, small snakes, small animals, and bird eggs.



©Dan Suzio

RINGNECK SNAKE

The ringneck snake is a small, slender snake with a topside that is olive, brownish, blue-gray, or nearly black. It has a neck band that can be yellow, orange, or cream. The underside is red-orange with black dots and the red intensifies on the underside of the tail. It lays 4-6 eggs in late spring. **LENGTH:** 12-30 inches. **HABITAT:** Ringneck snakes prefer moist soil on north-facing slopes of foothill canyons, grassland, chaparral, and riparian areas. **FOOD:** They eat mainly slender salamanders, but also small tree frogs, lizards, earthworms, and insects.



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GOPHER SNAKE

The background color of the gopher snake is glossy yellow to buff with black, brown, or reddish-brown blotches on the back. The scales are keeled and the tail pointed. Its general coloration and behavior mimic a rattlesnake, but the gopher snake is harmless. This snake is a good climber and burrower. It lays an average of 6-7 eggs in the spring to early summer, with the young hatching in about 70 days. **LENGTH:** 36-100 inches. **HABITAT:** They are found in many different habitats throughout California including blue oak, gray pine, and oak woodlands. Gopher snakes are also found in chaparral, grassland, and riparian areas. **FOOD:** They eat small mammals, birds, bird eggs, and lizards. These snakes often inhabit the same burrows as their prey.

The gopher snake is often mistaken for a rattlesnake and killed.

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GOPHER SNAKE