

SNAKES OF BERRYESSA

Introduction

There are around 2700 snake species in the world today. Of these, 110 species are indigenous to the United States. Here at Lake Berryessa, park visitors have the opportunity to observe as many as 10 different species of snakes.



Aquatic Garter Snake

When observing snakes in the wild, it's important to follow certain guidelines. The fallen trees, stands of brush, and rock piles found around Berryessa serve as homes, hunting grounds, and refuges for numerous wild animals. Therefore, please refrain from destroying or altering the habitat of the area. Habitat destruction leads to increased snake/human encounters within the park, and ultimately, fewer snakes.

Snakes play a crucial role in the ecosystem. Through rodent control, snakes keep in check a rodent population that otherwise might spiral out of control. Large rodent populations not only lead to problems with property destruction, but also facilitate the spread of many diseases that can not only be dangerous, but fatal to humans.

Predators of the snakes here at Lake Berryessa include owls, eagles, foxes, raccoons, and other snakes. The kingsnakes are notorious consumers of rattlesnakes, yet rarely actively seek them out as prey. The number one



Western Rattlesnake

predator of our lake's snakes is humans. Many beneficial species are killed on the roads or in the park due mainly to misidentification and mis-information. There is but one venomous snake found in the Lake

Berryessa region, the western rattlesnake, which is distinctly different in appearance from any of our non-venomous species.

Rattlesnakes pose no serious threat to humans. The truth is, in the entire United States only 10-12 people die each year due to snake bites, with 99% of these deaths attributed to either the western or eastern diamondback rattlesnake, neither of which are found in the Berryessa area. The western rattlesnake is a rather docile, non-aggressive species of rattlesnake that tends only to strike if handled or cornered. Caution should be used when handling any venomous snake.

To avoid contact with rattlesnakes, stay on designated trails, watch where you step, and keep pets on a leash. The western rattlesnake is an important member of the natural community, so give them distance and respect. If you find a rattlesnake please contact a Park Ranger. The main purpose of assembling this guide is to provide information and dispel myths about snakes, and promote the preservation of this important member of our ecosystem.

Snakes of Berryessa

California Kingsnake, *Lampropeltis getulus*: Common. Up to 200 cm in length, brown to black with white bands, yet can be striped. Nocturnal during the hot summer months. Found from forests to meadows and fields. Feeds on birds, lizards, rodents and other snakes (including rattlesnake). Immune to rattlesnake venom. Oviparous.

California Mountain Kingsnake, *L. zonata*: Rare. Up to 106 cm in length, beautiful red, black and white bands. Nocturnal during the summer. Egg laying species that prefers dense forests near streams or rivers. Found in or around fallen trees and rock outcrops. Feeds on birds, lizards, and snakes.



California Kingsnake

Gopher Snake, *Pituophis melanolancus*: Common. Up to 250 cm in length. Tan to cream dorsal color with brown and black markings. Dark line in front of and behind the eyes. Diurnal except for the hottest portions of summer. Egg laying species that is found in almost any habitat. Can be arboreal. Feeds on birds, lizards, rodents and eggs. Hisses loudly and vibrates it's tail when disturbed. Looks similar to rattlesnake, but is completely harmless.



Gopher Snake

Western Rattlesnake, *Crotalus viridis*: Common. Up to 152 cm in length. Light stripe behind the eyes, and triangular shaped head. Body brown to green with brown and black blotching. Tail ringed with black bands. Rattles on end of tail. Chiefly diurnal, yet nocturnal during the summer months. Live birthing. Lives in a wide range of habitats, from forests to lake edges. Often found at the base of trees, brush, or near rock piles. Feeds on lizards, birds and rodents. VENOMOUS.

Ringneck Snake, *Diadophis punctatus*: Fair numbers. Up to 76 cm in length. Olive to black with a red to orange belly. Distinct orange neck band. Very secretive species. Egg laying. Usually found under rocks or logs in a moist environment. Prefers woodland habitats. Feeds on salamanders, lizards, and worms. Produces fetid odor when handled.



Rubber Boa

Rubber Boa, *Charina bottae*: Rare. Up to 76 cm. Plain brown with a

yellow belly. Head roughly as thick as the neck. The tail blunt like the head. A live birthing constrictor. Nocturnal during the summer. Found in coniferous forests under rocks and logs, usually near a permanent source of water. Feeds on small mammals and lizards.



Western Yellow Bellied Racer

Western Yellow-Bellied Racer, *Coluber constrictor*: Common. Up to 175 cm in length. Brown to olive skin with a pale yellow belly. Young possess brown side blotches and resemble young gopher snakes. Very large eyes. Diurnal, egg laying species that inhabits grassy regions and woodland around rocks and logs. Feeds primarily on lizards and insects. An extremely quick snake.

Western Terrestrial Garter, *Thamnophis elegans*: Common. Up to 100 cm. Yellow to cream dorsal stripe on a red and black body. Belly color will vary greatly. Head is usually dark colored. Diurnal. Live birthing. Broad range of habitats. Found in arid to moist environments. Permanent source of water not required. Feeds on frogs, insects and worms.

Common Garter Snake, *Thamnophis sirtalis*: Common. Up to 127 cm in length. Well defined dorsal and lateral stripes (red blotches between stripes on a brown body). May have blue to greenish belly and red head. Diurnal. Live birthing. Usually found in the vicinity of a permanent water source, yet also common in a variety of other habitats. Feeds on worms, lizards, frogs, fish and insects.

Western Aquatic Garter Snake, *Thamnophis couchi*: Less Common. Up to 127 cm. Dorsal stripe not well defined. Red markings usually absent. Head usually a dusky color. Diurnal. Live birthing. Uses water as a retreat. Feeds on fish, lizards, salamanders, and crustaceans.

http://www.usbr.gov/mp/ccaofield/offices/lake_berryessa/index.html

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GLOSSARY OF TERMS

ARBOREAL	- Tree climbing
CONIFEROUS	- Trees and shrubs bearing cones
DIURNAL	- Active during the day
DOCILE	- Manageable, easily handled
DORSAL	- The back
ECOSYSTEM	- A system made up of a community of animals and plants
FACILITATE	- Make easier
FETID	- Foul smelling
HABITAT	- Native environment
IMMUNE	- Show no ill effects from or not susceptible to
INDIGENOUS	- Native to an area
LATERAL	- Sideways
NOCTURNAL	- Active at night
OVIPAROUS	- Egg producing
PALEONTOLOGY	- Study of fossilized remains
PREDATORY	- Actively seeks out prey as food
VENOMOUS	- Poisonous
VENTRAL	- Belly portion

FOR MORE INFORMATION

PLEASE CONTACT:

Bureau of Reclamation
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5520 Knoxville Road, Napa CA 94558
(707) 966-2111
Monday through Friday
7:00am to 3:30pm.

FOR MORE INFORMATION

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Photo Credits

Western rattlesnake: Courtesy of the National Park Service (NPS); Roy Wood, 1990.

Gopher snake; Courtesy of the United States Fish and Wildlife Service (USFWS); Jim Rorabaugh.

Rubber Boa: Courtesy of the National Park Service (NPS); J.R. Douglass, 1971. Courtesy of the United States Geological Survey (USGS).

Aquatic Garter Snake, Yellow Bellied Racer, and California Kingsnake: Courtesy of Gary Nafis at www.californiaherps.com.

RECLAMATION

Managing Water in the West

Snakes of Berryessa A Visitor's Guide



U.S. Department of the Interior
Bureau of Reclamation
Mid-Pacific Region