

# Spotlight ON Species

## Snakes of the South Okanagan Similkameen

**The South Okanagan Similkameen is known for its diversity of beautiful habitats. It is this natural diversity that allows a great variety of snakes to live here. There are seven different snake species that are found in the region. The two most common snakes are the Western Rattlesnake and the Great Basin Gopher Snake.**

**Western Rattlesnake** (also called the Northern Pacific Rattlesnake)

### Characteristics:

The Western Rattlesnake can grow from .6 to 1.2 meters long. Two distinct characteristics of the rattlesnake are a triangular-shaped head and a thick tail ending in a series of rattles. The body colour is tan to pale green, with a series of dark brown to olive ovals along its back. The distinctive head has two holes located below the nostrils connecting to a heat sensing organ (heat pits) which are used to sense the presence of prey. The eyes have a distinctive “cat’s eye” vertical pupil.

### Food Habits:

The rattlesnake likes to sit and wait for a mouse to move. It quickly strikes and injects venom into the mouse that both paralyzes it and has digestive enzymes which helps to break down the food.

### Habitat and distribution:

The Western Rattlesnake is found from Southern British Columbia to Mexico. In British Columbia, it is found in the dry interior valleys of the Fraser Canyon, Similkameen, Thompson, Okanagan, and Kettle Valleys. Rattlesnakes hibernate in communal dens on rocky hillsides. In the spring, they disperse through grasslands and forests to areas with rodent populations. Individual males occupy distinct summer hunting territories but return to the den or rocky areas for a few days while they shed their skins.



Latin name: *Crotalus oreganus*  
**Conservation status:** Federally listed as Threatened. **BLUE** listed in BC.

Photo courtesy of One Wild Earth Photography

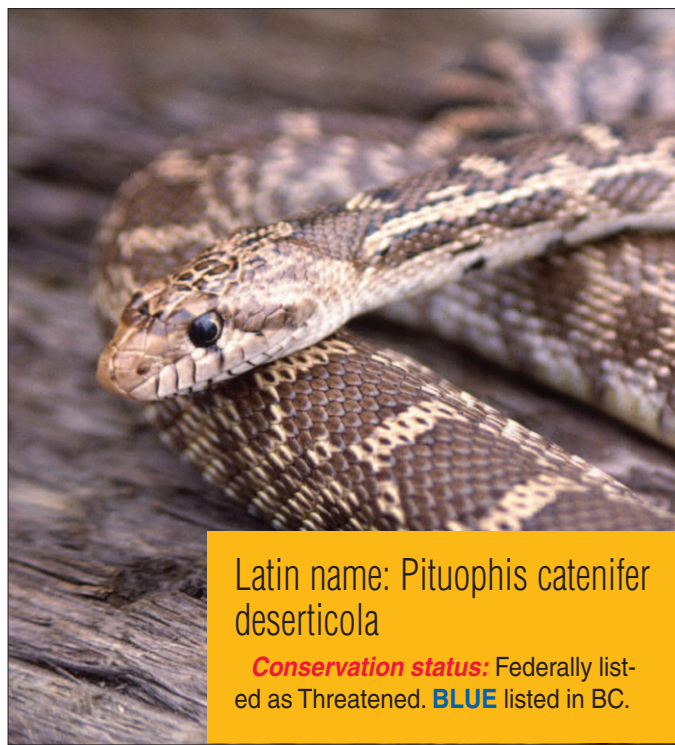
**Great Basin Gopher Snake** (commonly called Bull Snake)

### Characteristics:

The gopher snake is British Columbia’s largest, non-venomous snake, reaching up to 1.8 meters long. The snake is light tan with dark-brown markings. Along the back are dark rectangular patches (which contrast with the oval or round markings on a rattlesnake). The head is small with a dark line running through the eye and over the forehead. The eyes are pale with a dark round pupil. Their tail tapers gradually to a thin point.

### Food habits

Gopher snakes are active hunters who love rodents, climb trees to find birds nests, and also eat lizards, insects and other snakes. They are mainly active at night and spend the day resting in a mouse hole.



Latin name: *Pituophis catenifer deserticola*  
**Conservation status:** Federally listed as Threatened. **BLUE** listed in BC.

Photo courtesy of Laure W. Neish

### Habitat and distribution:

The Gopher Snake is widely distributed over Western North America. The deserticola sub-species is restricted in British Columbia to the Thompson, Okanagan, Similkameen and Kettle valleys. Winter dens are located in rocky slopes. In April, the snakes emerge to feed in sage grasslands and forests near streams and ponds.



### Who are the snakes of the South Okanagan-Similkameen?

- Night Snake
- Rubber Boa
- Racer
- Western Rattlesnake
- Great Basin Gopher Snake
- Common Garter
- Terrestrial Garter



Rattlesnake den photos courtesy of Wade Alcock

### Shake, rattle and bite

The Western rattlesnake is actually a shy creature that does everything it can to stay out of the way. Snakes cannot hear but are very sensitive to vibrations. If a snake feels something large approaching—like a human walking on a trail—its first reaction is to hide. It may also shake its rattles to warn you of its presence. The rattles are made up of 2 to 16 or more segments made of material like your fingernail. Each segment sits loosely inside the next so that when the tail is shaken the segments buzz and rattle. A tiny young rattlesnake only has only a popcorn-kernel sized button so can’t make any noise. As snakes grow, they shed their skins and a new rattle is gained with every shed. Older snakes have twelve or more rattles but the ends are often broken off.

A rattlesnake bites non-prey only as a last resort when it is close to being stepped on or picked up. Venom is instantly injected out of two large fangs. The venom has a complex chemistry which in humans can cause disorientation and eventual damage around the site of the bite. Victims should be driven to the hospital so they can be given anti-venom medication if necessary. Not all rattlesnake bites are venomous and require anti-venom.

When a gopher snake feels threatened it will make a hissing or vibrating noise that may be designed to imitate a rattlesnake. This may also be where it got the name “bull snake”. Gopher snakes may even vibrate their tails and strike with a bite but are not venomous.

Intensive urban and agricultural development have affected snake habitat and populations. Rattlesnakes were once actively persecuted and killed, and many gopher snakes were killed because of their similarity to rattlesnakes. Both snakes are now protected by federal and provincial wildlife regulations so it is illegal to harm or harass a rattlesnake.

### Reproduction and population

Gopher snake females need special sandy and sunny sites to lay their eggs. From two to eight eggs will be laid in June or July and hatch in late summer. Rattlesnakes mate in late summer and the female will spend the following year close to the den before giving birth to from 2 to eight live young in September. Both the female and young soon enter hibernation so there is an eighteen month period where the female will go without food. For this reason females only breed every two to three years. The populations of both snakes grow very slowly since special requirements are needed for female gestation.

The population of Gopher Snakes and Western Rattlesnakes is gradually diminishing as the habitat areas needed for hibernation, gestation, and foraging gradually get smaller and more fragmented. Many snakes are killed each year as they cross roads travelling between their dens and summer feeding areas.

*Text prepared by Margaret Holm*

**Presented by**

