

Spotlight on Species

Desert Nightsnake

Endangered: The Desert Nightsnake is considered to be the rarest snake in Canada.

Latin name: *Hypsiglena torquata deserticola* (recently changed to *Hypsiglena chlorophaea*)
Conservation status: Federally listed as Endangered. **RED** Listed in BC (endangered or threatened).



Photo by Mike Sarell



Photo by Wade Alcock

Characteristics:

The Desert Nightsnake is a small and slender-bodied snake that grows to an approximate length of only 30 to 66 cm. It is British Columbia's only opisthoglyphous (rear-fanged) venomous snake. The venom is not known to be poisonous to humans and they are reluctant to bite when handled. However, no snake in the wild should be handled especially those that are threatened or endangered.

The Desert Nightsnake has a vertical pupil like that of the Western Rattlesnake and the Rubber Boa. This slender blotched snake could be mistaken for a juvenile racer, gophersnake or rattlesnake, but close examination reveals its distinguishing features:

It has three long, dark blotches along the neck and running behind each eye, a slender tail without a rattle and smooth body scales. It has a beige, yellowish or grey body, patterned with dark grey-brown blotches that are usually in offset pairs down the back. The belly is unpatterned cream or white.

Habitat

The Desert Nightsnake is usually found under rocks or other cover, but may be seen crossing roads at night as it searches for prey. This species occurs in a variety of habitats but is associated with arid sandy and rocky habitats. All British Columbia specimens have been found near talus slopes (also known as scree, talus is a sloping mass of rocky fragments and debris formed at the base of a cliff.) and under rocks in antelope brush grassland habitat. Other vegetation in the immediate vicinity of record sites includes: saskatoon, bunchgrass, chokecherry, poison ivy and sage. Grasslands and low elevation ponderosa pine are important foraging areas and the rocky outcrops and cliffs provide winter dens.



Photo by J. Kevin Dunn

Behaviour and Breeding

Since, the Desert Nightsnake is secretive and nocturnal, little is known about its behaviour.

Nightsnakes may lay eggs between April and August. They may produce two clutches per year in other parts of their range which would explain the wide range of egg-laying dates. They deposit two to nine eggs. There is no data on reproductive rate, growth rate of individuals, or Desert Nightsnake population trends in British Columbia. Mating has been observed in British Columbia in the spring, shortly after emergence from winter hibernacula.

Diet

The Night Snake is the only rear-fanged venomous snake in British Columbia. The fangs consist of enlarged teeth at the back of the upper jaw and are only slightly grooved to transmit venomous saliva. The saliva is toxic to the snake's usual prey and is worked into the prey when grasped, accompanied by a "chewing" motion. This venom appears toxic to amphibians and can paralyze small lizards within seconds, although more time is required for death to occur. Small frogs may simply be swallowed whole and alive. Desert Night Snakes also feed on eggs, juveniles and adults of small lizards and snakes (including young rattlesnakes) and toads, salamanders, centipedes, scorpions and insects.

Article prepared by
**Jacquie Likins
and Mike Sarell.**



OKANAGAN
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Threats :

Extensive land development in the South Okanagan Similkameen has eliminated or fragmented their habitat (including dens and feeding grounds).

Exploitation of talus (see above definition of talus) as source of rip-rap, landscaping rock and fill for construction.

Despite the fact that they are harmless to humans, Night Snakes may occasionally be killed because they look very similar to young rattlesnakes

Traffic mortality

Burning and clearing of shrubs and subsequent seeding of non-native grass species may reduce quality and prey availability.

Distribution:

In Canada, the Night Snake is only found in the Southern Okanagan and Lower Similkameen Valleys of British Columbia. This British Columbia subspecies is known as the Desert Nightsnake. As its name implies, this snake is mostly active at night and prefers dry, rocky outcrops. It is difficult to determine the population size because of their secretive and nocturnal nature. Thus, its rarity may stem more from its secretive nature than actual population size. Only fifty specimens have been positively identified in British Columbia since the species was first discovered in 1980.

In the United States, Desert Night Snakes are restricted to the Great Basin desert of central Washington, eastern Oregon, southern Idaho, Nevada and northern California. In the northwest, it is confined to the Columbia Basin.

Got Snakes?

Attention Vineyard & Orchard Managers and Crews... You are invited to attend a free Snake Smart Training & Management Workshop.

In this session, snake biologist Mike Sarell will teach the identification, biology and habits of the Great Basin Gophersnake and the Western Pacific Rattlesnake. Hazard assessment and snake relocation guidelines will be addressed so that workers and snakes can be protected in the field. Information kits and posters will be distributed. Material is available in English, French, Spanish and Punjabi.



Photos by One Wild Earth Photography

Great Basin Gophersnake, left, and the Western Pacific Rattlesnake

**Sept. 9, 2009, 9:00 - 11:00 am
Tinhorn Creek Vineyard,
Road 7, Oliver**

Please RSVP to Jacquie Likins at (250) 492-4422 or outreach@osca.org

Other workshops will be available in Naramata & Summerland. Please contact Jacquie for further information.

What you can do:

- ✓ Attempts should be made to protect den sites, and natural habitats within one kilometer of dens, to ensure the continued survival of these shy and vulnerable creatures.
- ✓ Maintain habitat such as grasslands and ponderosa pine forests.
- ✓ Retain ground debris.
- ✓ Avoid disturbing rocky slopes.
- ✓ Conduct survey to locate den sites before surface disturbances occur in their habitat.
- ✓ Avoid road construction near talus slopes and around known snake dispersal routes.
- ✓ Maintain good range condition in grasslands for cover and habitat for prey species.

To learn more about this and other species at risk, consult a local conservation organization. Visit www.soscp.org
Please report sightings of the Desert Nightsnake to OSCA at (250) 492-4422 or outreach@osca.org

