



Night Snake

Scientific name: *Hypsiglena torquata deserticola*

About 1 to 2 ruler lengths in size, cryptic, and nocturnal, the Night Snake is perhaps the least understood snake in British Columbia. The superficial resemblance of Night Snakes to juvenile Rattlesnakes and Gopher Snakes may contribute to their mystery...and perhaps their rarity. Similar to other blotchy snakes found in the same hot regions, Night Snakes are tan, grey, light brown or pinkish grey with dark brown squarish blotches running down the back. A smaller series of blotches often marks each side of the body. And like Rattlesnakes, Night Snakes have vertical pupils.

However, Night Snakes have 4 key features that distinguish them from Rattlesnakes. Most obvious is the lack of a rattle (and potentially harmful venom)! Night Snakes are not truly venomous; the venom they produce is just strong enough for their small prey. Night Snakes also have smaller markings, a less distinct neck, and smooth scutes (scales). In comparison, the scales of Rattlesnakes are keeled (a ridge runs down the middle of each scale). Finally, Night Snakes have a dark band across each eye and a dark collar-like marking around the neck that often runs into the eye bands, a combination of markings unique amongst B.C.'s snakes.

Making a living

Because of its cryptic nature, and perhaps because of its superficial resemblance to juvenile Rattlesnakes and Gopher Snakes, little is known about the life history of B.C.'s Night Snakes. Like all snakes in B.C., Night Snakes spend their winters

in hibernacula (dens). These hibernacula likely are communal and may be shared with Rattlesnakes. Little is known about their breeding habits, except that they are an oviparous species (their young develop in eggs outside of their mother's body). While biologists have not found an intact Night Snake nest in B.C., biologists in the United States report that females lay between 3 and 6 eggs. In B.C., eggs likely are laid on south-facing slopes in June or July, and hatchlings emerge in late August to September.

What's for dinner?

Night Snakes are generalist amphibian and reptile predators. Their usual fare consists of lizards, lizard eggs, small snakes (even neonate Rattlesnakes), frogs and toads. Night Snakes sometimes ambush their prey by burrowing beneath the sand. Their eyes are partially upturned, a trait that allows them to view the world (and potential prey) from their sandy trap. But ambush is not the only weapon in their arsenal. As Canada's only rear-fanged snake, Night Snakes have enlarged grooved teeth in the back of their mouths. By 'chewing' on its prey, the snake injects a mildly venomous toxin – not dangerous to humans – from modified salivary glands in the back of its mouth.

Places and spaces

Night Snakes appear to be limited to south-central British Columbia. About 40 Night Snakes have been recorded in B.C., and most of these snakes were located in the Okanagan Valley. Some snakes also have been found in the Similkameen. Within this region, Night Snakes appear to be associated with Sagebrush and Juniper plant communities, rock outcrops, and south-facing talus slopes. Like other oviparous species, these snakes need appropriate hibernacula, egg-laying sites, and productive summer hunting grounds to survive within these hot, dry regions.

Past, present, and...future?

The Night Snake, one of the most rare snakes in Canada, shares its habitat with one of the fastest growing human populations in B.C. More than 60% of the grasslands and shrublands in the southern portions of the Okanagan have been lost. As with other snakes within this region, human activities such as urbanization, expansion of vineyards and orchards, and rock removal for road construction and landscaping may negatively impact habitat availability and connectivity for Night Snakes.

Because of this species' rarity and its restricted range, the Night Snake is on the provincial red list, flagging the species as being at risk and requiring further study. Accordingly, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) classifies this species as endangered.

If you find a Night Snake, make note of where you found it and contact your local branch of the Ministry of Water, Land, and Air Protection – you could contribute to our knowledge about these elusive snakes!