



Living in Nature Series

How to Snake-proof Your House and Yard

It is not unusual for residents of the southern interior of BC to have the occasional encounter with a snake in their yard. For some, this is a thrilling experience; for others, it is a most unpleasant or dreaded encounter. People's reactions differ largely because of their level of understanding of snakes, early life experiences and/or what they were taught. Fear can be transferred to others, especially impressionable children. Learning about the habits and needs of snakes can help to alleviate fear.

In any event, snake encounters around your house and yard can be reduced with appropriate snake management techniques. These techniques, in combination with knowledge of the different species of snakes, their importance in the environment, and suitable behaviour in snake habitat, will help us co-exist with snakes.

The Provincial Wildlife Act and the Federal Species at Risk Act prohibit the harassment, killing, or capturing of listed snakes.



A home with snake exclusion fencing

Know Your Snakes

Seven species of snakes reside in the southern interior. Knowing your snakes helps prevent fear, and generates tolerance and fascination. These snake species and their respective status are:

Snake Species (Proper Common Name)	Federal Status ¹	Provincial Status ²
Desert Night Snake	Endangered	Red
Northern Pacific Rattlesnake (Western)	Threatened	Blue
Great Basin Gopher Snake	Threatened	Blue
Racer (Western or Yellow-bellied)	Special Concern	Blue
Rubber Boa	Special Concern	Yellow
Common Garter Snake	Not Assessed	Yellow
Terrestrial Garter Snake	Not Assessed	Yellow

¹ Federal status is designated by the Committee on the Endangered Wildlife in Canada (COSEWIC). Endangered indicates a species facing imminent extirpation or extinction. Threatened indicates a species likely to become endangered if limiting factors are not reversed. Special concern (formerly Vulnerable) indicates that a species is particularly sensitive to human activities or natural events, but is not an endangered or threatened species.

² Provincial status is ranked by the Conservation Data Centre to indicate the degree of threat that the species has of becoming provincially extinct. Yellow indicates that there is no immediate risk. Blue indicates that populations are suspected of declining or considered vulnerable. Red indicates that populations are very low and at risk of becoming extinct within the province.



The **Gopher Snake** is sometimes referred to as the Bull Snake, which is actually its eastern cousin. The Gopher Snake is the largest snake in our area. It is not venomous but when threatened will mimic a rattlesnake by hissing, coiling and shaking its tail.



The **Racer** is the fastest snake in our area. It is the only snake that remains active during the hottest parts of the day while chasing down prey. The Racer is not venomous but can bite if handled. It is one of the few snakes that include insects in its diet.



The **Rubber Boa** is one of the most timid snakes in our area and is not known to bite. Its skin texture appears rubbery, as its name suggests. The tail is blunt like the head and is often presented to predators and parent mice as a diversion when under attack. The Rubber Boa occurs further north than any other species of boa.



The **Desert Night Snake** is the rarest and elusive snake in our area. As the name implies, it is most active at night while seeking out lizards for food. The Desert Night Snake is mildly venomous but is not known to bite, even if handled.



The **Western Terrestrial Garter Snake** is one of two species of garter snakes which inhabit our area. Both species have a yellowish stripe down the back. Neither species is venomous, but they may bite if handled roughly.



The **Common Garter Snake** is also often found around water where frogs and small fish are numerous.



Only the **Northern Pacific Rattlesnake** (Western Rattlesnake), is venomous and potentially hazardous to people. Rattlesnakes have very broad heads and a blotched pattern on their backs. Their tails end in a rattle rather than tapering to a point. Even newborn rattlesnakes have a button, the precursor of a rattle. By nature, rattlesnakes are timid and will usually avoid confrontation. Bites are rare and almost never fatal. In fact, some bites result in little or no venom being injected. However, it is important to employ the following tips to avoid being bitten.

Rattlesnake Safety

Tips to avoid being bitten:

Move slowly and be observant if you are in an area where rattlesnakes are likely present (rocky talus, open grasslands and wetlands).

Wear protective footwear, such as rubber boots or high leather boots, when walking in tall grass or areas where you cannot clearly see the ground.

Never put your hands or feet where you cannot see if a rattlesnake is present.

Avoid picking up objects under which a snake might hide. If you must, use a pole to carefully overturn the object.

Avoid getting close to a rattlesnake and agitating it (stay at least the snake's body length away).

Stay calm when a rattlesnake is encountered and leave it alone. Ensure that others do the same.

People who approach rattlesnakes do so at their own risk, and carelessness may result in being bitten.

Snake-proofing in and Around Your House

As a rule of thumb, if a mouse can get into your house so can a snake. However, unlike mice – which can chew their way in – snakes rely on existing holes and unsealed gaps. Most access points are just above the foundation of the house or in basement window wells. Another common entry point is under basement doors. To ensure that there are no entry points, use steel wool to fill rodent holes, caulking for unsealed seams, and weather stripping for around doors. The best time to snake-proof your house is from late fall to early spring when snakes are in their dens and unlikely to be in the building or under siding.

Outdoors, snakes like to hang out or hide in cool, shady spots. If you are not installing snake barrier fencing around your yard, you can reduce snake encounters outside your house by:

- closing in the skirting around decks and installing kick boards and skirting on steps;
- moving rock and wood piles away from the side of your house or playground;
- placing stored materials in carports and outbuildings in a manner that minimizes the opportunity for snakes to use them as cover; and
- installing removable or hinged plexi-glass over basement window wells so that snakes and other small animals are not trapped inside them.

Snake Barrier Fencing

You may want to snake-proof your entire yard, or perhaps only your vegetable garden or the area where children play. Any of these options can be accomplished with snake barrier fencing, although fencing can be expensive and does require regular maintenance to be effective. Snake barrier fencing is made of material that snakes cannot go through, over or under. One type of fencing material that works well is hardware cloth, which is galvanized screening with $\frac{1}{4}$ inch mesh. The rolls of mesh are 36 or 48 inches wide and are available in 50 or 100 feet lengths. An industrial gauge mesh is recommended as it wears better. In some cases it may be advisable to bury landscape cloth along the length of the fence to prevent weeds from growing along the fence. This reduces the need for weed control along the fence that could tear the material.



The layout of the fence will vary depending on the topography and configuration of your yard. One strategy could be to fence the back yard and tie the fencing into the walls of the house. A gate or stile can be installed to provide easy pedestrian passage beyond the fence. For further information on the construction and installation of gates and fencing, please see the Snake Barrier Fencing factsheet.

Installing the Fence

Bury the bottom apron of the fence at least 4 inches down with an additional 4-inch lip extending outwards to deter any rodents that try to dig under the fence. The snake fence can then be secured to existing fences or placed independently on new posts. The mesh is pulled taught and heavily stapled or secured with screws and a stripping to prevent the mesh from being ripped off the post when pressure is applied.



Hardware cloth (i.e. the galvanized mesh) can tear easily, so the upper edge requires strengthening by securing to a top rail or folding the mesh over taut smooth wire. This prevents tearing when people or animals go over the fence.



Wooden Top Rail



Smooth Wire Edge



If the entire yard is to be fenced, then the driveway also needs to be snake-proofed. One way to do so is to install a grate such as a cattleguard and tie the fence into the sides. Snakes are not likely to cross the cattleguard, but on occasion may end up in the excavated area below. In order to allow trapped snakes to exit, the sides on the outer portion of the cattleguard pit should be sloped or a pipe should be dug in to allow snakes to exit the pit, outside of the fenced area.

It is important to provide exits for snakes if they ever manage to get by the fencing. Funnel traps are an effective way of providing one-way exits and usually require an extension to encourage snakes to enter the funnel. Snakes on the outside of the fence are unable to find the small end of the funnel that extends from the fence.



Maintaining Your Fence

Conduct regular inspections of the fence to ensure that there are no tears in the mesh. Tears can be mended with 18-gauge galvanized wire, available at most hardware stores. Also, ensure that no animals have burrowed under the fence such that snakes could follow. If there is considerable wear on the fence consider installing chicken wire or page wire on the inside of the posts to protect the fine mesh that is attached to the outside. Clear away branches or weeds that would provide a means for snakes to climb over the fence. Snakes that manage to find their way past your fence will likely be trapped and require removal unless a funnel is installed.

For further details on installation of fencing,
please refer to the factsheet entitled Snake Barrier Fencing

Relocating Snakes

Rattlesnakes rarely need to be relocated in rural areas. Most often they can be avoided until they go on their way. In these cases, anyone who might come in contact with the snake should be notified and pets kept away. In situations where it is imperative to move a snake, if possible, only snake response personnel should carry out the task. This is to avoid accidental bites, as well as to protect the snake from injury by inexperienced handlers.



Directing a snake into a container



Using snake tongs

A variety of implements can be used to direct snakes into a container from which they cannot escape. Professional equipment such as snake hooks or tongs should be used to handle snakes. A long stick or other suitable implements may be effective snake handling devices when proper equipment is not available. If the tongs have an interlocking tooth, be wary of the tooth's position relative to the snake's body so the tooth does not pin the snake causing bodily injury. Regardless of what tool you use, be careful as a snake's organs can be easily damaged.

It is essential that the handler does not agitate the snake. The handler must use slow, smooth movements, so the snake is less likely to attempt striking and is easier to capture. Throughout the capture and release process the snake should never come within striking range of the handler or anyone else. Handlers should also be cautious not to harm the snake, either physically or by leaving the transport container in the sun.

When relocating a snake, the release site should be carefully considered, as the snake must be able to return to its den. Traditionally, a snake uses the same den year after year and should not be moved more than one kilometre away from where they were found. Also, the snake should be released well away from any area where conflict with humans is likely. Typically snakes move from winter dens to lush areas for summer foraging and then back to their dens on rugged slopes in the fall. Knowing these movement patterns can help you to relocate the snake along its direction of seasonal travel.

Call the Conservation Officers Hotline for assistance in capturing and relocating a snake... 1-800-663-WILD (9453)

Other Resource Materials

- Snake Smart (South Okanagan-Similkameen (SOS) Stewardship) – revised 2006
- Working in Snake Country (SOS Stewardship)
- Snake Barrier Fencing (SOS Stewardship)
- Wildlife in British Columbia at Risk: Western Rattlesnake (Ministry of Environment (MOE))
- Gopher Snake (MOE and Conservation Data Centre)
- Habitat Atlas for Wildlife at Risk: South Okanagan and Lower Similkameen. BC Environment, 1998.

For more information, please contact:
South Okanagan-Similkameen (SOS) Stewardship Program
and *TLC* The Land Conservancy of BC at:
Suite #201 - 262 Main Street
Penticton, BC V2A 5B2
Phone: (250) 492-0173
www.conservancy.bc.ca

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Text, Design by: Mike Sarell

Edited by: Sue Austen, Janna Foster-Willfong and Alyson Pulham

Photos by: Mike Sarell unless otherwise indicated

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