# Living with Wildlife SNAKES





**Common Garter Snake** (*Thamnophis sirtalis*) Al St. John photo

#### Oregon's 15 Native Snakes Life History Observing Snakes Preventing and Addressing Conflicts Removing, Trapping and Relocating Snakes Recommended Conservation Actions Attracting Snakes Injured Snakes Oregon's Snake Species Status Nonnative, Invasive and Exotic Snakes Scientific and Education Permits Public Health Concerns More Information

# **OREGON'S 15 NATIVE SNAKES**

Snakes are among the most misunderstood of animals. Myths abound: Most snakes are poisonous, snakes can jump two feet, snakes will not cross a rope, snakes only strike when coiled and snakes travel in pairs. All of these myths are untrue as are many of the others that circulate, but in the absence of information, people often believe them. In this fact sheet, we provide facts about Oregon's native snakes that dispel myths and promote a better understanding of these wonderful, ecologically important and often beautiful animals.

In general, snakes are relatively inactive except when looking for a spot in the sun or shade or when hunting. Like other reptiles, snakes are ectotherms meaning their body temperature is regulated directly by the surrounding temperature. They generally have poor eyesight and hearing, but have a well-developed sense of smell and the ability to "taste" their immediate environment. To do this, they flick their tongues to pick up gaseous particles out of the air and into a sensing organ (Jacobsen's organ) in the roof of their mouths. This helps them sense danger, find mates and locate or track prey.

There are 15 native snake species in Oregon. Of these, only the Western Rattlesnake has poisonous venom that is dangerous to humans.

# **Garter Snakes**

There are four species of garter snakes. They inhabit a variety of habitats, including suburban areas. Their name comes from their resemblance to the design on garters once worn by men to hold up their socks. Garter

snakes are non-venomous and harmless to humans, though the saliva of a garter snake may be mildly toxic to amphibians and other small animals. If disturbed, a garter snake will try to escape, but may strike or bite if cornered or someone gets too close or tries to pick it up. Other than attempting to flee, garter snakes best defense against would-be predators is the secretion of a foul-smelling fluid from post-anal glands that is released during high stress events such as capture and handling.

Garter snakes are highly beneficial in that they feed on slugs, snails and other garden pests. Small garter snakes eat earthworms and slugs while the diet of larger snakes includes amphibians, small rodents, nestling birds and fish. Garter snakes give birth to live young. Following are the four species found in Oregon.

The **Common Garter Snake** (*Thamnophis sirtalis*) is the most widespread and frequently encountered snake in Oregon. It is found from coastal and mountain forests to sagebrush deserts and backyard gardens. The coloration and patterning can be highly variable, but these snakes typically have a bright cream or yellow dorsal stripe that runs lengthwise down its body and a grayish-blue, green, yellow or black underside. It averages 18 to 36 inches long. In the eastern part of that state, it typically occurs close to water. There are two sub-species in the state: The Red-spotted Garter Snake (*T. s. concinnus*), which is found only in the Willamette Valley and the Valley Garter Snake (*T. s. fitchi*) which occurs throughout Oregon except for the northern coastal area and arid central portions of the state.



Northwestern Garter Snake (Thamnophis ordinoides) Al St. John photo

The **Northwestern Garter Snake** (*Thamnophis ordinoides*) occurs in coastal and mountain forest habitats west of the Cascades. It is most commonly found in grassy-brushy areas and in weedy sections of suburban backyards and city parks. It is more slender than other garter snakes and reaches two feet at maturity. The Northwestern Garter Snake is the most variable in color and patterning of all Oregon snake species. The dorsal stripe can be absent or resplendent in various shades and colors, such as red, orange, greenish yellow, tan, blue or white.



Western Terrestrial Garter Snake (Thamnophis elegans) Al St. John photo

The **Western Terrestrial Garter Snake** (*Thamnophis elegans*) occurs in a wide variety of habitats except along the central and north coastal zones, much of the east slope and crest of the Cascades, and in a small portion of central Oregon. Despite its name, this snake spends a lot of time in the water. It is usually gray-brown or black, with a dark, checkered pattern between yellow stripes although identification can be difficult, because there are three sub-species recognized in Oregon, all varying in coloration: the Coast Garter Snake (*T. e. terrrestris*), found in the far southwest corner of the state; the Mountain Garter Snake, found throughout the Willamette Valley and southwest Oregon; and the Wandering Garter Snake (*T. e. vagrans*), found east of the Cascade Mountains. Nearly black forms occur in some areas. Adults are 18 to 43 inches long.



Pacific Coast Aquatic Garter Snake (Thamnophis atratus) Simon Wray photo

The **Pacific Coast Aquatic Garter Snake** *(Thamnophis atratus)* is found along rivers in the southwestern part of the state, as far north as the Umpqua Valley in Douglas County. It stays close to water and its diet is comprised mostly of fish and amphibians (adults and larvae). To escape, this snake will dive beneath the surface of the water and hide under rocks. Adults average 18 to 33 inches long and usually show a pattern over olivebrown to gray background color. Dorsal stripes can be absent; if present are typically a light yellow.



Gopher Snake (Pituophis catenifer) Simon Wray photo

The **Gopher Snake** (*Pituophis catenifer*), also known as the bull snake, is a constrictor, preying primarily on small rodents. It is often mistaken for a rattlesnake due to its coloration and its impressive ability to mimic a rattlesnake by flattening its head, coiling, striking and hissing loudly. To complete the pseudo image of a rattlesnake, a gopher snake will vibrate the tip of its tail. Although it is not poisonous, this aggressive behavior leads many to believe that it is a rattlesnake. The easiest way to tell a gopher snake from a rattlesnake is to look at the tail. Gopher snake tails come to a fine pint and lack rattles. Rattlesnakes have an obvious "rattle" that comes to a blunt end. The Gopher Snake is found statewide except along the coast and above 6,000 feet in the Cascades. It prefers warm, dry habitats including deserts, grasslands and open woodlands. It is a robust snake, measuring three to six feet in length, and has dark blotches against tan along its back. Like most of Oregon's snakes, gopher snakes have round pupils. The only snakes with elliptical (cat eye) pupils are night snakes and rattlesnakes. Gopher snakes have a distinctive dark facial stripe that passes through both eyes. There are two sub-species of gopher snake in Oregon, the Pacific Gopher Snake, found in the Willamette Valley and southwest Oregon, and the Great Basin Gopher Snake, found east of the Cascade Mountains.



Night Snake (Hypsiglena chlorophaea) Al St. John photo

The **Night Snake** (*Hypsiglena chlorophaea*) lives in rocky areas in eastern Oregon and is rarely seen because it hunts and moves at night. Night snakes are relatively small, less than 20 inches long, have a row of brown blotches down the back, a large dark blotch at the back of the head and conspicuous copper-colored eyes with narrow vertical or cat-like pupils. Night snakes feed largely on lizards, which they subdue with the help of poisonous saliva delivered via grooves in their slightly enlarged back teeth and worked into their victim by a chewing action.



Racer (Coluber constrictor) Al St. John photo

The **Racer** (*Coluber constrictor*) occurs statewide except along the coast north of Port Orford and the crest of the Cascades. It prefers warm, dry, open or brushy country where it is often observed crossing roads. It ranges from two to four feet long and is plain brown or olive above with a pale yellow belly. It is thinner than a garter snake of comparable size and has larger eyes. The Racer is well named because it is extremely fast. It holds its head and neck above the ground when hunting and may climb into shrubs. Its diet consists primarily of small mammals, lizards, frogs and insects.



Striped Whipsnake (Coluber taeniatus) Al St. John photo

The **Striped Whipsnake** *(Coluber taeniatus)* is a close relative of the racer, inhabiting brush and grasslands of eastern Oregon up to 7,000 feet elevation. Either black or dark brown above, the sides of the whipsnake each have a white stripe with a dark line or dashes in the middle of the stripe making it appear to be two light stripes on each side of the body. Primarily a day-hunting snake, it eats lizards, snakes and small mammals. Often exceeding five feet, it is slender, has a long tail and an elongated head with large eyes. Like the racer, it will hunt with its head held above the ground and often climbs into shrubs to pursue prey or evade predators.



Sharp-tailed Snake (Contia tenuis) Al St. John photo

The **Sharp-tailed Snake** *(Contia tenuis)* is closely associated with dry habitats such as oak woodland; coniferous and pine forest; and chaparral. It is found in southwest Oregon from the Cascades to the coast, in a small area in the north Willamette Valley and along the Columbia River near The Dalles. The Sharp-tailed Snake is secretive in nature and leads a largely subterranean existence or hides under logs, rocks and other objects. Its principal food source is small slugs. It is most commonly seen during periods when slugs are active in the fall when the ground is wet but before it begins to freeze at night and in the spring before it becomes too dry. It can also be found in irrigated gardens, especially those that have black plastic sheeting used to control weeds. The Sharp-tailed Snake has alternating crossbars of black and cream on its underside. A small snake, rarely over a foot long, it gets its name from a tiny spine-like scale on the tip of its tail.



**Ring-necked Snake** (*Diadophis punctatus*) Simon Wray photo

The **Ring-necked Snake** (*Diadophis punctatus*) occurs in the drier parts of southwestern Oregon, the Willamette Valley and the lower Deschutes River Valley and has been recorded along the Grande Ronde River and in Hells Canyon. This snake is two-toned, with slate gray to green coloration above with contrasting bright reddish orange or yellow below. A ring of matching orange or yellow encircles the neck. When alarmed, this snake hides its head and coils the tail upward, revealing the bright underside. It grows to thirty inches in length and eats salamanders, frogs, small lizards and snakes.



Ground Snake (Sonora semiannulata) Al St. John photo

The **Ground Snake** (*Sonora semiannulata*) reaches the northern limits of its distribution in Oregon with known populations along the Owyhee River. It is one of Oregon's smallest snakes with adults averaging eight to 12 inches. Ground Snake coloration can be varied, but the most common morph has alternating rows of black crossbands separated by a reddish color. Less common morphs include alternating black and white or black and gray bands, or no bands and a reddish orange stripe running down the back. The ground snake eats spiders, grasshoppers and insect larvae.



California Mountain Kingsnake (Lampropeltis zonata) Hodo Sondassi, USFWS, photo

The **California Mountain Kingsnake** (*Lampropeltis zonata*) is one of Oregon's most colorful snakes. It has a circular pattern of red, black and creamy yellow bands separated by black. They average 20 to 30 inches in length and occur mainly in the Rogue and Umpqua River valleys and the Klamath Basin. A constrictor, the California Mountain Kingsnake eats other snakes, lizards, small mammals and the eggs and nestlings of birds. These snakes are often killed when people mistakenly think they are venomous coral snakes native to the southeastern U.S. and as far west as southern Arizona.



**Common Kingsnake** (*Lampropeltis getula*) Al St. John photo

The **Common Kingsnake** (*Lampropeltis getula*) is found in oak savannas, mixed pine-oak woodlands and brushy areas in the Umpqua and Rogue River valleys. This snake attains a length of almost four feet and has a pattern of brown to black and cream to white circular bands. The Common Kingsnake feeds on a variety of live prey, but is partial to other reptiles, particularly lizards. These snakes are known to eat rattlesnakes and are immune to the venom. The species can be quite excitable when initially disturbed and may vibrate its tail, hiss or strike.



**Rubber Boa** (Charina bottae) Al St. John photo

Oregon Department of Fish and Wildlife

The **Rubber Boa** (*Charina bottae*) is a member of the family that includes some of the world's largest snakes—including the boa constrictor and anaconda. However, it measures only 14 to 30 inches. It is olive-green, reddish-brown or tan to chocolate-brown. It looks rubbery and has a short, broad snout and a short, blunt tail, giving it a two-headed appearance. The Rubber Boa is found in a wide variety of habitats including oak and pine woodlands, grassy areas, brushy chaparral and moist sandy areas along rocky streams. Although seldom encountered, this snake can be common and has one of the widest distribution of any Oregon snake species. It occurs statewide except along the coast north of Coos Bay, the Cascade crest, a section of the Columbia Gorge and southern Harney County. It eats small rodents, mostly mice and shrews, and is a good swimmer, burrower and climber.



Western Rattlesnake (Crotalus viridis) Al St. John photo

The Western Rattlesnake (Crotalus viridis) is Oregon's only indigenous rattlesnake. Two sub-species are recognized in Oregon: the Northern Pacific Rattlesnake (C. v. oreganus), which occurs in southwestern Oregon, the mid- to southern Willamette Valley and the Columbia Plateau and the Great Basin Rattlesnake (C. v. lutosus), which occurs in south central and southeastern Oregon. The Western Rattlesnake is distinguished from other Oregon snakes by its broad, triangular head that is much wider than its neck, vertical pupils (a characteristic shared only with night snakes) and the rattles on the end of its tail. Overall color patterns differ with habitat, ranging from olive to brown to gray. Black and white crossbars may occur on the tail. Western rattlesnakes average 18 inches to 36 inches at maturity.

These snakes are most commonly seen near their den areas, which are generally in rock crevices exposed to sunshine. They are most likely to be seen during the spring and fall when moving to and from hibernation sites. Rattlesnakes do not view humans as prey and will not bite unless threatened.

Rattlesnake fangs are hollow and are used to inject the snake's venom in order to stun or kill their prey, primarily warm-blooded mammals such as mice, woodrats, ground squirrels and young rabbits and marmots. Rattlesnakes are born with multiple sets of fangs that are shed and replaced approximately every two months. In order to ensure that the snake has at least one fang with which to subdue prey and defend itself, the fang on one side is shed and replaced before the fang on the other side is shed. Replacement takes a couple of days. Venom is contained in two glands in the snakes head. Each gland is connected to a fang and controlled by a sphincter that enables the snake to bite without releasing any venom. It can also release measured amounts of venom through one or both fangs. Rattlesnakes cannot spit venom. While human deaths from rattlesnake bites are rare, a doctor should be consulted immediately as a bite can be lethal.

Although venom is most often thought of as a threat to humans, it is used in a number of beneficial ways. For example, venom from Australian Taipans is being used to promote clotting and stop excessive bleeding during surgery or after major trauma. Additionally, ongoing research has demonstrated high potential for enzymes within snake venom to be used in the treatment of some cancers, stroke victims and neurological conditions such as Parkinson's and Alzheimer's diseases.

# LIFE HISTORY

# Food and Feeding Behavior

- Snakes are predators and eat a variety of animals including earthworms, slugs, snails, insects, mice, voles, bird eggs and nestlings, fish, frogs and lizards.
- Snakes have hinged jaws that can disengage to allow them to consume food that is wider than their bodies.
- Snakes have forked tongues that deposit air molecules on receptors in the mouth; thus, snakes "taste" the air, which helps them locate prey and sense their way in the dark.
- Snakes are cold-blooded animals that use the energy from the sun to run their bodies' bio-chemical processes, such as muscle contraction, digestion, growth and reproduction.
- Snakes can live off their stored fat reserve for extended periods of time.

# Shelter and Hibernation Sites

- Snakes seek shelter to hide from predators and to regulate body temperature. Sites used include rodent burrows, spaces under logs and tree stumps, rock crevices, lumber and rock piles. Man-made structures are also sometimes used.
- Snakes hibernate during winter, either alone or in a group site called a hibernaculum.
- Hibernation sites must remain warm enough to prevent death by freezing, they must be neither too dry nor too wet, and they must be adequately ventilated.
- Snakes will use the same hibernaculum year after year; several hundred snakes of different species, and sometimes lizards may occupy the same hibernaculum.
- Emergence from hibernation can begin as early as March, depending on the species, location and weather. Snakes will stay close to the hibernaculum in the spring, basking on nearby rocks during warmer day and returning to its safe depths during cold nights. This pattern will continue until the day and nighttime temperatures stabilize in the late spring and the snakes leave for their summer hunting grounds.

# Reproduction

- Courtship and mating occurs shortly after snakes emerge from hibernation.
- Garter snakes, rubber boas and Western rattlesnakes bear live young from eggs retained in the body until hatching. All other Oregon snakes lay eggs in protected areas where the eggs will receive enough external heat to hatch.

- Young hatch from July through September and fend for themselves after hatching, although there has been documentation of rattlesnake mothers defending their young for a period after birth.
- Young snakes grow rapidly and reach sexual maturity in two or three years.

# Mortality and Longevity

- Garter snakes have lived as long as 18 years in captivity. The lifespan of Oregon snakes in the wild is generally unknown.
- Snakes are prey for a variety of wildlife including badgers, coyotes, foxes, opossums, raccoons, skunks, weasels, great blue herons, raptors and other snakes. Some livestock—chickens for example—eat snakes.
- Habitat loss and alteration are a threat to snake populations.
- Humans kill many snakes each year out of fear and misunderstanding.
- Domestic cats and dogs, lawn mowers, weed-whackers and vehicles fatally wound or kill snakes.
- Vehicles account for more snake deaths than any other cause because the snakes are drawn to warm pavement to sun themselves.

#### **OBSERVING SNAKES**

Most snake encounters are momentary. Observe snakes from a distance. Never attempt to capture a snake. Although snakes are often seen as threatening, they hiss, strike or bite only if you get too close or if they are cornered or restrained. They tend to be inconspicuous, preferring to move away and hide or lie still in the hope of being overlooked. Most of the time, snakes are slow moving, but they can make short dashes to chase prey or escape from predators. They are unable to sustain long-distance movement. Because they are particularly active and less wary during the breeding season, be on the lookout for them in spring. Snakes are often inactive during the hottest part of the day, especially in mid- to late summer and seek shelter or crawl underground to avoid overheating. In desert areas, snakes may become active at night when the air cools and while the ground remains warm.

#### **Basking Sites**

Most snakes reach their preferred body temperature by basking on surfaces exposed to sun. They control their body temperature by moving in and out of the sunlight and by changing their orientation to it (facing the sun, back to the sun, etc.). They also derive body heat by lying on or under warm surfaces. In hot areas, look for snakes basking in the morning sun on asphalt, concrete, rocks and wooden fences. In cooler regions, they can be seen basking throughout the day. Snakes tend to bask on sun-warmed roads in the evening, a fact that often leads to them being run over by vehicles.

#### Shed Snake Skin

A growing snake sheds its skin every four to five weeks. When ready to shed, a snake's eyes look bluish white and dull. It may even become temporarily blinded until the old skin splits at the head, and it is able to crawl out. Shed skin looks like thin, clear plastic, with every detail of the scales still visible, even the eyeball cover. You may find shed skin near boards or rock piles and other places where snakes congregate.

#### Trails

Snake trails are most easily seen in sandy or dusty areas in their preferred habitats. Snakes tracks may be wavy or straight lines. Surface material, such as sand or loose soil, is usually pushed up at the outside of each curve.

# Droppings

Snake droppings are interesting in that you will find a capping of white calcareous deposits at one end. The size of the dropping corresponds to the size of the snake. Snake droppings are cord-like, with constrictions and undulations.

#### PREVENTING AND ADDRESSING CONFLICTS

Many people fear snakes and consequently try to get rid of them unnecessarily. Native snakes are an important part of a healthy ecosystem, both as predators and prey for other wildlife. They do not damage property and, with the exception of rattlesnakes, they do not generally pose any real threat to humans.

#### **Prevent Entry into Buildings**

Snakes usually enter buildings at ground level, so sealing all groundlevel holes or cracks can prevent their entry. Seal all cracks and holes in foundations and exterior walls, including warped siding, where a small snake could enter. Use 1/4-inch mesh hardware cloth, caulk, mortar or a concrete patch to make the seal. A three-inch layer of pea-size gravel around the foundation will help plug small holes. Snakes can find easy access to garage areas through open garage doors or under poorly fitting doors. Cover door bottoms with metal flashing or another material. Any weather-stripping along the garage and other outside doors should fit tightly. These modifications will also exclude mice and other rodents. Pursuing prey such as small rodents is often the reason snakes attempt to enter houses and other buildings.

Snakes in buildings fall into two categories: those that entered accidentally and are trying to escape because they find the habitat unsuitable and those that have entered to find prey or shelter and would take up permanent residence if allowed. The former includes small snakes that are trapped and will likely die from lack of food or moisture if not captured and removed. Some snakes may hibernate in buildings with leaky cellars or crawl spaces with dirt floors. The presence of shed skin usually indicates that a snake has been living in the building for some time.

#### **Modify Habitat**

To limit the number of snakes living in an area, reduce their food supply, shelter and encourage natural predators. Areas that provide shelter for rodents and cover for snakes should be eliminated, such as removing lumber, woodpiles, bushes, shrubs, piles of rocks, boards, and other debris lying close to the ground, especially around buildings. Modify areas that provide cool, damp dark habitat for snakes. Vegetation should be kept short around the buildings. Mowed lawns and short-cropped fields near the house are less attractive to snakes and the rodents they feed on. Of course, as the number of snakes decreases, the number of rodents and insects may increase, resulting in different problems.

#### Fences

Fences can be used to keep snakes away from buildings and out of yards. A snake-proof fence can be made from 30-inch high ¼-inch galvanized hardware cloth. The bottom edge should be buried three to six inches in the ground and the support stakes should be inside the fence to prevent snakes from crawling up them. A snake fence should be slanted outward at a 30-degree angle toward the area containing snakes. Fences should also have a self-closing gate design to prevent accidental access by snakes. Regularly inspect the fence to be sure that holes haven't been opened under it and that items have not been piled against the outside. Keep grass and weeds around the fence mowed.

#### Repellents

Snake repellents have mixed results. Snakes "smell" via their tongues and the Jacobson's organ. So, unless a snake just happens to poke its tongue out at the precise moment that it is moving over the repellent, it will not notice a thing. Even if it does, the smell may not be noxious enough to drive the snake in another direction.

# **REMOVING, TRAPPING AND RELOCATING SNAKES**

Relocation of any wildlife, including snakes, for any reason requires a permit from ODFW. However, you can move a snake outside on the same property if it is in a building or if a one-way door can be installed that will allow the snake to exit but not reenter.

If a snake gets into a house or other building, it may need help to find its way out and get back to its natural habitat. You can hire a Wildlife Control Operator to do the job. For a list of permitted <u>Wildlife Control Operators</u>, call your local ODFW office or refer to the ODFW website.

To create a one-way door, seal all the openings except the suspected main entrance being used by the snake(s). On that opening, install a one-way door made from a piece of aluminum window screen rolled into a cylinder about 10 inches long and with a slightly larger diameter than the entrance hole. Suspend the outlet end of the tube off the ground to prevent the returning snake(s) from finding the entry. The device may be left in place for a month or longer to allow time for the snake(s) to leave. Make any necessary repairs to the house or other structure to prevent the problem from reoccurring.

# **RECOMMENDED CONSERVATION ACTIONS**

Snakes are negatively affected by habitat alterations and from persecution based on fear and misunderstanding. For example, snakes fare poorly when natural lands are broken up by development as it isolates animals from one another and subjects them to increased risk of mortality as they move across inhospitable terrain. The following conservation actions are recommended to benefit snakes:

- Protect known hibernation sites and other areas used by snakes.
- Maintain, create and enhance habitat features (e.g., ponds, rock piles, downed wood, brush piles) to provide suitable habitat for snakes.
- Do not use or limit use of chemicals such as fertilizers and pesticides. Snakes and their prey can be adversely affected by toxic chemicals.
- When mowing lawns, mow at slow speeds so that snakes in the area can move out of harm's way. Leave some areas of lawn un-mowed, particularly in places that adjoin a wet area, sunny forest edge, or other area known to be used by snakes. If the grass has to be cut, survey the area and move or direct any snakes to a safe location prior to mowing. Set the mower blades as high as possible, or use a weed-whacker and leave grass six inches high.
- Provide habitat corridors for snakes by maintaining taller grasses and placing habitat features strategically to link patches of habitat and facilitate safe movement of snakes across the landscape.
- Protect snakes from outdoor cats and off-leash dogs. Cats and dogs can attack and injure or kill snakes. The presence of dogs and cats can often deter snakes.

ATTRACTING SNAKES

You have a greater chance of attracting snakes to your property if it is near an undeveloped site, greenway or freshwater area (e.g., stream). But, you can add habitat features such as ponds, rock piles, brush piles and basking (sunning) sites to provide suitable snake habitat and improve your chances of observing snakes. Habitat-enhancement features ought to be placed away from driveways or heavily traveled roads to minimize road mortality. See <u>Attract Reptiles and Amphibians to your Yard (pdf) in the Oregon Extension catalog</u> for more information.

# Water

Many snakes are associated with water. Even backyard ponds can provide habitat for a variety of invertebrates that snakes consume. Build a small, fish-free (fish eat all stages of amphibians) pond for amphibians. Many snakes, garter snakes in particular, feed on tadpoles, adult frogs and invertebrates found in and around backyard ponds. Place logs, rocks and plants near your pond to provide shelter for snakes and their prey.

# **Rock Piles**

Rock piles or rock walls are excellent habitat for snakes. Snakes will use them as cover from predators and weather, as places to raise young and for basking. You can build rock piles from bricks, rocks or broken concrete. Place your rock pile where it receives both sun and shade each day. A good place for a rock pile is next to a creek or a pond.

# **Brush Piles**

Brush piles also provide habitat for garter snakes and attract insects and small mammals that then become prey for snakes. The best places to build a brush pile are near a hedgerow, shrub, mature tree, pond or recently cleared area. If you have enough land, make several brush piles and place them in spots that get different amounts of sunlight. Do not place piles in low areas where there is standing water in rainy weather.

# **INJURED SNAKES**

If you find an injured snake, you can call your local ODFW office during weekday business hours for advice or call a certified wildlife rehabilitator. A list of <u>licensed wildlife rehabilitators</u> is available on the ODFW web site.

Do not attempt to care for snakes unless you have a valid wildlife rehabilitation permit from ODFW. See <u>OAR DIVISION 044</u>, Holding, Propagating, Rehabilitating Protected Wildlife.

# **OREGON SNAKE SPECIES STATUS**

Three of Oregon's snakes are classified as state sensitive species. The Western Rattlesnake is a <u>Sensitive (Critical) Species</u> (pdf) in the Willamette Valley. The common kingsnake and California mountain kingsnake are identified as <u>Sensitive (Vulnerable) Species</u> (pdf) throughout their ranges.

Four snakes are classified as protected nongame species, meaning it is illegal to kill, catch or possess them. They are: The Common Kingsnake, California Mountain Kingsnake, Sharp-tailed Snake and Western Ground Snake. See <u>OAR DIVISION 044</u>, Holding, Propagating, Rehabilitating, Protected Wildlife.

• Do not remove snakes from the wild.

Species	Status
Western Rattlesnake	Sensitive – Critical (Willamette Valley)
Common Kingsnake	Sensitive – Vulnerable (range-wide), Protected
California Mountain Kingsnake	Sensitive – Vulnerable (range-wide), Protected
Sharp-tailed Snake	Protected
Western Ground Snake	Protected

# NONNATIVE, INVASIVE AND EXOTIC SNAKES

#### Exotic pets

Some nonnative snake species are legal to have as pets in Oregon, while others species are classified as Prohibited NonNative Wildlife, meaning they are illegal to import into Oregon, transport, buy, sell, possess, trade or barter. See <u>OAR Division 56</u>: Importation, Possession, Confinement, Transportation and Sale of Nonnative Wildlife. Contact your local ODFW office for more information.

Prohibited species are considered invasive and have detrimental effects on Oregon's native species and habitats. Some species of nonnative snakes, particularly those that are either venomous or that can attain a large size, are regulated by county and city laws. It is an individual's responsibility to know applicable federal, state, and local laws regulating wildlife, including nonnative or "exotic" species.

# Releasing nonnative snakes

Do not release snakes into the wild—it is illegal under state law ORS 498.052.

#### Importing snakes

Importation of wildlife, including snakes, into Oregon is regulated by the Oregon Department of Agriculture. Before importing any wildlife into Oregon, check with ODFW and ODA for applicable import restrictions and required permits.

# SCIENTIFIC AND EDUCATION PERMITS

Use of snakes for scientific and educational purposes requires a <u>Wildlife Scientific Taking Permit</u> from ODFW.

#### PUBLIC HEALTH CONCERNS

Non-venomous snakebites are typically harmless; however, irritation or infection can result from a bite and some people may be allergic to what are usually harmless bites. If bitten, clean and sterilize the site and consult a doctor. Snakes and other reptiles can also carry the Salmonella bacteria, which can be transferred to humans via handling. Therefore, it is advised to minimize direct contact with snakes and wash your hands after handling. Contact your local physician for any medical concerns.

#### Western Rattlesnakes

If you live in or visit rattlesnake country, be alert and aware of this species in order to avoid threatening it.

• If you encounter a rattlesnake, move away. It wants to avoid you as much as you want to avoid it. A rattlesnake will coil into a defensive posture if it cannot escape. If you remain too close, the rattlesnake will usually warn you with its distinctive rattle. Its last defensive move is to strike.

- If you hear but cannot see a rattlesnake, stay calm and locate the direction of the rattle. Do not panic and risk being bitten by accidentally moving closer or stepping on the snake. Once you know the direction of the snake, move away in the opposite direction.
- Rattlesnakes are occasionally found near buildings seeking shelter, shade, or prey but they seldom enter houses.

# **Prevent Problems While Hiking**

- Stick to well-used, open trails. In brushy areas, use a walking stick to alert a snake of your approach.
- Avoid walking through thick brush and willow thickets.
- Do not step or put your hands where you cannot see.
- Wear over-the-ankle boots and loose-fitting long pants.
- Watch rattlesnakes from a distance, and be aware of defensive behaviors that let you know you are too close.

# **Rattlesnake Bites**

Rattlesnakes do not always release venom during a defense bite, however, it is best to assume venom has been delivered and act with all haste. If possible, call ahead to the emergency room.

See the Oregon Health and Science University website for what to do in case of snakebite. You can print the page to carry in your first aid kit.

# **MORE INFORMATION**

<u>Oregon Conservation Strategy</u> <u>ODFW Living with Wildlife</u> <u>Attract Reptiles and Amphibians to your Yard (pdf)</u>



**Oregon Department of Fish and Wildlife** www.dfw.state.or.us (503) 947-6000

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