Reptiles and Amphibians of Oregon's Deschutes, John Day, and Owyhee Rivers

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This page is meant to serve as a guide for identifying the Reptile and Amphibian Wildlife which one might encounter while exploring Oregon's desert rivers' canyons. The harsh dry climate created in the rainshadow of the Cascades provides a pleasant home for these unique creatures, whose physiological adaptations allow them to thrive in an otherwise barren environment.

This guide should be useful for previewing what wildlife you may encounter, or for identifying species you have seen. In either case, please do not harass, feed, collect, or kill any wildlife you discover in Oregon's scenic backcountry. Many of the species listed here are protected from such actions under state law.

Deschutes River Canyon

Reptiles

Elgaria multicarinata

Southern Alligator Lizard

The distinguishing features of this lizard are the squarish scales on its back and underside, and the folds of smaller, white-tipped scales between its front and rear legs. Individuals are usually brown or olive-brown with yellow eyes and dark wavy lines across the backs of adults. They can reach up to a foot in length and their prehensile tail is often more than twice the length of the body. When travelling quickly on the ground, this lizard will tuck its legs in and move with a snake-like motion of its body.

E. multicarinata **can be found in oak woodlands, grasslands, talus, or brush. The lizards feed on insects and other arthropods (including black widows and scorpions) and small vertebrates except amphibians, whose skin secretions have lethal effect.**

Eumeces skiltonianus
Western Skink

The Western Skink is betrayed by its bright blue tail, which is most prevalent in the young. A wide brown stripe, bordered by two lighter stripes, runs down the center of the back. The scales are smooth, shiny, and appear rounded. Skinks grow up to eight inches long, and inhabit a variety of habitats, including rocky desert canyons and woodlands.

Skinks are daytime foragers, feeding mostly on small invertebrates. The females lay their eggs early in the summer and will stay with them until they hatch in August. In escape, Skinks may burrow for short distances, and their tails will often break off if agitated.

Phrynosoma douglassi
Short-Horned Lizard

Short-Horned Lizards are the smaller of the two horned lizard species in Oregon, reaching at most a total length of four inches. They have a flat, rounded body and a row of small toothlike scales along each side. As the name suggests, the "horns" at the back of their head are short, only as long as they are wide. The lizards vary in coloration, ranging from grey to near black, and often match the color(s) of their habitat. These lizards like loose, sandy soils in sagebrush plains or juniper/pine woodlands. They feed on insects, primarily ants. After mating early in the summer, females retain their

eggs and give live birth in late summer, a physiological trait which may help them reside at altitudes up to 5000 ft.

Sceloporus graciosus
Sagebrush Lizard

The Sagebrush Lizard can be distinguished from its relative the Western Fence Lizard by the smaller, smoother scales, and the lack of a solid blue patch on the throat. A pattern of gray and brown stripes runs down the length of the back. Males have blue to black patches on each side of their underbelly, and a mottled blue throat. While not exclusive to sagebrush plains, the lizards do like bushy ground cover, or may inhabit rocky areas if *S. occidentalis* is not present. These alert and fast hunters feed on insects and other small invertebrates and may reach at least six inches in length. Like the Skink, they can easily lose (and regenerate) their tail.

Sceloporus occidentalis
Western Fence Lizard

These close relatives of *S. graciosus* are brown or gray to black, have large blue patches on the undersides of the abdomen and throat (less pronounced in females), and have conspicuous, pointed scales on their backs.

Western Fence Lizards tend to inhabit rocky areas but will climb on fences, trees, or buildings. Males are territorial and use elevated perches to show off their blue patches and attract mates. The lizards feed on insects and spiders and can reach eight inches in length. Like the Sagebrush Lizard, Western Fence Lizards have a tail that breaks easily under stress, but grows back in many individuals.

Uta stansburiana
Side-Blotched Lizard

These are the smallest lizards in Oregon. From a distance they appear grayish brown, but upon closer inspection they reveal a bluish-black spot behind each of the front legs. Males sport light blue spots on their backs and some orange coloration on their belly. Adults reach up to five inches in total length.

Side-Blotched Lizards will live on sandy desert soils or in rocky canyon walls. On hotter days, these lizards emerge in the morning and towards evening to dine on insects and other arthropods. Males are territorial and display their colors for the females, who may drop two clutches of eggs per year. Like many other Oregon lizards, *U. stansburiana* can lose its tail in a confrontation and regenerate a replacement.

Charina bottae
Rubber Boa

The common name of this snake is derived from the rubbery look and feel of its skin. These snakes are uniform in color down the entire length of their back, generally brown or olive green. They have no apparent neck, small eyes with vertical pupils, and large plates on top of their heads. Rubber Boas have vestigal remnants of hind limbs, visible as small hooks adjacent to the cloaca on their rear underbelly. The snakes are usually less than two feet long.

Rubber boas can survive in various habitats, from deserts to heavily forested higher elevations. They have a unique tolerance for cold, and have been reported active at temperatures below seven degrees Celcius. Their preferred diet seems to be mice and shrews, but they have been known to eat other small creatures such as lizards, snakes, salamanders, and birds. Rubber Boas are typically active from March through November, moving and foraging primarily at night. The snakes have keen defensive mechanisms; when threatened, they may hide their head, and raise and even "strike" with their tail. They also may release a strong predator-deterrent musk from glands on their tail.

Coluber constrictor
Racer

The racer is a snake of uniform color, olive to blue-gray with a yellowish underbelly. Its relatively large eyes allow it powerful vision for hunting. Hatchlings and youth have a brown blotched appearance which fades as they mature. Adults can reach lengths of up to four feet.

These highly visual predators are active during the day, and tend to inhabit open areas such as sagebrush flats or rocky slopes. Racers will hibernate with many other species of snakes, and are known to "migrate" to the same den site each winter. As their name suggests, they are quite fast. Racers will move along the ground with their head elevated, on the lookout for prey such as

insects, lizards, frogs, and small mammals. They are generally quite aggressive in captivity.

Hypsiglena torquata
Night Snake

The Night Snake is light tan with brown blotches down the back, and might be easily mistaken for a Gopher Snake if not for its vertical pupils and the dark stripe along its upper jaw. Their underside is a glossy white, and they rarely grow to longer than two feet.

Nightsnakes are primarily nocturnal, and are assumed to prefer rocky, arid, low elevation areas. Their prey includes small lizards, frogs, toads, and large insects. *H. torquata* is the only venomous snake in Oregon besides the Western Rattlesanke, but poises no threat to humans as the venomous teeth are in the rear of the mouth and are less for striking than for immobilizing a meal-in-process. Because of their habits, Night Snakes are hard to come by, but are best found or warm rocks or roads at night.

Crotalus viridis
Western Rattlesnake

Oregon's lone pit viper is most readily identified by the audible rattle produced by the shaths of dried skin on its tail. It has a green to tan body with dark blotches down the back, a broad diamond-shaped head, and a relatively thick body. Facial heat-sensing pits can be seen midway between the nostrils and the eyes. Full grown adults average thirty to fourty inches long.

Both Gopher Snakes and juvenile Racers can be mistaken for rattlers, with Gopher Snakes even adopting the tail-wagging behaviour sometimes. Rattlesnakes are usually found in arid regions with sparse vegetation, and in rocky areas. They are knwon to hibernate in large numbers in a common den or "hibernaculum".

The snakes active hours are dictated by the weather; in hotter weather, they may be highly nocturnal. Rattlesnakes usually wait for prey (small mammals, birds, lizards, or amphibians) to pass by, at which point they strike and then follow a scent trail to the bitten animal. Despite popular beliefs, Western Rattlesnakes are not a major threat to humans and will usually not bite unless continuously provoked.

Diadophis punctatus
Ringneck Snake

This distinctly-patterned snake can be identified by the bright orange-red neckband and underbelly. The back is a uniform slate-green (the head slightly darker)and the belly is mottled with black spots. In this region Ringneck snakes reach a maximum of about twenty inches long.

Ringnecks are usually found under moist debris in open or wooded areas. Females reach maturity after three years and produce an average clutch of three or four eggs per year. These snakes feed mostly on salamanders and lizards, but will also eat frogs, snakes, and small invertebrates. the saliva of *D. punctatus* appears to paralyze prey but is not known to be harmful to humans.

Masticophis taeniatus
Striped Whipsnake

This snake is a slender, fast moving snake with relatively large eyes and smooth scales. Individuals have a dark gray to black stripe down the back, a cream-colored to salmon bottom and cream-colored sides with black stripes. Striped Whipsnakes can reach over five feet in length.

***M. taeniatus* prefers arid low elevation regions with sparse vegetation and rocky substrates. Their most common prey are lizards, but they will also eat rodents, bats, snakes, frogs, and birds. Striped Whipsnakes are active and hunting during the day, and similar to the Racer, they will elevate the front third of their body to improve their range of vision. These snakes are probably the fastest in our region.**

Pituophis catenifer
Gopher Snake

Gopher snakes, some of the larger snakes in the region, are usually between three and four feet in length. They are typically tan or yellow with dark blotches down the back and sides. The snakes have a characteristic dark stripe across theit head. Gopher Snakes will expand their jaws to give their head the diamond-shaped appearance of a Rattlesnake, as well as imitating the rattling motion.

P. catenifer **occurs in a wide range of habitats, but generally prefers burrows or debris in deserts or dry, open forests. The snakes will hibernate with other species, but not in great numbers like *C. viridis*. Gopher Snakes actively hunt for small mammals and birds, and kill their prey by constriction (suffocation).**

Thamnophis elegans
Western Terrestrial Garter Snake

A great deal of variation in color and pattern exists among subspecies of this snake. Therefore, scalation characters are usually used in identifying this species. The snakes usually have ten lower and eight upper labial scales, and nineteen or twenty-one rows of scales on the back. The subspecies present in Eastern Oregon (*T.e.vagrans*) is gray to brown with black spots and a narrow yellow stripe down the back.

T. elegans **active season ranges from March through mid-autumn. The snakes are usually active during the day, but in hotter weather may be active nocturnally. The snakes will forage in trees, terrestially, and in fresh and saltwater, giving them one of the most diverse diets of any snake. If caught, garter snakes usually release the contents of their cloaca(feces and urine) as well as a musk scent.**

Thamnophis sirtalis
Common Garter Snake

As with *T. elegans*, much variation exists between regions in the way of coloration, so scalation characters are important in identifying Common Garter Snakes. They usually have ten lower and seven upper labial scales, and nineteen rows of scales on the middle back. The general color pattern exhibited in *T. sirtalis* is a black body with a bright yellow stripe down the back. They are relatively heavy-bodied snakes and can grow to up to fifty-two inches. In the dry climate of Eastern Oregon the snakes typically are near a water source. Common Garter Snakes have a diet similar to that of the Western Terrestial Garter Snake, and act in a likewise fashion when handled.

Amphibians

The Amphibians described here are not likely to be found associated directly with the rivers, but are listed because their potential habitats do overlap with some of these areas. In the cases of the two salamanders, both have been observed in the cool streams which feed into the Deschutes near Maupin, Oregon. The Bullfrog and Pacific Treefrog prefer still waters, and likely occur within these river canyons wherever suitable habitat is available.

Dicamptodon tenebrosus
Pacific Giant Salamander

This salamander, the largest in Oregon, has a thick head and stocky legs. Adults carry a marbled pattern of tan and brown and measure up to thirteen inches in length. The stream dwelling larvae are a plain brown with short, comb-like gills, and have a vertical tailfin which reaches to their hind legs. Pacific Giant Salamanders like cool, moist forests near cold, clear streams. Adults are rarely seen, emerging to the surface only at night during wet periods. The salamanders eat insects, slugs, snails, worms, and sometimes small vertebrates. *D. tenebrosus* is a species that exhibits a high occurrence of "Neoteny", or sexual maturation without metamorphosis.

Taricha granulosa
Rough-Skinned Newt

Probably the most conspicuous salamander in Oregon, the Rough-Skinned Newt touts granular (bumpy) skin and a bright orange belly. The rest of the body id reddish-brown. Adults may grow to eight inches in length.

While ponds, lakes, or slow moving streams are necessary for breeding, outside of the breeding season these salamanders may wander far from water. *T. granulosa* feed on amphibian eggs, larvae, aquatic invertebrates, and worms. These are the only salamanders in the region that can be found out in the open during daylight.

The prominent grandular glands produce poisonous secretions strong enough to kill most any predator; *T. sirtalis* is an exception in that it seems to have adapted to the toxin.

Rana catesbeiana
Bullfrog

Bullfrogs are large pale to dark green frogs, often with darker blotches. They have a skinfold which leads from the back of the eye to the forearm. The belly ranges from off-white to yellow with darker marbling. The toes of the hind feet are fully (to the tips) webbed. Bullfrogs may grow to up to eight inches long.

This introduced species is common around the shores of natural and man-made bodies of still water. The adults will eat nearly anything they can swallow, from insects and fish up to small mammals and even birds. Their deep mating calls can be heard during late spring and summer.

These frogs' variable and voracious appetites are believed responsible for the decline in numbers of several native species, including the Spotted Frog and the Western Pond Turtle. Bullfrogs are classified as a game fish in Oregon, and may be caught as such in accordance with rules published in the state's fishing pamphlet.

Hyla regilla
Pacific Treefrog

The smooth skin of the Pacific Treefrog may be green, brown, reddish, bronze, or gray. All share a characteristic "mask", a stripe extending from the nostrils through each eye to the shoulders and most carry a Y-shaped figure between the eyes. The frog is the only in our region with round toe pads on the tips of its toes. Adults grow as large as two inches.

***H. regilla* feed on spiders and insects, sometimes travelling relatively far from the nearest water. Their ability to utilize temporary ponds helps to avoid predation by larger amphibians and fish. Treefrogs are quite vocal; their two-syllable "rib-it" is widely heard during the breeding season (February to June at lower elevations, later at higher elevations).**

John Day River Canyon

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* *Elgaria multicarinata*
* *Phrynosoma douglassi*
* *Sceloporus occidentalis*
* *Sceloporus graciosus*
* *Uta stansburiana*
* *Eumeces skiltonianus*
* *Coluber constrictor*
* *Hypsiglena torquata*
* *Crotalus viridis*
* *Masticophis taeniatus*
* *Pituophis catenifer*
* *Thamnophis elegans*
* *Thamnophis sirtalis*
* *Rana catesbeiana*
* *Hyla regilla*

Owyhee River Canyon

Crotaphytus bicinctores
Mojave Black-Collard Lizard

This lizard, one of the most distinct in the state, can be identified by the pattern on its neck which resembles two black collars separated by a white collar. The body is gray, tan, or reddish, with alternating bands sometimes apparent. Males grow to as large as twelve inches; the females are smaller and develop vertical orange stripes on their sides during the breeding season.

Collared lizards inhabit rocky hillsides, boulder piles, and talus. Males are territorial, engaging in chases and fights, and will monitor their territory from a sizable rock within. They feed on small invertebrates, lizards, snakes,

and some vegetation. When running at full speed, Collared lizards will raised their tail and run on their hind feet only.

Phrynosoma platyrhinos
Desert Horned Lizard

This lizard is similar in appearance to the Short-Horned Lizard, except larger and with more pronounced horns. The body is flat and relatively rounded, usually no longer than six inches. At the rear of the head are two enlarged scales ("horns") with smaller scales adjacent. Rows of pointed scales run along the sides of the bodies, and the lizards have a dark blotch on each side of the neck. Desert Horned Lizards tend to develop coloration that mimics elements of the habitat; the grays, tans, reds, and browns of the desert floor and the more brilliant colors of the lichens present.

These lizards prefer open deserts with sandy soils which facilitate burrowing and sparse to moderate vegetation. Their diet consists almost extensively of ants, with some beetles and other insects. *P. platyrhinos* hibernate in the loose soil, tucked among the roots of desert vegetation.

Cnemidophorus tigris
Western Whiptail

The Western Whiptail is identified by four gray-brown stripes that run the length of its body, separated by rough black lines and/or blotches. Its long tail is relatively uniform gray-brown. The squarish scales of the lizard's underbelly grow increasingly darker, from the tail to the head. Juveniles present more prevalent stripes and their tail is gray-blue. Adults grow to be twelve inches plus.

These lizards like areas of firm sandy or silty soil with a healthy covering of brush. They are most active in the morning hours, foraging for insect larvae and adults. *C. tigris* will commonly spend the hottest month of the summer inactive, emerging in late August or September for a few weeks before returning to hibernation

* ***Sceloporus occidentalis***
* ***Sceloporus graciosus***
* ***Uta stansburiana***
* ***Eumeces skiltonianus***
* ***Charina bottae***

* *Coluber constrictor*
* *Hypsiglena torquata*
* *Crotalus viridis*
* *Masticophis taeniatus*
* *Pituophis catenifer*
* *Thamnophis elegans*
* *Thamnophis sirtalis*
* *Rana catesbeiana*
* *Hyla regilla*

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