Family Colubridae (Natricinae)

Subspecies: Orange-striped Ribbonsnake (Thamnophis proximus proximus)

Updated 2025



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Description/Identification: The Western Ribbonsnake is a very long, and slender-bodied species of Gartersnake measuring a total length, as adults, from 20.1 to 30.0 inches. There are approximately 17 to 19 scale rows in total, from posteriorly to anteriorly, and as with other Gartersnakes, the scales are strongly keeled. The anal plate is single, or undivided. The tail lengths of Western Ribbonsnakes are also very long, and comprise about 27% or more of the total body length. On the inside of the mouth, Western Ribbonsnakes have one to two rows of tiny, recurved teeth on the maxillae and lower quadrate bones of their upper and lower jaws which are normally covered by a fleshy membrane, and an enlarged pair of rear-maxillary teeth on the upper jaw. These teeth, however, are too small to easily or effectively puncture human skin.

The head and eyes are large, and distinct from the neck and rest of the body. Western Ribbonsnakes may be confused with the Eastern, or Northern Ribbonsnake (*Thamnophis saurita*). Western Ribbonsnakes, however, differ in that they possess 8, rather than 7 supralabials, and the white or light colored parietal spots atop the head, if present, are usually touching or fused, and the irises of the eyes are brow, orangish, or reddish-brown and the pupils of the eyes are normally round. The tops of the heads are otherwise unpatterned, and are equal to or darker in black or brown, or slate gray-brown, than the rest of the body, and the labials and preocular scales are a pure, unpatterned white or pale bluish. This also distinguishes the Northern Ribbonsnake from all of the other Gartersnakes (*Thamnophis spp.*) in Wisconsin, which also have much stockier bodies than either of the Ribbonsnakes. Other Gartersnakes also have much shorter tail lengths about, or less than one-fourth of their body lengths. Western Ribbonsnakes have 2 rows of subcaudal scales on the underside of the tail past the ventral opening, numbering 21 to 33 rows.

The dorsum ground color on the rest of the body ranges from a black to dark brown, with three lighter colored longitudinal stripes running from behind the quadrates for the lateral stripes, and from behind the parietal spot for the mid-dorsal stripe. The median or mid-dorsal stripe is usually a bright orange or yellow in color. The lateral stripes, covering scale rows 3 and 4, are white to greenish-white. The dark, ventrolateral stripe present on the Northern Ribbonsnake (which is almost always wider), may be narrower, or lacking altogether on the Western Ribbonsnake. The underside, or ventral surface, is a plain, unmarked white, cream, or pale greenish-yellow.

Neonate or juvenile Western Ribbonsnakes appear similar to the adults, but are more brightly

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colored. Male and female Western Ribbonsnakes are similar in size and appearance, except for females being only slightly larger or thicker-bodied than males. As with other Gartersnakes, the tongue is forked, and pinkish to red, and black-tipped.

The subspecies of Western Ribbonsnake occurring in Wisconsin is also sometimes known as the Orange-striped Ribbonsnake (*Thamnophis proximus proximus*).



© WDNR. Missing: Sauk County, WI.

Range and Distribution: Western Ribbonsnakes occur within the Mississippi River basin, from the periphery of western Wisconsin, south along Iowa and Illinois, all of the way to northeastern Texas and south-central Louisiana, in the south, and west to eastern Nebraska, Kansas, and Oklahoma. Isolated, disjunct populations also occur in northeastern Illinois to northwestern Indiana. In Wisconsin, Western Ribbonsnakes are very rare, and have only isolated occurrences scattered throughout the southern two-thirds of the state, where each occurrence is represented only by a single specimen. As such, very little is known regarding the population sizes or dynamics of this snake in Wisconsin, and no new, or recent sightings have been reported in over a decade or more. This has led to many doubting this species' continued presence in Wisconsin.

Habitat: In nearby northern Illinois, Western Ribbonsnakes have been reported to occur in vegetated or shrubby margins along rivers or river banks, along lake shores, marshes and marshy ponds, and along the margins of swamps, ditches, and adjacent upland forests or woods. In Wisconsin, the very few specimens which have been documented have occurred in sandy soiled areas along marshes or rivers, including the Wisconsin River floodplain.

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Ventral/Belly View. © Herps of Arkansas.

Feeding and Diet: As with the northern Ribbonsnake, western, or Orange-striped Ribbonsnakes are carnivorous, feeding almost exclusively on smaller, ectothermic prey. These snakes may feed on tadpoles, newly metamorphosized frogs or other amphibians and their larvae, as well as earthworms or other worms, and small fish. Other prey which may be eaten could include small lizards, or large, soft bodied insects and insect larvae, such as caterpillars. Western Ribbonsnakes feed primarily by chewing and ingesting their prey live without venom or constriction, as with most other natricine snakes.

Natural History: Due to their rarity and sparsity of records in the state, with there only having been a small handful of records, very little is known about the natural history, overwintering, and breeding and reproduction in the state. It is furthermore the author's personal account to have never seen or found a Western Ribbonsnake in Wisconsin, and at least some others might doubt the continued existence of this snake in Wisconsin.

Nonetheless, from what is known of their biology from nearby states, Western Ribbonsnakes likely become active in the year during warm days in late March or through April, and are likely to remain active throughout the year until October or November. Mating may occur in the spring, but as previously mentioned, this has never been documented in Wisconsin. As with other Gartersnakes, Western Ribbonsnakes are ovo-viviparous, giving birth to anywhere from 5 to 27 live young by mid-to late August or September, where they then fend entirely on their own after being born.

Western Ribbonsnakes, like the other Ribbonsnake species, are wary and alert snakes, which will glide into thicker vegetation when threatened or disturbed. Their striped coloration and patterning can make them both very cryptic and difficult to pinpoint the snake's outline when they are rapidly moving. Ribbonsnakes are not likely to bite upon capture, although if they do, it is most inconsequential, as their teeth and mouths are very small. Western Ribbonsnakes may emit a bad, foul-smelling musk when they are handled, as with most other Gartersnakes.

Little is known about the overwintering habits of this snake in Wisconsin, although they may overwinter with other Gartersnake species, and/or other small snake species from the area, and in Illinois, where Western Ribbonsnakes are a more common snake, overwinter in in rocky limestone crevices and rock outcroppings at the bases of bluffs, along with many other species of

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snakes. As with most other Gartersnakes, Western Ribbonsnakes are diurnal, and after death, their pigmentation begins to break down, giving their stripes a much more bluish or bluish-gray color than when they were living.

Western Ribbonsnakes can be predated upon by many different species of birds (such as crows, turkeys, kestrels, hawks, owls, and other birds of prey, and wading birds such as herons, cranes, egrets, and bitterns), other larger snakes, and a number of different carnivorous or predatory mammals including domestic cats, foxes, skunks, shrews, raccoons, otters, mink, moles, and opossums. Large, predatory fish, snapping turtles, and large North American Bullfrogs will also eat Gartersnakes as well.

Conservation Status: Conservation Status: In Wisconsin, Western, or Orange-striped Ribbonsnakes are currently listed as a "State Endangered" species. They are therefore regulated and protected along with all other of Wisconsin's herptiles. Western Ribbonsnakes are currently not protected or regulated federally. Western Ribbonsnakes are currently IUCN Red-List Least Concern (LC).