

Western Wormsnake (*Carphophis vermis*)

Family Colubridae (Dipsadinae)

Subspecies: None currently recognized

Updated 2025



© Garret Adamek (Both)

Description/Identification: The Western Wormsnake is a small species of burrowing, highly fossorial snake ranging from a total length of about 8.6 to 11.8 inches in length, with the maximum reaching about 13.0 inches. The scales, which are large, overlapping, and very smooth, and are in about 13 rows in total. The ventral, or anal plate is divided, and the head and eyes are proportionately small, wedge-shaped, and indistinct from the neck and rest of the body. The pupils and irises of the comparatively small eyes are not well discernable, but are round and black in color. On the inside of the mouth, Western Wormsnakes 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. These teeth, however, are too small to easily or effectively puncture human skin.

The dorsum coloration beginning on the tops of their heads, is a uniform, unmarked iridescent dark gray, black, dark grayish-black, or dark bluish or purplish-blue. This dorsal coloration contrasts significantly with the lateral (sides) and ventral, or underside coloration which ranges from a solid, uniform pink, reddish, or reddish-orange. Western Wormsnakes are fairly non-descript snakes, having few other significant color or pattern features, aside from also having a highly pointed tail tip. Their tongues, which are tiny, are forked and pinkish in color. Western Wormsnakes have 2 rows of 21 to 41 rows of subcaudals beneath the tail past the ventral opening.

Hatchling and juvenile Western Wormsnakes appear identical to the adults, and males and females are also very similar in appearance, aside from being only very slightly dimorphic in size, with female Western Wormsnakes being only slightly larger and thicker bodied than males. The very sharply pointed tail-tips, small and reduced heads and eyes, and very smooth scales all distinguish the Western Wormsnake from any other small fossorial snakes with which they may be confused with, such as DeKay's Brownsnakes (*Storeria dekayi*), Red-bellied Snakes (*Storeria occipitomaculata*), both of which have keeled scales, and Ringneck snakes (*Diadophis punctatus*).

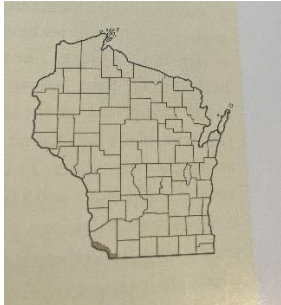
No subspecies of the Western Wormsnake are currently recognized.

Western Wormsnake (*Carphophis vermis*)

Family Colubridae (Dipsadinae)

Subspecies: None currently recognized

Updated 2025



© WDNR.

Range and Distribution: The Western Wormsnake occurs in the south-central United States, from western Illinois, southern Iowa, and extreme southeastern Nebraska, through Missouri, most of Arkansas, eastern Kansas, and eastern Oklahoma into the northern edges of Louisiana and Texas. In Wisconsin, Western Wormsnakes comprise of a disjunct population from the rest of their range, being known only from extreme southwestern Grant County. They could potentially, however, be more widespread in this county and/or in southwestern Wisconsin.



Ventral/Belly View, © Jeff LeClere.

Habitat: In Wisconsin, the habitat in which Western Wormsnakes have been found consist of southwest to west-exposed, open bluff prairies and nearby oak-hickory woodland hillsides adjacent to the Mississippi River in extreme southwestern Grant County. Western Wormsnakes are secretive snakes, being found under large flat limestone rocks, under logs, boards, or in loose, damp soil on wooded to partially wooded hillsides.

Feeding and Diet: Western Wormsnakes are carnivorous, and as their names might imply, feed almost exclusively on earthworms or other worms. As with other small fossorial snakes, they simply overpower their prey with their jaws or will ingest their food while live.

Natural History: Western Wormsnakes are secretive, fossorial snakes, with little being known about their habits and natural history in Wisconsin due to only a handful of specimens having been found in the state. They are most likely active on the surface beginning from late April, May, or June, and remain active through October. They most likely breed in May, in the spring shortly after they emerge, or during

Western Wormsnake (*Carphophis vermis*)

Family Colubridae (Dipsadinae)

Subspecies: None currently recognized

Updated 2025

the fall, Western Wormsnakes are oviparous, laying small clutches of about one to four eggs from mid-June to mid-July in somewhat moist, humid microclimates underneath rocks, logs, stumps, or other debris. The eggs then hatch in about 50 to 60 days, by mid to late August or September, where the young range from about 2.75 to 4.72 inches in total length.

During the warmer summer months, Western Wormsnakes move to more shaded microclimates or habitats, or move deeper underground. These small, docile, inoffensive snakes almost never attempt to bite in defense when handled, but even if one did, their mouths are much too small to be of any consequence. They may quickly attempt to burrow down into the soil when uncovered, or flail and wriggle to expose their brightly colored undersides as a potential means of startling threats with their bright colors. They may also emit a foul-smelling musk when they are handled. Western Wormsnakes may also attempt to startle predators by pressing their sharpened tail tips into the perceived threat. This tail tip is completely harmless, however.

Small snake species such as Western Wormsnakes can be predated upon by many different species of birds (such as crows, turkeys, cranes, kestrels, hawks, and other small birds of prey), other larger snakes, and a number of different carnivorous or predatory mammals including domestic cats, foxes, skunks, shrews, raccoons, moles, and opossums.

Conservation Status: In Wisconsin, Western Wormsnakes are listed as a “Special Concern” species. They are therefore regulated and protected along with all other of Wisconsin’s herptiles under N.R. 16. Western Wormsnakes are currently not protected or regulated federally. Western Wormsnakes are currently IUCN Red-List Least Concern (LC).