Family Colubridae (Natricinae)

Subspecies: Northern Watersnake (Nerodia sipedon sipedon)

**Updated 2025** 



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Description/Identification: The Common, or Northern Watersnake (*Nerodia sipedon sipedon*), as the only subspecies occurring in Wisconsin, is a medium-sized to large, heavy bodied species of snake, and the only species of large, heavy-bodied "water" snake from the genus Nerodia occurring in Wisconsin. These snakes range from between 23.6 and 39.3 inches in total length as adults, or up to a maximum of about 42.0 inches. The scalation, which is heavily keeled, ranges from about 21 to 25 scale rows anteriorly, and 17 to 19 rows posteriorly, and the anal or ventral scale is divided. The tail is long and heavily keeled in appearance as well. The pupils are normally round or ovular, and are on a dark brown or reddish-brown color of the irises of the eyes. On the inside of the mouth, Northern Watersnakes 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 not large enough to cause anything more than a superficial laceration, however.

The head is fairly broad and triangular, and distinct from the neck, but in no way should lead to these snakes being commonly confused with venomous cottonmouths, or "water moccasins" (*Agkistrodon piscivorous*), which do not occur in, or anywhere near Wisconsin. The eyes sit relatively high up on the head, which is mostly a solid, unpatterned dark coppery brown or reddish-brown, except for the upper labials, being lighter brown, reddish, or yellowish-brown bordered in black or darker labial sutures. The labials and jawline are deeply set on the head. Northern Watersnakes have 2 rows of subcaudal scales on the underside of the tail past the ventral opening, comprising of 21 to 42 rows.

The dorsum ground color can be quite variable, ranging from gray or grayish, light to dark brown, or tan, banded with 30 or more darker brown, reddish to reddish-brown, or black traverse banding, usually on

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the anterior third or so of the snake, grading into larger, darker dorsal blotches alternating laterally with one or two rows of smaller, similarly colored lateral blotches along their sides. There can be much individual variation in the number of bands and/or blotches, which may be connected or unconnected. This dorsal coloration and patterning often become obscured or faded with age, and older Northern Watersnakes may often become solid, uniform gray, brown, or black in color, with only a small, slight trace of their patterning when they become wettened.

The ventral, or underside typically ranges from a lighter cream color, white, or gray with two or three rows of darker brown, reddish or reddish-brown, or orangish "half-moon" shaped blotches or flecks, interspersed with two rows of darker grayish flecks or speckling along their undersides, and which may become darker towards the posterior third of the snake towards the tail. Some individuals can also have a brighter, vermillion red or pinkish undersides less clearly patterned. Neonate and juvenile Northern Watersnakes are similar to the adults, but tend to be much more boldly colored and patterned, having a lighter ground color from tan, light grayish, or cream color with darker gray, brown, or black blotches intergrading to banding or crossbarring posteriorly.

Northern Watersnakes can be confused with several other non-venomous snake species in Wisconsin. Queensnakes (*Regina septemvittata*), the only other semi-aquatic species of "water" snake in Wisconsin, have four rows of narrow brown or reddish-brown stripes dorsally and ventrally, unlike Northern Watersnakes. Eastern Milksnakes (*Lampropeltis triangulum*) are more slender bodied, undivided anal plates, and have smooth scales rather than keeled scaled. Eastern Foxsnakes (*Pantherophis vulpinus*) have more weakly keeled scales than water snakes. Adult Central Ratsnakes (*Pantherophis alleghaniensis*) are more slender-bodied, have more weakly keeled scales, and are found only in the Driftless region of western and south-western Wisconsin. The tongues of Northern Watersnakes are forked, and usually a dark reddish, pinkish, or purplish.

Northern Watersnakes are also commonly confused for Eastern Massasauga rattlesnakes (*Sistrurus catenatus*) or Timber Rattlesnakes (*Crotalus horridus*), but do not have rattles on their tails, and are not rattlesnakes.



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Range and Distribution: Northern Watersnakes have a broad range and distribution, from southeastern

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Maine and New Hampshire through the New England States, throughout much of the Eastern U.S. to northern South Carolina and Georgia, eastern Tennessee, and north through southern Ontario and Quebec, and west through to Kansas, South Dakota, and Colorado. The range from mid to southern Illinois, western Tennessee, and through most of northern Georgia, Alabama, Mississippi, southeastern Missouri, Arkansas, and Louisiana are occupied by another subspecies, the Midland Watersnake (*Nerodia sipedon pleuralis*).

In Wisconsin, Northern Watersnakes can occur throughout most of the state, except for perhaps the northern, eastern, and northeastern most peripheries of the state, and tend to be localized and scattered. They are most common in the southern half of the state, and are also common in Door County, including on Washington and Rock Islands, but otherwise tend to be less common in northern Wisconsin.

Habitat: As their name might imply, Northern Watersnakes are most frequently seen and observed near and along a variety of permanent bodies of water. Most of the large rivers, including the Wisconsin, Mississippi, Chippewa, Black, Saint Croix, as well as smaller streams, creeks, springs, ponds, prairie potholes, bogs or marshes, river sloughs and floodplains, swamps, backwaters, lakes, canals or reservoirs are all possible haunts for Northern Watersnakes. They can also be found along Lake Michigan and along the Green Bay in the Door Peninsula. Habitats with ample log or brush piles, rocky riprap, uprooted and overhanging trees, log snags, dikes, and impoundments, and along shorebanks, dams, causeways, or spillways near or along the water are frequented basking areas for Northern Watersnakes. The only types of wetlands not usually inhabited are more heavily forested wetlands and more temporary ponds or other wetlands.

**Feeding and Diet:** Northern Watersnakes are carnivorous, feeding on amphibians such as frogs, tadpoles, and other amphibian larvae, as well as small fish, fish eggs, or other larger fish on occasion, aquatic insects, crustaceans, and other aquatic invertebrates. Small mammals such as rodents are said to only make up a very small percentage of Northern Watersnake's diets overall. As with other natricine snakes, watersnakes do not use venom or constriction to subdue their prey; they will usually simply seize their intended prey and overpower it with their jaws ingesting it live.

**Natural History:** Northern Watersnakes will emerge and become active in the year from mid-to late April or May, and remain active throughout the year until October or November. They may utilize a variety of overwintering hibernacula to spend the winter, such as beaver or muskrat lodges or burrows, within rocky riprap, nearby upland rock crevices and outcroppings, nearby old wells or foundations, or other burrows underground which are not otherwise subject to severe or prolonged flooding. These snakes may overwinter singly or individually, or in larger numbers of watersnakes, and/or other snake species in the area.

Male and female Northern Watersnakes are noticeably dimorphic in their sizes between the sexes; females are usually much larger, stockier-bodied, and have proportionately shorter, thicker tails than do

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the smaller males. Males can also be examined for the presence of their hemipenes as well. Northern Watersnakes mate and copulate most commonly in the spring or fall, where, as with garter snakes, many smaller males may try to mate or copulate with a single larger female, often in and amongst overhanging tree branches, brush along the shoreline, among rocks, or other debris along the shoreline.

As with other natricine snakes, Northern Watersnakes are ovo-viviparous, giving birth to anywhere from 10 to 48 live young by mid to late August, or September, where the young are immediately on their own and receive no parental care afterwards. After mating, watersnakes disperse into their summer habitats for the rest of the year, basking and foraging for food, where they are primarily sight and scent driven predators. Northern Watersnakes are primarily diurnal snakes, but during hotter weather, or during or after heavy rain or storms, can sometimes be more nocturnal to crepuscular, and may cross roads further away from water. Despite a common misperception, watersnakes are not obligated to live in or near water, and can sometimes turn up away from water, but rather this is simply where these snakes are most commonly found due to their preferred food sources being located there.





Typical Ventral/Belly View. © PA Herp Identification.

Upon being disturbed, Northern Watersnakes will usually first attempt to glide or drop into the water, where they may swim parallel to the shoreline, or if repeatedly disturbed, will dive underwater and submerge themselves beneath submerged rocks or logs on the bottom for up to 20 to 30 minutes until the threat has passed. If these snakes are managed to be captured or cornered, they will flatten their bodies and heads to assume a defensive posture, and will usually readily coil into a defensive posture and strike or bite when handled. They may thrash and twirl their bodies around when first handled or picked up, and will also emit a foul, musty-smelling musk or defecate to deter predation as well.

In Wisconsin, Northern Watersnakes are subject to several different negative perceptions, one of them being that they are commonly misidentified as venomous "copperheads" due to their coppery brown heads, or "water moccasins". Neither of these species of venomous snakes, however, are native to, or found anywhere in or near Wisconsin. Although Northern Watersnakes may bite readily when handled or cornered, they are non-venomous and are harmless and beneficial when simply left alone.

Another belief which still sometimes persists is that Northern Watersnakes contribute to the decline of

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sport or game fish populations. While these snakes will occasionally eat larger fish which they can catch and overpower, there is no evidence that they have any substantial impact on natural fish populations, outside of perhaps more artificial fish hatcheries or other fish rearing ponds. In actuality, Northern Watersnakes are far more beneficial for anglers and the environment in that they are serving to control overpopulation of fish, stunted fish, and by consuming less desirable fish by anglers anyway, and which may cause more harm by eating game fish eggs than do these snakes.

Northern Watersnakes 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 cranes, herons, 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 northern water snakes as well.

**Conservation Status:** In Wisconsin, Common, or Northen Watersnakes are listed as "Common". They are still regulated and protected along with all other of Wisconsin's herptiles, however under N.R. 16. Common, or Northern Watersnakes are currently not protected or regulated federally. Common Watersnakes are currently IUCN Red-List Least Concern (LC).