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4-10-2008

Midwestern Snakes Facts & Folklore

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Ferraro, Dennis M.; Fogell, Dan; Vantassel, Stephen; and Wright, Rachel, "Midwestern Snakes Facts & Folklore" (2008). *Other Publications in Wildlife Management*. 57.

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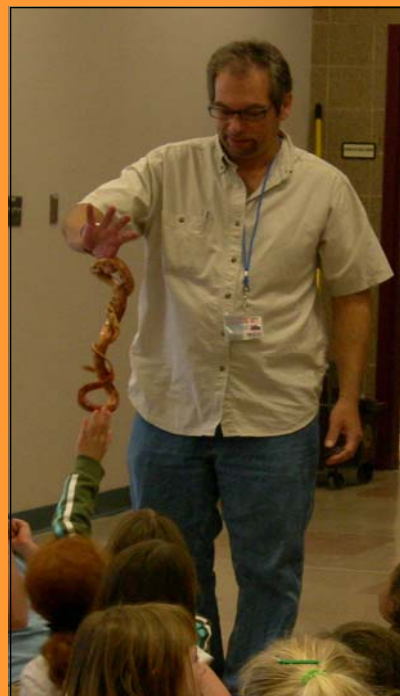
MIDWESTERN SNAKES FACTS & FOLKLORE



Midwestern Snakes Facts & Folklore

Snakes are probably the most misunderstood members of the animal kingdom. Perhaps this is due largely to the misinformation, legends, and myths surround them, as well as to their nature. Most of these myths have been based upon pure exaggeration or total lack of knowledge. This presentation is designed to inform youth groups, adults and other interested parties about the facts of snakes found native to the United States. We hope that people will recognize that snakes are an important part of the ecosystem and some provide considerable benefits to mankind.

Most snakes are completely harmless as only about three percent of the snakes found in the United States are venomous. However one should learn to distinguish between the non-venomous and venomous snake species. The toxins from venomous snakes vary in their potency depending upon such factors as species, size and condition of the snake. The effect of snakebite also varies according to the size and sensitivity of the victim as well as the site and effectiveness of the bite. Although some 7,000 cases of venomous snakebite occur in this country each year, less than 50 actually inject venom into the person (snake venom is a liquid, usually yellowish in color). The fangs are hollow, with an opening near the end, similar to a hypodermic needle. The venom from the pit vipers affects the blood cells and muscle tissues primarily causing swelling, discoloration and great pain. If given proper treatment, victims of snake bite usually recover.



Snakes Fact & Folklore

Throughout the world humans have expressed different attitudes towards snakes. Some cultures attribute supernatural powers to snakes and establish cults to worship particular species believed to be endowed with great powers of good or evil. Americans also exhibit an attitude about snakes. It tends to be richly flavored with misinformation, myths, legends, and simple exaggeration concerning snakes. This presentation will provide a better understanding of snakes and help us to recognize their important role in nature.

Common Garter Snake

The pattern and coloration of the Common Garter Snake (*Thamnophis sirtalis*) is extremely variable with either spots or stripes predominating. It is a well-known and probably the most common snake in the Eastern United States. It feeds on frogs, toads, salamanders, fish, tadpoles, and earthworms. It occupies a wide variety of habitats—meadows, marshes, woodlands, hillsides, along streams and ditches, and in city lots and dumps.



Garter Snake

Occasionally, in both the plant and animal kingdoms, we find unusual examples, such as the color mutation of a Garter Snake specimen. Not only the color of the scales is different, but also the pattern. As shown with this Garter Snake specimen from Hall County Nebraska.



Genetic Aberration Snake

While pink eyes and white scales designates an albino snake this garter snake found in Washington County Nebraska exhibits genetic aberration showing yellows and tans.

Hognose Snakes

These snakes are referred to as “Hognose Snakes” (*Heterodon spp.*) because of the up-turned rostral or nose scale. It is believed that this feature aids them in uprooting lizards, toads and other prey from the sand.

When first approached the Hognose “hoods out” (flattening their heads and necks) and tries to look like a small cobra. When hissing loudly, the Hognose also inflates their body with air, as they produce a show of hostility that would unnerve all but the stout-hearted. Pictured below is the plain hognose Snake (*Heterodon nasicus*).



Eastern Hognose Snake

The Eastern Hognose Snake (*Heterodon platirhinos*) is larger than the Plains species, but its actions are the same. When the bluff of the Hognose Snake fails to frighten the intruder, it will soon roll over on its back, open its mouth, give a few convulsive movements, and then lie still as though dead. When turned right side up, it will promptly roll over again, probably thinking that the only position for a dead snake is on its back.



Fun Snake Fact

Snakes have 100 to 500 ribs.

Northern Plains Rat Snake

The Northern Plains Rat Snake (*Pantherophis emoryi*) is a particularly beneficial reptiles. It should be protected and not destroyed through ignorance or prejudice. They consume many rodents that feed on corn and stored grain. We see the snake immediately after it struck and coiled its body around the mouse to suffocate it.



Corn Snakes as Pets

Normally snakes swallow their prey beginning with the head first. The flexibility of the snake's skull and body enables it to swallow prey much larger than its own head. By working the two sides of its jaw independently, the snake literally pulls its body over and around its food. Once the food has passed the mouth, it is worked back to the stomach by a series of muscular contractions in the snake's body. Corn Snakes (*Pantherophis guttata*) are common in the pet trade, because



they accept food easily, reproduce in captivity, and rarely attempt to bite.

Western (Black) Rat Snake



Another species of Rat Snake is the Black Rat Snake (*Pantherophis obsoleta*). These snakes are semi-arboreal, spending a considerable amount of time in trees. Amazingly, they can climb almost any kind of tree by working their scales and muscles on the rough bark. In the spring they are known to prey on young birds in their nests.

Fun Snake Fact

All snakes and some lizards have long, slender, forked tongues. The tongue picks up air-borne chemicals (odors). This aids the animal in detecting prey, predators and habitat. The tongue is drawn into the mouth, the ends of the forked tongue are inserted into two small openings in the roof of the mouth. These openings are part of a sensory organ called the vomeronasal organ.



Western Fox Snake

This Fox Snake (*Pantherophis vulpina*) is another of our beneficial snakes. It is thought the name "Fox" came from the fact that when it becomes agitated or threatened it will illicit an odor from its musk glands. This odor reminds people of a red fox's musk.

Snake Fact

Most snakes have musk glands and will emit the odor as a defense tactic.

Bull Snake

This large black and white snake with a noisy hiss is called the "Bull Snake." Due to its habit of burrowing underground, its presence is often unsuspected, even by people who have lived in the same area with it for years. Its diet consists primarily of rodents, including the Pocket Gopher, therefore, earning it another common name, the "Gopher Snake."



Snake Fact

Bull snakes will NOT chase or kill rattlesnakes. However, Bull snakes are more efficient predators than most Rattlesnakes, so they do out compete them in most habitats.

Worm Snake

The Worm Snake (*Carphophis vermis*) is a small species that is fossorial (living mainly underground). When held in the hand, Worm Snakes attempt to push their way between the fingers with both the head and the spinelike tail tip. Their primary diet consists of termites, ant larva and small insects.



Snake Fact



Most non-venomous snakes such as this Black Rat Snake (right) have round eye pupils and do not have the pits between the nose and eyes, which most of our venomous snakes (on the left) have.

Eastern Coachwhip



This Eastern Coachwhip (*Masticophis flagellum*) is an active, fast-moving serpent. It sometimes prowls with its head above ground and escapes the would-be collector with a burst of speed. Fighting savagely when cornered, it embeds its teeth and then yanks away, producing lacerations instead of puncture wounds. Scales on the long slender tail suggests a braided whip with the dark forward part resembling a whip handle.

Yellow Bellied Racer

This slender, satiny snake has a solid color both above and below. While the underside is always yellowish, the top color may be light lime green, dark green, blue green, or grey green. The long keen tail and prominent eyes help to identify this as the Yellow Bellied Racer (*Coluber constrictor*), one of our fastest snakes. Contrary to many folk tales, these snakes do not move that rapidly. Actual measurements have shown that the fastest species never travel more than three or four miles an hour. A military marching pace is roughly 3.8 miles an hour, so almost anyone can outrun a snake.



Fun Snake Fact

Not all baby snakes look the same as their parents. Several snakes have a different color and pattern when they are hatched, which change as they grow into adulthood.

Snake Folklore/Myth

Snakes do not emerge until after the first spring thunderstorm, which will awaken them.

Fact: Spring temperatures and an internal time clock tells them to emerge from brumation (hibernation).

Juvenile Yellow Bellied Racer

This newly hatched Yellow Bellied Racer (*Coluber constrictor*) exhibits a juvenile pattern much different than that of it's parents. This allows it to hide more efficiently from predators. As juveniles, these snakes will feed on crickets, young grasshoppers, baby mice and smaller snakes.



Snake Folklore/Myth

Snakes carry their young in their mouth to protect them.
Fact: Some snakes will prey on smaller/younger snakes.

Can You Guess?

Snakes of this species are almost always found near water. They strike and bite hard when cornered. Some people resent them because they feed on fish, although research indicates they actually improve good fishing by culling out sick and less vigorous fish and helping to thin out overpopulated lakes and ponds. Can you guess what snake this is? Is it venomous or non-venomous?



The answer is...

Our common water snakes (*Nerodia* spp.) which are non-venomous.



Northern Water Snake

The Northern Water Snake (*Nerodia sipedon*) is harmless and is commonly found around most bodies of water around the U.S.. It's prey consists of frogs and fish. It is an accomplished swimmer and climber, often found up in trees 20 feet high or more. The head is distinctly triangular shaped, again destroying the belief that only venomous snakes have triangular shaped heads.

Snake Fact

Some snake species deposit eggs, some have an egg that hatches within the mother's body while other snake species give birth to live babies.

Ringneck Snake

The dorsal, or upper pattern and coloration of the Ringneck Garter Snake (*Diadophis punctatus*) varies between grey and black. However, each has a distinctive yellow or orange ring around the neck. The underside of this small, slender snake is brightly colored reddish orange. Being distasteful this snake will show it's bright underside to predators in hopes of being spared. The Ringneck snake feeds on small worms and insects as well as baby spiders.



Massausaga Rattlesnake

Looking somewhat like the Garter or Rat Snake, the Massausaga Rattlesnake (*Sistrurus catus*) is at home in close to wet meadows and marsh areas. This rattlesnake is known more for hiding quietly rather than rattling when approached. They are a secretive snake, commonly staying deep in tall wetland grasses and hibernating in crayfish burrows. The Eastern Massausaga's populations are in decline.



Prairie Rattlesnake



The Prairie Rattlesnake (*Crotalus viridis*) will usually, but not always, warn you with its rattles. The snake is commonly found in mixed and short grass prairies. It commonly hibernates in prairie dog towns and vacant badger burrows. Since it is not capable of constricting like most other snakes, it has developed a venom to secure and digest its prey. Venom was not developed in these snakes for defense. Female snakes give birth to live young in the fall.

Snake Fact

Most snakes, including garter snakes, shake and "rattle" their tails when they get approached or frightened.

Snake Folklore/Myth

Venomous and Non-venomous snakes can interbreed.

Fact: This could never happen, it would be like mating a dog with a cat.

Timber Rattlesnake

The Timber Rattlesnake (*Crotalus horridus*) prefers retreat to combat, but will fight bravely when cornered. Considerable variation may be found in the coloration of this species. The most familiar phase is a yellowish ground color with wide, dark brown or black cross bands. The tail of some specimens is black. It's food includes small rabbits, squirrels, rats, mice and birds.



Tips about Rattlesnakes

Rattlesnakes and other snakes are commonly found on or under old logs and downed trees. As a safety measure when hunting or walking in the woods, always watch where you put your feet. When crossing a log, never step over the log, but step on it and then over.

Copperhead



The Copperhead (*Agkistrodon contortrix*), when viewed from above, the dark markings on this venomous snake resemble an hour-glass. It is able to hide extremely well amongst leaf litter on the forest floor with it's light and dark patterns that perfectly imitate the upper and underside of falling leaves. Prey of the Copperhead includes small birds, frogs, insects, and mice. While not a rattlesnake, it will rattle the end of it's tail in the leaves as a defense mechanism.

Kingsnakes

Listed among our most popular and beneficial reptiles are the Kingsnakes (*Lampropeltis spp.*). They are powerful constrictors which kill rodents, other snakes, including venomous ones. Contrary to popular opinion, they do not prowl around looking for rattlesnakes to fight, but they will make a meal of any snake. They apparently are immune to the venoms of our native venomous snakes. The Milk snake (*Lampropeltis triangulum*) can easily be identified by the white or yellow markings against a background of shiny black.



Milk snake patterns and colors are very variable across the Midwest.



Snake Folklore/Myths

Snakes suck milk from animal's (mammal's) udders.

Fact: They do not.

Snake Folklore/Myth

Snakes can whistle by placing their tongue between fangs.

Fact: Snakes do not whistle.

The following individuals are responsible for designing, adapting and updating this guide.



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