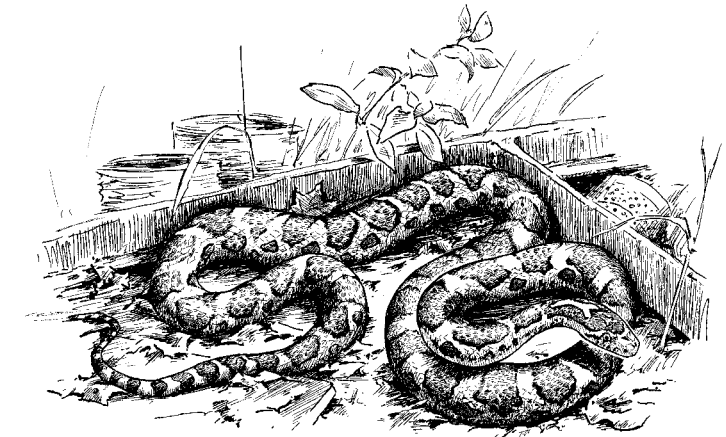


Snakes



Eastern Milk Snake

of Indiana State Parks and Reservoirs

DNR

Department of Natural Resources
Division of State Parks and Reservoirs
Interpretive Services
402 W. Washington Room W298
Indianapolis, IN 46204
317/232-4124

The mission of the Interpretive Services is to provide information and offer interpretive experiences with Indiana's natural and cultural resources to visitors, staff and a diverse public.

Midwest Worm Snake *Carphophis amoenus*

This snake version of the earthworm is brown above and has a pink belly and sides. It is secretive and seldom seen, spending most of its time under stones, boards and logs where the ground is moist. It feeds on soft-bodied insects and earthworms.



Rough Green Snake *Opheodrys aestivas*

Smooth Green Snake *Opheodrys vernalis*

Both species are green above with white, yellow or pale green bellies. The rough green snake has keeled scales that give it a rough texture. This snake, listed as a species of special concern in Indiana, spends most of its time in trees feeding on crickets, grasshoppers, butterfly/moth larvae and spiders.

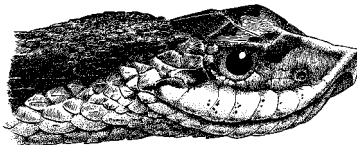


The smooth green snake has smooth scales. It rarely climbs and is generally smaller than the rough green snake. It is only found in three small areas of the state.



Eastern Hognose Snake *Heterodon platyrhinos*

This snake of open, sandy areas is recognized by its upturned nose, wide head and thick body. It may be solid black, gray, yellow-green or orange with dark blotches and spots on its back and sides.



Often called the puff adder, spreading adder or blow viper, it will flatten its head and neck like a cobra's hood, inflate its body and make a striking motion if threatened. It may roll over on its back and play dead with its mouth open and its tongue hanging out. It will remain that way, limp and lifeless, even if picked up. Toads are a favorite food and are swallowed whole.



Southern Black Racer *Coluber constrictor priapus*

Blue Racer *Coluber constrictor foxi*

Racers are constrictors and feast on a diet of large insects, frogs, lizards, snakes, small rodents and birds. Both species typically have white on the chin and throat. The black racer is slender and satiny black above and

satiny gray below with a brown or dark amber iris of the eye. The blue racer may show varying shades of gunmetal gray or blue above and below with a darker head and eye area. Racers move fast and sometimes appear to "chase" people. In fact, this behavior is often associated with courtship and may be used to drive an intruder out of a territory.



Eastern Milk Snake

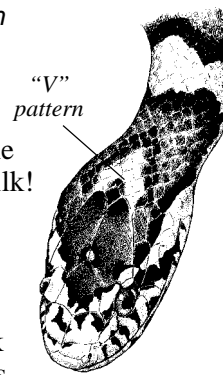
Lampropeltis triangulatum triangulatum

Red Milk Snake

Lampropeltis triangulatum sypila

This snake's taste for mice makes it a common visitor in barns. Hence, the myth developed that it drinks cow's milk!

It is so well camouflaged by its pattern of black rimmed rusty-red blotches on a background of light gray that it is often missed. A light "Y" or



"V" on the back of the neck may be present. The belly is an irregular checkerboard of black on white.

At night, it hunts small rodents and lizards, constricting them in its coils to suffocate them before swallowing them. This harmless snake is often mistaken for the rustier red, elliptical-eyed, wider-headed northern copperhead, which does not have a checkerboard belly. The red milk snake is larger, brighter red and has a white or yellow "collar."



Black Rat Snake *Elaphe obsoleta obsoleta*

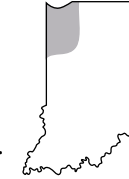
The "pilot black snake," is a good climber. Shed skins are often found in attics and forks of trees. This constrictor feeds on mice and bird eggs and is usually a welcome resident in farmers' barns and outbuildings. Although black rat snakes can and will bite when cornered, they are not usually aggressive. Black rat snakes resemble black racers but are loaf-shaped instead of round. The belly is usually white or a black and white checkerboard pattern. The area between scales is light colored. A pattern of blotches on the back is common.



Thanks to Amelia Hansen for reptile artwork and to Bruce Kingsbury for brochure review.

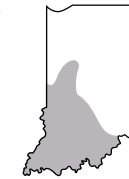
Fox Snake *Elaphe vulpina*

This snake of marshes and wet places has bold blotches, a grayish- or brownish-yellow body and a dull orange/reddish head and tail. It vibrates its tail if cornered, but rarely bites.



Black Kingsnake *Lampropeltis getulus getulus*

This glossy black snake has speckles of white and cream that may be less apparent in older snakes. It lives on streambanks and in moist meadows, where it feeds on other snakes, turtle eggs, mice and voles. It is generally secretive and can be found under boards, logs and debris. This snake's reputation for killing and devouring poisonous snakes is well known.



What If I Get Bitten?

Avoid bites by watching snakes in their natural habitat instead of picking them up. Look closely before stepping when hiking trails or fishing along lake edges. If bitten:

- Keep calm. Most snakes are not poisonous. Make note of the markings, color, behavior and habitat of the snake.
- Clean the bite area thoroughly with soap and water as soon as possible.
- If you think the snake was poisonous, or if you are unsure, have a friend find a phone or contact property staff and call 9-1-1. Walk-don't run-when moving, and keep the bitten part of your body lower than your heart.

Protection for Indiana's Snakes

Indiana's snakes, turtles, lizards, salamanders, toads frogs and their eggs are protected by a law that prevents collection of any nongame reptiles or amphibians without a valid fishing or hunting license. Even with a valid license, collecting is restricted to four individuals from a defined list of species. Collecting is not permitted on state park properties, even with a valid license. Protect Indiana's reptiles and amphibians - leave turtles, snakes, lizards, salamanders toads and frogs in their native habitats where they can remain healthy and wild!

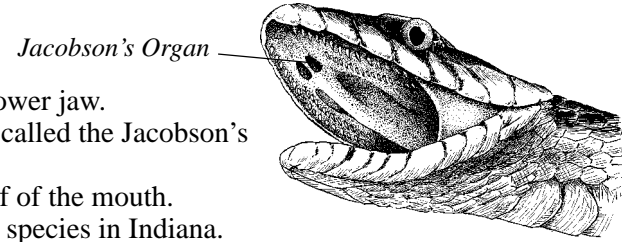
For more information about these laws, contact the Division of Fish and Wildlife.

It's a Snake!

You turn over a rock in the creek, looking for fossils, and suddenly – it's a snake! You may see snakes in our campgrounds, sunning on logs, swimming in our lakes and marshes and even dangling on the end of a fishing line! Are they poisonous? Will they bite? This brochure answers your questions about our common snakes. Not all Indiana snakes are listed here, and not all snakes listed here are found on every state park and reservoir property. Habitat, climate and people impact where snakes can be found. Species ranges are shaded on accompanying maps.

Cool Stuff!

1. Snakes don't have ears. They feel vibrations through the bones in their lower jaw.
2. Snakes use their tongues and a special structure in the roof of the mouth called the Jacobson's organ to "taste" what is around them.
3. Most snakes have 6 rows of teeth: 2 on top, 2 on bottom and 2 in the roof of the mouth.
4. There are 2100 species worldwide, 115 species in North America and 31 species in Indiana.



Setting the Record Straight About Indiana's Poisonous (Venomous) Snakes

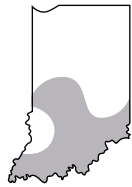
Only four Indiana snakes are venomous. All are pit vipers, which means they have heat-sensing pits near the eyes to help them locate their warm-blooded prey.

Northern Copperhead

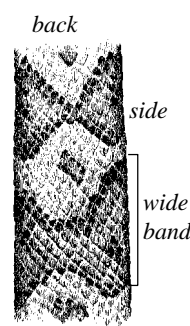
Agkistrodon contortrix mokasen

The northern copperhead is Indiana's most common poisonous snake. Its coloring includes a coppery-red head and an hourglass pattern of reddish brown bands on its body. It is sometimes confused with the water snake.

The bands of the copperhead are narrow along the back and wide on either side. Banding on the water snake is saddlelike; wide on the back and narrow on the side. This nocturnal reptile lives in dry, rocky areas, but can be found in old outbuildings and barns. Its venom kills prey and breaks down tissues for digestion. Young copperheads eat a lot of caterpillars. Adults feed mostly on amphibians and mammals. The bite reflex remains active up to an hour or more after a northern copperhead's death. The bite of this snake is extremely painful but rarely life threatening.



Copperhead banding pattern



and hibernates in dens. Colors and patterns vary from almost black to yellow with dark blotches. The distinctive head shape and rattle at the end of the tail are characteristic. A new rattle segment is added when the snake sheds its skin once or twice a year.

Massasauga Rattlesnake

Sistrurus catenatus catenatus

The massasauga is a small endangered pit viper found only in northern Indiana in marshy, swampy areas and bogs. It may be found in woodlands and old fields on occasion. It is spotted with dark black or brown blotches on the back and 3 rows of small, dark spots on either side. This "swamp rattler," which eats mice and other snakes, is generally mild mannered and rarely strikes unless stepped on.



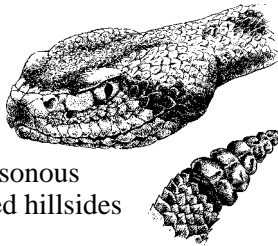
It's a Water Moccasin! I know it is!

Well, probably not – not in Indiana. The "cottonmouth" is a distinctly southern species. One small population is known in the south central portion of the state. The water moccasin is recognized by the distinctive white mouth lining that it displays when annoyed. The color patterns are easily confused with those of the northern or midland water snake.

Timber Rattlesnake

Crotalus horridus horridus

The timber rattlesnake is endangered in Indiana. This grandfather of all poisonous snakes lives on dry forested hillsides

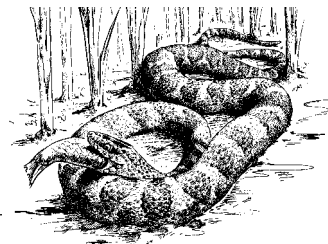


Northern Water Snake *Nerodia sipedon sipedon*

Nerodia sipedon pleuralis

This common reptile of streams, ponds and lakes suns itself on rocky banks and fallen branches. It grabs unsuspecting frogs, salamanders, tadpoles or fish with its teeth and swallows them whole.

This nonpoisonous snake is often mistaken for a northern copperhead or water moccasin because of the patterned, dark brown and tan crossbands on the neck and front. If caught, it may thrash and bite. It can hold its breath underwater for almost 3 minutes at a time.



Queen Snake *Regina septemvittata*

This harmless water snake has a dull olive-brown back and a yellow belly with 4 distinct brown stripes running the length of its body. It is sometimes mistaken for the water moccasin. It feeds almost entirely on soft-bodied crayfish that have shed their shells. Its picky eating habits make it difficult to keep in captivity.



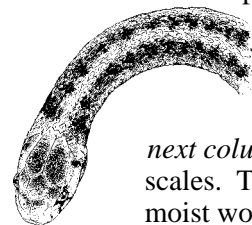
Kirtland's Water Snake *Clonophis kirtlandi*

This endangered water snake, found primarily in the Midwest, has a reddish belly and a visible row of round black spots down each side. It feeds on earthworms and slugs in wet meadows and swamp forests. It flattens its body into a ribbonlike position if alarmed.



Midland Brown Snake *Storeria dekayi*

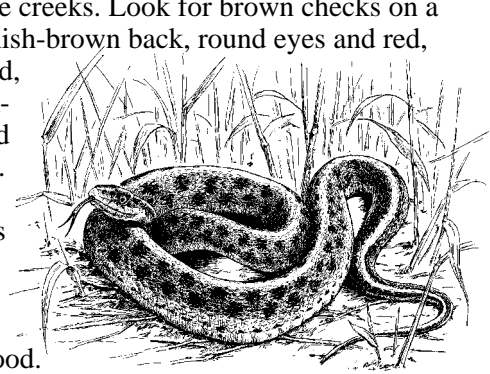
This reptile is often mistaken for a young garter snake. It has two parallel rows of black spots down the back and a brown body. The young have a light band on the neck like the northern ring-necked snake, (see next column) but brown snakes have rough scales. This snake is common in marshes and moist woods.



Eastern Garter Snake *Thamnophis sirtalis sirtalis*

Sometimes mistakenly called the "garden" or "gardener" snake, it is seen along trails, in meadows and beside creeks. Look for brown checks on a greenish-brown back, round eyes and red, forked, black-tipped tongue.

Each individual seems to have a personality that extends even to preferences in food. This snake flicks its tongue in and out and watches for the motion of earthworms, insects, minnows, tadpoles, frogs, salamanders, birds and small mammals. Prey is grabbed with the teeth and swallowed whole.



N. Ribbon Snake *Thamnophis sauritus septentrionalis*

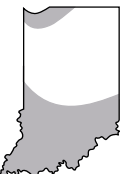
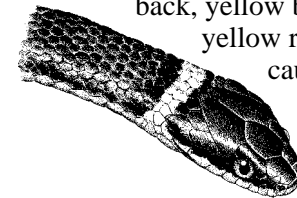
Thamnophis sauritus sauritus

This slim relative of the garter snake has a dark slender body with three bright yellow stripes. The middle stripe is sometimes orange or greenish. It stays close to streams and marshes where it feeds on fish and frogs; it rarely eats earthworms. The two subspecies listed are almost indistinguishable.



Northern Ring-necked Snake *Diadophis punctatus*

This slender snake hides beneath logs or rotting bark while hunting earthworms, slugs, salamanders and lizards. It has a slate-gray back, yellow belly and unmistakable yellow ring around the neck. If caught, it will twist, squirm and release a foul-smelling liquid that is a combination of musk, feces and urine. The northern ring-necked snake rarely bites.



For more information and color pictures to aid in snake identification get a copy of Peterson's Guide to Reptiles and Amphibians (ISBN 0-395-90452-8) or The Golden Guide to Reptiles of North America (ISBN-0-307-13666-3)