

# SNAKES

## OF ILLINOIS



### Taxonomy

Taxonomy is the process of classifying and naming living things. Grouping organisms into categories with similar traits helps scientists talk about and study related organisms. In the past, species were named by using characteristics that could be observed and/or counted. As technology advanced, information from DNA in the cells of organisms began to be used to classify organisms, causing many changes to older taxonomic categories. Geographic variations in species may also be used as factors in classification. Taxonomic categories and names continue to be revised as new information is obtained and proven to be correct.

Snakes are reptiles. Reptiles are vertebrates (animals with a backbone) that also have scales, plates or shields on their body. Their body temperature is dependent upon the temperature of their environment, although they can modify their body temperature through some of their behaviors. Other native reptiles in Illinois include turtles and lizards.

Snakes have overlapping scales but no legs, no ear openings and no eyelids.

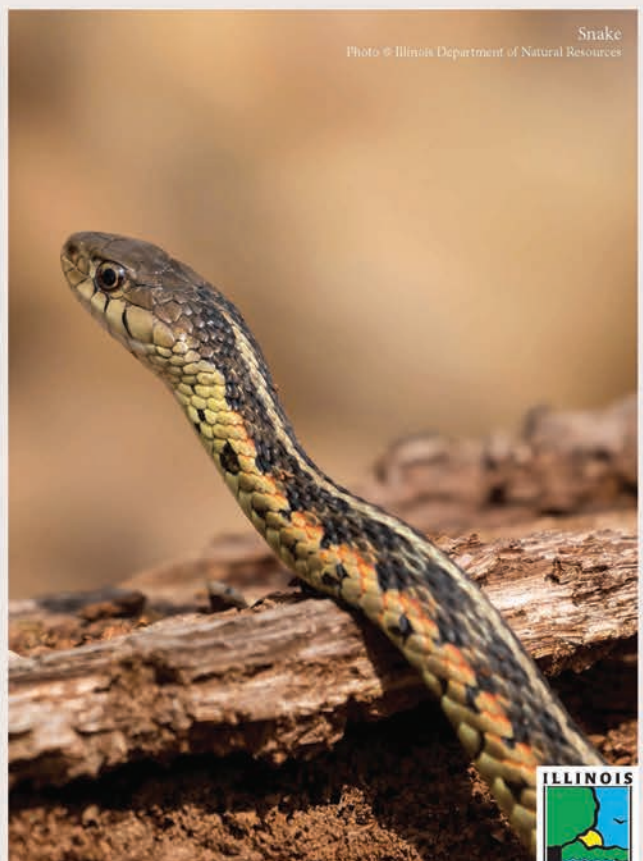
Forty species of snakes are native to Illinois.



Lizard  
Photo © Illinois Department of Natural Resources



Turtle  
Photo © Illinois Department of Natural Resources



Snake  
Photo © Illinois Department of Natural Resources



# SNAKES

## OF ILLINOIS



### Feeding

Snakes are carnivores. They hunt and eat animals. They are solitary predators that do not have good senses of sight and hearing.

They use their forked tongue to pick up chemicals from the environment. The tongue is extended into the air frequently to detect changes in chemicals. In the roof of the mouth, the snake has a Jacobson's organ where the tips of the tongue are placed as the tongue is pulled back into the mouth. The particles brought in on the tongue are analyzed by the nervous system and interpreted as smells. The sense of smell is used to recognize potential prey items, enemies and a mate. It is also used to track prey items.



A snake flicks its tongue to pick up chemicals from the air.  
Photo © Brad M. Glorioso



A timber rattlesnake (*Crotalus horridus*) swallows its rodent prey.  
Photo © Scott R. Ballard



Teeth can be clearly seen in this snake skull.  
Photo © Scott R. Ballard

# SNAKES OF ILLINOIS



## Feeding

Snakes have teeth. There are four rows of teeth in the top of the mouth and two rows on the bottom of the mouth. A snake's teeth are curved backward. They are not for chewing. The teeth help to retain prey in the mouth once it is subdued. Fangs are specialized teeth that are used to inject venom.

Snakes' lower jaws are movable, allowing the snake to eat large prey items.

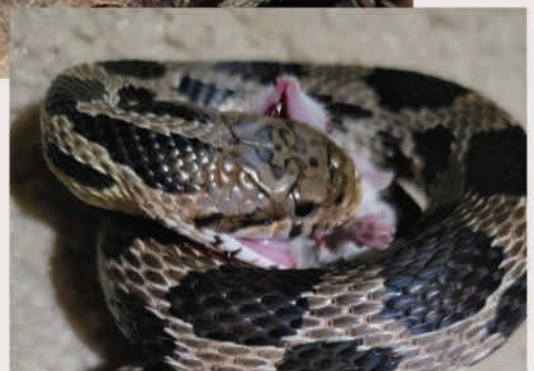
Depending on the species, a snake overpowers a prey item, constricts it or injects venom into the prey. The prey is swallowed whole. After feeding the snake finds a place to rest and hide while the prey item digests. Snakes eat invertebrates, fishes, amphibians, lizards, birds, other snakes, mice, rats and other small mammals.



A snake has captured and is eating a frog.  
Photo © Brad M. Glorioso



An eastern fox snake (*Pantherophis vulpinus*) constricts its prey.  
Photos © Scott R. Ballard



# SNAKES OF ILLINOIS



## Size Relationships

Sizes listed are total length (measurement from tip of nose to tip of tail) of an adult snake of the species in Illinois. Size measurements, except the western fox snake, were taken from the following publication.

Phillips, C. A., R. A. Brandon and E. O. Moll, 1999. *Field guide to amphibians and reptiles of Illinois*. Illinois Natural History Survey Manual 8. 300 pp.

The information regarding the size of the western fox snake was obtained from the Missouri Department of Conservation <https://nature.mdc.mo.gov/discover-nature/field-guide/western-foxsnake>.

flat-headed snake <i>Tantilla gracilis</i>	up to 20 cm (7.87 inches)
Midwestern worm snake <i>Carphophis amoenus</i>	up to 35 cm (13.78 inches)
lined snake <i>Tropidoclonion lineatum</i>	up to 35 cm (13.78 inches)
northern red-bellied snake <i>Storeria occipitomaculata</i>	up to 35 cm (13.78 inches)
western smooth earth snake <i>Virginia valeriae</i>	up to 35 cm (13.78 inches)
western worm snake <i>Carphophis vermis</i>	up to 35 cm (13.78 inches)
ring-necked snake <i>Diadophis punctatus</i>	up to 40 cm (15.75 inches)
midland brown snake <i>Storeria dekayi</i>	up to 45 cm (17.72 inches)
Kirtland's snake <i>Clonophis kirtlandii</i>	up to 47 cm (18.5 inches)
northern scarlet snake <i>Cemophora coccinea</i>	up to 60 cm (23.62 inches)
western hog-nosed snake <i>Heterodon nasicus</i>	up to 60 cm (23.62 inches)
eastern ribbon snake <i>Thamnophis sauritus</i>	up to 80 cm (31.5 inches)
rough green snake <i>Ophiodryx aestivus</i>	up to 85 cm (33.46 inches)
smooth green snake <i>Ophiodryx vernalis</i>	up to 85 cm (33.46 inches)
eastern hog-nosed snake <i>Heterodon platirhinos</i>	up to 90 cm (35.43 inches)
queen snake <i>Regina septemvittata</i>	up to 90 cm (35.43 inches)
western ribbon snake <i>Thamnophis proximus</i>	up to 90 cm (35.43 inches)
common garter snake <i>Thamnophis sirtalis</i>	up to 100 cm (39.37 inches)
Graham's crayfish snake <i>Regina grahamii</i>	up to 100 cm (39.37 inches)
eastern massasauga <i>Sistrurus catenatus</i>	up to 100 cm (39.37 inches)
Mississippi green watersnake <i>Nerodia cyclopion</i>	up to 100 cm (39.37 inches)
plains garter snake <i>Thamnophis radix</i>	up to 100 cm (39.37 inches)
southern/broad-banded watersnake <i>Nerodia fasciata</i>	up to 100 cm (39.37 inches)
milk snake <i>Lampropeltis triangulum</i>	up to 110 cm (43.31 inches)
Great Plains rat snake <i>Pantherophis emoryi</i>	up to 120 cm (47.24 inches)
northern watersnake <i>Nerodia sipedon</i>	up to 120 cm (47.24 inches)
common king snake <i>Lampropeltis getula</i>	up to 125 cm (49.21 inches)
prairie king snake <i>Lampropeltis calligaster</i>	up to 130 cm (51.18 inches)
eastern fox snake <i>Pantherophis vulpinus</i>	up to 130 cm (51.18 inches)
copperhead <i>Agkistrodon contortrix</i>	up to 135 cm (53.15 inches)
diamond-backed watersnake <i>Nerodia rhombifer</i>	up to 135 cm (53.15 inches)
western fox snake <i>Pantherophis ramspotti</i>	up to 137.16 cm (54.00 inches)
plain-bellied watersnake <i>Nerodia erythrogaster</i>	up to 140 cm (55.12 inches)
racer <i>Coluber constrictor</i>	up to 150 cm (59.06 inches)
western mud snake <i>Farancia abacura</i>	up to 150 cm (59.06 inches)
western cottonmouth <i>Agkistrodon piscivorus</i>	up to 159 cm (62.6 inches)
rat snake <i>Pantherophis obsoletus</i>	up to 175 cm (68.9 inches)
timber rattlesnake <i>Crotalus horridus</i>	up to 180 cm (70.87 inches)
bull snake <i>Pituophis catenifer</i>	up to 180 cm (70.87 inches)
eastern coachwhip <i>Masticophis (Coluber) flagellum</i>	up to 260 cm (102.36 inches)



This image shows the lengths of the longest and shortest adult snakes of Illinois.

Photo: Tony Ragan, Illinois Department of Natural Resources

# SNAKES OF ILLINOIS



## Endangered and Threatened Species

As of 2020 in Illinois, four snake species are listed as endangered and seven are listed as threatened.

### Endangered in Illinois

- eastern coachwhip *Masticophis (Coluber) flagellum*
- southern/broad-banded watersnake *Nerodia fasciata*
- Great Plains rat snake *Pantherophis emoryi*
- eastern massasauga *Sistrurus catenatus* (federally threatened)

### Threatened in Illinois

- Kirtland's snake *Clonophis kirtlandii*
- timber rattlesnake *Crotalus horridus*
- western hog-nosed snake *Heterodon nasicus*
- Mississippi green watersnake *Nerodia cyclopion*
- flat-headed snake *Tantilla gracilis*
- eastern ribbon snake *Thamnophis sauritus*
- lined snake *Tropidoclonion lineatum*

Some snake species in Illinois are at the edge of their geographic range. They have never been present in large numbers in the state. Kirtland's snake, the eastern massasauga and the timber rattlesnake are declining over a large area of the United States.



eastern coachwhip *Masticophis (Coluber) flagellum*

Photo © Brad M. Glorioso



southern/broad-banded watersnake *Nerodia fasciata*

Photo © Brad M. Glorioso



Great Plains rat snake *Pantherophis emoryi*

Photo by MDC Staff, courtesy Missouri Department of Conservation



eastern massasauga *Sistrurus catenatus* (federally threatened)

Photo © Illinois Department of Natural Resources



ILLINOIS  
DEPARTMENT OF  
NATURAL RESOURCES

# SNAKES OF ILLINOIS



## Venomous Snakes

Venom is a toxin for subduing prey. It is injected through a pair of hollow fangs in the front of the upper mouth. The fangs fold up to the roof of the mouth when the mouth is closed and drop down to be used in biting. Fangs are shed and replaced periodically. Venomous snakes strike their prey, inject venom and pull away. They find and eat the prey after it dies. With this method of hunting, the snake avoids a prolonged confrontation with the prey item that could damage the snake. The venomous snakes in Illinois produce venom that affects the blood (hemotoxin).

Juvenile venomous snakes have venom equal in potency to that of the adult snake of the same species, but they have a smaller amount of the venom. The tip of the tail in juvenile copperhead, western cottonmouth and eastern massasauga snakes is yellow.

Illinois' four species of venomous snakes are pit vipers. They have a large opening, or pit, on each side of the head between the eye and the nostril. This pit is used by the snake to detect heat from warm-blooded animals.

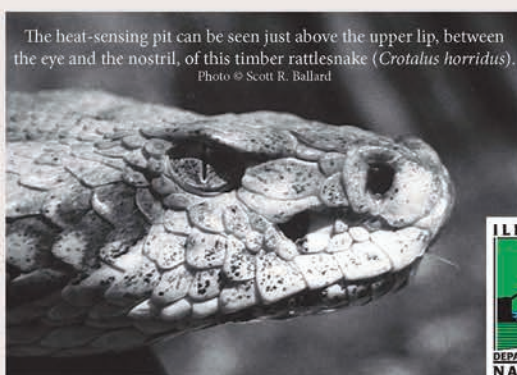
The venomous snakes in Illinois are restricted to specific habitats.



Juvenile copperhead (*Agkistrodon contortrix*) showing the yellow tail tip that is also present in juvenile eastern massasaugas (*Sistrurus catenatus*) and juvenile western cottonmouths (*Agkistrodon piscivorus*).  
Photo © Scott R. Ballard



Fangs of the western cottonmouth (*Agkistrodon piscivorus*) are visible in its mouth.  
Photo © Illinois Department of Natural Resources



The heat-sensing pit can be seen just above the upper lip, between the eye and the nostril, of this timber rattlesnake (*Crotalus horridus*).  
Photo © Scott R. Ballard

# SNAKES

## OF ILLINOIS



### Venomous Snakes



copperhead *Agkistrodon contortrix*  
Photo © Brad M. Glorioso

**copperhead** *Agkistrodon contortrix* This species lives in the southern one-third of Illinois, south of Illinois Route 16, and in the lower Illinois River valley. It is found in upland forests or river bluffs that have rocky outcrops.



western cottonmouth *Agkistrodon piscivorus*  
Photo © Brad M. Glorioso

**western cottonmouth** *Agkistrodon piscivorus* Cottonmouths live in swamps and wet bottomlands in southern Illinois, south of Illinois Route 13.



timber rattlesnake *Crotalus horridus*  
Photo © Brad M. Glorioso

**timber rattlesnake** *Crotalus horridus* The timber rattlesnake lives in the southern one-fourth of Illinois (south of Interstate 64), in the lower Illinois River valley, in the Mississippi River valley and a few other places. It prefers heavy woods with rock outcrops and bluffs.



eastern massasauga *Sistrurus catenatus*  
Photo © Illinois Department of Natural Resources

**eastern massasauga** *Sistrurus catenatus* The eastern massasauga lives in Madison, Clinton, Piatt, Knox, Warren, Will, Cook and Lake counties in scattered locations. Prairie wetlands and river floodplains are the preferred habitats.

While venomous snakes are not aggressive and tend to bite people only when stepped on, picked up or cornered, their bite can be a serious matter. Even freshly killed snakes can bite. These snakes should be avoided and precautions taken (wear leather boots, do not reach under rocks or logs, do not step over rocks or logs, look around before you sit) if you are entering an area possibly inhabited by venomous snakes. Although usually not deadly, the bite is painful and can cause swelling, nausea and the risk of infection. If you are bitten, go to a hospital for treatment immediately.

# SNAKES

## OF ILLINOIS

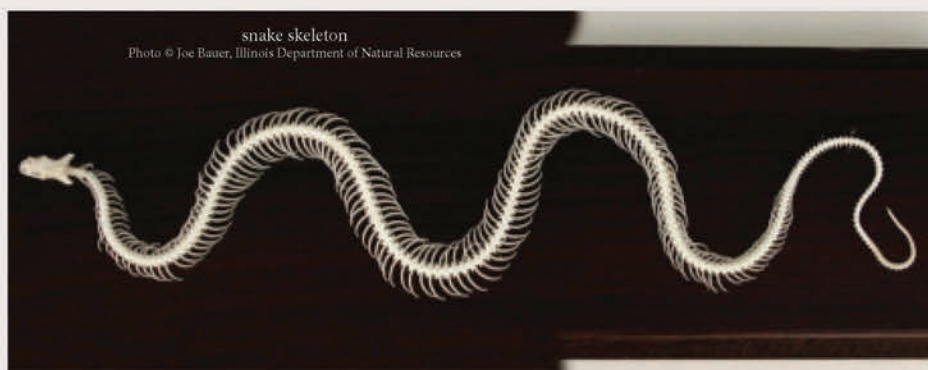


### Movement

Snakes can move quickly and easily. They have a reduced skeleton made of a skull, many vertebrae and many ribs. They use their skeletal and muscular systems and the scutes on their belly in tandem to create movement. Each ventral scute correlates with a pair of ribs and its associated muscles. Although there are four types of movements that snakes use, only two of them are regularly used by snakes in Illinois.

The serpentine, or s-shaped motion, is used in water and on land. The snake contracts muscles in a manner that pushes the body from side to side. In water, the body pushes against the water. Many snakes that swim regularly in water have ridges, called keels, on their scales that can aid them in pushing against the water column. On land, the scales are used to push against hard items on the ground. The scales push on these items, and the result is forward motion.

For climbing or moving in tight spaces, snakes use a concertina motion that relies on the scutes on the snake's belly. The snake extends the front of its body, and then grips the surface, such as a tree trunk, with its scutes. It bunches the central section of the body into curves that also grip the surface, then pulls the rest of the body upward. It repeats this sequence as it moves higher.





# SNAKES OF ILLINOIS



## Identifying Snakes

Snakes can be difficult to identify. There are some key traits that are used in snake identification. You may find that some of these traits are hard or impossible to use without picking up the animal. We discourage you from doing so.

**Length** – The length of an adult snake can help you to put it in a range of possible species but is not enough for a definitive identification.

**Color** – Colors on snakes include the background color, any colors on the background and the shapes of their patterns, and the belly colors and patterns. Color can be variable.

**Keeled versus Smooth Scales** – If the body scales have a raised ridge that is oriented generally from the head to the tail of the snake, those are keeled scales. If there is no ridge on the scale, the scales are smooth. Some snakes have a ridge on the scale that is not prominent, but you can still see it. These weakly keeled scales are still considered to be keeled scales. The ridges tend to be larger on the scales of the back than they are on those of the sides. Belly scales (scutes), which are wide and rectangular, are generally smooth, even on snakes with keeled scales on their back.



# SNAKES

## OF ILLINOIS



### Identifying Snakes

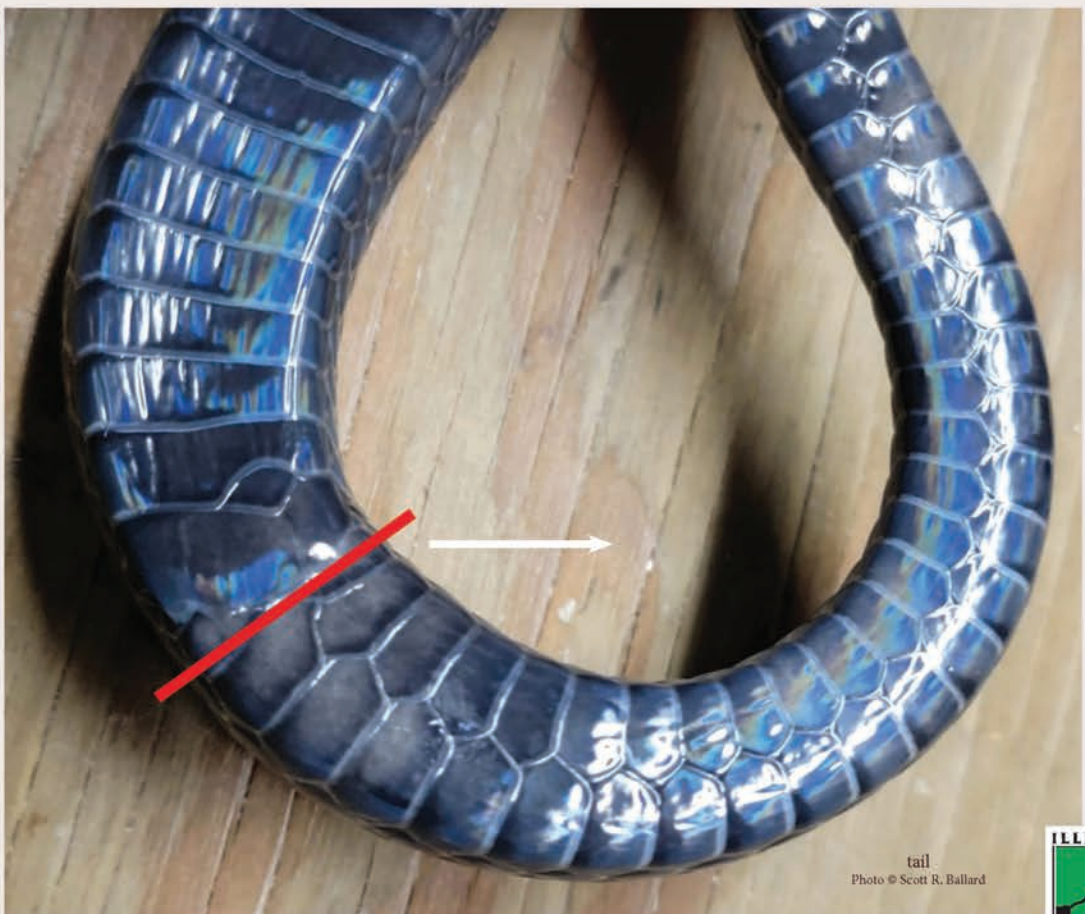
**Entire versus Divided Anal Plate** – The anal plate is a covering over the anal opening, where waste products as well as reproductive products exit the body. An entire anal plate is formed from one scale. A divided anal plate has two distinct scales.

**Tail** – The tail of a snake starts at the anal opening, which is covered by the anal plate. A snake's tail is usually short. Under the tail there can be a single row of scales (that may become a double row of scales near the end of the tail) or a double row of scales.

**Presence of Heat Pit** – A heat pit between the eye and nostril is present only in the four venomous snake species in Illinois.

**Pupil Shape** – An elliptical pupil in the eye is present only in the four venomous snake species in Illinois. All other native snakes have a round pupil.

**Scales** – Scales are arranged in specific patterns. Counting the number of scale rows can help to identify a snake species. The arrangement of scales on the head is also used in snake identification.



tail  
Photo © Scott R. Ballard

# SNAKES OF ILLINOIS



## Growth and Shedding of Skin

A snake's body grows throughout its life, but its outer skin does not grow. The skin is shed at times as a snake grows so that a new skin layer can form over the larger body. A clear scale covers each eye, and it is shed with the rest of the skin. When a snake is going to shed its skin, the body produces a milky blue fluid that separates the old and new skin layers. The eye will appear to have a milky film over it, and the body color will be duller than usual. A snake that is getting ready to shed its skin may become defensive and may seek a secluded location where it is less susceptible to predators.

After a few days the scale over each eye becomes clear, and the snake begins rubbing its head on rough objects to loosen the old skin. It crawls out of the old skin, which is usually turned inside out. Snakes shed two to four times per year depending upon the amount of food that they eat.



shed snake skin  
Photo © Joe Bauer, Illinois Department of Natural Resources



A copperhead (*Agkistrodon contortrix*) shedding its skin.  
Photo © Scott R. Ballard

# SNAKES OF ILLINOIS



## Reproduction

Snakes mate in the spring and fall. Spring mating results in young that are born or hatched in late summer or fall. With fall mating, the sperm is stored in the female's body until spring. She can use the stored sperm in the spring or mate again in the spring. It is an advantage in case no male snake of her species can be found in the spring.

The male has paired reproductive organs called hemipenes at the base of the tail. They are used to transfer sperm to the female. Only one hemipenis is used at a time. The one used depends on which side of the female's body the male snake is crawling along.

Snakes do not provide parental care of the eggs or young. The young live on yolk stored in the stomach for a few days before they begin hunting prey.



These snake eggs were found in soil under a stone.  
Photo © Brad M. Glorioso

# SNAKES

## OF ILLINOIS



### Reproduction

Many, but not all, snakes lay eggs. In Illinois, for those snakes that do lay eggs, they are deposited in late May and June and hatch in the fall. The eggs have a leathery shell. They are often placed in rotten wood or other dead vegetation. Decaying vegetation releases heat that helps keep the eggs warm. Snakes that lay eggs are oviparous. The young have a small egg tooth on their snout that allows them to cut through the egg's shell. The tooth falls off after hatching.

Some snakes do not lay eggs. They give birth to live young. These snake species are either viviparous or ovoviviparous. Viviparous snakes retain the developing embryos in the body of the female until they are born, and some food is provided by the female to support the embryos during their development. Ovoviviparous snakes also have young that develop entirely within the body of the female, but they only feed on the yolk from their egg. These snakes develop in a thin, transparent membrane that they hatch from before exiting the female's body.



# SNAKES

## OF ILLINOIS



## Reproduction

### Ovoviviparous Snakes in Illinois

These snakes have young that develop entirely within the body of the female, but they only feed on the yolk from their egg. The female gives birth to live young.

### Family Crotalidae

copperhead *Agkistrodon contortrix*  
timber rattlesnake *Crotalus horridus*

western cottonmouth *Agkistrodon piscivorus*  
eastern massasauga *Sistrurus catenatus*

### Family Natricidae

Kirtland's snake *Clonophis kirtlandii*  
northern watersnake *Nerodia sipedon*  
queen snake *Regina septemvittata*  
western ribbon snake *Thamnophis proximus*  
eastern ribbon snake *Thamnophis sauritus*  
lined snake *Tropidoion lineatum*

Graham's crayfish snake *Regina grahamii*  
midland brown snake *Storeria dekayi*  
plains garter snake *Thamnophis radix*  
common garter snake *Thamnophis sirtalis*  
western smooth earth snake *Virginia valeriae*

Mississippi green watersnake *Nerodia cyclopion*  
northern red-bellied snake *Storeria occipitomaculata*  
plain-bellied watersnake *Nerodia erythrogaster*  
southern/broad-banded watersnake *Nerodia fasciata*  
diamond-backed watersnake *Nerodia rhombifer*

### Oviparous Snakes in Illinois

The female in these snake species lays eggs.

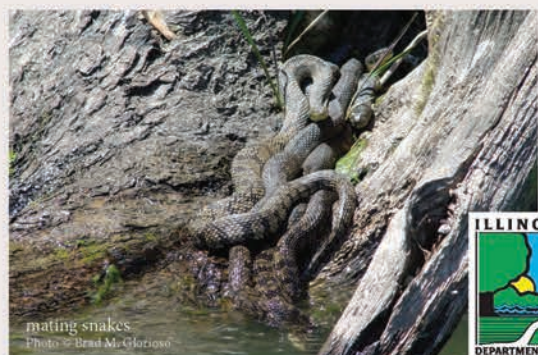
### Family Colubridae

northern scarlet snake *Cemophora coccinea*  
eastern coachwhip *Masticophis (Coluber) flagellum*  
common king snake *Lampropeltis getula*  
rough green snake *Ophedrys aestivus*  
Great Plains rat snake *Pantherophis emoryi*  
eastern fox snake *Pantherophis vulpinus*  
bull snake *Pituophis catenifer*

racer *Coluber constrictor*  
prairie king snake *Lampropeltis calligaster*  
milk snake *Lampropeltis triangulum*  
smooth green snake *Ophedrys vernalis*  
rat snake *Pantherophis obsoletus*  
western fox snake *Pantherophis ramspotti*  
flat-headed snake *Tantilla gracilis*

### Family Dipsadidae

Midwestern worm snake *Carphophis amoenus*  
western worm snake *Carphophis vermis*  
ring-necked snake *Diadophis punctatus*  
western mud snake *Farancia abacura*  
western hog-nosed snake *Heterodon nasicus*  
eastern hog-nosed snake *Heterodon platirhinos*



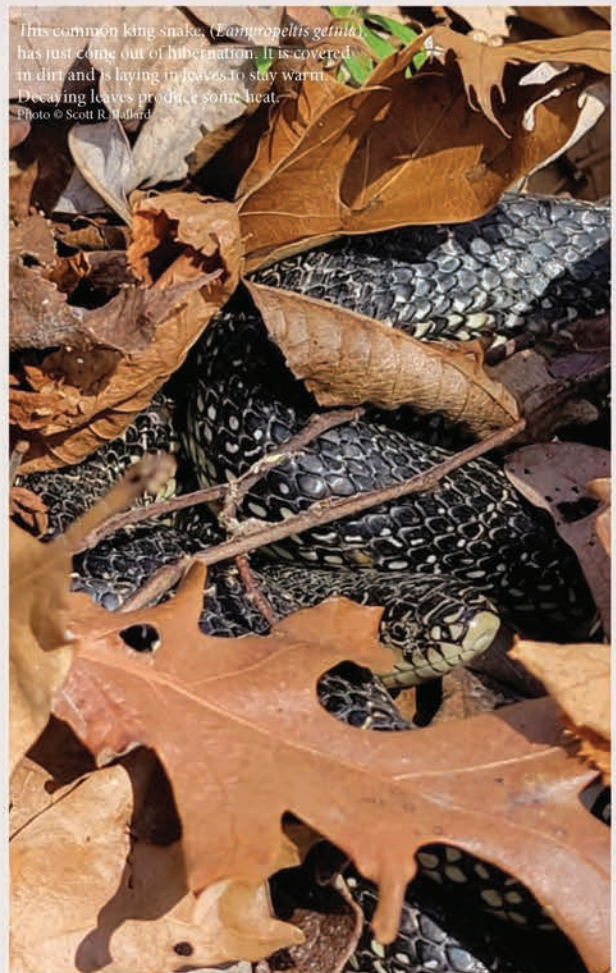
mating snakes  
Photo © Brad M. Glorioso

# SNAKES OF ILLINOIS



## Activity

Snakes hibernate in winter. They must hibernate below the freeze line and may do so in the ground, in openings in rocks or in other places. They become active in spring. These are cold-blooded animals, so their body temperature is dependent on their environment. They can modify their body temperature somewhat, though, with their behavior. They may bask on logs, roads or other objects to warm their body, or they may change their activity period. Snakes are generally active during the day, but they may become nocturnal when prolonged, high daytime temperatures occur.



# SNAKES OF ILLINOIS



## Anatomy

A snake's body is covered with overlapping scales that function to aid in protection and in prevention of water loss from the skin. The scales are dry. Those snakes with keeled scales scatter light that strikes them differently than those snakes with smooth scales. The scattering of light provides a duller appearance to the snake, making its camouflage more effective. Keeled scales may also provide an advantage in swimming for snakes that are found in and around water.

The lack of an eyelid is compensated for by the presence of a clear scale over each eye.

Snakes do not have legs, yet they can move quickly and easily in a variety of habitats. Their flexible movements are the result of their reduced skeletal system, composed of a skull, many vertebrae and many ribs. The skeletal and muscular systems along with the platelike scutes on the belly work together to allow a snake to move swiftly, pushing off surface irregularities in the places it crawls.

Snakes do not have an external ear. They can sense vibrations through their body, though.



smooth scales  
Photo © Scott R. Ballard



weakly keeled scales  
Photo © Scott R. Ballard



keeled scales  
Photo © Scott R. Ballard



scute  
Photo © Illinois Department of Natural Resources



# SNAKES

## OF ILLINOIS



### Defense

Snakes will try to defend themselves when they feel threatened, although their first method of defense is to try to escape. If escape isn't possible, some of them will vomit and/or defecate. Some of them flip over and play dead. They may vibrate their tail and flatten their head. They may strike without the intent of biting. They may bite if they feel it is necessary for their survival.

### Habitats

Snakes can be found in all habitat types in the state. Some snake species live on land. Some snake species live in water for all or part of the year. Some snake species spend a lot of time in trees. Some snake species can be found under rocks and logs. There are snake species in woodlands, prairies, aquatic areas and cities.



bog-nosed snake playing dead  
Photo © Brad M. Coleman



prairie - eastern massasauga (*Sistrurus catenifera*)  
Photo © Illinois Department of Natural Resources



woodlands - common king snake (*Lampropeltis getula*)  
Photo © Illinois Department of Natural Resources



aquatic - northern watersnake (*Nerodia sipedon*)  
Photo © Illinois Department of Natural Resources



urban - common garter snake (*Thamnophis sirtalis*)  
Photo © Illinois Department of Natural Resources



# SNAKES OF ILLINOIS



## Value

Snakes have great ecological value. They are predators that help control rodent and insect populations. They provide food for many other animals in the food web, too. Recent research has shown that snakes may be important in seed dispersal. Rodents eat many seeds, and rodents are eaten by snakes. Seeds inside rodents eaten by a snake can pass through the snake's digestive system intact. These seeds are deposited with the snake's wastes and can germinate. The snake moves the seeds away from their original plant source and provides the seeds with nutrients from its wastes to help them grow.

Snakes have economic value, too. They are important in the pet trade and in the healthcare industry. Snakes are raised to provide anti-venom. Snakes in an area can also reduce the need for health care for people by reducing the occurrence of rodent-transmitted diseases.



The broad-winged hawk (*Buteo platypterus*) has captured and is eating a midland brown snake (*Storeria dekayi*).  
Photo © Illinois Department of Natural Resources



This snake is eating a frog.  
Photo © Bill M. Clifford

# SNAKES OF ILLINOIS



## Value

### Helping Snakes

Habitat alteration and loss are major threats to snake populations. Over-exploitation of snakes for the pet trade, misinformation and/or lack of information and irrational fears also lead to the decline of snake populations.

### What actions can you take to help snakes?

- Provide habitat for snakes such as rocks, water and brush piles.
- Don't kill snakes. While it can be startling to find a snake (they are quiet and make no noise to attract your attention), if you give it a few minutes, it will move on. It is most likely hunting for food.
- Educate others about the value of snakes and the fact that they are not aggressive.
- Don't take snakes from the wild.



# SNAKES OF ILLINOIS



## Possession

There are regulations regarding the possession of snakes in Illinois.

- Permits are required to study, work with, possess or maintain venomous snakes.
- There are captive maintenance regulations for any boa, python or anaconda.
- Permits are required to study, work with, possess or maintain endangered/threatened species.
- Permits are required to work with, possess or collect snakes from public lands such as a state park, nature preserve or national forest.
- There are personal possession limits for all native snake species.
- It is illegal to buy, sell, trade, barter or breed any wild-caught Illinois snakes, any resulting offspring from them, or any lineage of Illinois origin.
- The full list of regulations regarding the legalities of snakes or any other reptile or amphibian can be found at the following links.



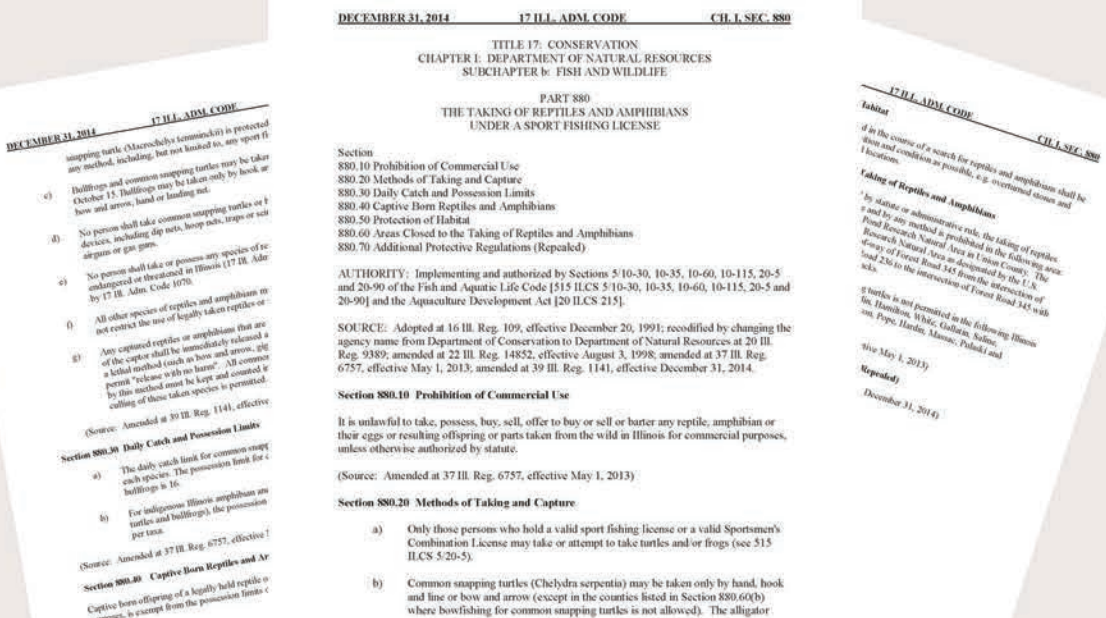
<https://www2.illinois.gov/dnr/adrules/documents/17-805.pdf>



<https://www2.illinois.gov/dnr/adrules/documents/17-880.pdf>



<https://www2.illinois.gov/dnr/adrules/documents/17-885.pdf>



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# SNAKES OF ILLINOIS



## Educational Resources about Snakes Illinois Department of Natural Resources



***Illinois' Amphibians and Reptiles Field Pack***  
– available for loan statewide  
<https://www2.illinois.gov/dnr/education/Pages/ItemsForLoan.aspx>



***Illinois Snakes poster***  
<https://dnr2.illinois.gov/teachkids/>



***Biodiversity of Illinois species Web pages***  
<https://www2.illinois.gov/dnr/education/Pages/Biodiversity-of-Illinois.aspx>



***Slime, Scales and Mudpuppy Tails activity book***  
<https://dnr2.illinois.gov/teachkids/>



***Illinois' Natural Resources Trading Cards***  
<https://dnr2.illinois.gov/teachkids/>



***Wild About Snakes Web page***  
<https://www2.illinois.gov/dnr/education/Pages/WildAboutSnakes.aspx>



***Snakes of Illinois brochure***  
<https://dnr2.illinois.gov/teachkids/>



## Illinois Natural History Survey, Prairie Research Institute, University of Illinois



***Reptiles of Illinois: Snakes and Lizards Card Set***  
<https://shop.inrs.illinois.edu/inhs-bio-edu.html>



***Field Guide to Amphibians and Reptiles of Illinois***  
[www.press.uillinois.edu](http://www.press.uillinois.edu)



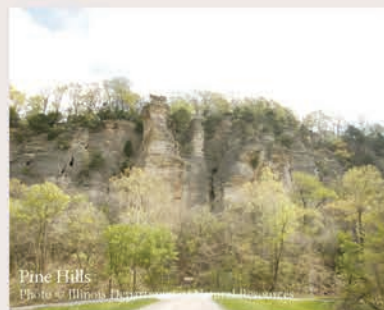
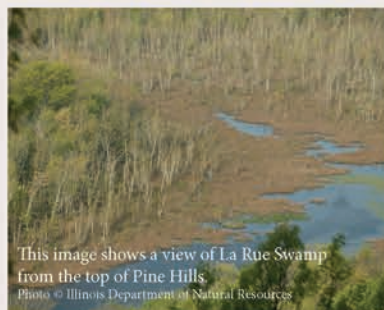
# SNAKES OF ILLINOIS



## Snake Road

For about two months in the spring and fall, reptiles and amphibians move across a narrow, U.S. Forest Service road in southwestern Illinois, known as the Snake Road. In the fall, these animals move into the towering limestone bluffs on the east side of the road from La Rue Swamp, where they have been living in the spring and summer, which is on the west side of the road. The reverse migration occurs in the spring.

A portion of the Snake Road is closed to vehicular traffic during the time of the spring and fall migration because of the large number of amphibians and reptiles, some of which are endangered or threatened, that must cross the road. People are welcome to walk the road, though, and those who do are generally rewarded with glimpses of some of the great biological diversity in this location. About 66 percent of the amphibian species and 59 percent of the reptile species from the state live here. People from other states often travel here to view the wildlife.



# SNAKES OF ILLINOIS



## Snake Facts

- A snake can swallow prey that is three times larger than the size of its own head.
- Snakes are very efficient rodent controllers. Large- and medium-sized snakes can eat up to nine pounds of rats and mice per year. That number of rodents could fill a king-sized pillowcase!
- Females of some snake species can store sperm for as long as five years inside their body.
- Snake scales and rattlesnake rattles are made of keratin, a hard protein also found in the hair, fingernails and hooves of other animals.
- Snakes have four rows of teeth in the top of the mouth and two rows in the bottom of the mouth.
- Rattlesnakes add a new segment at the base of the rattle each time the snake sheds its skin. Old segments at the tip may disintegrate or break off.
- King snakes are immune to the venom of copperheads, cottonmouths and rattlesnakes.
- When threatened, a hog-nosed snake spreads its head and neck, somewhat like a cobra would, then rolls over and plays dead if it continues to be disturbed.



rattlesnake rattle  
Photo © Scott R. Ballard



snake scales  
Photo © Scott R. Ballard

# SNAKES OF ILLINOIS



## Timber Rattlesnake Skin

The timber rattlesnake (*Crotalus horridus*) skin shown in the display case was confiscated from an Illinois resident by an Illinois Conservation Police Officer of the Illinois Department of Natural Resources (IDNR). The timber rattlesnake is a threatened species in Illinois. A “Permit for Possession of Endangered or Threatened Species” is required to collect/possess any endangered or threatened animal or any part or product (skin, bones, eggs, nest, etc.) of an endangered or threatened animal. The original person in possession of this timber rattlesnake skin did not have a permit. Upon his death, the timber rattlesnake skin was illegally sold at auction. The Illinois Conservation Police were notified of the existence of this skin and worked with the auction company to arrange the return of the skin from the buyer. The timber rattlesnake skin was provided to the IDNR Division of Education to use in making people aware of the regulations regarding possession of wildlife and wildlife parts.

