

Identification and Control of Snakes in Alabama

► Learn what is fact and what is myth about snakes. Drawings help readers identify the difference between venomous and nonvenomous snakes. Colorful images help you learn to identify different kinds of snakes found in Alabama, including rattlesnakes, cottonmouths, copperheads, and coral snakes.

Approximately 40 species of snakes occur in Alabama, and only six of these are venomous. Yet these six attract a lot of attention. Get a crowd of people together and yell *snake* and you're bound to get a reaction. Since early times, people have had a mysterious fascination with snakes. They have been used in religious ceremonies and for medicinal purposes. To some people, snakes conjure up an image of evil. Yet, in reality, snakes as a group are very beneficial to humans, especially because snakes help control farm pests that can transmit diseases.

Snake Facts

Depending on the species, larger snakes may feed on rodents, fish, frogs, lizards, and other snakes. Smaller snakes feed primarily on insects, earthworms, and small vertebrates they can overpower. These feeding habits apply to venomous and nonvenomous snakes. Since



Gray rat snake (Photo credit: Wendy VanDyk Evans, Bugwood.org)

the majority of snakes in Alabama are nonvenomous and pose no threat to humans, their varied feeding habits make them valuable to have around for rodent and insect control.

Most snakes, such as the common kingsnake, bury their eggs under loose dirt or in decaying logs, leaving the young to hatch and fend for themselves. Others, including the garter snake, give birth to a writhing mass of babies.

Some snakes, the gray rat snake for example, are excellent climbers. More often than not, when someone in Alabama finds a snake or shed snake skin in the attic, it is some type of rat snake. Stout, heavy-bodied snakes, such as the eastern diamondback rattlesnake and other pit vipers, are poor climbers. Their bodies are simply not designed for climbing, and they spend most of their time on the ground.

Like other reptiles, snakes are cold-blooded. This means that their body temperature is regulated by factors such as the air temperature or exposure to sunlight. On days when it is very hot, snakes are likely to seek shelter in shady areas or in dens. On cool days, snakes may look for sunny areas, where they will coil and warm up. During times of prolonged cold, snakes won't be active at all.

Snake Myths

The mysterious and sometimes frightening behavior of snakes has resulted in many myths about these legless reptiles. In many of these myths, the snake's tongue and tail are said to have stinging capabilities. In reality, snakes use their tongues to help identify prey and other surrounding objects. In many ways, a snake flicking its tongue is like a dog sniffing the air. It uses the chemicals in the air and on the objects it touches to help identify potential food sources, enemies, and other objects in its environment.

The tail of a snake is not a venomous stinger. Some snakes, if held, will push the tip of the tail against your hand. However, it will not break the skin and there is no

danger. When threatened, many snakes vibrate the tail rapidly. If the snake is on dry leaves, this sound may be similar to that produced by a rattlesnake.

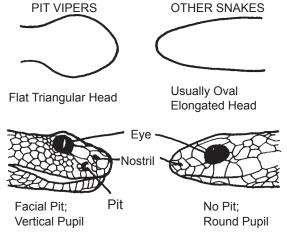
Many snake myths are comical, such as the myth about the hoop snake (a name applied to rainbow snakes and mud snakes) and the coachwhip snake. As you might guess, the hoop snake is reported to take its tail in its mouth and roll after an intended victim in hula hoop fashion. When the victim is overtaken, the hoop snake is said to use its tail as a deadly stinger. The coachwhip snake is said to chase a person and use its tail to whip them to death. While there is an Alabama snake called the coachwhip, it is nonvenomous and does not use its tail as a whip.

Snake Identification

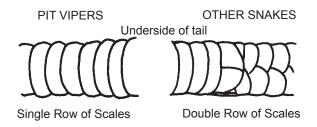
Since snakes are helpful to humans, as well as being a part of our natural environment, it is important that we learn to distinguish venomous and nonvenomous varieties. There are several general rules that are useful in field identification.

Five of the six venomous snakes in Alabama are in the pit viper group. Pit vipers get their name from the presence of pits on both sides of the face between the eye and nostril. These pits are used to detect heat and improve the snakes' accuracy in striking warm-blooded prey. Pit vipers have vertical or "cat-like" pupils, thin necks, and heavy bodies. While all pit vipers have wide, triangular heads, some nonvenomous snakes share this characteristic. Pit vipers are also characterized by having retractable, hollow fangs near the front of the mouth. All pit vipers give birth to their young. This group includes the eastern diamondback rattlesnake, timber rattlesnake, pigmy rattlesnake, copperhead, and cottonmouth.

The sixth venomous snake in Alabama is the coral snake. This fairly small, secretive relative of the cobra has black



Snake head comparisons



Snake scale comparisons

and red rings separated by yellow rings, and a black snout. Unlike the pit viper, the coral snake has a small head, round pupils, and a slender body.

The nonvenomous snakes in Alabama also have round pupils and small heads. Another distinguishing characteristic of all nonvenomous snakes is the double row of scales on the underside of the tail. All of the pit vipers have a single row of scales. However, like nonvenomous snakes, the coral snake has a double row. (Markings—see coral snake description—are the key to telling the difference between coral snakes and nonvenomous snakes.) Examining the underside of the tail is not recommended as an identification technique on live specimens. If you find a shed snake skin, you can look at the underside of the tail and determine if the skin was shed by a pit viper or by a nonvenomous snake or coral snake. The nonvenomous snakes of Alabama are too numerous to mention separately. However, because of their potential danger to people, each of the six venomous species warrants a more detailed discussion.

Eastern diamondback rattlesnake. An extremely large, heavy-bodied snake, capable of attaining a length of about 8 feet. The diamondback likes the relatively dry pine flatwoods and longleaf pine-turkey oak hills of southern Alabama. The burrow of the gopher tortoise often serves as a refuge, particularly during cold weather. Diamondbacks feed on mice, rats, and rabbits, and less frequently on squirrels and birds.



Eastern Diamondback Rattlesnake



Timber rattlesnake



Pygmy rattlesnake

Timber rattlesnake. (Sometimes referred to as canebrake rattlesnake.) A large, heavy-bodied snake that may attain a length of over 7 feet. The species may be found in most of Alabama. It is most common in sparsely settled, forested areas. The timber rattlesnake feeds on a variety of small rodents and, infrequently, on ground-dwelling birds.

Pygmy rattlesnake. A small snake, with a maximum length of 30 inches. Distributed throughout the state, it is seldom encountered except during late summer. The small rattle can scarcely be heard more than 3 feet away. It feeds on mice, lizards, frogs, insects, and spiders.

Copperhead. A medium-sized snake, with maximum length of slightly over 4 feet. It is distributed throughout the state, but is scarce in parts of extreme southern Alabama. Color patterns are highly variable, but the basic color is tan to brown with darker crossbands. Above the coastal plain, the copperhead prefers forested areas with rocky bluffs and ravines.

In the coastal plain it prefers floodplains, swamp edges, and hilly hardwood areas. Abandoned farms also provide ideal habitat conditions. The diet consists of small mammals, frogs, lizards, and insects.



Copperhead



Cottonmouth

Cottonmouth. A large, heavy-bodied, aquatic snake. In Alabama, the cottonmouth may attain a maximum length of about 5 feet. Adults are variable in color, ranging from a solid dark gray to tan with brown bands. Young cottonmouths are tan with conspicuous bands. The cottonmouth lives in waters statewide. Its diet includes insects, snails, fish, frogs, baby alligators, lizards, turtles, snakes, bird eggs, small mammals, and carrion. There are seven species of harmless water snakes often mistaken for cottonmouths.

Coral snake. A slender snake with a maximum size of about 3½ feet. The top of the head and nose are black. The typical body markings are complete bands of alternating red and black, separated by narrow yellow rings. The snake is found mostly in the lower coastal plain. Coral snakes spend much time underground in loose soils. They will bite readily when restrained, and they have a habit of "balling the tail" and waving it about. This habit may cause the handler to mistake the tail for the head. The coral snake's venom is conducted through a pair of short, erect, grooved fangs near the front



Coral snake

of the upper jaw. The best practice is to leave coral snakes alone and under no circumstances handle them—the bite can be deadly.

Three nonvenomous snakes, the scarlet snake, the scarlet kingsnake, and the red milk snake, have markings similar to the coral snake. However, on these, the red and black bands touch, not the red and yellow. An easy rhyme can help you remember the difference: "Red on yellow, kill a fellow; red on black, friend of Jack." If you're in coral snake country and encounter a snake with red, yellow, and black bands, the best course is to leave it alone.

Snakes sometimes appear in strange places as they crawl about looking for food, water, or shelter. This means that there is a possibility that a snake will cross your path someday. If you've read this far in the publication, you should be aware that most snakes pose no threat to people and are, in fact, beneficial. While nothing will guarantee that you never meet a snake, there are some things that can be done to reduce the chances of a snake showing up around your home.

Some snakes, such as copperheads, are fond of using old rock or woodpiles as shelter and feeding areas. In addition, brush and trash piles provide habitat for snakes and rodents. Given these facts, keeping old piles of debris cleaned up around your home reduces the shelter for snakes and their food sources. This will reduce the likelihood of snakes being present. Turfgrass lawns are poor snake habitat. A well-maintained yard without high weeds eliminates much of the cover or shelter snakes may be searching for. In addition, the mowed yard increases your ability to see a large snake should it enter the area.



Rock and debris piles provide shelter for snakes.

Snakes are less likely to be found when large dogs have the run of the premises. However, dogs are not a guarantee that snakes will not show up.

Many people wish a magical powder could be sprinkled around to keep snakes away. While several chemicals have been tested, their effectiveness varies greatly. If you use a chemical snake repellent, you should still be cautious. The product may not be effective.

While expensive to erect, a snake-proof fence may keep nonclimbing snakes out of an area. These fences should slant away from the home or dwelling at an angle of about 30 degrees and be constructed of small mesh hardware cloth. The bottom of the screen should be buried in the ground approximately 2 to 4 inches.

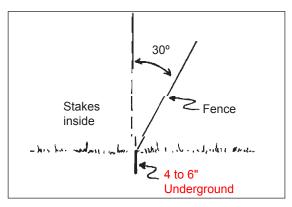


Diagram of snake-proof fence

Conclusion

On the average, about one person dies from snakebite in Alabama every 10 years. This indicates that much of the fear over snakes is not justified. Try to learn to identify venomous and nonvenomous snakes, so you will know when there is a danger. Most snakes are beneficial and desirable to have around.

If you would like more information about snakes and other reptiles and amphibians in Alabama, *The Reptiles and Amphibians of Alabama* by Robert H. Mount is an excellent book. It may be obtained from the Auburn University Bookstore, Haley Center, Auburn University, AL 36849.



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