

Eastern Diamondback Rattlesnake

Crotalus adamanteus

Rattle, Rattle, Go Away

Rattlesnakes are named for the rattle attached to their tail. They are the only snakes that have rattles. The rattle consists of up to 10 loosely connected segments in adults. Segments are added each time the snake sheds but segments may also break off easily. When threatened, the snake rapidly shakes its tail causing the distinctive rattling sound to warn potential predators to go away.

It's the Pits

Rattlesnakes have heat-sensing pits located between their eyes and nostrils. Rattlesnakes often hunt at night and these sense organs enable the snakes to "see" the heat given off by the bodies of warm-blooded animals such as rodents. As the rattlesnake moves its head from side to side, the pits detect warmer or cooler areas that pinpoint the direction and location of potential prey.

Classification

Class: Reptilia

Order: Squamata

Family: Viperidae

Genus: *Crotalus*

Species: *adamanteus*

Distribution

This species of rattlesnake resides in the southeastern United States from southeast North Carolina to Florida and the Florida Keys, west to southern Mississippi and extreme eastern Louisiana.

Habitat

The eastern diamondback rattlesnake lives in palmetto thickets, dry pinewoods, scrublands, abandoned fields and brushy, grassy areas within its distribution or range.

Physical Description

- Eastern diamondback rattlesnakes average three to six feet (1-2 m) in length but have been known to reach eight feet (2.25 m).
- Their scales are olive to brown in color with a distinctive pattern of large dark diamond shaped markings with yellow borders.
- The tail is brown or gray banded with dark rings ending in a well-developed rattle.
- They have inch long fangs and heat-detecting pits between the eyes and nostrils.

Diet

What Does It Eat?

In the wild: Small mammals including mice, rabbits and squirrels plus a variety of birds.

At the zoo: Rats and mice.

What Eats It? Juveniles are vulnerable to predation by raptors and other snakes, hogs and fox. Adults are preyed on by larger snakes, hogs and humans.

Social Organization

Rattlesnakes are solitary except during breeding season when snakes gather together in large groups.

Life Cycle

Courtship and mating take place from late July through early October. During the mating season, males compete for females through combat sessions. Males raise the front section of their bodies and become entwined with each other and try to throw the other to the ground. The victor wins the right to breed with females in that area. After a gestation period of six to seven months females give birth to live young in a ground burrow or hollow log. Brood sizes range from six to 21 young and females may only bear young every two to three years. Females have been known to protect the young for the first few days after they are born. Newborn snakes are fully formed miniature

adults about 12 inches (30 cm) long. They are able to care for themselves at birth and are equipped with needle-sharp fangs and venom powerful enough to deliver a lethal bite to a grown man. Young rattlesnakes have many enemies and a high mortality rate. If they survive, Eastern diamondback rattlesnakes reach maturity in three to four years. In captivity, rattlesnakes may live 20-25 years.

Adaptations

Rattle, Rattle, Go Away

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Beware the Bite

Rattlesnakes hunt by ambushing prey, lying in wait for prey to come along or silently sneaking up on the unsuspecting victim. When a rattlesnake strikes, the fangs enter and within a fraction of a second in the prey inject a lethal dose of powerful venom. The snake then retreats to a safe hiding place to wait for the victim to die. Prey is swallowed whole, starting with the head. Venom kills the prey but also aids in the process of digestion. Snake venom is also a means of defense against potential predators that learn to avoid these dangerous snakes.

It's the Pits

Rattlesnakes have heat-sensing pits located between their eyes and nostrils. Rattlesnakes often hunt at night and these sense organs enable the snakes to "see" the heat given off by the bodies of warm-blooded animals such as rodents. Even if the animals are not moving, they are giving off heat that the snake can detect. As the rattlesnake moves its head from side to side, the pits detect warmer or cooler areas that pinpoint the direction and location of potential prey.

Conservation Connection

IUCN Status – Least concern.

Although not endangered, the eastern diamondback rattlesnake is in trouble. It is disappearing from many areas due to conversion of natural habitat for suburban housing communities and agricultural development. Rattlesnakes may also be killed by humans out of fear, even though they are extremely beneficial to humans in controlling rodent populations.

Fun Facts

- The number of rattles does not reflect the age of the snake. The rattles break off easily and a new button segment is produced each time the snake sheds.
- The eastern diamondback rattlesnake is the largest rattlesnake species in the world and the most venomous snake in North America.
- Rattlesnakes are good swimmers.
- Of the 2,400 different species of snake only 400 are venomous and less than 50 are dangerous to humans!
- Snakes never inject more than half of their venom in a single bite.
- Rattlesnakes can see well only up to 15 feet.