Eastern Diamondback Rattlesnake

Crotalus adamanteus

Upland Snake Species Profile

Venomous



Name Game

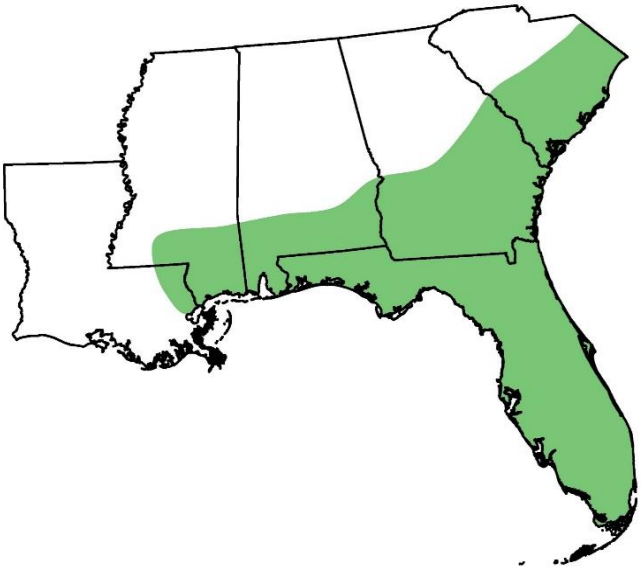
The genus, *Crotalus*, roughly translates to “rattle”. The species epithet, *adamanteus*, means “diamond-shaped”.

Natural History: Eastern diamondback rattlesnakes are habitat specialists that are dependent on longleaf pine forests in Coastal Plain landscapes. These snakes use habitat with an open-canopy, limited midstory, and grassy groundcover. Eastern diamondback rattlesnakes are in the pit viper family. The loreal pit is a specialized organ that allows vipers to detect infrared radiation and ambush warm-blooded prey in low-light conditions. As with all pit vipers, this species uses a potent venom to disable its prey. Adults typically feed on squirrels, rabbits, and cotton rats; young snakes eat smaller rodents. These rattlesnakes are most active during their fall mating season when males move long distances to seek mating opportunities. Female rattlesnakes can store sperm for several years, and most do not eat when gravid (pregnant). Because the birthing process is energetically costly, females only reproduce every 2-3 years. As ectotherms, or cold-blooded animals, eastern diamondback rattlesnakes must rely on their environment to regulate their body temperature. During times of inclement weather, these snakes seek shelter underground in rotted stump holes and tortoise burrows, which maintain a constant moderate temperature year-round.

Range and Appearance: Eastern diamondback rattlesnakes have historically occurred in the Coastal Plain from North Carolina through Louisiana. They have a pattern of dark brown diamonds outlined by yellowish scales on their backs. This pattern is amazingly cryptic; eastern diamondback rattlesnakes easily blend in with fallen pine needles, wiregrass, and charred remnants from fires in their natural habitat. The hard and brittle rattle is made of keratin and can easily break if snagged on an object. The size of a newborn snake is around 6 inches, a typical adult is 4-6 feet, and remarkably large individuals may approach 8 feet. These are the heaviest native snakes in North America; adults weigh between 6 and 15 pounds.

Rattlesnake Myth

Rattlesnakes do not always rattle when a human is near. In many cases, rattlesnakes will rely on their camouflage to silently blend into the environment, remaining undetected.



Upland Snake Conservation Initiative

www.gophertortoisecouncil.org

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Conservation Challenges: Eastern diamondback rattlesnakes rely on high-quality Coastal Plain habitat. The role of fire, a historically naturally occurring phenomena, is essential to the persistence of this species in the wild. Without fire as a disturbance mechanism, open pine habitat will convert to closed-canopy hardwood forest, rendering the habitat unsuitable for eastern diamondback rattlesnakes, gopher tortoises, and several other longleaf pine endemic species. Large eastern diamondback rattlesnakes are highly prized at rattlesnake roundup events. Thankfully, these roundups are diminishing in popularity, yet rattlesnakes are still often killed on sight due to misunderstandings and fear of the species. The practice of "gassing" gopher tortoise burrows to drive out snakes has been outlawed throughout the southeast to the benefit of tortoises, rattlesnakes, and other tortoise burrow commensal species. Eastern diamondback rattlesnakes are a Candidate for federal protection and are state protected in North Carolina, a state where they unfortunately may no longer occur.

Snake Vocabulary
Cryptic: Coloration, markings, or patterning that camouflages an animal within its natural environment.



Rattlesnakes spend most of their lives coiled up waiting to ambush potential prey. Rattlesnakes rarely strike at humans unless harassed and should never be handled. These animals pose no threat when viewed from a distance.



The rattle of an adult snake (top photo) will have many segments of the same length. The rattle of a young snake (bottom photo) quickly narrows to a point.

What You Can Do To Help: Sharing the value of prescribed fire and proper habitat management will not only benefit the eastern diamondback rattlesnake but many other species in the southeastern Coastal Plain.

For More Information:

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The Gopher Tortoise Council. Minimizing conflict with venomous snakes. Available at www.gophertortoisecouncil.org/edu/snakeinitiative.php

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