Eastern Diamondback Rattlesnake

Crotalus adamanteus

Eastern Diamondback Rattlesnakes are the largest venomous snake in North America, and the largest of our six venomous species found in Georgia.

Description
These are large, heavy-bodied pit vipers. They are known to reach 78 inches (6.5 feet), and there are unsubstantiated reports of them growing to just over 8 feet. The thick body is covered in keeled scales, and the anal plate is un-divided. The top portion of the body has a series of dark brown diamonds edged in yellow, running down the back. A dark brown or black stripe that is also bordered by yellow hides the eyes. Juveniles look like adults, but are only about a foot long at birth. The head is wide and blocky, and is distinctly wider than the neck. As pit vipers, they have a deep pit, or opening, on each side of the face in between their eye and their nostril. These pits are heat sensitive and allow snakes to locate and accurately strike at warm-blooded prey. The most distinctive feature of this impressive snake is the rattle for which it is so well known. The rattles are hollow individual ringed segments made of keratin.

Range & Habitat
In Georgia, eastern diamondbacks are found south of the Fall Line, in the Coastal Plain. Their range across the US runs from southeastern North Carolina all the way over to extreme eastern Louisiana. Their preferred habitat is open longleaf pine woods, but they are also found in pine-hardwood forests that are burned regularly and have an open canopy. The snakes can also be found in coastal habitats like marshes, sand dunes and open areas with grasses and shrub islands. Eastern diamondbacks are also commonly found in association with gopher tortoises, and use their burrows as refuge. Stumpholes and other underground chambers are also used if there are no gopher tortoise burrows.

Myth & Legend
Eastern diamondbacks may be the snake involved in the most legends and misconceptions here in the Southeast. Through the use of the internet and digital photography, dozens of stories exist of rattlesnakes over 10 feet in length, or individuals so large they hung over both edges of the road. These stories simply are not true. There is also misinformation about being able to age a rattlesnake by the number of segments on the
rattle. This is incorrect, because the snakes get a new segment each time they shed their skin. After years of accumulation, the segments may break off due to being so long that they get caught in brambles as the snakes crawl through brush.

**Natural History**

Eastern diamondbacks are considered diurnal, which means they are most active during daylight hours. ‘Active’ is a relative term though. Most rattlesnakes are somewhat lethargic, preferring to find a suitable spot and wait for prey to wander by them, or use that area for thermoregulation.

Rattlesnakes (and other reptiles) are poikilothermic, meaning that they cannot maintain their own body temperatures, they are dependent on surrounding temperatures and conditions for their body temperature. Over the late fall and winter, eastern diamondbacks enter a dormancy period in their underground shelters. They may emerge briefly on warm sunny days, but are not seen above ground regularly until the warmth of spring. Courtship and mating occur in late summer and early fall, and the female stores sperm over the winter, fertilizing their eggs the following spring. The babies, usually numbering around a dozen, are born alive in late August through September. The snakes have been found to live nearly 20 years in the wild, and beyond that in captivity. Adults have impressively large home ranges. The male diamondbacks may have home ranges over several hundred acres, and females around 200 acres. Within these home ranges, the snakes may have a favored hunting ground, and can often be located near a preferred log or bush for several days in a row, waiting for a prey item to wander by. Eastern diamondbacks eat warm-blooded prey almost exclusively, with small rodents like mice, rats, chipmunks and squirrels making up the majority of their diet. Large adults are fully capable of eating cottontail rabbits. In turn, young rattlesnakes may be eaten by king snakes and indigo snakes, red tailed hawks and other large raptors or wading birds, hogs and bobcats. Most adults are safe from predation, aside from persecution by humans.

**Conservation**

This species has suffered large declines across its range, mainly due to human impacts. Habitat loss and fragmentation due to agriculture and urbanization is one of the leading causes of their decline. The well-draining upland areas that are the favored habitat for the rattlesnakes make good land for farming practices and land for silviculture. Persecution by humans because of misconceptions is another cause of the population decline. Many people kill these snakes on sight. The widespread, and illegal, practice of dripping gasoline or blowing gas fumes down into gopher tortoise burrows kills rattlesnakes or drives them to the surface where they are collected or killed. This method was used for a long time as the standard practice for collecting the snakes during ‘rattlesnake roundups’.