



Rat Snake

Elaphe obsoleta

This large, nonvenomous snake derives its common name from its food preference—rodents. Also known by such local names as “black snake,” “pilot black snake,” and “chicken snake,” it is one of North Carolina’s most familiar and conspicuous reptiles, although it is sometimes confused with the smaller and faster-moving black racer (*Coluber constrictor*).

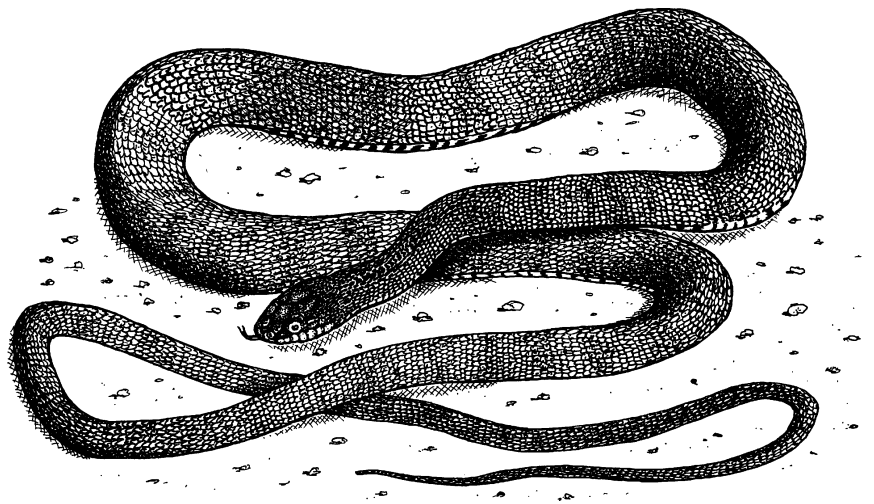
Two subspecies of rat snake occur in North Carolina—the black rat snake (*Elaphe obsoleta obsoleta*) in the Mountains and Piedmont, and the yellow rat snake (*E. o. quadrivittata*), which intergrades with the black rat snake throughout most of the Coastal Plain to produce a form often referred to as the “greenish rat snake.”

History and Status

Although habitat destruction has eliminated some local populations, and human activities cause other fatalities, the rat snake is still common throughout North Carolina and is one of the state’s most frequently encountered snakes. It is not currently listed under any category of special protection.

Description

This snake exhibits considerable geographic variation throughout its range. Specimens from the Mountains and Piedmont of North Carolina are glossy black as adults, with grayish mottled bellies and considerable white on the chin and throat. Specimens from the southeastern Coastal



Plain are greenish with four dark longitudinal stripes. Individuals from most of the inner and northern Coastal Plain may be predominantly black, greenish or intermediate. Their relatively slender bodies are shaped like a loaf of bread in a cross section; the flat belly meets the sides of the body at an angle, unlike the more cylindrical bodies of most snakes. This body shape is believed to be an adaptation for climbing.

Regularly reaching 5 to 6 feet in length, the rat snake is one of North Carolina’s longest snakes, surpassed only by the eastern coachwhip (*Masticophis flagellum*).

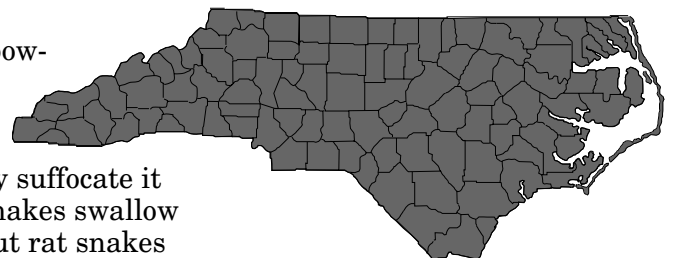
Habitat and Habits

Rat snakes occur in nearly every type of terrestrial habitat in North Carolina. They are the most skilled climbers among all our snakes, and often ascend trees, sometimes residing in cavities high above the ground. Unlike most other snakes, they may climb straight up the trunks of large trees without the benefit of branches.

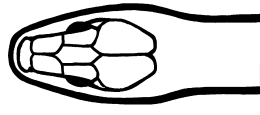
Rat snakes are powerful constrictors. They seize live, active prey in their mouths and quickly suffocate it in their coils. All snakes swallow their food whole, but rat snakes are better swallows than most and can easily ingest items much

larger than their heads. Most captive snakes readily accept live or dead food items. They have been known to swallow (usually with fatal results) inedible objects that somehow acquire the scent of food, most notably the artificial wooden or porcelain eggs that are sometimes placed in hens’ nests to stimulate laying. They have also swallowed such unlikely items as golf balls and glass bottles.

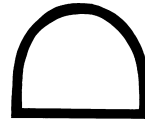
Rat snakes are fairly slow-moving. When approached in the open, an individual will often lie still and kink its body so that it somewhat resembles a crooked stick. If further molested or touched, it usually attempts to crawl away, but if cornered or restrained, many specimens assume a defensive posture, rapidly vibrating their tail and striking at their tormentor. The temperament of individual rat snakes varies, however, and occasional specimens may not bite, even if handled roughly. Like most snakes, rat snakes often release a foul-smelling musk



Range Map:
Found statewide ■



Rat snake head shape



breadloaf shape of snake body

WILD Facts

RAT SNAKE

Classification

Class: Reptilia
Order: Squamata

Average Size

3 to 6 ft.; record 8 ft., 5 in.

Food

Small mammals, birds and their eggs. Juveniles also eat lizards and frogs, especially treefrogs.

Breeding

Most mating takes place in the spring. Females lay a single clutch of 5 to 30 white, leathery-shelled eggs in late spring or early summer, in a damp, sheltered spot such as a rotten log, tree cavity or sawdust pile. Eggs hatch in late summer or early fall with no parental care.

Young

Hatchlings average 11 to 16 inches in length, slightly thicker than a pencil, and strongly patterned with dark brown or gray blotches on a pale gray background. Pattern darkens as the animal grows, and is usually replaced by the adult coloration in a year or two.

Life Expectancy

Has lived 23 years in captivity. Wild specimens are unlikely to live that long; most probably do not survive until adulthood.

from glands at the base of their tails when they are frightened or angry—an effective deterrent against some predators.

Adult rat snakes are active primarily by day, but juveniles are often nocturnal. Both are frequently encountered crossing roads, and they are commonly found in and around barns or other buildings, or under scrap metal, boards or similar sheltering objects.

Like other Temperate Zone snakes, rat snakes hibernate in winter, taking refuge in stump holes, root channels or other sheltered areas below the frost line. They may occasionally emerge to bask during warm periods.

Rat snakes and their eggs serve as food for many animals, including hawks, carnivorous mammals and kingsnakes.

Range and Distribution

Rat snakes range over most of the eastern and central United States, from Vermont and south-eastern Minnesota to southern Texas and the Florida Keys. They occur throughout North Carolina and are absent only from the highest elevations in the Mountains and from the most heavily urbanized areas.

People Interactions

Because of their climbing abilities and shelter-seeking habits, rat snakes enter human dwellings more frequently than any other North Carolina snake. Large shed skins found inside buildings are usually from rat snakes. Most specimens will bite if handled roughly or otherwise restrained, but a bite from even a large specimen is no more severe than a briar scratch. The economic value of these snakes as agents of rodent

control is well known to many farmers, and some intentionally place them in barns, corn cribs or even human dwellings for that purpose, regarding them as “good” snakes. They have also gained a “bad” reputation because of their habit of eating the eggs and young of chickens and other domestic fowl, and of entering bird boxes to feed on eggs and nestlings. Fortunately, many humans are at last beginning to understand what nature has always known—that snakes, birds and rodents are all “good,” and that their age-old interactions represent essential processes in healthy ecosystems.

References

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Credits

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