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hile most people associate lizards with warm southern climates, few realize that New York State is home to several lizard species. Found in isolated populations scattered around the state, these unique creatures often go undetected or misidentified.

Lizards are reptiles and are closely related to snakes. Though similar in body shape to salamanders, lizards can be identified by their scaly reptilian skin and sharp claws. Their skin protects them from desiccating in the drier environments they usually inhabit, and their claws make them adept climbers. In contrast, salamanders, which are amphibians, lack claws and have smooth skin that quickly dries out. Like snakes, lizards shed their skin as they grow. However, unlike snakes which shed their entire skin in one piece, lizards shed their skin in small pieces.

Depending on the species, lizards eat a variety of items. New York's lizards are attracted by movement and feed on live prey,

primarily insects, spiders, snails, millipedes and other small invertebrates which they capture by a sudden dash.

In New York, lizards breed in the spring shortly after emerging from hibernation. Unlike other breeding reptiles in the state, male lizards defend their territories from other males. The displaying male will perform a series of push-ups accompanied with head bobbing. If the intruding male does not respond by retreating, the defender may resort to direct attack and biting. Several weeks after mating, in late spring or early summer, female lizards lay eggs which hatch in mid to late summer.

Of the approximately 4,200 species of lizards found worldwide, New York is home to only four—three are native and one is introduced. All are at the northeastern edge of their range.

(Note: since many wild lizards have lost a portion of their tail, standard length for a lizard is usually listed as snout-to-vent length, whereas total length includes the tail.)

The northern fence lizard has strongly keeled scales that give it a dull, spiny appearance.

Males have unpatterned, grayish-brown backs, with bluish sides bordered by black, and blue throats. In contrast, females are distinctly patterned with irregular, wavy crossbands on their backs, white bellies, and a red, orange or yellow patch at the base of their tails. Newly hatched and young fence lizards look similar to adult females.

The northern fence lizard is a variable and wide-ranging species. A New York native, it occurs in only a few isolated colonies in the southeastern part of the state, preferring dry, rocky hillsides within oak or oak-pine forests. It is a great climber and can be spotted basking and feeding on rocks and logs, or around and on the base of trees or brush piles. When disturbed, this lizard quickly escapes into nearby protective cover. An introduced population also exists on Staten Island, the result of a release made in the 1940s aimed at providing a reliable source of food for snakes at the zoo.

During the mating season, male fence lizards perform an elaborate territorial display, standing stiff-legged and extending their heads to unfold their dewlap and reveal their blue throat. About two months after mating, females lay a clutch of 4 to 17 eggs in an excavation a few inches deep in damp soil. Eggs hatch in about 10 to 12 weeks. Young reach maturity by their second year and adults live four years or more.

Northern Fence Lizard

Threatened
 Adult standard length.. 3.0 inches
 Total length..... 4.5 to 7.5 inches
 Hatching..... 1.5 to 2 inches

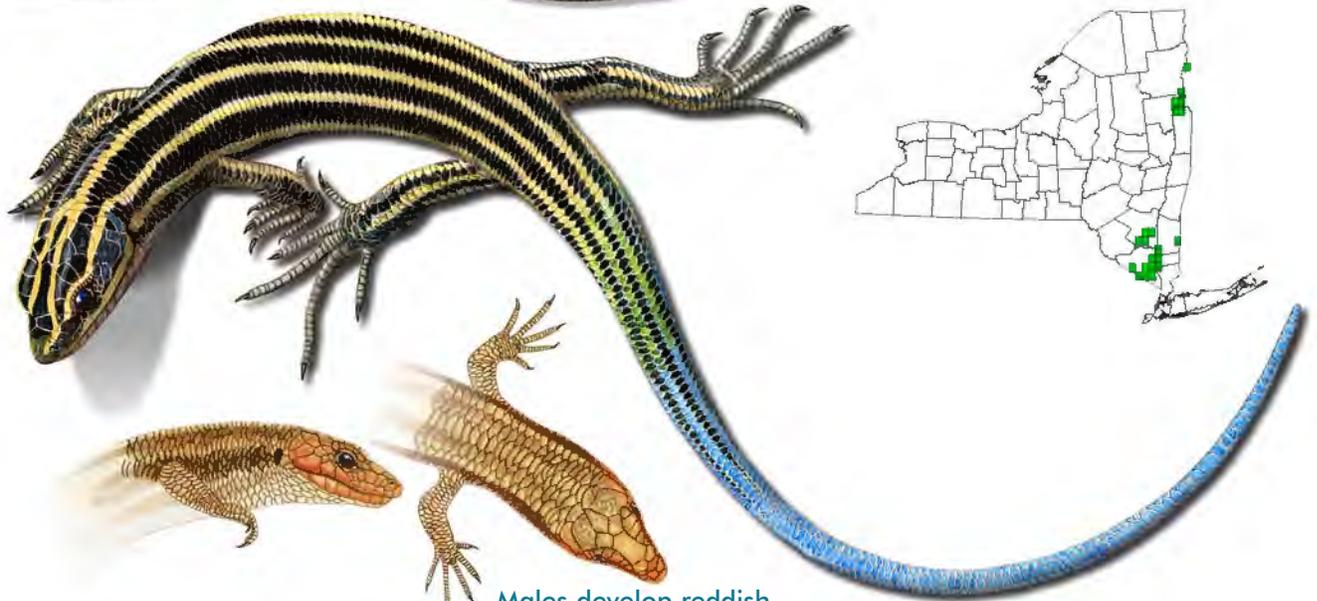


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Five-lined Skink

Adult standard length.. 3.5 inches
Total length..... 5 to 8 inches
Hatchling.....2 to 2.5 inches



Males develop reddish jaws during mating season.

With smooth, shiny scales that are typical of all skinks, the five-lined skink gets its name from the five light yellow or whitish stripes that run lengthwise along its body, eventually fading on the tail. Juveniles have a uniform black body with sharply contrasting stripes and a brilliant blue tail. As the skink matures, the blue tail fades to gray. The stripes on the female's head also fade with age, but the body stripes remain distinct. Older male skinks also experience color changes, sometimes completely losing their stripes and becoming a uniform olive brown.

Although five-lined skinks can occur in either moist or dry areas, in New York they usually inhabit rocky summits and slopes within mixed deciduous forests. Largely terrestrial, they generally remain along the ground, though they may occasionally climb trees and shrubs. On warm, sunny days, they frequently bask on rocks and logs. Skinks are generally active from April to October, hibernating underground or in decaying logs during the winter. In New York, they are found in the Hudson Highlands, the Taconic Ridge, and the Shawangunk Ridge in the southeastern part of the state, as well as in isolated locations in the mountains near Lake George and Lake Champlain. Though these lizards occur on the Canadian side of the St. Lawrence River in the Thousand Islands area, they have yet to be found on the New York side.

Breeding begins in late May, during which time adult males develop reddish jaws. In June or July, females deposit 4 to 20 eggs under rocks, rotting wood or loose soil. The females remain with their eggs until the young hatch in late summer.

Five-lined skinks primarily eat insects and other invertebrates, but large individuals may take small shrews and lizards, including juvenile skinks. To avoid predation, skinks use their quick speed to dart from open ground into or under some form of cover.



Coal Skink

Adult standard length.. 2.5 inches
Total length..... 5 to 7 inches
Hatchling2 inches

A small lizard covered with smooth, shiny scales, the coal skink occurs in isolated populations extending from western New York southwest along the Appalachian Mountains to central Alabama and northern Mississippi. It has two broad black stripes on its sides, bordered by yellow stripes, that run the length of the body and onto the tail. While males and females generally look alike, during the breeding season, males develop a reddish hue on the sides of their head. Hatchlings and juveniles are patterned like adults but are darker and have very distinctive bright blue tails. Many believe the blue color, which contrasts sharply with their habitat and fades as skinks mature, is a signal to distract predators. Others, however, suggest the blue tail is especially distasteful and serves as a warning to predators.

Males develop reddish hue on the side of their head during mating season.



Preferring forested areas, coal skinks are typically found in or near swamps and other wet areas, but also occur on rocky or shale-covered hillsides with water nearby. They are active during the day, but unlike fence lizards which frequently bask, coal skinks usually stay under objects, such as loose flat rocks, leaf litter or loose moss. While their coloration helps them blend in with the environment, their main defense against predation is their surprising quickness. When startled, they will take to water.

Coal skinks breed during May in New York. One month later, females deposit a clutch of eight or nine eggs in nests located in rotten logs or under rocks. Female guard their eggs until hatching occurs in four to five weeks.

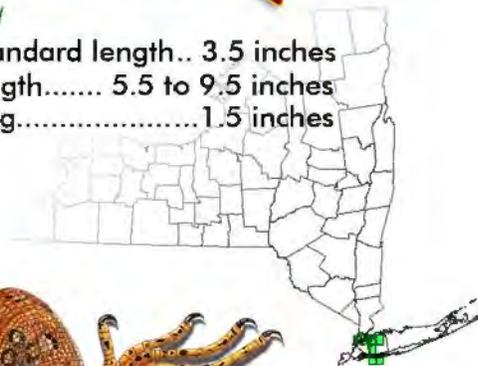
Italian Wall Lizard

Introduced

Adult standard length.. 3.5 inches

Total length..... 5.5 to 9.5 inches

Hatchling..... 1.5 inches



While adult Italian wall lizards are highly variable in color and pattern, they are generally tan with green on the head, neck, and most of the upper body. Younger lizards are duller with no green and have distinct dorsal stripes. In addition, their underside is white and they may have various dark markings on the body. Males are larger than females.

Also known as the ruin lizard, the Italian wall lizard is not native to New York. Originally from the Mediterranean area, it was introduced around 1967 in the Town of Hempstead, Nassau County, most likely the result of an accidental escape from a captive population believed to be from Rome, Italy. It adapted well to urban and suburban settings, and is now permanently established on western Long Island and in isolated pockets in New York City as far north as the Bronx.

Italian wall lizards are active in New York from April to October. Their diet consists primarily of insects. During the winter months they become inactive and have little freeze tolerance. As such, they are not likely to spread much further north. Breeding takes place during the spring and summer. House cats and some species of birds are believed to be their main predators.

[Author's Note: Although natural range expansion associated with an invasive species undoubtedly helped the dispersal of the Italian wall lizard, deliberate relocation of individuals from the core population is likely responsible for their rapid spread in the last ten years. Release of these lizards, or any wildlife, is illegal without a permit. While often well-intentioned, such releases can introduce diseases to native wildlife populations and upset natural predator-prey relationships that have evolved over millennia.]

Escape Artists

Lizards have a unique way of escaping capture—their tails break off when grasped by potential predators such as snakes, birds, mammals and even other lizards. Muscles within an unattached tail then cause it to twitch for several minutes, hopefully distracting a predator's attention long enough to allow the lizard to escape. The tail will regenerate, but it will not obtain the length or color of the original tail.

Maps are based on New York Amphibian and Reptile Atlas data, a project funded by Return A Gift To Wildlife, U.S. Fish & Wildlife Tax Check-off, U.S. Fish and Wildlife Service Partners for Wildlife Grant, and the NYS Biodiversity Research Institute..

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