

# Five-Lined Skink

North Carolina Wildlife Profiles



# **Five-Lined Skink**

# Eumeces (Plestiodon) fasciatus

Three species of five-lined skinks occur in North Carolina—the five-lined skink (*Eu*meces (*Plestiodon*) fasciatus), southeastern five-lined skink (*E.* (*Plestiodon*) inexpectatus) and broadhead skink (*E.* (*Plestiodon*) laticeps). The five-lined is probably the most common and widespread of the three, which are sometimes difficult to distinguish. Juveniles of all three species have five stripes and a bright blue tail. Broadhead skinks reach a much larger size than the other two, and adult males, with their bronze bodies and broad orange heads, are unmistakable. The other two species are perhaps most easily identified by examining the scale rows beneath the tail. The middle row is distinctly wider than the other rows in the five-lined (and the broadhead) skink, and about the same size as the other rows in the southeastern five-lined skink. Experienced observers can often distinguish adults of each of the three species at a glance, but juveniles are more difficult. All three of these skinks are sometimes known as "scorpions" in rural folklore and erroneously regarded as venomous. They are completely harmless.

# Description

This lizard is highly variable in color and pattern, depending upon the age and sex of an individual. Juveniles are black, with five distinct yellowish stripes and a bright blue tail. Females usually retain this pattern but lose their bright colors as they age. Old adult males may lose their stripes altogether and develop an overall bronze coloration with an orange or reddish head, which becomes more brightly colored during the breeding season. Skinks have smooth, shiny scales and streamlined bodies, reinforced with bony plates known as osteoderms.

## **History and Status**

The five-lined skink occurs over most of North Carolina and is quite common in rural areas throughout most of the Piedmont and inner Coastal Plain. Urban and suburban development has destroyed many populations, but pockets of these lizards still occur n vacant lots in some of our larger cities. The species is not currently listed under any category of special protection.

# Habitats and Habits

These skinks occur in a variety of habitats but prefer fairly moist areas. They are most commonly associated with deciduous forests, being especially common around cutover woodlots, clearings or other open areas in or near deciduous or mixed woods. Good spots to observe these lizards are old buildings; rock, log or trash piles; road cuts; stone walls; boardwalks; and bridge foundations. They are largely terrestrial and are often found on the ground under sheltering objects, but they are also excellent climbers, often ascending trees to escape danger. Sometimes they live and nest in tree cavities. Five-lined skinks, like all of North Carolina's native skinks, are harmless and non-venomous.



Five-lined skink missing most of its tail (Photo: Judy Gallagher)

# Range and Distribution

This skink ranges over most of the eastern United States, from New England and southern Ontario to northern Florida, west to Minnesota and eastern Kansas, Oklahoma and Texas. It occurs throughout most of North Carolina, but it is absent from the highest elevations in the Mountains and from some portions of the Coastal Plain, including the Outer Banks. It is generally most common in the Piedmont.

## Range Map



■ Five-lined skink range map

In the Coastal Plain they are most commonly found in hardwood areas, often along rivers or other permanent water, and they usually avoid pocosins, pine flatwoods and sandhills—habitats more typically favored by the southeastern five-lined skink.

Five-lined skinks are diurnal, and most active on warm, sunny days. They hunt insects and other living prey largely by sight but may also use their tongue to locate and identify food. Active prey items are seized in the mouth and often shaken vigorously before being swallowed.

These lizards have many defenses against predators, among them speed and secrecy. They may ascend trees, take refuge under debris or even enter water to escape danger. The stripes create an optical illusion that makes a fleeing lizard difficult to see and causes it to appear faster moving than it really is.

Like many other lizards, these skinks have fracture planes in the vertebrae of their tails. The tail breaks easily if seized by a predator, and the broken tail continues to move for several minutes, creating a distraction while the skink attempts an escape. If the skink survives, the broken tail will regenerate in time, but the new tail will be shorter and less brightly colored than the original. The bright blue coloration may serve to direct the attention of some predators toward the expendable tail. If this fails and a skink is seized by the body, it will usually turn and bite its assailant with its strong jaws. The skinks' compact bodies and armored scales make them a difficult mouthful for some predators, and there is some evidence that they may taste bad to some animals. Despite these strategies, they are eaten by numerous predatory birds, mammals and snakes. Kingsnakes are especially fond of them, and the scarlet kingsnake specializes in feeding on skinks. In winter, skinks hibernate in stump holes or other protected areas below the frost line.

## **Human Interactions**

Five-lined skinks are common around human dwellings, especially in rural areas, and frequently enter buildings, where they are often welcome because of their insect-eating habits. They quickly retreat if closely approached. Some people, however, still fear these completely harmless lizards. Although most specimens will bite if handled, a bite from a large adult produces only a pinch that is more startling than painful. These skinks coexist well with humans in most rural areas, and old buildings, woodpiles and similar structures provide ideal habitat. Like most wildlife, however, they are threatened by urbanization. House cats kill great numbers of these lizards and may even eliminate entire populations. Pesticides may also take a heavy toll. From an economic standpoint, skinks are probably almost entirely beneficial because of the numbers of insects they consume. Children may enjoy catching skinks, but they are not easy to maintain in captivity and make less-than-ideal pets.

References

- Behler, John L., and F. Wayne King. The Audubon Society Field Guide to North American Reptiles and Amphibians (New York, N.Y.: Alfred A. Knopf, 1985).
- Conant, Roger and Joseph T. Collins. A Field Guide to Reptiles and Amphibians of Eastern and Central North America (Boston, Ma.: Houghton Mifflin Company, 1991).
- Martof, Bernard S., William M. Palmer, Joseph R. Bailey and Julian R. Harrison III. Amphibians and Reptiles of the Carolinas and Virginia (Chapel Hill: University of North Carolina Press, 1980).

Palmer, William M., and Alvin Braswell. Reptiles of North Carolina (Chapel Hill: The Univ. of North Carolina Press, 1995)

#### Credits

## Wild Facts

## Classification

Class: Reptilia Order: Squamata Family: Scincidae

### **Average Size**

5 to 8 in. (head-body maximum  $3\frac{3}{8}$  in.)

## Food

Mostly insects, spiders and other arthropods, earthworms, snails and occasionally small vertebrates.

### Breeding/Young

Mating usually takes place in April and May. Males are aggressive toward one another during this time, often exhibiting some territorial behavior. Females lay a single clutch of about 6 to 12 white, leathery-shelled eggs, usually in May or June, in rotting wood or under a sheltering object such as a large rock or log. A female remains with her eggs, turning them frequently and guarding them until they hatch, usually in July or August. Young are  $2 - 2\frac{1}{2}$  in. at hatching, with five distinct yellow, white or orange stripes on a black ground color, and a bright blue tail. Color and pattern fade with age. Independent upon hatching.

## Life Expectancy

Unknown. Published longevity records for captive specimens are for only 2 to 3 years, but these lizards are probably capable of living much longer.



Five-lined skink with clutch of eggs (Photo: Brian Tilley)