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LIZARDS OF SOUTH FLORIDA PART I: NATIVE SPECIES

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Lizards make up one of the most diverse and successful groups of modern reptiles. They occur in an incredible variety of habitats, and through evolution have undergone physical changes that adapt them to their environment. These adaptations allow different species of lizard to live in mountains, deserts, oceans, and forests. Some withstand the scorching sun along the equator, while others survive the arctic freeze. Their bodies may be adapted to climb trees, glide through the air, dive to the ocean floor, burrow in the soil, or race along the ground.

Too often lizards have been overlooked as valuable contributors to the environment. The lizards of South Florida feed mostly on insects and other small invertebrates, making them economically important to man as natural pest controls. More important still is their ecological role as predators and prey. The survival of many larger lizards, birds, mammals, and snakes is dependent on the availability of lizards as food. They are an essential element in the balance of nature.

Today, lizards, as well as many other types of wildlife, are rapidly disappearing from areas where they were once abundant. Land development, pollution, indiscriminate and accidental killing, and the introduction of exotic animals and plants are all factors in their decline. The disappearance of some animal populations is caused by habitat loss. Another problem our native lizards must face is the potential for competition from non-native species. Non-native lizards do not naturally occur here, but have been accidentally or deliberately introduced by man to south Florida's subtropical environment. More information about Florida's exotic lizards is available in *Lizards of South Florida; Part II: Non-native species*.

Development not only destroys habitat, but it also brings people in closer contact with lizards. Many people fear them out of misunderstanding, others are fascinated by their abilities to climb walls, change color, and lose their tails. The following descriptions will acquaint you with the native lizards of South Florida and may make your lizard-watching more enjoyable.

The Cooperative Urban Wildlife Program is a cooperative effort between the Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida and Florida Game and Fresh Water Fish Commission's Nongame Wildlife Program.

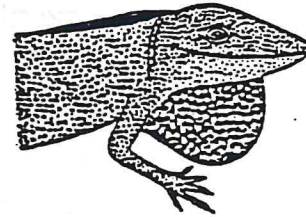
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ANOLES – family Iguanidae

Anoles are the most commonly seen lizards in Florida. Most people call anoles "chameleons" due to the green anole's ability to change color; however, anoles are only distantly related to the chameleon, and in fact are more closely related to the iguana. Anoles are small lizards that are adapted for climbing trees, shrubs, fences and walls. They are frequently seen basking in the sun or hunting insects around Florida homes. Male anoles have a large throat fan which is often displayed, along with "push-ups" and head-bobbing behaviors when they court or defend territories.

Florida has only one native species of anole, the green anole (Anolis carolinensis). It is 5-8 inches (13-20 centimeters) long and has the ability to change its color from green to brown. It can be distinguished from exotic anoles by its long pointed snout and the pinkish throat fan of the male. Anoles lay their tiny white eggs in moist places, which may include the soil around your potted plants!



Green anole

SPINY LIZARDS – family Iguanidae

Members of the same family as anoles, these are very distinctive lizards with pointed scales on their backs. This rough appearance helps these arboreal lizards blend in with the tree bark. While they eat mostly insects, they are also known to feed on smaller lizards, spiders, and other invertebrates.

South Florida has only one species of spiny lizard, the Florida scrub lizard (Sceloporus woodi). This rare lizard only reaches a length of 3-5 inches (7.5-20 centimeters). It is usually a pale or grayish brown, and has a dark band on each side running from its neck to the base of its tail. Unlike other spiny lizards, which frequent trees, this species is mostly terrestrial. The Florida scrub lizard can be found in Florida scrub areas from Marion and Putnam counties southward to Dade County.

SKINKS – family Scincidae

Skinks are smooth, shiny, active lizards that may be seen scurrying quickly along the ground in search of insects. At first glance they may resemble small snakes due to their tiny limbs and cylindrical bodies. To escape from predators trying to catch them, skinks have tails that break off easily. The tail continues moving as an additional distraction

While the skink runs away. Some species also have tails that are a brighter color than their bodies, good lures to keep predators from attacking their heads. Skinks are among the few lizards to demonstrate any parental care. The female skink will guard her eggs after laying them, sometimes remaining coiled around them, until they hatch.



Female skink guarding eggs

South Florida has 3 native skink species, the ground skink, the peninsular mole skink, and the southeastern five-lined skink. The one most often seen in urban settings is the ground skink (Scincella lateralis). This skink reaches a maximum length of 5 inches (13 centimeters). It is light brown with a wide dark stripe along its sides and has a bluish belly with a yellow center. The ground skink is found in all habitats that have ground cover such as grass or leaves. They are commonly seen moving across lawns in a snake-like manner. Occasionally a ground skink may take a bite out of its own tail, mistaking it for some wiggling prey!

South Florida's two subspecies of the mole skink also move with a snake-like wriggle. One, the peninsular mole skink (Eumeces egregius cnocrepis) is a secretive skink that can be up to 6 inches (15 centimeters) long. It has a yellow stripe running on each side of its brown body, and its tail is pink-red or light blue. The peninsular mole skink inhabits sand pine scrub and dry hammocks where it can burrow in the loose, dry sand. Therefore it is only found in a few areas where there is still suitable habitat.

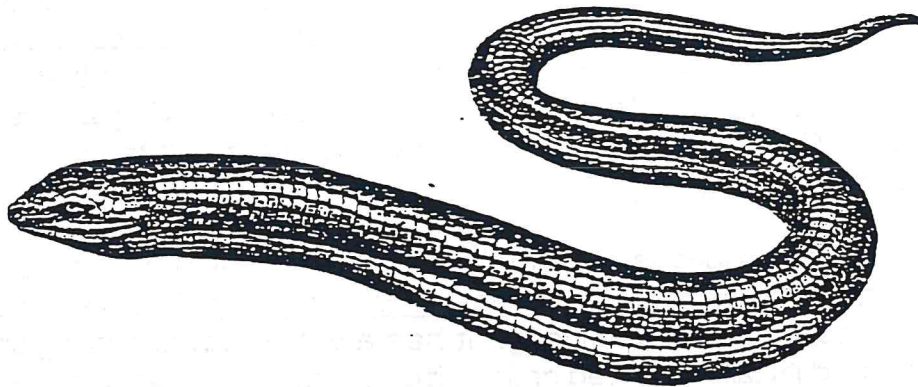
South Florida has one subspecies of skink whose existence is threatened. The Florida Keys Mole Skink (Eumeces egregius egregius) is found only in the Florida Keys, where its habitat is continually being reduced by development. This shiny, brownish skink has light lines running along its back and may be up to 5 inches (13 centimeters) long. Its reddish tail makes up 2/3 of its length. The Florida Keys mole skink is found in sandy areas near the shoreline, where it can burrow under debris and in the loose soil.

The largest skink in South Florida is the southeastern five-lined Skink (Eumeces

inexpectatus). This species of skink may be as long as 8 inches (20 centimeters). The females are dark brown with 5 yellow-white stripes running down their backs, while the males have fainter stripes and may be light brown. The tails of both sexes are brown to bluish for adults, and bright blue with white stripes for juveniles. Southeastern five-lined skinks inhabit drier habitats, but also may be found around wetter pine flatwoods and cypress domes and strands. This skink also can be found around buildings and wood piles.

GLASS LIZARDS -- family Anguidae

Glass lizards are legless lizards, and therefore are often mistaken for snakes. However, they can be distinguished from snakes by appearance and behavior once you learn what to look for. Snakes have no external ear opening, no eyelids, and have large scales on their bellies. Glass lizards have visible ear openings, eyelids, and small scales on their bellies. When observing a glass lizard you may notice that it laps its water and chews its food. Snakes swallow their food whole and suck water into their mouths. Glass lizards are the largest lizards native to Florida, but also are among the most secretive. They spend most of their time burrowing through the soil and ground cover in search of insects. Like many lizards, their defense against predators is a tail that can break off and grow back. One can appreciate why 2/3 of the glass lizard's total length is tail!



Glass lizard

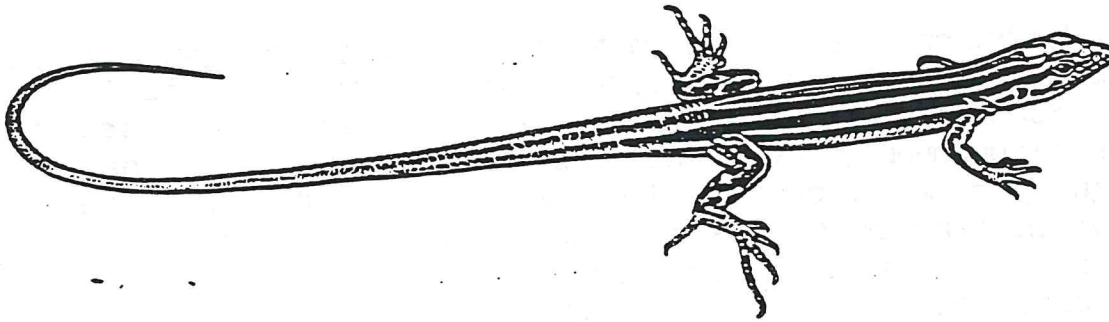
The eastern glass lizard (Ophisaurus ventralis) is sometimes seen basking on roads in the early evening and mid-morning. It is a long lizard, reaching up to 43 inches (109 centimeters). Its body is black with squarish emerald spots, and it has a bright yellow belly. Juveniles have similar markings but have a tan body. During the day the eastern glass lizard hunts insects, especially crickets and grasshoppers.

A more secretive relative is the eastern slender glass lizard (Ophisaurus attenuatus longicaudus), which is rarely seen above ground in the fields where it hunts for insects. It may be 42 inches (106 centimeters) long, and has a light brown body with a dark stripe running down its back and on each side.

The smallest glass lizard in south Florida is the island glass lizard (Ophisaurus compressus). It is up to 25 inches (64 centimeters) long with a pair of dark brown stripes on each side of its light brown body. The color of its underside can range from yellow-tan to pink. The island glass lizard is found in dry habitats such as sand pine scrub, coastal hammocks, and dry pine flatwoods. It feeds on insects, spiders, and other invertebrates.

WHIPTAILS – family Teiidae

The members of this lizard family can be easily recognized by their long tails and active nervous prowling. There are thousands of tiny scales on their backs, and their tails are rough to the touch.



Six-lined racerunner

The six-lined racerunner (Cnemidophorus sexlineatus sexlineatus) is the only native species of whiptail in south Florida. It may reach a total length of 9.5 inches (24 centimeters) and it has a wedge-shaped head. The body is brown with 6 yellow stripes running down the back. Its hind legs are much larger than the front legs, and the fourth toe on the hind foot is extremely long. This body form is adapted for speed, earning this swift moving lizard its name. Reports indicate that it can run at speeds of 17 miles per hour (27 kilometers per hour)! The male of this species has a bluish throat and belly. Look for the six-lined racerunner in dry habitat with open ground, such as sand dunes. It is most active in the heat of the day when it hunts insects.

GECKOS -- family Gekkonidae

Geckos are stout lizards that are well adapted for climbing. If you notice lizards around your home at night they are probably geckos. They have big catlike eyes for hunting at night, with pupils that contract to slits in the daylight and wide in the dark. Many geckos have adapted to living in, on or around houses since these attract insects, their favorite prey. The gecko returns this favor by keeping our neighborhood pests under control.

It is amazing to watch a gecko in action. With adhesive toe pads it can run over a windowpane and across a ceiling as if to defy gravity! If this climbing skill is not enough to keep from being caught by a predator, the gecko can escape by relying on its ability to shed its tail in an instant. This escape mechanism is used so often it is almost impossible to find an adult with its original tail!



Gecko toe pad

South Florida has only one native gecko, the reef gecko (Sphaerodactylus notatus notatus). It is Florida's smallest native lizard, reaching a maximum length of 2 inches (5 centimeters). You might see a reef gecko in vacant lots or around trash piles in the evening when it is out hunting insects. The head and body are brown, and the scales are keeled, giving it a rough appearance. It is easy to tell the female from the male by the two yellow stripes she has behind her head. If you are very observant, you may even be able to find where she lays her eggs. Look closely at debris and damp logs; a female gecko may have adhered her sticky white eggs there.

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