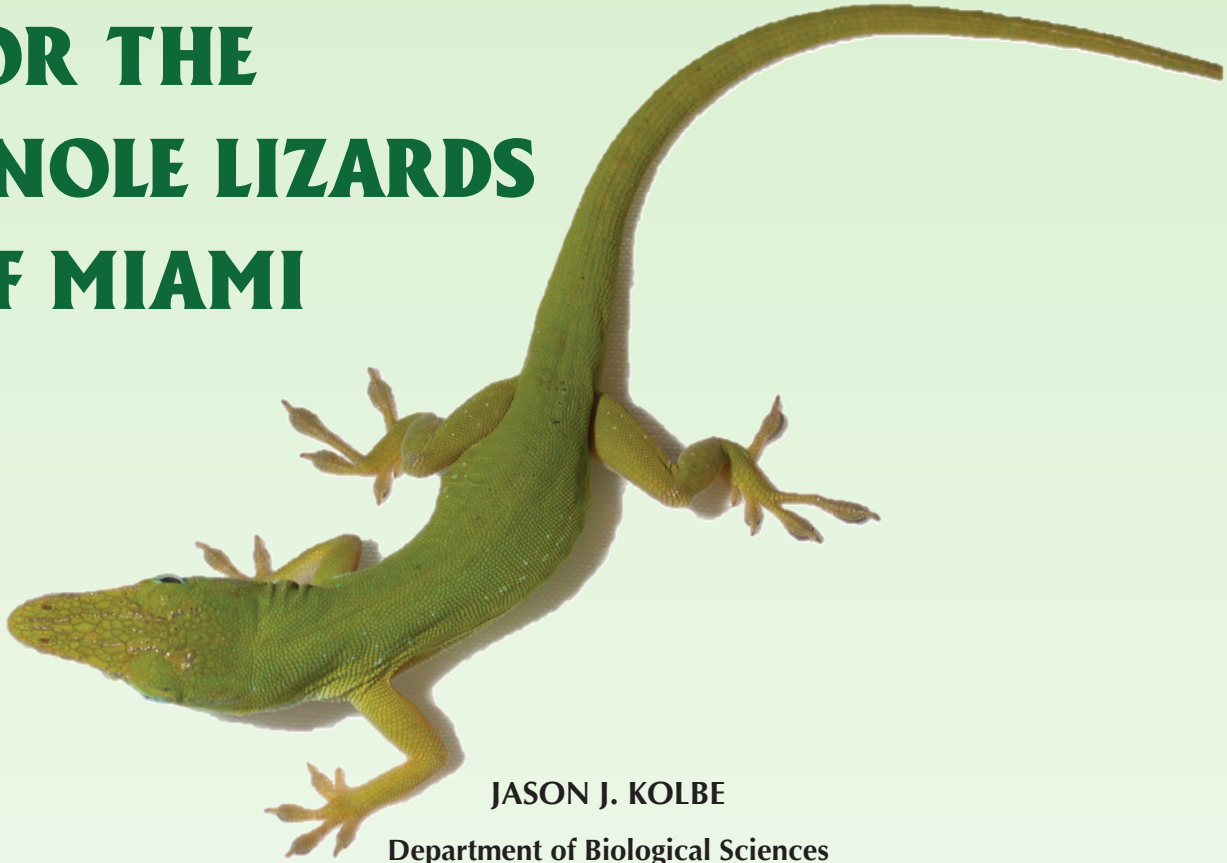


FIELD IDENTIFICATION GUIDE FOR THE ANOLE LIZARDS OF MIAMI



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General description: Anoles (lizards in the genus *Anolis*) are the most common and abundant lizards found in Miami. The Green Anole is the only species native to the United States. The other anoles present in Miami are non-native, resulting from deliberate or accidental introductions of species from Caribbean islands. Anoles are typical lizards in many ways. They hunt for small prey (mostly insects) using excellent eyesight and color vision. Anoles lay eggs, usually only one or a few eggs at a time, but they do this every few weeks from spring to fall. They are capable of detaching and re-growing their tails, which is thought to help them escape from potential predators. Anoles have two notable features lacking in most other lizards: dewlaps and toepads. The **dewlap** is a piece of loose extendable skin on the throat, found primarily in males. Anoles extend their dewlaps to communicate with each other and each species has a different colored dewlap. Males frequently display to warn other males of their presence, along with extending their dewlap, they also do head-bobs and push-ups – sending a clear message: "back off man, this is my tree trunk." **Toepads** are enlarged scales (called lamellae) on the underside of the fingers and toes. Each lamella is covered in millions of microscopic hairlike structures called setae. Toepads allow anoles to cling to smooth surfaces, such as leaves or walls. Geckos aren't the only master climbers in the lizard world!



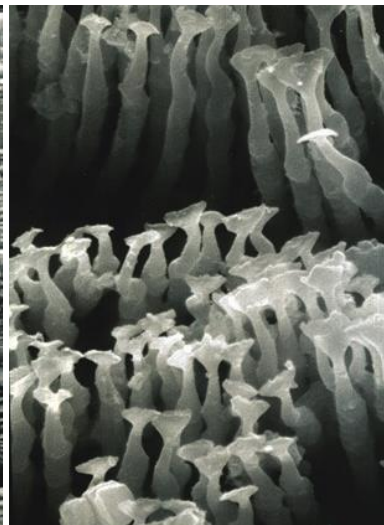
Dewlap



Toepads



Lamellae



Setae

The following field identification guide provides a species-by-species description of the six species of anoles you are most likely to see during your surveys. Several days before you begin your surveys, take some time to observe and identify the lizards in your survey area.

Good luck!

Green Anole (*Anolis carolinensis*)



Description: The Green Anole is the only native species of anole in the United States. You can recognize it (not surprisingly) by its bright green coloration, but be careful – these "green" lizards can change their skin color to a dark brown. Don't confuse it with the Brown Anole, which is a different species. Remember, green anoles can turn brown, but brown anoles can't turn green! Similar to most anoles, Green Anoles eat primarily small insects, but they are also known to lick nectar from plants. This species is mostly arboreal (lives in the trees), but occasionally can be found on the ground as well as on bushes, houses, and fences. Males are up to 7.5 cm snout-vent length and females are somewhat smaller.

Key features: Males usually have a bright pink to reddish dewlap, and when displaying they often have a crest along their head and neck and a black patch between their eye and ear opening. Females have a light line along the middle of their back. The only other all green anole in Miami is the Giant Anole, which is somewhat larger and has a yellow dewlap. Green Anoles have longer and pointier snouts than other anoles in Miami.



Crested Anole (*Anolis cristatellus*)



Description: The Crested Anole is a relatively recent introduction to Miami, coming from Puerto Rico in the mid-1970s. This species is usually found on the ground up to around 1.5 m high, typically perching on tree trunks, fences, and houses. In contrast to the Brown Anole, which better tolerates open, sunny areas, the Crested Anole often sticks to shadier habitats. Male dewlaps are yellow in the center with an orange border and range from pale to bright. The largest males are about 7 cm snout-vent length, whereas females are usually less than 5 cm snout-vent length.

Key features: The Crested Anole is olive-tan to almost black in color and individual lizards can change color. Broad bands on the body and tail can be found on some individuals. The easiest distinguishing feature, as the name suggests, is the prominent crest found on the tail of adult males – but not all males have tail crests! This species is easily confused with the Brown Anole, which is about the same size and similar in behavior and habits. As compared to the Brown Anole, the Crested Anole has a light ring around the eye and a light stripe above the front limb. Also, females have a cream-colored stripe in the middle of their back.

Brown Anole (*Anolis sagrei*)



Description: The Brown Anole is by far the most abundant lizard in Miami. This non-native species comes from the Bahamas and Cuba, and has spread to the entire state of Florida and beyond. They are often found on the ground or perching low on tree trunks (up to 1.5 m high). Like tourists at the beach, these guys love the sun – they are often active during the hottest parts of the day. All anole species display, but Brown Anoles are the champions – they are often seen fanning their brightly colored dewlaps, and doing head-bobs and push-ups with the intensity and stamina of an Olympic athlete.

Key features: Males have red-orange dewlaps, sometimes with a yellow border or blotches. Females often have a pattern with diamonds, bars, or a stripe running down their back, whereas Crested Anole females only have a cream-colored stripe. Unlike Crested Anoles, Brown Anoles do not have a light ring around the eye or a light stripe above the front limb. Instead, they often have two dark bars above their eyes. These guys are never green!



Bark Anole (*Anolis distichus*)



Description: The Bark Anole is introduced from the island of Hispaniola (Haiti and the Dominican Republic). It is usually found perching higher than Brown and Crested Anoles, from 1-3 m above the ground on wide tree trunks. These lizards are very fast and often dash around the tree trunk before you can get a good look – a behavior called "squirreling." They are the smallest anole species in Miami, males and females are about the same size (no larger than 5 cm snout-vent length). Their favorite food is ants!

Key features: Males have white to yellow dewlaps, sometimes with an orange spot. Their bodies can be gray to yellowish brown, sometimes greenish, and their tails are usually banded yellow with black at the tip. They have a dark bar on the top of their head between their eyes, a light ring around their eye, and light and dark flecks of variable size covering much of their body.



Knight Anole (*Anolis equestris*)



Description: The Knight Anole is introduced from Cuba, arriving in Miami-Dade County in the 1950s. It is by far the largest anole found in Miami at up to 17 cm snout-vent length. This species is highly arboreal, keeping to large branches in the canopy in cool weather, but often perching low on trunks during the midday in the summer. Knight Anoles eat insects, fruits, and small vertebrates – including other species of anoles. Both males and females of this species have light pink dewlaps!

Key features: Usually a brilliant green color, but sometimes changing to a deep brown. This species has two light yellow or white stripes, one along its upper lip and the other on its shoulder. No other anole in Miami has such a large and bony head.



Giant Anole (*Anolis garmani*)



Description: The Giant Anole is native to Jamaica, being introduced to Miami in the 1970s. Despite its name, this "giant" rarely exceeds 10 cm snout-vent length and never gets as big as the Knight Anole. It is usually found high in the canopy and eats a variety of foods, similar to the Knight Anole. This species is uniformly green, but can turn dark brown like other anoles. Both males and females have yellow dewlaps with male throat fans being somewhat larger.

Key features: Similar in color to the Green Anole (being bright green), the Giant Anole is somewhat larger, has a spiny crest along its neck and back, has yellow around its eye, and has a yellow dewlap, not pink like the Green Anole.

