

TRAVELOGUE

The Blue Anoles of Isla Gorgona

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The idea for this trip began to form about six years ago. A group of *Anolis* enthusiasts (yes, believe it or not, such folks do exist) were corresponding on our website when someone posted a photograph of a pure blue anole with the label “*Anolis gorgonae*.” At that time, none of us had ever heard of it. Considering that over 350 species of *Anolis* have been described, this was not too unusual. I was familiar with all of the West Indian species (at least by name), and, based on the looks of the animal in the photograph, I suspected that it was a continental form in a group of species frequently assigned to the genus *Norops*¹. However, I was skeptical that this was even a real lizard. It was a pure blue, from head to tail, and the picture just looked like it had been doctored. Not only did I suspect that the color was enhanced, but a name like *gorgonae* (after a mythical creature) suggested that this, too, was a mythical creature and that someone was playing a prank on the group.



Colombia sits at the junction of Central and South America, features a vast array of varying habitats, and is a hot-spot of biodiversity.

Blue lizards do exist. Species such as *Cyclura lewisi* and *Chamaeleo (Furcifer) pardalis* are blue, and several anoles and some Day Geckos (genus *Phelsuma*) are at least partially blue. So, why was this animal so hard for me to take seriously? This lizard was just too blue to believe. It looked as if it had been painted blue; it had no pattern and no stripes or spots. What purpose could being solid blue serve any creature in a natural environment (and, in nature, logical reasons almost always exist for certain colors or characters)?

A day or two later, a group member from Germany confirmed that *Anolis (Norops) gorgonae* was a real species, and was even able to identify the geographic origin — Isla Gorgona off the Pacific coast of Colombia. I searched in earnest to find more information, but met with very little success. I did determine that Isla Gorgona was a real place, but... was the lizard really blue? I couldn't find any natural history information or any descriptions that verified the color. Some subsequent exchanges on the website discussed the possibility of going to Isla Gorgona to find out for ourselves, but, at that time, the western coast of Colombia could be a dangerous place, with paramilitary guerrillas and government insurgents in control of some areas. Some problems remain, but, as time passed, the image of the blue anole of Gorgona haunted me. Every so often, I would do an internet search in an effort to find more information or photographs of the species. Discussions (mostly less than serious) about getting to Isla Gorgona persisted — but too many obstacles appeared to preclude a casual trip to the island. I had checked, and getting there was certainly not like traveling to one of the easy-to-visit islands in the West Indies with which I was quite familiar. Isla Gorgona is a Colombian national park (and a prison?), and you need permission to visit. In addition, the logistics of getting to the island are daunting. The park service does not provide transportation. So, how could an *Anolis* fanatic get there?

One day, as luck would have it, Nathan, the very same person who posted the picture of the anole, met and married Ingrid, a Colombian woman. Could this finally be an in? It was! Still, it didn't happen overnight. Over the next year, I continued to search for information. I even enlisted the help of Sandy Echternacht (University of Tennessee), who had spent considerable time in the Neotropics, and he managed to find a publication about the herpetofauna of Gorgona. It was from the early 1970s and in Spanish, but it was far more than I had been able to find. I also came across another picture of a blue lizard that

¹ See the footnote in the article by Alexander Gutsche (*Iguana* 12:240–243) about the status of the genus *Norops*.

was linked to Dr. Kirsten Nicholson's website. I contacted her and found out that she had been to Isla Gorgona just a few months earlier — now, I was making some real progress. We corresponded via email, and she helped clarify the status of some of the other anoles that occurred on the island and which the publication (in Spanish) had misidentified.

Getting to Isla Gorgona

Traveling to any country is always an adventure, but, when you are able to dive into the culture with one of its citizens, you really get a different perspective. I had been to Colombia before, but, after the first day, I could tell I was going to see a lot more than I had previously.

The trip began in the beautiful old city of Cartagena, where I attended Nathan and Ingrid's wedding. From there, we spent some time in Bogotá and Cali before setting out for Gorgona. We would be joined on the trip by one of Nathan's friend, Dominic. While herpetology is not his interest, he would prove to be a good sport and supportive of our efforts. Getting to the island is no easy task, and definitely not something for the casual traveler. From the U.S., you would have to take several flights on progressively smaller planes and then a boat ride from two optional points of departure. We chose the town of Guapi, since the boat ride from there was about eight hours shorter; however, the boat was much smaller than I'd prefer for a voyage into the Pacific.

As soon as we landed in Guapi, the plane was surrounded by Colombian marines with automatic weapons. They established a perimeter for the safe debarking of passengers. The entire town had a strong military presence, a constant reminder of how dangerous this area of Colombia could be.



The old city of San Diego, Cartagena, Colombia.



The river town of Guapi.



Lush Isla Gorgona.

Guapi is an interesting little river town. No roads pass in or out of the city, which has only the small airstrip and the river for transporting people and goods. Although roads exist within the town, vehicular traffic, excepting only an occasional minibus or truck, is absent. Being there was like stepping back in time. We watched dugout canoes bringing fruits and vegetables to the riverside town square. The river was truly the main street; all of the action was there. After about a half-hour wait spent taking in the local flavor, our boat captain, “Highpitch,” arrived and we were on our way.

After a short stretch of the Rio Guapi, we emerged into the Pacific Ocean. About 20 miles of ocean now stood between us and our destination. The day was overcast and hazy, but the island started to take shape on the horizon after about 10 miles. It didn't look much different than many of the mountainous islands I'd visited before, but it was a stark contrast compared to the mainland we had just left behind. This portion of Colombia's western coast is a flat estuarine coastal landscape. So, having this island rise from the sea before us was immensely impressive. As we got closer, we began to make out some of the island's features, a beautiful rainforest that probably hasn't changed much in thousands of years. I could see the few small buildings of the park facilities as we approached the shore, but no dock. I wasn't dressed for a beach landing, but Highpitch was an experienced captain and got us right onto the beach; I didn't even get my shoes wet.

Upon arrival, we were greeted by park staff and given an indoctrination to the park, its rules, and a brief history (in

Spanish). In 1526, Francisco Pizarro discovered the island on his way to Perú. When he visited the island, he was amazed by the number of snakes he saw, and consequently named it “Gorgona,” in reference to Medusa, the mythical Gorgon with a proliferation of serpents upon her head. The island is still known for its plentiful snakes, but it also has an otherwise rich fauna, flora, and marine environment (coral reefs). For these reasons, the government declared the island a national park in 1984. Prior to that, it contained the most feared penitentiary in the country. The ruins of the prison remain, but are quickly being reclaimed by the forest. The park facility buildings are actually part of the old prison's administrative and staff structures.

The park includes 61,688 hectares, of which approximately 97% correspond to marine area and 1,660 hectares are terrestrial. The main island is 9 km long and 2.5 km wide, with a highest elevation of 330 m. It and the smaller island of Gorgonilla are covered by lush tropical forest that descends from the top of the mountain to the edge of the ocean. The known fauna includes 19 lizards (4 of which are endemic), 15 snakes, 8 amphibians, over 175 birds (including sea and migratory), 12 bats, monkeys, a sloth, sea turtles, whales, and sea lions that come to visit from the relatively nearby Galápagos Islands. The park receives only about 7,000 visitors a year, most of which are students or scuba divers.

Isla Gorgona

We collected our bags and were on our way to our cabin when we came across the first reptile, a Red-headed Basilisk (*Basiliscus*



A large mural depicts the park namesake, Medusa, The Gorgon.

galeritus), quickly followed by our first amphibian, a dart frog (*Epipedobates boulengeri*). These were the most commonly encountered species during our visit. The dart frogs were present almost in plague proportions, a testament to the efficiency of their toxic skin secretions to deter predation. When walking, we had to be careful not to step on them.

We were eager to get into the forest and begin our search for the blue lizards. From the very beginning, I was concerned about even finding one. Anoles on the southern continent often are far less abundant than what you encounter in the West

Indies or even some parts of North America. My previous visits to South America had yielded only a few individuals, and I often missed many targeted species. We discussed our desire with a member of the park staff, who took us to a trail along which he had seen them — but he told us that they are very rare. We traversed the trail and found many other interesting species,



Dart Frogs (*Epipedobates boulengeri*) were ubiquitous and obvious, exploiting the protection provided by extremely toxic skin secretions.



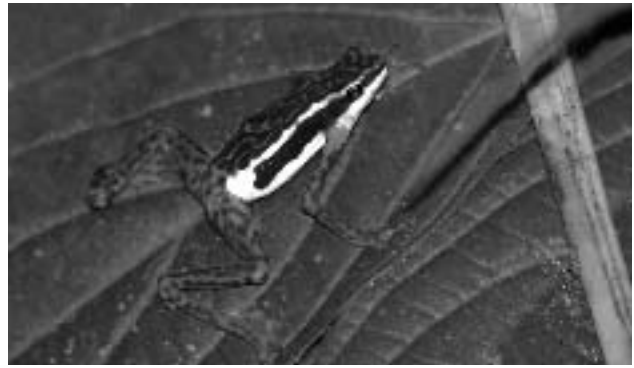
A handsome male Red-Headed Basilisk (*Basiliscus galeritus*), one of the most commonly encountered reptiles on Isla Gorgona.



Anolis princeps is a true giant, reaching total lengths to 64 cm.

Harlequin Toads (*Atelopus elegans*), Wood Lizards (*Enyaliodes heterolepis*), Bridge's Ground Lizards (*Ameiva bridgesii*), and a Large-scaled Black Treesnake (*Chironius grandisquamis*), but we were almost to the end of the trail and had not seen a single anole. We decided to take a side trail into an overgrown fruit orchard, which turned out to be a very good decision. We almost immediately found two species, and after some initial confusion, identified them as *Anolis* (*Norops*) *medemi* (an endemic) and a juvenile *A. (N.) princeps*. We returned to the main trail and, with only about 50 meters left, our guide pointed out an enormous *A. (N.) princeps*. I had no idea they could get that big. With my eyes locked on this giant anole, I walked right past the object of the trip. From behind me, I heard Dominic say: "It's the blue one" (remember that he is not a "herper" and is unfamiliar with scientific names). As I turned to see what he was describing, I saw it: A glowing neon blue lizard that looked very out-of-place in this shadowy forest. It was more fantastic than I imagined it could be, and we all stared in amazement. All doubt was gone, and the fabled blue anole not only existed, it lived up to all the anticipation. After a lot of talk and a short photo session, we headed back. Although exciting, we still had some work to do. Virtually no literature addresses *A. (N.) gorgonae*, so I wanted to find out as much about it as I could. We had to find more.

As we adjusted to a steady diet of fish (or sometimes chicken), rice, and plantains provided by the park, we made several additional excursions into the forest, but with limited success. We were finding only about one blue anole per day. Only a few trails were accessible and the park required visitors to have



Harlequin Toads (*Atelopus elegans*) often lie exposed to view, even during daylight hours, relying on bright warning coloration to deter predators.

a guide. The staff was very protective of the park, which was a welcome surprise. They also had an obligation to protect the everyday tourist from the serpents and had strict rules for venturing out at night. Our guide, Orlando, was always a little nervous about our "off the trail wanderings" and the fact that Nathan and I were not wearing "snake protection boots." Concerns centered mostly on venomous snakes, like the Fer-de-Lance (*Bothrops* sp.), especially at night, although we saw none. Snakes of other kinds were certainly not in short supply. We encountered several in the area immediately around our cabin. In fact, one afternoon, we found a large Boa Constrictor (*Boa constrictor*) consuming one of the large rodents (*Proechimys semispinosus*) that graced our cabin porch each night. However, after wrangling several large boas and several other snakes, we earned Orlando's respect and confidence. We also in a way became his guide, teaching him specifics about the amphibians and reptiles that we encountered along the trails. After a while, we were permitted to make several hikes alone, which is normally not allowed, and we were grateful.

Although this was considered the dry season, it rained often and was extremely humid. After one good downpour, Nathan and I hit the trails to see what the rain had brought out of hiding. One interesting observation was that the multitudes of dart frog were now carrying tadpoles on their backs. This is a common strategy among some dart frogs. They lay their eggs in a moist and protected crevice or a convenient crab-opened



Ingrid watches a large Boa Constrictor finish its meal.



One of the many Brown Vine Snakes (*Oxybelis aeneus*) encountered during the trip. These exceedingly slender snakes feed primarily on lizards.



“Lagarto Azul,” the Blue Anole (*Anolis gorgonae*) of Isla Gorgona.

coconut. Upon hatching, they ferry the tadpoles to a permanent source of water in which to complete their development.

One fortunate day, we were on the beach trail and conditions must have been perfect, because we found five *A. (N.) gorgonae*. In the following days, we found additional animals in this area. So far, all were in closed canopy forest with little to no undergrowth. Also, 90% of what we had seen so far was on small diameter (single stalk) trees and lizards were perching low (< 1 m) on the trunks. We also were finding a high female-to-male ratio, with females being a deeper blue than any of the males we observed. Our observations contrasted with what Kirsten Nicholson had seen during the wet season, when she found no females and only three males, all of which were found on large-diameter trees at heights >3 m. The paucity of arboreal lizards was easy to explain. The density of saurophagus snakes (*Oxybelis*, *Leptophis*) was very high.



We saw only two species of tiny geckos in the genus *Lepidoblepharis*, this is *L. peraccae*.



Yellow-headed Geckos (*Gonatodes albogularis*) have an extensive distribution throughout Central America and northern South America. Like many lizards in the genus *Gonatodes*, this species is sexually dimorphic; females lack the yellow head of males for which the species is named.

Although not reported in any of the literature, House Geckos (*Hemidactylus* sp., probably *H. frenatus* or *H. leightoni*) were present in small numbers. These most likely represented a recent introduction from the mainland. Already, however, these apparently new arrivals appeared to be excluding a smaller introduced gecko (*Lepidodactylus lugubris*) from several of the facility’s buildings.

One frustrating situation during this trip was our failure to find two species of anoles I had hoped to see, *A. (N.) biporcatus* and *A. (N.) chocorum*. While I am familiar with *A. (N.) biporcatus*, having encountered them during visits to Central America, I was completely unfamiliar with *A. (N.) chocorum*. Fortunately, the park had a small lab with preserved specimens, which were immensely helpful in clarifying the inevitable identification problems initially encountered with new faunas. Those specimens also gave me the opportunity to view any species we had not observed in the field. The park also had an informative library (mostly in Spanish), with references to the island’s ecology as well as that of Colombia and South America.

Every day on Isla Gorgona brought new discoveries and interesting creatures we had never seen. Our time on the island came to an end all too quickly — but it and the Lagarto Azul will be long remembered. The island is a great opportunity for any student or professional herpetologist. Very few non-Colombian scientists visit the island, and its abundant biotic riches lay largely untapped.

Acknowledgement

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