

A Field Guide to the Herpetofauna on Dominica, W.I.

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ABSTRACT

Dominica has 24 herpetofauna species and 12 were observed. The purpose of this field guide is to help identify the different species and discuss where and when they were observed.

INTRODUCTION

The island of Dominica, West Indies, is a magnificent tropical paradise located in the center of the Lesser Antilles. It is located between 15°10' and 15°40' north latitude and 61°15' and 61°29' west longitude. It is the third largest island in the Lesser Antilles at 45 kilometers long and 24 kilometers wide at the widest point. More than 60% of the land is forested with dry scrub forest, montane rain forest, or elfin woodland with the highest elevation at 1447 m.

The herpetofauna of Dominica is rich in endemism due to its diverse habitat and long period of geographic isolation. There are four species of frogs, two of which are Lesser Antillean endemics. One tortoise species and four marine turtle species have also been recorded. There are ten species of lizards, two confined to the Caribbean, two Dominican endemics, and one Lesser Antillean endemic. Five species of snakes also inhabit the island. One is a Dominican endemic and two are Lesser Antillean endemics.

MATERIALS

Wildlife guidebook
Camera

METHODS

The method used for data collecting was very straightforward. I simply searched the areas I visited. My main area of focus was SCEPTRE (Springfield Center for Environmental Protection, Teaching, Research, and Education). This was my place of residence while in Dominica. This area is a transition forest consisting mainly of evergreen lowland forest and an abandoned plantation. Cabrits was another area visited. This is a dry scrub woodland with the main vegetation being deciduous shrubs and cacti. The canopy is low, ranging from 2-10m and the area receives <1m rainfall annually. Most of the west coast is dominated by this habitat. Littoral, or coastal, vegetation was also observed. It can be found along the coast, however it is difficult to differentiate from dry scrub woodland since they have much the same vegetation. Hummingbird Inn was another area visited containing dry scrub woodland habitat. Syndicate and Middleham were two rainforest habitats I visited. This habitat is the most diverse occurring mainly between 300 and 700m elevation. Rainforest canopy can reach in excess of 40m high and consists mainly of layered evergreen species. Montane woodland

was observed while hiking to Boiling Lake and Freshwater/Boeri Lakes. This habitat can be found in elevations above 800m and contains vegetation lower in height forming a clear zone above the rain forest. This area receives >2m rainfall annually. The last habitat observed was the elfin woodland, occurring in elevations above 1,000m. The vegetation is less than 3m tall and is thick sometimes to the point of impassability.

RESULTS

The species I observed are broken down by family for easier reference.

Family Boidae

Boa (Boa constrictor nebulosus). This species, known locally as tèt chien, has been observed twice. Both were seen at night at SCEPTRE and captured so measurements could be taken. The first measured 1.83m and the second 1.39m, however they can reach 3m in length. This species is brown in color with lighter brown splotches.

Family Colubridae

Alsophis antillensis. This species, locally known as kouwès nwé, is Lesser Antillean endemic and was observed only once in dry scrub woodland. It was black in color with small white splotches on its sides and ventrum tapering off to a solid black tail. Sizes can reach up to 1.3m long.

Liophis (Dromicus) juliae. This species, also Lesser Antillean endemic, is known locally as kouwès sayga. It was observed only once in montane woodland. It was black with small white spots on the scales and had a white ventral surface as well as a distinct line which passes through the eye. This species can reach lengths of 60cm.

Family Gekkonidae

House gecko (*Hemidactylus mabouia*). This species was observed only once on the kitchen wall at SCEPTRE. It is known locally as mabouya kai and can reach lengths of 14cm including the tail. The species observed was a light gray color, however this species has color variations from light to dark. This species is usually only seen at night.

Sphaerodactylus fantasticus. This species is Lesser Antillean endemic and can only be found at the Batalie Beach area in Dominica. This area has littoral vegetation and the species was found in leaf litter. The species has a rust color body with a lighter colored tail and a black head with white spots and reaches about 3.4cm snout-vent length (SVL).

Tree Gecko (*Thecadactylus rapicauda*). This species, locally known as mabouya hazyè, was observed only once in the transitional forest at SCEPTRE. It was a brown color with lighter splotches on the body and rings on the tail. This species can reach body lengths of 12.1cm and 10cm tail length.

Family Iguanidae

Lesser Antillean iguana (*Iguana delicatissima*). The iguana, locally known as lèza, was observed twice on the side of the road while driving. The first sighting was on a rock cliff in coastal vegetation. The second was in littoral woodland. Both individuals were solid green in coloration denoting immaturity. While at Hummingbird Inn, six specimens were observed. Five were green in color with the last being a brownish gray. The adults are brown in coloration and can reach lengths of 40cm SVL with tails at least as long.

Tree lizard (*Anolis oculatus*). The anole, zanndoli locally, was observed in all habitats, excluding elfin woodland. This species is Dominican endemic and had a broad color variation. I observed colors ranging from a light gray to yellow-green to black with all having light colored spot or striped patterns. The anole uses its color as camouflage, so its color varies with the habitat. The males have yellow or orange throat dewlaps used for both reproduction and aggression display. Sizes can reach up to 25cm total length.

Family Leptodactylidae

Mountain Chicken (*Leptodactylus fallax*). This species, known locally as crapaud, was observed on a regular basis in the transitional forest at SCEPTRE. One specimen was captured and measurements were taken. It was 16cm SVL (snout-vent length) and 12cm in width. They are brown in color with black and brown patchy spots on the dorsal surface. This species is hunted by the locals for food, hence the name, and is Lesser Antillean endemic. This species was observed only at night, with the exception of one juvenile seen in the early morning.

Tink frog (*Eleutherodactylus martinicensis*). This small frog, only 4.7cm in length, was also observed on a regular basis in the transitional forest at SCEPTRE. This species is Lesser Antillean endemic and light brown in color. The local name is gounouj and was seen only at night. However, the call of this species could be heard at Boeri Lake and on the Boiling Lake trail.

Family Scincidae

Skink (*Mabuya mabuya*). Known locally as zanndoli kléwan, this species was observed only once. It was brown in color with a wide black stripe beginning at the mouth, passing through the eye, and extending most of its body length. There are also two white stripes on either side of the black stripe.

Family Teiidae

Ground lizard (*Ameiva fuscata*). This species, known as abòlò locally, is a Dominican endemic. This species was very abundant in dry scrub woodland, but was also observed in littoral vegetation and transition forest. Two color variations were observed. The first being a brown color and the second a blue-green color both having blue spots on the flanks. The adults tend to become bluer as they age. This species can reach lengths of 20cm SVL with tails at least as long.

DISCUSSION

Of the 24 herpetofaunal species found in Dominica, I only observed twelve. However, four of the species are marine turtles, which are not very common in the coastal areas I visited. Of the species observed, *Anolis oculatus* was by far the most common. It could be seen in all but one habitat visited. The *Anolis* also had the most diverse color variation of all the species observed.

Based on my observations, most species were observed at SCEPTRE since that was my main area of focus. However, Cabrits definitely has the most diversity of species. Most herpetofauna species can be found in dry scrub woodland, and some can only be found there. Only one day was spent at Cabrits, but in my observation, it also has the most abundance of herpetofaunal species. *Anolis* and *Ameiva* were seen in great numbers. Also, according to P.G.H. Evans and A. James, authors of *Dominica Nature Island of the Caribbean #2 Wildlife Checklists*, dry scrub woodland contain the highest densities of snakes and lizards.

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