The Distribution, Foraging Areas and Behavior Of the Flycatcher Species at Springfield, Dominica

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**ABSTRACT:** 

This describes the natural history, habitat use and foraging techniques of the native

flycatchers at the Springfield station on the island of Dominica. There are three species

observed in this report and pictures and techniques on identifying them have been

included in the paper.

INTRODUCTION:

Flycatchers are members of the family Tyrannidae; and are generally relatively plain

looking birds. Some species have day-to-day contact with humans by nesting in buildings

and other artificial structures. The birds of North, Central and South America are related

to the Old World Flycatchers but are usually more robust and possess a much stronger

beak than their European counterparts (Wikipedia). The flycatchers, by their name, are

mostly insectivores, but their diet can also include fruit, lizards, snakes and, as I

observed, an occasional crab. Flycatchers rarely spend much time on the ground foraging

for food, but rather catch their food and return to a perch for safety and then gorge down

their catch. The flycatchers can be found at all times during the day if you know where

to look for them, but the best times are from 0500 to 0800 and 1630 to 1900. They are

most active during this time of day because insects, the staple of their diet, are most

active during this time as well.

**Kingdom:** Animalia

Phylum: Chordata

Class: Aves

**Order:** Passeriformes

**Family:** Tyrannidae

#### **STUDY AREA:**

The flycatchers were all seen on land owned by the Springfield Research Center located on the southwest side of the Commonwealth of Dominica, a small West Indian island in the Caribbean. The research station is located at approximately 1150ft. of elevation and is nestled between mountains. The area is well maintained with a good bit of cultivation. The land I surveyed also went up to the Bee House and a palm grove located at approximately 1350ft., above the main research station. It is inferred that the flycatcher species located on Dominica flew up the islands from South America. For this reason a large number of the species of flycatchers are scattered across the Caribbean and Lesser Antilles.

### **EQUIPMENT:**

Field guide to birds of Dominica

Binoculars

Note Pad

Pen

Rangefinder

#### **METHODS:**

I used the walk and stop method of observation to observe the birds. I would walk for about 50 yards and then stop and sit or lean in a nicely concealed location and wait to see which birds would appear. This was an effective way of searching out the flycatchers, especially when away from significant human interference. This technique was given to me by Dr. Lacher and requires a good bit of patience to gaze up at nothing for a while and then finally get a faint glimpse of one of the flycatchers foraging for food. When a

flycatcher was seen, I made a special note about what tree it was in and came back later with a range finder to see how high the bird had perched. This was a much more effective strategy instead of sitting in one area and hoping one of the birds would show up. I had to be sure to move quietly because sometimes the birds that are closer to the ground were easily spooked and would leave the area immediately.



(www.viacess.net)

## **RESULTS:**

<u>Species</u>	Number of Observations	
Gray Kingbird	7	
Lesser Antillean Flycatcher	6	
Caribbean Elaenia	3	

Species	Observation	Habitat Observed	Estimated Perch Height
Kingbird	1	Palm	30m
	2	Clothes	10m
	3	Line Palm	30m
	4	Palm	30m
	5	Wire	2m
	6	Palm	30m
	7	Palm	30m
Lesser Antillean Flycatcher	1	Palm Berry Area	25m
<u></u>	2	Palm	30m
	3	House	15m
	4	Under Palm	20m
	5	Palm Berries	25m
	6	Tree at End of Field	20m
Caribbean Elaenia	1	Bread Fruit Tree	15m
	2	Bread Fruit Tree	15m
	3	Bread Fruit Tree	15m



(www.birdforum.net)

Gray Kingbird Tyrannus dominicensis

Length: 23-24cm

Local Name: Pipiri

The Kingbird is the largest flycatcher on the island of Dominica. It is very distinctive with a black mask that gives a characteristic bandit look. It possesses gray wings, tail and head and white belly and throat. The bill of the Kingbird is very thick and black in color. Its call is a harsh, shrill pititititit repeated multiple times. They prefer to perch very high off the ground about 30 meters high. Kingbirds perch for a majority of their time on naked branches and single palm fronds and they seem to love power lines. They tend to forage more in areas where there is a naked branch and a cultivated field underneath. Kingbirds exhibit very strong territorial tendencies. They will not tolerate any other bird larger than them in the vicinity of their territory. I viewed a hawk encroach on the nesting territory of a kingbird I was watching and noticed that the kingbird flew and hovered by another tree for a few seconds before it pursued the hawk. I think that this is a strategy used by the kingbird to make the hawk think that the nest might be located in

the other tree the kingbird hovered by for a few seconds. The hawk was defenseless against the quicker onslaught by the smaller bird. They also exhibit territorial behavior towards other kingbirds...I observed a possible juvenile kingbird land in the same tree a pair claimed as their nesting area and the pair promptly drove the smaller kingbird out of the vicinity of the tree. Their food sources consist of insects, frogs, snakes, lizards and an occasional crab. It will flutter into the air to catch large insects and then return to the same perch to eat its meal. Kingbirds are also opportunistic feeders, picking bugs off branches right next to them and coming down onto the clothes lines and picking moths off the building that came to the lights in the night. From what I have seen kingbirds are a very successful species on this island and when found will more than likely stay in that area for a while.



(www.birdforum.net)

# Lesser Antillean Flycatcher Myarchus oberi

Length: 18-19cm

Local Name: Gobe-mouches Huppe

Probably the most distinct and beautiful flycatcher species on the island, the Lesser Antillean Flycatcher is a pronounced resident of Dominica. It has brown/gray upper parts with a prominent brown/gray "flat-top" crest on its head. Its throat and chest area goes from a white throat and becomes more yellow towards the stomach and rear area. It has a thick, black beak, but not as thick as the kingbirds. Its commonest call is a prolonged whistle, but other calls may be made at dawn from modified whistles such as; 'oo-ee', 'ee-oo' or 'e-oo-ee' (Birds of the Eastern Caribbean). These birds like to perch fairly high at about 15-25 meters, but will usually catch insects at or near ground level. They prefer to perch a little below the canopy in a little cover and will sometimes encroach on the kingbirds territory. I observed a Lesser Antillean Flycatcher take an insect under the kingbirds nesting tree, but it quickly flew to deeper cover as opposed to staying in the area and risking a confrontation with the kingbird family. The primary forage for the

Lesser Antillean Flycatcher is insects, some reptiles and small berries, as I observed. They do not seem to hold and axel territory as the kingbird will. From what I observed the Lesser Antillean Flycatcher will travel through a vast area in search of food. They will flutter from tree to tree using the canopy as cover to search for insects among the branches. They like to forage for food on the edge of the rain forest and open, usually cultivated areas. They will also perch and gaze at the ground, and when they see something they will lean towards the spot where they saw the movement to zero in on their target. The Lesser Antillean Flycatcher is a bit more difficult to locate due to the nomadic foraging technique, but when found it is an impressive bird.



(www.birdforum.net)

### Caribbean Elaenia Elaenia martinica

Length: 16-18cm

Local Name: Siffleur

The Caribbean Elaenia was the most elusive bird for me to locate. It is a quite plain looking bird with grey upper parts and two white bars on each wing. The under parts are white/gray with no distinct markings. The bill is the smallest of the three birds, very thin and black. Its call is a harsh repetitive 'che-up' followed by 'wi-wi-yup' (Birds of the Eastern Caribbean). These birds tend to perch under the canopy but not as high as the Lesser Antillean Flycatcher. Caribbean Elaenias perch around 15-20 meters above the ground. They enjoy perching in a good bit of cover since they are smaller and need to hide from larger predators. Their diet consists of insects and berries. I observed a Caribbean Elaenia picking berries off a royal palm in the back yard of the research station. It would fly into the area the berries were in pick a berry and fly back to the same perch to eat its meal. They do enjoy deeper cover but they share their habitat with both the Kingbird and the Lesser Antillean Flycatcher. They like to forage on the edge of the forest near the open area but still in cover.

**Conclusion:** 

This description of the habits, foraging areas and behavior of the flycatcher species at

Springfield, Dominica can be used to aid others in locating the birds in order to conduct

more experiments with them. I think someone could use a call recorder to record other

birds such as, hawks and Lesser Antillean Flycatchers, and replay them near a Kingbird

to study the different reactions to the different calls. If someone wished to pursue this

project they need to get as directional microphone since I tried to record the bird calls

unsuccessfully with a caridoid microphone. I have only described 3 of many species of

birds on Dominica and it could be a good idea to use my guide as an outline to describe

the behavior of more bird species.

**References:** 

Wikipedia

http://en.wikipedia.org/wiki/Tyrant\_flycatcher

Evans, Peter (1990). Birds of the Eastern Caribbean.

Lesser Antillean Flycatcher Picture

http://www.birdforum.net/pp\_gallery/showphoto.php/photo/36841/sort/1/cat/all/page/1

Kingbird Picture

http://www.birdforum.net/bird\_view.php?bid=3713

Caribbean Elaenia Picture

http://www.birdforum.net/pp\_gallery/showphoto.php/photo/34005/sort/1/cat/all/page/1

Dominica Map Picture

www.viaccess.net/~bwaden/dominica.html