

Carriacou Project Report

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Carriacou, Grenada, W.I.

Carriacou is a small island in the Lesser Antilles and part of the territory of Grenada. It is located between Grenada and St. Vincent and the Grenadines. Carriacou translates to the “Land of the Reef”, an accurate translation. Carriacou has abundant reef structure and sea grass beds.

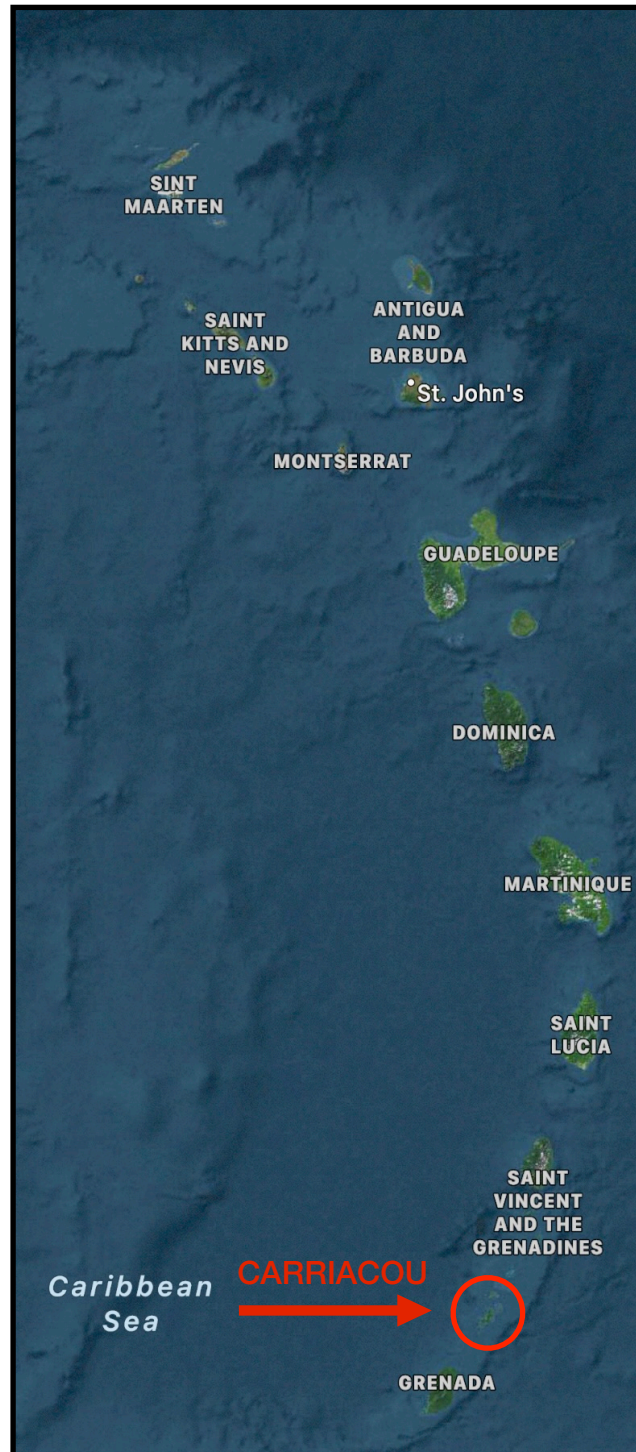
Home for the Hawksbills?

There should be more

In 10 days of surveys/sampling, a total of 7 critically endangered Caribbean hawksbill sea turtles were documented and sampled (ranging from juveniles to adults). An additional 30 observations were recorded (turtles seen at the surface). Surface observations are an additional method for recording sea turtles when in-water observations are not possible.

The area with the highest abundance of hawksbills is off the southwest coast of Carriacou comprised of the islands of Frigate and Large, including Rose Rock and Bonaparte Rocks. Barring this area, the observations/sampling of hawksbill turtles around Carriacou is sporadic. On occasions, just a single recorded sighting in each location.

Considering the sheer volume and quality of reef, more hawksbills of all sizes would be expected, specifically juvenile turtles in the near shore reefs of Carriacou. The apparent lack of hawksbill turtles is concerning given the role they play in healthy reef ecosystems as a keystone species.



Don't Forget the Greens

Just as worrisome

The situation may be just as dire for green sea turtles. Green sea turtle populations are threatened across the Caribbean. Despite this, it is normal for in-water surveys to document a greater abundance of green turtles than hawksbills. However, even in Carriacou, green sea turtles were not observed to the expected level. Swimming surveys over large swaths of sea grass beds produced zero recordings.

Visual surface observations of Hillsborough Bay (a large bay on the Western side of the island) did not document a single green turtle. A bay this large, even with intermittent sea grass beds would normally have a number of resident green turtles.

The Factors Responsible

Harvesting is having an impact

The issues leading to the lack of sea turtles around Carriacou could be numerous. Certainly, with the territory of Grenada allowing the legal harvest of sea turtles from September to April, it would be imprudent to think harvesting turtles has not had an impact on local sea turtle populations.

Sea turtles often traverse international borders, for example, hawksbill sea turtles in the USVI have been shown to originate in Barbados. The natal origin of both hawksbill and green turtles around Carriacou should be investigated to rule out any issues “up stream” responsible for supplying the island with its population.

THE GOOD

Ocean Spirits, with funding and participation from The Hawksbill Project (and research assistance from the UVI) performed an island wide assessment of Carriacou. This study can be used in the future as a baseline. The local Grenadian government can also use the findings to make informed policy decisions.



THE GREAT

In 10 days, Ocean Spirits, UVI Sea Turtle Research and Conservation, and The Hawksbill Project discovered the location of the greatest density and abundance of hawksbill turtle in the southern islands of Carriacou. This area becomes an immediate area of concern and desired protection.

THE BAD

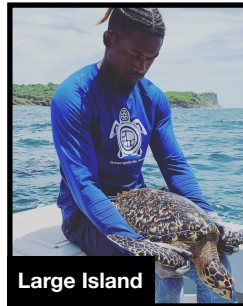
Carriacou has abundant reef and sea grass habitats, an ideal habitat for hawksbills and green sea turtles. Despite this, the island appears to have an absence of two keystone species. Sea turtles are a “canary in the coal mine” marker for habitat health. Their absence is a major concern for Carriacou’s reefs and sea grass beds.

THE FUTURE

Frigate Island and Rose Rock, Large Island, and Bonaparte Rocks are the area of greatest density/abundance of hawksbill turtles in Carriacou. This area warrants further investigation with a specific need to examine their movement via satellite tags and the natal origin of the hawksbill turtles present.

Conclusion on Carriacou

It is the conclusion of The Hawksbill Project that Carriacou does not have the expected abundance of critically endangered Caribbean hawksbill and threatened Caribbean green turtles.



Recommended steps for the island of Carriacou

1. Create a marine park, protecting the marine habitat of Frigate Island and Rose Rock, Large Island, and Bonaparte Rocks (in the square below) as they are excellent marine habitat and already home to the greatest abundance/density of hawksbill turtles (ranging in size from juvenile to adult).



2. Cease the harvest of both hawksbill and green turtles.
3. Support any and all sea turtle research specifically examining the natal origin of both hawksbill and green turtles in an effort to conclude the “upstream” supplier responsible for the turtles of Carriacou.