

**A Photographic Field Guide to Fish Species
at Scott's Head and Champagne Reef**

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Abstract

Scott's Head and Champagne Bay are coral reefs on the island of Dominica in the Caribbean Sea. The purpose of this project is to provide a photographic field guide to the reef fish found at these two reefs. Five dives were done and twenty-six species of fish were identified.

Introduction

Dominica, officially the Commonwealth of Dominica, is about halfway between Guadeloupe and Martinique. It has spectacular and varied flora and fauna and is the fourth largest island in the Lesser Antilles. Dominica has one of the most rugged landscapes in the Caribbean and also has a largely unexploited, multi-layered rain forest. Many rivers, natural pools and waterfalls can be found on the island. Champagne Reef and Scott's Head are two of the most popular dive sites on the island, and also the location of the fish described in this photographic guide. It is said that Dominica is the only place Columbus would recognize were he to see it today (Cubie, 2007).

Champagne reef has unique features that are found nowhere else in the Caribbean. Located on the reef is a thermal freshwater spring and covers approximately three hundred square feet. It is approximately 80 feet at its deepest. Champagne Reef got its name because of the thermal underwater vents that create thousands of bubbles that ascend to the surface. It is said that swimming there is like swimming in a giant glass of champagne (Evans 1997).

Scott's Head is located on the southwest coast of Dominica. It is a fishing village and a popular snorkeling and diving site for tourists. The village is named after Colonel George Scott

who captured Dominica from the French in 1761 and served as lieutenant governor of Dominica from 1764 to 1767. The reef is between 30-65 feet deep (Gulick 2009).

Methods and Materials

A total of five trips were made to Champagne Reef and Scott's Head. The first trip was just to get familiar with the sites and get used to using the snorkel and the flippers. An underwater camera was used, and it was necessary to practice a bit with the camera before trying to get pictures of the fish. After becoming comfortable in the water and practicing with the camera, it was easier to concentrate on the different types of fish. A wetsuit was used only on the first day because it was not possible to dive and take pictures. On the other four dives, no wetsuit was needed, because it was easier to take photographs just using just the mask and snorkel.

Three more trips were made to Champagne reef to get pictures of the different reef fish. The photographs were taken by diving down and chasing the fish to get as close as possible to take the picture. Once the photographs were taken, *Reef Fish Identification Florida Caribbean Bahamas* by Paul Humann was used for identification of the fish. The same process was used during each trip made to Champagne reef.

Only one trip was made to Scott's Head. Although no new species of fish were identified than were seen at Champagne, photographs were taken at Scott's Head also, so that the photos could be compared and the best ones used for identification.

Results

A total of twenty-six fish species were identified and photographed. The physical description, distribution and picture are provided below for each fish species.

Family: Butterflyfish - Chaetodontidae

Banded Butterflyfish (*Chaetodon striatus*) (Figure 1)

Description: A silvery white with black bands that run vertically and through the eye.

Distribution: Florida, Bahamas, Caribbean, north to New Jersey, Bermuda, Gulf of Mexico and south to Brazil.

Size: 3-5 in.

Depth: 10-60 ft.



Figure 1

Family: Butterflyfish - Chaetodontidae

Foureye Butterflyfish (*Chaetodon capistratus*) (Figure 2)

Description: Silvery white with dark thin lines that rap around the body diagonally with a black spot near the upper base of the tail.

Distribution: Florida, Bahamas, Caribbean, north to Massachusetts, Bermuda, and Gulf of Mexico.

Size: 3-4 in.

Depth: 10-60 ft.



Figure 2

Family: Angelfish - Pomacanthidae

Rock Beauty (*Holacanthus tricolor*) (Figure 3)

Description: Navy blue lips, black body outlined in yellow with a yellow face and tail.

Distribution: Caribbean, uncommon in Florida and Bahamas. Found north to Georgia, Bermuda, Gulf of Mexico and south to Brazil.

Size: 5-8 in.

Depth: 10-80 ft.



Figure 3

Family: Surgefish - Acanthuridae

Blue Tang (*Acanthurus coeruleus*) (Figure 4a and 4b)

Description: Deep blue body with bright blue fins. Juveniles are bright yellow and change to blue.

Distribution: Florida, Bahamas, Caribbean, north to New York, Bermuda, Gulf of Mexico and south to Brazil.

Size: 5-10 in.

Depth: 10-60 ft.



Figure 4a Intermediate (unconfirmed)

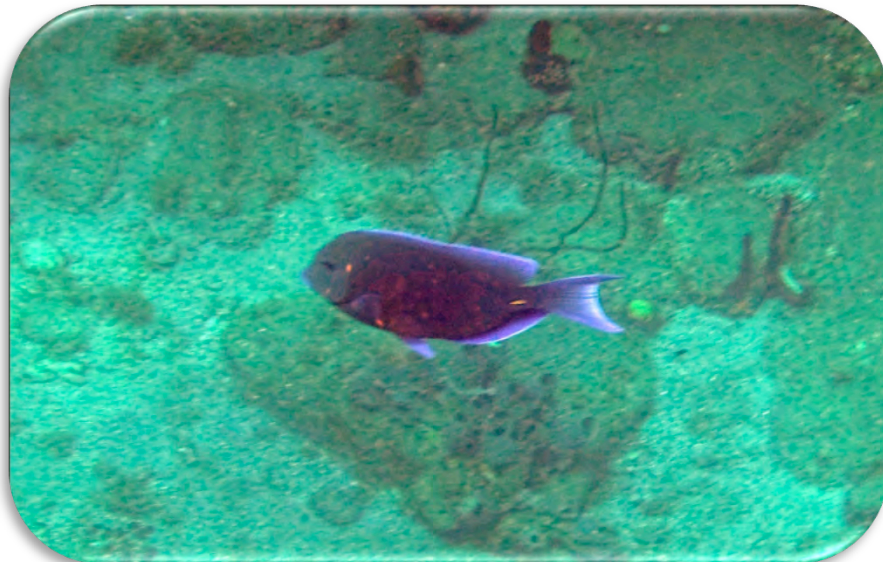


Figure 4b (Adult)

Family: Surgeonfish - Acanthuridae

Ocean Surgeonfish (*Acanthurus bahianus*) (Figure 5)

Description: From bluish gray to dark brown. Blue edging on dorsal, anal and tail fins.

Distribution: Florida, Bahamas, Caribbean, north to Massachusetts, Bermuda, Gulf of Mexico, south to Brazil and tropical West Africa.

Size: 6-12 in.

Depth: 15-80 ft.



Figure 5

Family: Barracuda - Sphyraenidae

Great Barracuda (*Sphyraena barracuda*) (Figure 6)

Description: Scattered black spots with dorsal fins widely separated.

Distribution: Florid, Bahamas, Caribbean, north to Massachusetts, Bermuda, Gulf of Mexico, and south to Brazil.

Size: 1½-3 ft.

Depth: 0-60 ft.



Figure 6

Family: Grunt - Haemulidae

French Grunt (*Haemulon flavolineatum*) (Figure 7)

Description: Yellow fish with silverish blue horizontal stripes above the lateral line and yellow fins.

Distribution: Florida Keys, Florida, Bahamas, Caribbean, north to South Carolina, Bermuda, Gulf of Mexico, and south to Brazil.

Size: 6-10 in.

Depth: 12-60 ft.



Figure 7

Family: Damselfish - Pomacentrida

Longfin Damselfish (*Stegastes diencaeus*) (Figure 8)

Description: Brown to almost black with no distinctive markings.

Distribution: South Florida, Bahamas, Caribbean

Size: 3-4 in.

Depth: 15-80 ft.



Figure 8

Family: Damselfish - Pomacentridae

Yellowtail Damselfish (*Microspathodon chrysurus*) (Figure 9a and 9b)

Description: Adult is bluish black with blue gem-like dots on head and back and a yellow fin. Juvenile is blue with bright blue gem-like dots and a yellow fin.

Distribution: Florida, Bahamas, Caribbean, Bermuda and Gulf of Mexico.

Size: 4-6½ in.

Depth: 10-14 ft.



Figure 9a (Adult)



Figure 9b (Juvenile)

Family: Damselfish - Pomacentridae

Sergeant Major (*Abudefduf saxatilis*) (Figure 10)

Description: Upper body is yellow and blue with vertical stripes while the bottom is bluish silver

Distribution: Florida, Bahamas, Caribbean, north to Rhode Island, Bermuda, Gulf of Mexico and south to Uruguay.

Size: 4-6 in.

Depth: 1-40 ft



Figure 10

Family: Hamlet/Seabass - Serranidae

Blue Hamlet (*Hypoplectrus gemma*) (Figure 11)

Description: Bright gleaming blue

Distribution: South Florida and Keys, Bahamas, and Caribbean

Size: 3-4½ in.

Depth: 10-40 ft.

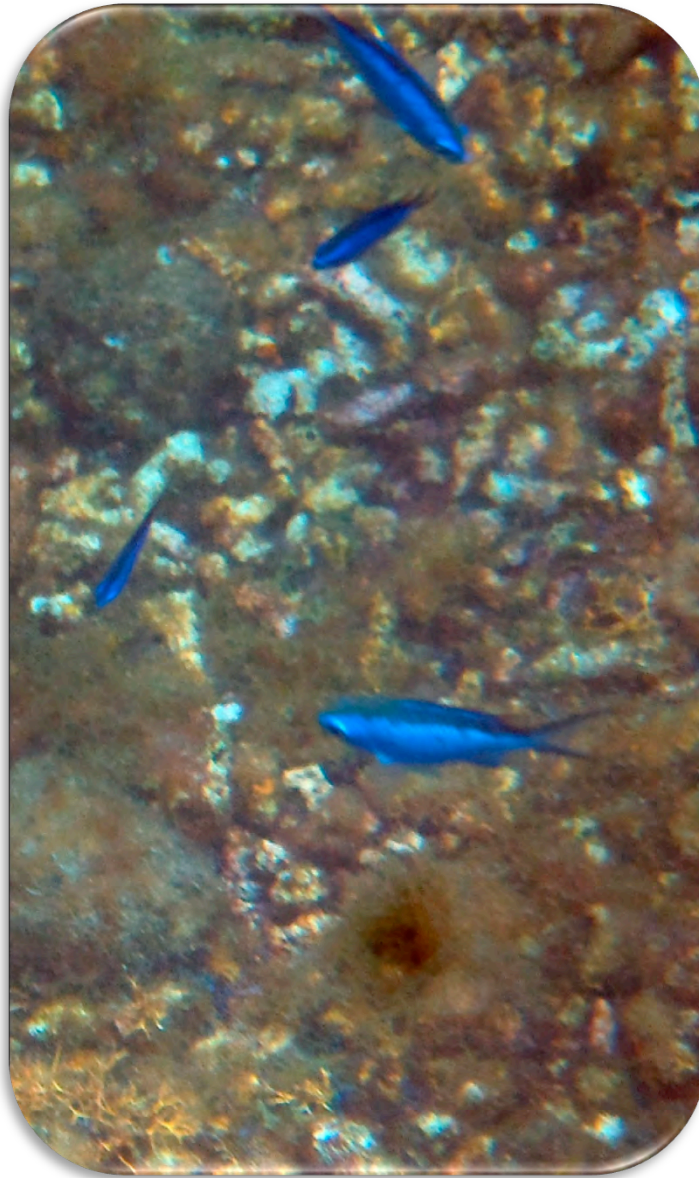


Figure 11

Family: Parrotfish - Scaridae

Stoplight Parrotfish (Figure 12)

Description: Emerald green with yellow markings on the head and fins. Tail is a crescent moon shape.

Distribution: Florida, Bahamas, Caribbean, Bermuda, eastern Gulf of Mexico and south to Brazil

Size: 1-1½ ft.

Depth: 15-80 ft.



Figure 12

Family: Parrotfish - Scaridae

Princess Parrotfish (*Scarus taeniopterus*) (Figure 13a and 13b)

Description: The terminal phase is a bluish green color with a yellow stripe that runs the length of the dorsal fin. Juveniles are white with horizontal black stripes.

Distribution: South Florida, Bahamas, Caribbean, Bermuda and south to Brazil

Size: 8-10 in.

Depth: 10-80 ft.



Figure 13a (Terminal Phase)



Figure 13b (Juvenile)

Family: Wrasse - Labridae

Bluehead Wrasse (*Thalassoma bifasciatum*) (Figure 14a and 14b)

Description: Adult body is a green to blue-green color with black and white vertical stripes around the midbody and a blue head. Juvenile has a yellow upper body with a white belly and a black dot on the dorsal fin.

Distribution: South Florida, Bahamas, Caribbean, Bermuda, and southern Gulf of Mexico

Size: 4-5 in.

Depth: 6-80 ft.



Figure 14a (Adult)



Figure 14b (Juvenile)

Family: Wrasse - Labridae

Slippery Dick (*Halichoeres bivittatus*) (Figure 15)

Description: Intermediate/Juvenile phase is white with a horizontal stripe that goes through the eye.

Distribution: Florida, Bahamas, Caribbean, north to North Carolina, Bermuda, Gulf of Mexico and south to Brazil

Size: 5½-7 in.

Depth: 6-40 ft.

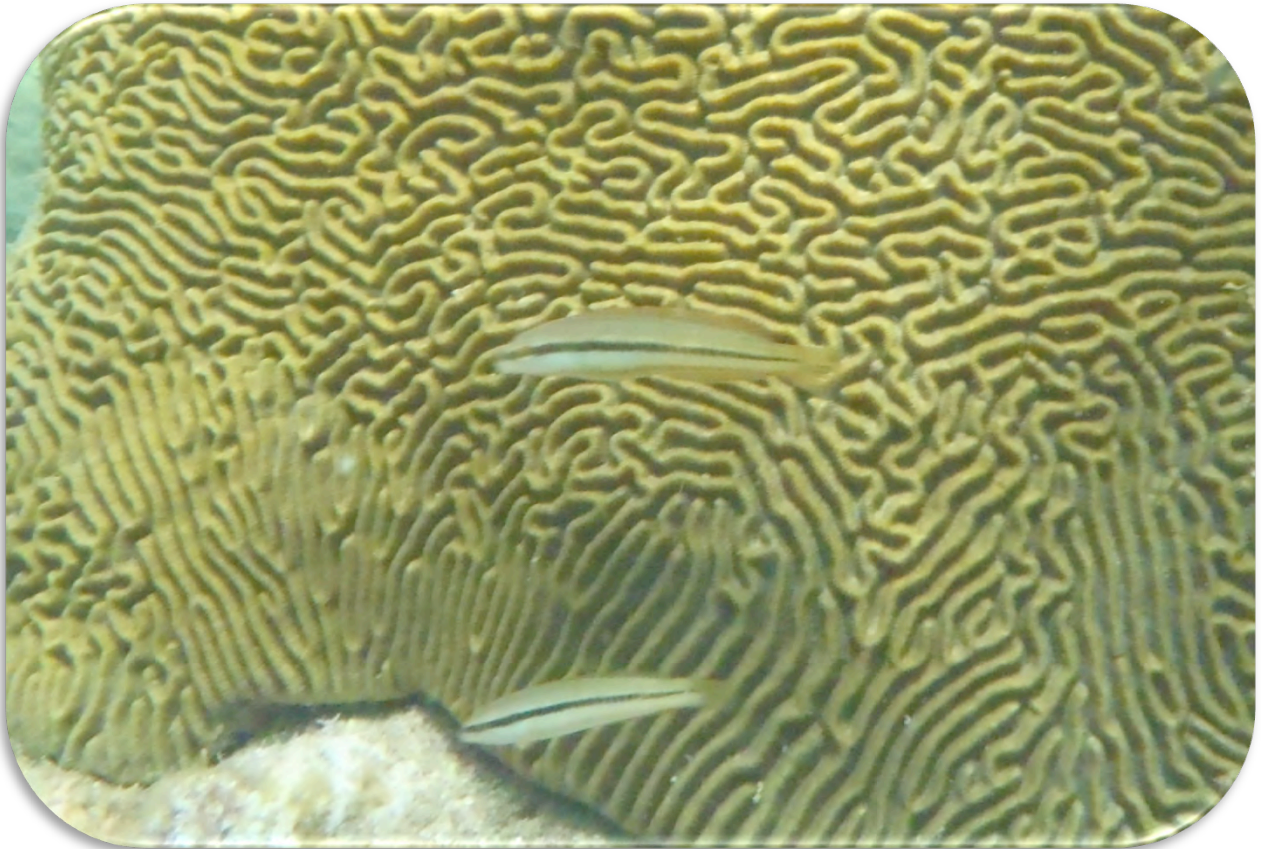


Figure 15

Family: Squirrelfish - Holocentridae

Squirrelfish (*Holocentrus adscensionis*) (Figure 16)

Description: A reddish color with vertical silver stripes and an elongated rear dorsal fin.

Distribution: Florida, Bahamas, Caribbean, north to North Carolina Bermuda and south to Brazil

Size: 6-12 in.

Depth: 4-40 ft.



Figure 16

Family: Squirrelfish - Holocentridae

Blackbar Soldierfish (*Myripristis jacobus*) (Figure 17)

Description: Red with a red dorsal fin and a vertical black bar behind head.

Distribution: Florida, Bahamas, Caribbean, north to North Carolina, Bermuda, Gulf of Mexico, south to Brazil and eastern Atlantic

Size: 3½-5½ in.

Depth: 15-60 ft.



Figure 17

Family: Blenny - Blenniidae

Redlip Blenny (*Ophioblennius atlanticus*) (Figure 18)

Description: Brownish color with golden pectoral fins and upper border of tail.

Distribution: Florida, Bahamas, Caribbean, north to North Carolina, Bermuda and south to Brazil

Size: 2½-4½ in.

Depth: 1-35 ft.



Figure 18

Family: Flounder - Bothidae

Peacock Flounder (*Bothus lunatus*) (Figure 19)

Description: Tan with light blue rings that cover the body.

Distribution: Florida, Bahamas, Caribbean, Bermuda, and south to Brazil.

Size: 6-15 in.

Depth: 2-40 ft.

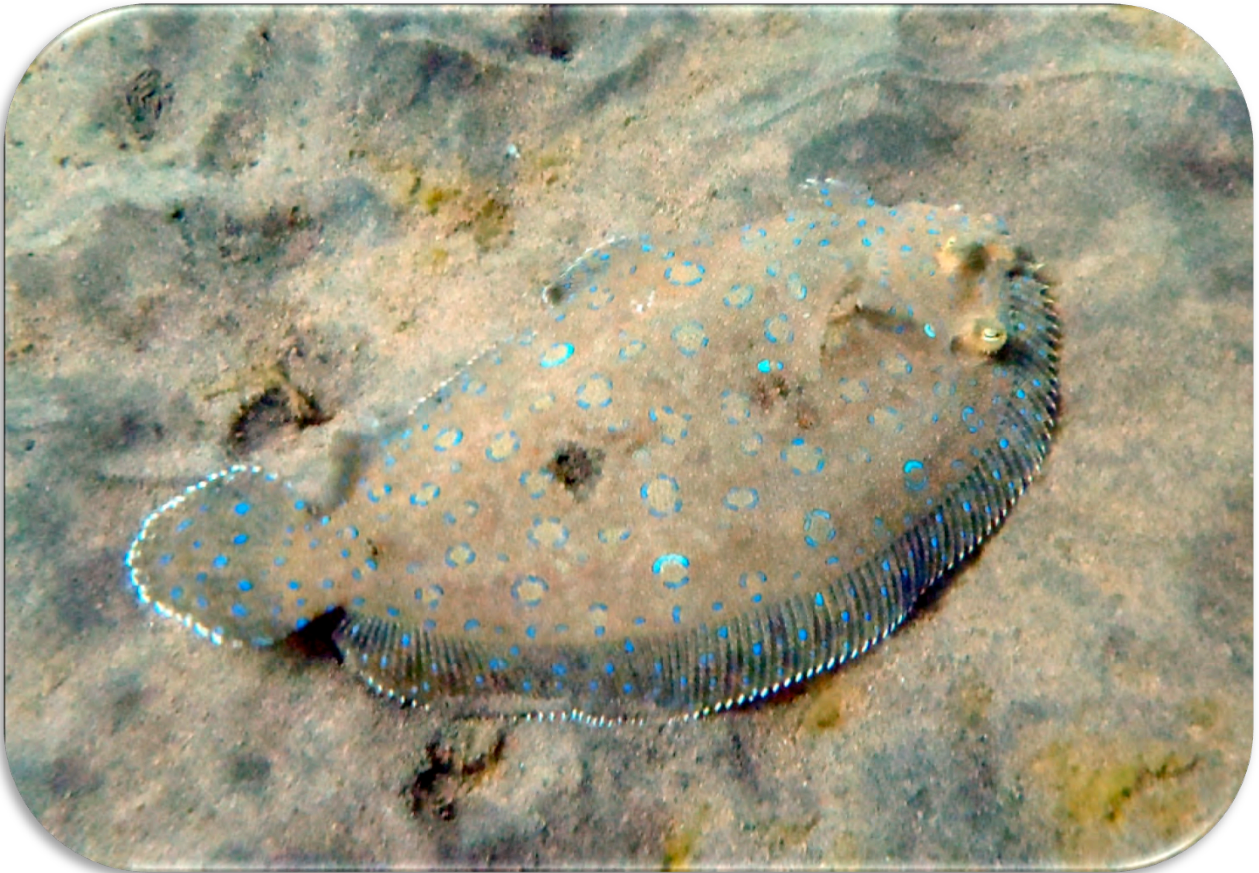


Figure 19

Family: Trumpetfish - Aulostomidae

Trumpetfish (*Aulostomus maculatus*) (Figure 20)

Description: Brownish gray color and have pale lines, scattered small spots, and a black streak on the upper jaw.

Distribution: Florida, Bahamas, Caribbean, Bermuda, Gulf of Mexico and south to Brazil.

Size: 1½-2½ ft.

Depth: 15-80 ft.

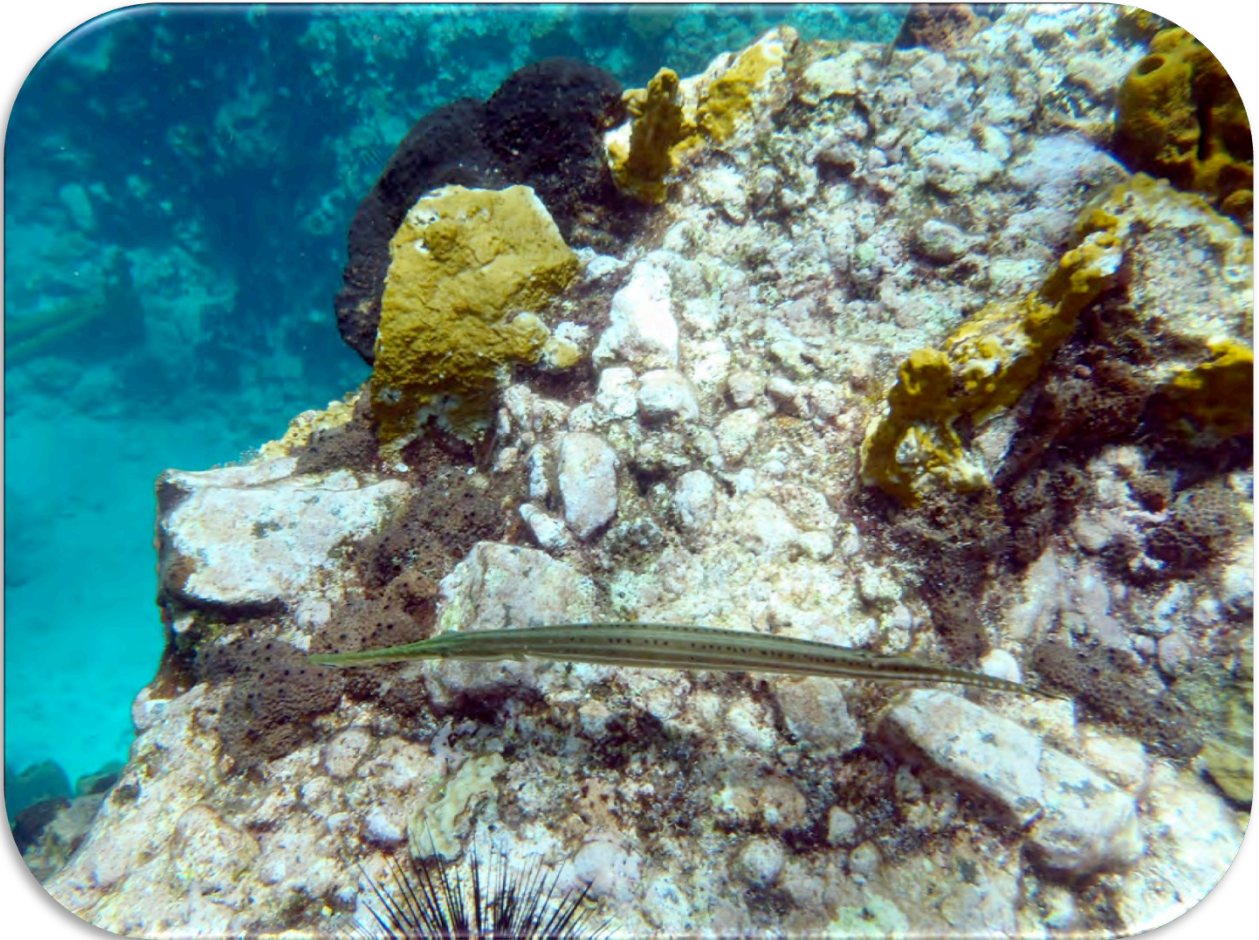


Figure 20

Family: Puffer/Smooth - Tetraodontid

Sharpnose Puffer (*Canthigaster rostrata*) (Figure 21)

Description: Dark brown upper body with a white lower body with blue dots over head and body.

Distribution: Florida, Bahamas, Caribbean, Bermuda, Gulf of Mexico and south to Brazil and eastern Atlantic.

Size: 2-3½ in.

Depth: 5-45 ft.



Figure 21

Family: Boxfish - Ostraciidae

Smooth Trunkfish (*Lactophrys triqueter*) (Figure 22)

Description: Dark body with white or yellow spots and a dark mouth and pectoral fin.

Distribution: Florida, Bahamas, Caribbean, north to Massachusetts, Bermuda, Gulf of Mexico and south to Brazil

Size: 6-10 in.

Depth: 15-80 ft.



Figure 22

Family: Moray - Muraenidae

Spotted Moray (*Gymnothorax moringa*) (Figure 23)

Description: White or yellow body with black specks all over body.

Distribution: Florida, Bahamas, Caribbean, north to North Carolina Bermuda, Gulf of Mexico and south to Brazil and eastern Atlantic.

Size: 1½-3 ft.

Depth: 6-40 ft.



Figure 23

Family: Moray - Muraenidae

Chestnut Moray (*Enchelycore carychroa*) (Figure 24)

Description: Brown with white spots on the jaw.

Distribution: Florida, Bahamas, Caribbean, Bermuda, Gulf of Mexico, and south to Brazil eastern Atlantic.

Size: 8-10 in.

Depth: 4-100 ft.



Figure 24

Family: Snake Eels - Ophichthidae

Sharptail Eel (*Myrichthys breviceps*) (Figure 25)

Description: Thin and snakelike, gray with white dots all over body.

Distribution: Florida, Bahamas, Caribbean, Bermuda.

Size: 1-2½ ft.

Depth: 5-40 ft.



Figure 25

Family: Electric Ray - Torpedinidae

Lesser Electric Ray (*Narcine brasiliensis*) (Figure 26)

Description: Light brown with dark brown blotches over entire body.

Distribution: Florida, Bahamas, Caribbean, north to North Carolina, and south to Argentina

Size: 10-15 in.

Depth: 0-60 ft.



Figure 26

Discussion

This field guide includes twenty-six species of reef fish found in Champagne reef and at Scott's Head. The only photographs used were the ones taken at Champagne reef because no different species were found at Scott's Head. Also, the pictures taken at Scott's Head did not turn out as well as those taken at Champagne reef. One reason for that could have been the difference in the color of the coral found at Scott's Head. Also, there was quite a bit of trash at Scott's Head. Better pictures could have been taken if diving equipment had been used because the fish in the deeper water would have been accessible. One thing to note is that squid were seen at Scott's Head and not at Champagne reef.

It was interesting to note the differences in coloration of the fish when they were in a transition period from young to adult. Some of the female fish also have a different appearance than the male fish. Some of the fish were so small that a good picture was unattainable, so they will not be included in this guide. The fish presented in this guide are the ones that could be photographed without diving too deep and the ones that weren't too small for photographing.

Works Cited

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