

## **Shake-A-Leg Miami Science Booklet**

### **Fauna:**

#### **Fish:**

##### **Fringed Pipe fish:**



These long and narrow fish come in a variety of colors, just like their seahorse cousins, male pipefish are responsible for giving birth to their young. Be sure to carefully check for a clutch of eggs on their bellies.

##### **Bay Scallop:**



Shy and generally inactive, this mollusk is a beauty when it does open up. In the right conditions, several blue pearl-like eyes can be seen near it's mouth. Also while rare, scallops can be seen swimming in the water to evade possible predators.

**Bandtail Puffer:**

The bandtail puffer is usually found on seagrass beds and coral reefs, and mostly close to the bottom, where it finds adequate cover and is less likely to be spotted by predators. The preferred food items are molluscs, crustaceans and echinoderms.

**Checkered Puffer:** Like many other puffers, the checkered puffer can be highly toxic as a result of tetrodotoxins and saxitoxins in their bodies, making them potentially quite dangerous to consume. Like all puffers, it is a poor swimmer and propels itself by flapping its small dorsal and anal fins.

**Florida Blenny:**

**Rock Beauty:**

**Adult and juvenile shown below**

This beautiful fish can be found in rocky reefs and are very territorial. if you approach too close to their home the Rock Beauty may swim in defense of its territory.



### **Nurse Shark:**



A nocturnal predator, able to grow to be 14 feet long. Nurse sharks prefer to hide and rest during the day and spend their nights searching for small fish or crustaceans on the sea floor. Due to their diet, nurse sharks lack large sharp teeth and instead rely on small teeth strong jaws and a suction action in order to hunt their crustacean prey. They are relatively harmless to people.

### **Needlefish**

This fish swims in small groups just below the water's surface



### **Toad fish**





The entire family Batrachoididae are called toadfishes. They are benthic ambush predators, known for their ability to produce sound with their swim bladders.

**Sergeant Major** -Adults can grow up to 9 inches in length, these fish can be seen swimming in schools along shipwrecks and rocky outcroppings.



Porcupine Fish are fishes of the family Diodontidae, also commonly called blowfish and, sometimes, balloonfish and globefish. They are sometimes collectively called pufferfish.

Pinfish-The pinfish is a small fish, growing only to about 4.5 in (11.4 cm). Both the male and the female have a silvery sheen with five to six vertical bars on the side. They have olive backs with yellow and white pigmentation and blue, green, and purple.

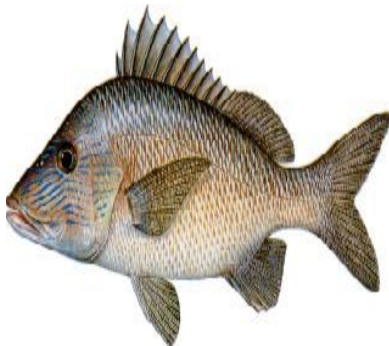


**Sargassum fish (type of frog or angler fish)**



**Searobin**  
**Sharp nosed puffer**  
**Slender filefish**  
**Pygmy Seahorse**  
**Barracuda**

**White Grunt-**The white grunt is a silvery cream color with numerous yellow and blue horizontal stripes present throughout the body. The head is long with a distinct snout, and falcate pectoral fins and a forked caudal tail are also present. *H. plumieri* also has numerous dorsal spines and rough teeth.



**Blue Striped Grunt**



**Zebrafish**-The zebrafish is named for the five uniform, pigmented, horizontal, blue stripes on the side of the body, which are reminiscent of a zebra's stripes, and which extend to the end of the caudal fin.

**Boxfish**

**Cowfish**

**French Angel Fish**-The adult background coloration is black but the scales of the body, except those at the front from nape to abdomen, are rimmed with golden yellow. Furthermore the pectoral fins have a broad orange-yellow bar, the dorsal filament is yellow, the chin is whitish, the outer part of the iris is yellow, and the eye is narrowly rimmed below with blue. Juveniles are black with vertical yellow bands.



**Juvenile, subadult, and adult French angel fish shown above**

**Sand Perch**-The sand perches are a family, *Pygopodidae*, of fishes in the order *Perciformes*. Sand Perches typically live on sand or rubble in shallow seas. The eyes are on the top of the head and the fish lie on the seabed.



## **Crustaceans**

### **Sargassum Swimming Crab**

This small orange crab is generally found hiding on sargassum seaweed.





### **Blue Crab**

These beautiful crabs can be found walking along the floor. They are quite timid, usually attempting to escape from your presence, however they can become aggressive if confronted.



**Stone Crab**-The Florida stone crab, *Menippe mercenaria*, is a crab found in the western North Atlantic, from Connecticut to Belize, including Texas, the Gulf of Mexico, Cuba, The Bahamas, and the East Coast. They are usually found hidden in small holes or rocks near the floor.



### **Decorator (Spider) Crab**



These crabs attach plants and other objects to their backs in order to camouflage themselves from predators.

### **Spiny Lobster**

This species of lobster lack pinching claws and as a result are quite timid and rely on their hard shell for protection

### **Echinoderms (fun fact: Latin for spiny skin)**

Common Starfish

Brittle (or serpent) Sea Star

Sea Urchin

### **Flora:**

#### **Mangroves:**

Black Mangrove

White Mangrove

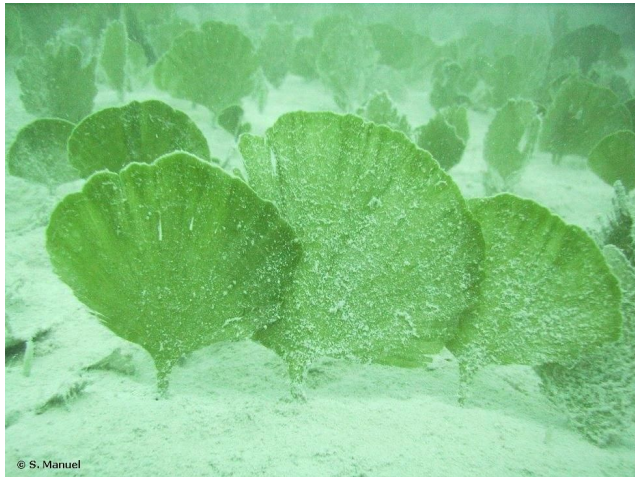
Red Mangrove

## **Algae:**

### **Oatmeal Algae**



### **Hard Fan Algae**



### **Soft Fan Algae**



### **Sargassum algae/weed**

**This algae can be seen floating in the bay. Small fish and crabs can be found hiding in this floating plant.**



### **Merman's shaving brush algae**

**Named for its resemblance to a shaving brush, this soft algae can be found growing along the sandy bottom.**



**Mermaid's Wine Glass**-This plant is formed of small clusters of slender; whitish to pale green stalks surmounted by one or more slightly concave discs of fused rays with a crenulate edge. The rays radiate from the center and minute branched hairs occur on the upper surface of the discs.





**Petticoat Algae**



**Laurence's Seaweed**



**Snorkeling Fish**

## **Net catching fish**

### **Link to Database of Biscayne Bay Fish**

<http://www.nps.gov/bisc/learn/nature/fish.htm>

<http://www.flmnh.ufl.edu/fish/Education/biopofile.htm>