



An Educational Poster of Marine Life
Prepared by **Dr. Nigel Thomas**,
with the cooperation of
the Grand Roatan Resort

Hi, my name is Julie Sugar. I live in the sea off the Grand Roatan Resort. I am going to take you on a tour of some of the species you can find there. Attached is a set of questions to test you at the end! But first I want to tell you about my name.



WHAT'S IN A NAME. My species has a "common name", which is **Sergeant Major**, but because common names vary in different places and with different languages, I also have a "scientific name", which is *Abudefduf saxatilis*, and this stays the same everywhere. The scientific name is normally in latin and in my case means, "The one with prominent sides, living among rocks!". I think I prefer Julie Sugar! The names given here are both **Common** and **Latin**

ECHINODERMS. Unlike the corals, worms and sponges, the Echinoderms generally move around to catch their food, although most of them do so very slowly. The Echinoderms include several strange looking groups of species, such as; Starfish, which you probably know about, although few were found in West Bay; Sea Urchins, with their prickly spines; and the rather unattractive Sea Cucumbers, which spend all their time vacuuming up sediments to eat. Most of these species stay hidden during the day but emerge to feed during the night

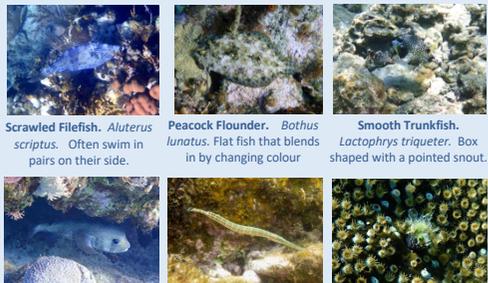


West Indian Sea Egg. *Tripneustes ventricosus.*
Slate Pencil Urchin. *Eucidaris tribuloides.*
Long-spined Urchin. *Diadema antillarum.*
Reef Urchin. *Echinometra viridis*
Tiger Tail Sea Cucumber. *Holothuria thomasi.*
Donkey Dung Sea Cucumber. *Holothuria mexicana*



My friend Nigel and I photographed over 60 different species of fish. Here are a selection of different types.

ODD SHAPES. Many different shaped fish can be found off Grand Roatan Resort ranging from flat fish, box shaped fish, fish with spines, trumpetfish and tiny blennies living in tubes inside a sponge. Although tiny the blennies often have the longest names!



Scrawled Filefish. *Aluterus scriptus.* Often swim in pairs on their side.
Peacock Flounder. *Bothus lunatus.* Flat fish that blends in by changing colour
Smooth Trunkfish. *Loctophrys triquetra.* Box shaped with a pointed snout.
Typical pose of the Porcupinefish. *Diadon hystrix.* Hiding under an overhang.
Trumpetfish. *Aulostomus maculatus,* with a trumpet shaped snout.
Spinyhead Blenny. *Acanthemblemaria spinosa.* Very small with a seaweed wig!

DANGEROUS FISH SPECIES. There are a few dangerous fish species in the area. They are dangerous because they can sting you with their poisonous spines. They can also be well disguised with seaweed like camouflage. If you see them just keep away, they won't chase after you!



Common Lionfish. *Pterois miles.* Considered a pest in the Caribbean.
Spotted Scorpionfish. *Scorpaena plumieri.* Watch out as really well camouflaged.

EGGS AND JUVENILES. Many of the fish change colour through their life, often starting out brilliantly coloured and then becoming much less attractive as they grow older. The **Yellowtail Damselfish** is a good example as it is covered in electric blue dots when it is young, which it loses when it is mature. The **Blue Tang** is a brilliant yellow when young but turns a grey/blue when adult. Other fish change colour at different times. When the adult males of the **Sergeant Major** guard their eggs they are coloured blue!



Yellowtail Damselfish. *Microspathodon chrysurus.* Juvenile above, adult below.
Blue Tang (yellow) *Acanthurus coeruleus* Juvenile above, adults below
Sergeant Major. *Abudefduf saxatilis.* Blue male, with eggs above, normal below



Cero. *Scomberomarus regalis.*
Flat Needlefish. *Blennius hians.*
Darkfin Chub. *Kyphosus bigibbus.*

HARD CORALS. One of the most important groups of species at the resort and the rest of the world in fact, are the corals. Some of these corals take hundreds or even thousands of years to form reefs. They are particularly at risk from changes in water temperature, because they exist in cooperation with microscopic algae (seaweed), which live in their cells and provide them with energy during the day. If the water gets too hot the algae can die and the coral dies as well. Climate change is a major cause of temperature change in the world's seas.



Smooth Flower Coral. *Eusmilia fastigiata.*
Massive Starlet Coral. *Siderastrea siderea.* Large, red/brown coral. Often found in a circular form
Grooved Brain Coral. *Diploria labyrinthiformis.*

WORMS. It may surprise you but some of the most colourful marine species are worms. These are not the same as the slippery creatures you find in the earth, as they have spectacular crowns of tentacles, which they use for feeding and respiration, often in brilliant colours. They can be difficult to see however, as they are afraid of shadows, and quickly retreat into their tube-like home if disturbed.



Split-Crown Feather Duster. *Anamobaea arstedii.*
Christmas Tree Worm. *Spirorbanchus giganteus.*
Social Feather Duster. *Bispira brunnea.*

SHRIMPS, CRABS AND LOBSTERS. Like the Echinoderms the Crustacea (apart from the barnacles) have to move to catch their food, they can't wait for it to come to them. The shrimps, crabs and lobsters catch their food using their claws and mobile mouthparts. They are generally "Omnivores", which means they will eat anything they can, including plants, other crabs and shrimps and, even little fishes like Julie Sugar.



Channel Clinging Crab. *Maiguimithrax spinosissimus* over reef top
Flame Box Crab. *Calappa flammea.* Usually buried in sand.
Caribbean Spiny Lobster. *Panulirus argus.* Hides under rock ledges.

BIG FISH. Although much of the area is very shallow several large species of fish can be seen. One of the most impressive is the Great Barracuda which is over 1.2m long.



Great Barracuda. *Sphyræna barracuda.* Often found in shallows
Rainbow Parrotfish. *Scarus guacamaia.* One of the largest parrotfish.
Southern Stingray. *Hypanus americana.* Found over the shallow water sands.

OPEN WATER FISH. The open waters around West Bay are populated by fish that are sleek in shape and often very fast swimmers. They are generally coloured silver which makes them almost invisible in the blue water.



Cero. *Scomberomarus regalis.*
Flat Needlefish. *Blennius hians.*
Darkfin Chub. *Kyphosus bigibbus.*

ANIMALS WITH TENTACLES. The hard corals and other similar, soft corals, zoanthids and anemones are all based on the same building block, the polyp. Hard corals and soft corals may include many hundreds of polyps, while anemones are solitary polyps. The polyps all have a similar form, each having a ring of feeding tentacles around their mouth, which they extend to catch small animals that swim in the water. This is a very diverse group of animals in both form and colour.



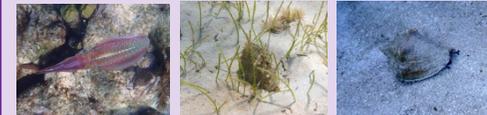
A group of Common Sea Fans. *Gorgonia ventalina.*
Grooved-Blade Sea Whip. *Pterogorgia guadalupensis.*
Brown Sponge Zoanthid. *Bergia catenularis.*

SPONGES are some of the biggest species in the resort area. They are also one of the most diverse groups with almost 20 species recorded. The biggest of all the sponges off Grand Roatan Resort is called the **Giant Barrel Sponge**, which can be almost 2m high. Sponges also have some of the strangest shapes, including barrels, tubes, dish, rope-like, round balls and encrusting. One species, known as the **Red Boring Sponge** is also very unusual, not because it is boring, but because it secretes acid to bore into the rock



Giant Barrel Sponge. *Xestospongia muta.*
Yellow Tube Sponge. *Aplysina fistularis.*
Red Boring Sponge. *Ciona delixrix.*

MOLLUSCS. All of the species shown on this poster, apart from the fish, are known as invertebrates, because they have no backbone. The final group of species of this type are the Molluscs. Many of these hardly move, such as the bivalves, or move very slowly including the Conch shells. Other species in this group, however, are very fast swimmers and often chase and catch other species in mid-water, including fish. These fast swimmers include squid and octopus, which can also change colour to hide, or swell up to make themselves look bigger, scaring predators away.



Caribbean Reef Squid. *Sepioteuthis sepioidea.*
Stiff Penshell. *Atrina rigida.*
Queen Conch. *Lobatulus gigas.*

COLOURFUL FISH. Many of the species in the area are brightly coloured with "disruptive" patterns, bars and false eyes, which help to confuse the animals that want to eat them. Some of the most brightly coloured are the Parrotfish. They are known as Parrotfish, not because of their colour but because they have hard, parrot like mouths.



Spotfin Butterflyfish. *Chaetodon ocellatus.*
Queen Angelfish. *Holocanthus ciliaris.*
Stoplight Parrotfish. *Sparisoma viride*



Longfin Squirrelfish. *Holocentrus rufus.*
Spanish Hogfish. *Bodianus rufus.*
Indigo Hamlet. *Hypoplectrus indigo.*