

# Welcome to PALM ISLAND

## Marine Life Resort Guide

### prepared by

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**Area 1.** Off the north west corner. Enter on the sandy beach before the pathway. Swim out to the seagrass, turn right on to sand and coral debris. Then find small coral mounds within former reef patches.

**Area 2.** Enter to the left of the jetty, keep left. Sand and rock initially, with seagrass in the offshore and flat rock ledges with overhangs in the inshore.

**Area 3.** Enter at the eastern end of the beach, next to the hammock. Cross area of sand and coral debris, then keep right. Area between the offshore reef and inshore rock ledges supports a large outcrop of coral reef.

This guide is intended to let you know about some of the marine species you can see around the island. The first point, however, is **your safety**. The three locations identified are considered to be the easiest and most rewarding to visit, however, when the prevailing east-north-east winds are strong be aware of the swell which affects all shallow waters. Also remain vigilant for boat movements, especially in area 2.

Four main habitat types exist; **Rock and Coral** (with ledges, crevices and overhangs), **Sand** (often with coral debris), **Seagrass** and **Open Water**.

Nearly all of these images were collected while snorkelling around Palm Island, so you can be assured that you will be able to see most of them yourself. All **common names** are in bold while *Latin* are in italic. An indication of size is given after the latin name: **L** = Large, **M** = Medium, **S** = Small and **VS** = very small. ☹ = Don't touch! **1, 2, 3, A** (all) indicates where you are most likely to see them

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### Rock and Coral Habitat

#### Fish

Rock and Coral, as a habitat, supports a wide variety of fish species. The following are some of the more frequently observed species, although by no means all.

**Banded Butterflyfish** easily identifiable from the large vertical black bars. It is often found in pairs in rocky areas. *Chaetodon striatus* (S-M, 1, 2).

The **French Grunt** found in shoals off the ledges in area 2. Brilliant yellow and silver blue stripes are characteristic. *Haemulon flavolineatum* (M, 2)

The **Smooth Trunkfish**, is normally solitary and can be found swimming with paddle like strokes in the rock and coral reef areas. *Lactophrys triqueter* (S-M, A)

The **Foureye Butterfly Fish** has a distinct false eye near its tail. Often found in pairs it can be observed around the rocky ledges of the west coast. *Chaetodon capistratus* (S, 2).

One of the most common of the shoaling fish, the **Sergeant Major** is present throughout the area. *Abudefduf saxatilis* (S-M, A)

This juvenile **French Angelfish** was spotted off the ledges in area 2. The striking yellow stripes black background and blue edged fins are characteristic. *Pomacanthus paru*, (VS as juvenile, 2).

The quite large, **Porcupinefish** may be found hiding beneath overhangs and in caves. It inflates if pestered! *Diodon hystrix* (L, 2).

A juvenile (yellow) and adult version of the **Blue Tang** (*Acanthurus coeruleus*, S-M, 1 & 2) particularly notable around the rock ledges of area 2, under the overhangs.

The **Doctorfish** is closely related to the Blue Tang and is often seen in large shoals over the ledge areas. They have characteristic vertical bars and may change colour from grey to dark blue. *Acanthurus chirurgus* (M, 1, 2).

What they lack in appearance they make up for in character. **Damsel fish** will vigorously protect their territory often nipping fingers and feet. Don't worry, as it amounts to nothing more than a fishy kiss. *Stegastes* sp. (S, A).

Lurking in the small holes and crevices you can find the **Spotted Moray eel**. They appear to be threatening, by frequently opening and closing their mouth's but this is only for respiration. *Gymnothorax moringa* (S-L, 2)

A **Trumpetfish**, hiding in a Sea Plume. *Aulostomus maculatus* (M, 2).

This is one of the group of species referred to as **Parrotfish** due to their hard beaks, and colouration. Most likely to be a **Redtail Parrotfish** *Sparisoma chrysopterygum* (ML, 1, 2).

One of several species that form the Sea Basses. In this case probably a **Graysby**. Notable within caves and on ledges. *Cephalopholis cruentatus*, (M, 2).

The **Longspine Squirrelfish**, characteristic big eyes and red and silver stripes. Several similar species exist which drift in shaded reef areas during the day. *Holocentrus rufus* (M, 1).

Common around all reef areas, the **Brown Chromis**, *Chromis multilineata* (S, A)

**Whitespotted Filefish**. This species is found in reef areas, feeds on sponges and algae. It has 2 phases one with white spots, one (unhelpfully) without! *Cantherhines macrocerus*, (M, 1).

A shoal of initial phase **Striped Parrotfish**, *Scarus iserti* accompanied by an initial phase **Blue-head** (yellow!) *Thalassoma bifasciatum* and a juvenile **Stoplight Parrotfish** at the bottom of the picture (*Sparisoma viride*). Found around the overhangs in area 2.

**Orange Spotted Filefish** found off the north west coast, within the coral reef. Note the distinctive spike like dorsal fin. *Cantherhines pullus* (M, 1).

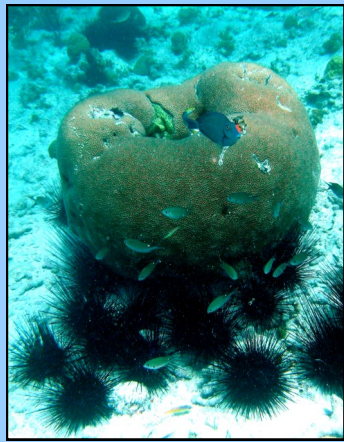
You may be lucky enough to see this **Barred Hamlet** off the deeper water reef areas. Note the vertical yellow bars. *Hypoplectrus puella*, (S-M, 1)

The **Glassy Sweeper**, with its shiny copper colour, is found in small shoals in shady areas, *Pempheris shombergi* (S, 2).

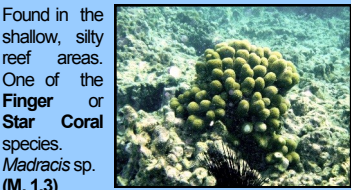
## Rock and Coral Habitat

### Coral and Coral like species

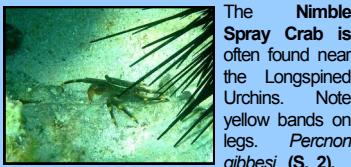
Many species of stony coral exist around the island including several massive species. There are also numerous examples of soft corals (Octocorals) and coral-like species including sponges and seaweeds.



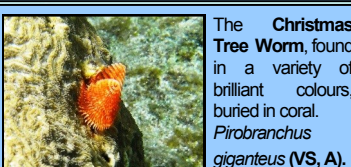
A good example of a true stony coral the **Massive Starlet Coral** (*Sidastrea siderea*, L, 1) surrounded by numerous **Long-spined Urchins** (*Diadema antillarum*, M, 2) and hosting many small fish species, with **Brown Chromis** (*Chromis multilineata* S, A) most evident.



Found in the shallow, silty reef areas. One of the **Finger or Star Coral** species. *Maeracris* sp. (M, 1,3)



The **Nimble Spray Crab** is often found near the Longspined Urchins. Note yellow bands on legs. *Percnon gibbesi* (S, 2).



The **Christmas Tree Worm**, found in a variety of brilliant colours, buried in coral. *Pirobranchus giganteus* (VS, A).



Another of the brightly coloured worm species, a **Split Crown Feather Duster**. Found encased in coral. *Anamobaea orstedii*. (VS, A).



The **Social Feather Duster** worm is found in small groups in areas of wave surge. The bright colours of the crowns are characteristic. *Bispira brunnea*. (VS, 1, 2).

**Blade Fire Coral.** *Millepora complanata*, (M-L, 2). Found in shallow reef areas.



**Branching Fire Coral.** *Millepora alvicornis* (S-M, 2). All reef areas.



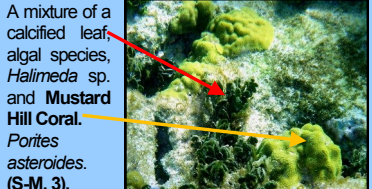
*Montastrea annularis* (VL, 3)

**Boulder Star Coral.** Massive growths off the south coast. Many fish are associated with this coral.



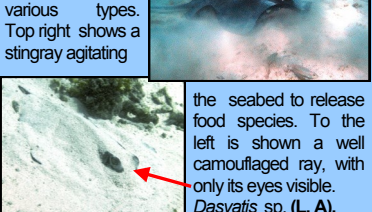
*Diploria strigosa* (L, 1,3)

**Smooth Brain Coral.** Common in the shallow silty areas off the south and north west coast.

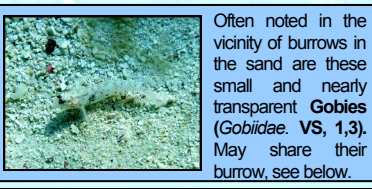


A mixture of a calcified leaf algal species, *Halimeda* sp. and **Mustard Hill Coral.** *Porites asteroides*. (S-M, 3).

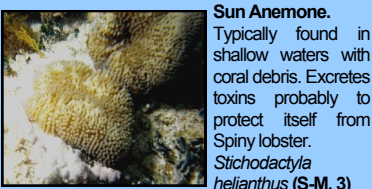
**Sand and coral debris.** As a habitat this is less visually interesting but it supports a variety of specialised fish and invertebrates.



The sand and coral debris habitat is favoured by **Stingrays** of various types. Top right shows a stingray agitating the seabed to release food species. To the left is shown a well camouflaged ray, with only its eyes visible. *Dasyatis* sp. (L, A).



One of the more often observed fish species in the sand habitat is the **Sand Diver.** *Synodus intermedius* (M, A).



Often noted in the vicinity of burrows in the sand are these small and nearly transparent **Gobies** (*Gobiidae*, VS, 1,3). May share their burrow, see below.



Burrows in the sand are also occupied by these shy **Snapping Shrimps.** Probably *Alpheus* sp. (S, 1,3).

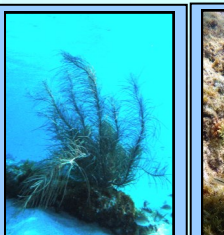


The **Sun Anemone.** Typically found in shallow waters with coral debris. Excretes toxins probably to protect itself from Spiny lobster. *Stichodactyla helianthus* (S-M, 3)

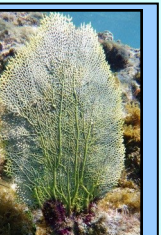


*Gorgonia ventalina*, (M, 2)

The shallow water areas, where wave surge is highest, are populated by the **Common Sea Fan** which is a soft, gorgonian Octocoral.



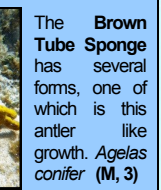
The **Sea Plumes** (*Pseudopterogorgia* spp. M-L, 2) may be found off the edge of the rock ledges.



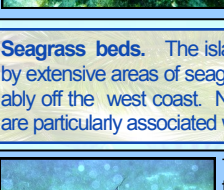
Another example of the **Common Sea Fan** illustrating the range of colour from purple to yellow.



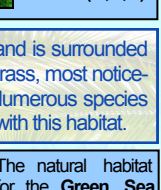
The **Brown Tube Sponge** has several forms, one of which is this antler like growth. *Agelas conifer* (M, 3)



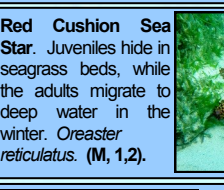
The **Brown Tube Sponge** has several forms, one of which is this antler like growth. *Agelas conifer* (M, 3)



Stunted version of the **Yellow Tube Sponge**, found in the shallow waters off the south coast. *Aplysina fistularis* (M, 2, 3)



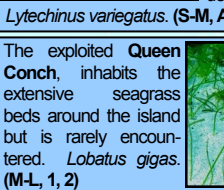
Stunted version of the **Yellow Tube Sponge**, found in the shallow waters off the south coast. *Aplysina fistularis* (M, 2, 3)



The **Red Cushion Sea Star.** Juveniles hide in seagrass beds, while the adults migrate to deep water in the winter. *Oreaster reticulatus*. (M, 1,2).



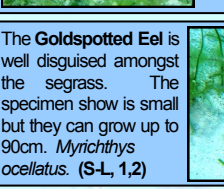
The natural habitat for the **Green Sea Turtle** is the inshore seagrass, grazing on the lush grass. Possible all coasts. *Chelonia mydas*. (L, A).



The exploited **Queen Conch**, inhabits the extensive seagrass beds around the island but is rarely encountered. *Lobatus gigas*. (M-L, 1, 2)



One of the most common species on seagrass beds, the **Green Sea Urchin**, is often found in small groups covered in leaf debris. *Lytechinus variegatus*. (S-M, A)



The **Amber Pen Shell** may be found partially buried in sediment. It is most easily observed in seagrasses. *Pinna camea*. (S-M, 1, 2)

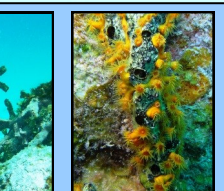


The **Goldspotted Eel** is well disguised amongst the seagrass. The specimen shown is small but they can grow up to 90cm. *Myrichthys ocellatus*. (S-L, 1,2)

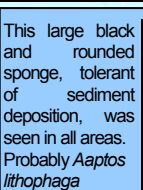
The **Black Sea Rod**, (*Plexaura homomalla*, M,1), an Octocoral. Characterised by distinctive yellow brown polys over a black stalk. Good examples in area 1.



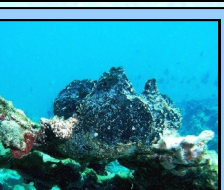
Several sponge species are similar to both soft and stony corals, with the **Green Finger Sponge** a good example (*Iotrochota birotulata*, M, 2). Notable for often having the **Golden Zoanthid** (*Parazoanthus swifti*) interwoven (above right).



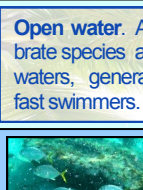
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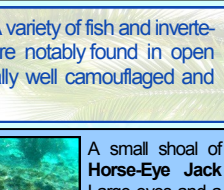
This large black and rounded sponge, tolerant of sediment deposition, was seen in all areas. Probably *Aaptos lithophaga* (M-L, A).



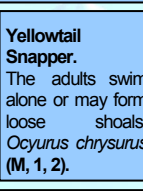
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The **Netted Barrel Sponge** has a thin wall and is often vase shaped. Mainly found in area 1, apparently tolerant of silts. *Verongula gigantea* (L, 1).



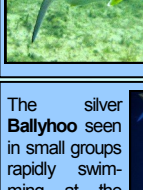
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**Open water.** A variety of fish and invertebrate species are notably found in open waters, generally well camouflaged and fast swimmers.



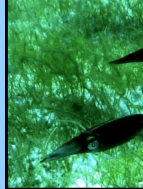
A small shoal of **Horse-Eye Jack** Large eyes and a yellow tail help identify this fish. *Caranx latus* (S-M, 2).



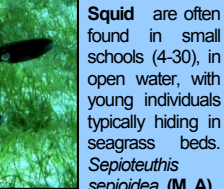
The **Yellowtail Snapper.** The adults swim alone or may form loose shoals. *Ocyurus chrysurus* (M, 1, 2).



The **Yellowfin Mojarra.** Fast moving in shallow water areas. Indistinct vertical stripes. *Gerres cinereus*. (S-M, 1,2)



The silver **Ballyhoo** seen in small groups rapidly swimming at the surface of the water. *Hemiramphus brasiliensis* (S-M, A).



The **Caribbean Reef Squid** are often found in small schools (4-30), in open water, with young individuals typically hiding in seagrass beds. *Sepioteuthis sepioidea*, (M, A)