PACIFIC OCEAN: *The Great Barrier Reef*

You slowly dive deeper, floating and gliding above colourful corals of different shapes and sizes. Some look like branches, or fingers on a hand. Some even look like thin plates. Rainbow-coloured parrotfish nibble them and tiny damselfish dart among them.

BRIGHT AND BUSY REEF

You plunge into the glimmering blue waters of the world's largest coral reef. Among sea turtles and hundreds of colourful tropical fish, you spot blacktip and whitetip reef sharks. You keep your distance to avoid scaring them. The sun lights up the corals and you stroke a friendly Maori wrasse as it swims by.

DID YOU KNOW?

Fish wee is one of the most important sources of nutrients to keep coral reefs healthy.

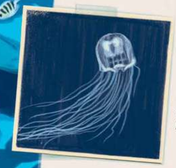
Pouty-lipped butterfly fish forage along the reef, while blue and gold fusiliers circle you curiously. Little clownfish bob in and out of sea anemones, and on the ocean floor you see giant clams with shining blue lips. Finding a hawksbill turtle, you pick some seaweed from the ocean floor and hold it out. The turtle swims over and plucks it from your hand.

STEER CLEAR!

Some of the world's most deadly animals live in the Pacific Ocean:

REEF STONEFISH
SIZE: 30–40 cm long
DEADLIEST FEATURE: sharp dorsal fin spines inject toxic venom.
AMAZING FACT: they are the most venomous fish in the world!





IRUKANDJI JELLYFISH
SIZE: 1–3 cm wide
DEADLIEST FEATURE: Highly venomous, painful stingers.
AMAZING FACT: their poison-filled, hooked capsules can be fired into their prey.

CONE SNAILS
SIZE: 13–23 cm long
DEADLIEST FEATURE: a special toxic tooth, which they can shoot out like a dart.
AMAZING FACT: there are over 900 different species of cone snail. Many of them have very beautiful shells.



BLUE-RINGED OCTOPUS
SIZE: 12–20 cm long (including legs)
DEADLIEST FEATURE: a toxic venom called TTX that can kill within minutes.
AMAZING FACT: their blue rings light up when they feel threatened.



WHAT IS CORAL?

Coral is alive! Coral polyps are actually tiny little animals related to sea anemones and jellyfish. They stick to hard surfaces, stretching out their stinging tentacles to catch food particles.



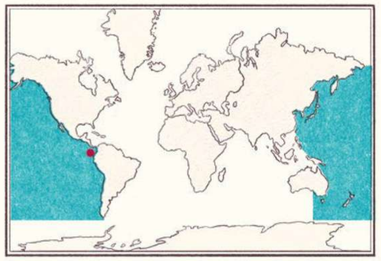


REEF BUILDERS

Coral polyps live together in large groups. They build stony exoskeletons that grow together over many years to form a reef. Their bright colours come from algae, which live inside the coral and provide them energy. In return, the algae get shelter and share nutrients with the coral.

PACIFIC OCEAN: *Esmeraldas Mangroves*

You head farther east, across the Pacific, to northern Ecuador in South America. Paddling along the coastline in a small boat, you come upon the Majagual mangrove forest, a rich and unique shallow ocean ecosystem.



There are animals everywhere you look. Bare-throated tiger herons wade through the water. An American yellow warbler sings among the branches and blue Esmeraldas crabs scuttle out of their muddy burrows.

A dense forest seems to be growing out of the water. You see tentacled roots standing high above the waterline, holding up the trees like wonky stilts. These trees are mangroves, which have special adaptations to grow in salty soil. They protect both the shoreline and the wildlife that live there, especially young fish.

AMONG MANGROVES

ESMERALDAS CRAB



These beautiful blue and orange crabs live in J-shaped burrows up to 2 m deep.

MANGROVE PERIWINKLE



RUFOUS-TAILED HUMMINGBIRDS



Tiny, glittering, blue-green and red hummingbirds live off nectar from the uncommon tea mangroves.

TAKING ROOT

Every part of a mangrove tree is important to this rich ecosystem. The leaves are home and food for many creatures; and molluscs, young fish and crustaceans harbour among the maze of underwater roots.

SPECTACLED CAIMAN

These ambush hunters lurk in the shallow waters around the mangroves or rest on the muddy shores.

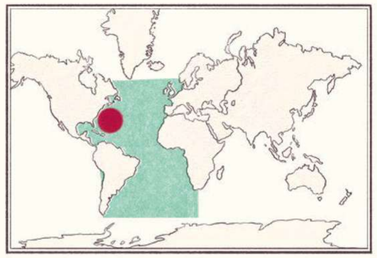


CAN YOU SMELL ROTTEN EGGS?

A huge number of mangrove leaves and seeds fall to the ground each year. When bacteria and fungi break down this plant matter for their own fuel, they often create stinky gases.

ATLANTIC OCEAN: *Sargasso Sea*

Your boat pushes south from the Arctic, deep into the Atlantic Ocean. Here, floating, golden clumps of Sargassum seaweed stretch far into the sapphire-blue distance. You are in the Sargasso Sea – the only sea in the world without a land boundary.



Look closer! Each clump of seaweed is a tiny island of life. Sheltered turtle hatchlings peep out among the bobbly blooms, and jewel-blue sea slugs float between the webs of weed life. Looking closer, you see a sargassum fish, hidden perfectly.

WHY DOES THE SARGASSUM STAY IN ONE PLACE?

The Sargasso Sea is surrounded by four special ocean currents. These move in a slow, clockwise circle called a gyre, which keeps the unattached seaweed from floating away.





DRIFTING NURSERY

In the last stage of their lives, millions of European eels leave their river homes, swimming for over a year to reach the Sargasso Sea, where they shelter and breed. Their babies stay here until they grow big enough for the long journey to Europe.

Watch out! A shoal of flying fish leap from the water as a rare Bermuda petrel soars above, searching for food.