

Surreal blue waters, spectacular beaches and lush forests make the Andaman and Nicobars some of the most beautiful islands in the world. Whether it's a family vacation, diving expedition, trek through the forest or a great meal of fresh seafood, there is much to enjoy here! Even when on holiday, there are ways in which we can take responsibility and help preserve its beauty.

Leave no trace behind!

Do ensure that the spaces you visit remain as you found them even after you leave. Plastic bags are banned in the islands, so make sure that you dispose waste responsibly and take back the plastic you bring with you.

Be mindful of consumption.

Electricity and most food produce is imported to the islands, so do consume only as much as needed.
Try to eat local and support small-scale fisheries.

Avoid disturbing marine life.

When snorkelling, diving or walking on the beach at low tide - do not touch, step on or break the living reef. Do not collect seashells, coral or any marine life.

Stay informed and aware to
PROTECT these ECOSYSTEMS!

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MARINE BIODIVERSITY of the **ANDAMAN** and **NICOBAR ISLANDS**

Dakshin Foundation, Andaman Nicobar Environment Team (ANET)
& Department of Environment and Forests, Andaman and Nicobar Administration



The Andaman and Nicobar Islands, home to 6 indigenous tribes, harbour a variety of highly biodiverse ecosystems.

The Andaman Islands are extensions of the submerged Arakan Yoma mountain range of Myanmar, while the Nicobar Islands form part of the Sumatra range. These islands have been separated from the Asian continent by deep seas for over 20,000 years, leading to the evolution of unique ecosystems and more than 180 species that aren't found anywhere else in the world! Such unique species are called endemic.

Over 80% of the Andaman and Nicobar land area is covered in evergreen and deciduous **Tropical Rainforests**. More than a quarter of the animals and plants found here are endemic.

Littoral Forests are those found between the seashore and the tropical rainforest, they contain species like the Sea Mahua, Pandanus and Nypa Palms.

Rocky Beaches

Sandy Beaches

Mangrove Trees are saltwater tolerant and well adapted to the intertidal zone.

Today, the population of Andaman & Nicobar is over 4 lakh people comprising primarily settler groups from the Indian mainland and Myanmar. The indigenous tribes form less than 8% of the total population and include the Great Andamanese, Jarawa, Sentinelese and Onge in the Andamans, the Nicobaris and Shompens in the Nicobars. The Islands are visited by over 5 lakh tourists annually and thus, tourism plays an important role in the local economy and island ecology.

Given the social and ecological fragility of these islands, significant portions are protected in tribal reserves, nine national parks, 96 wildlife sanctuaries and one biosphere reserve. The Andaman Islands have the largest marine national parks in India including the Mahatma Gandhi Marine National Park (MGMNP) to the west and the Rani Jhansi Marine National Park (RJMNP) to the east.

Coral Reefs support a high diversity of marine life (see the center fold for more information).

Seagrass Beds are important feeding grounds for threatened species like green turtles and the dugong, which is also the state animal.

Ross Island Sanctuary

Rani Jhansi Marine National Park

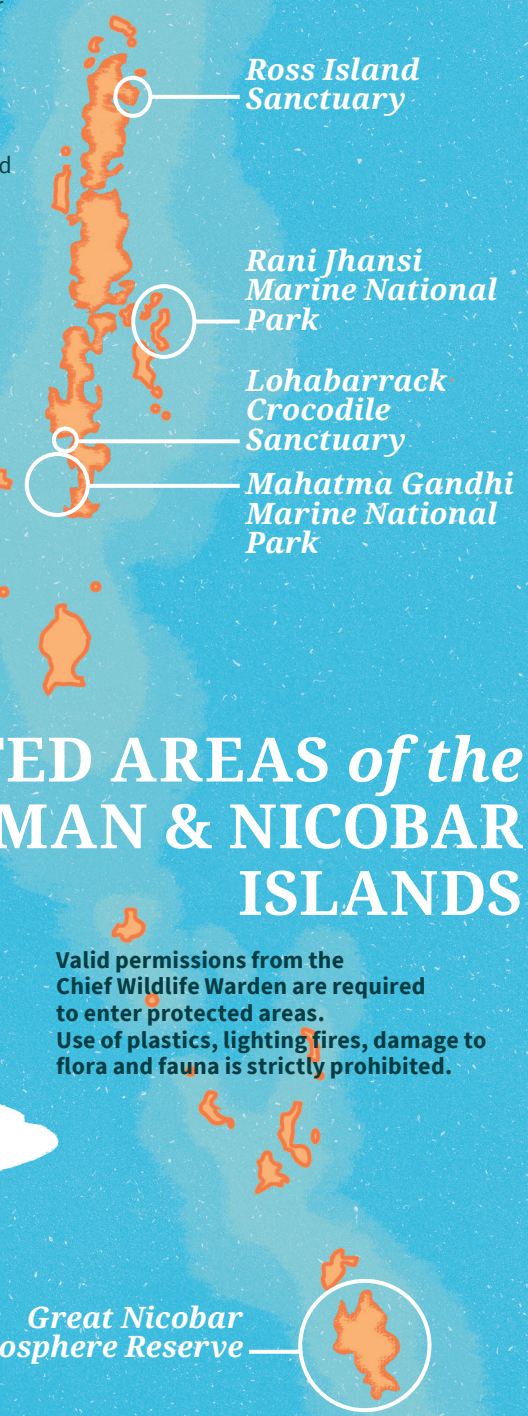
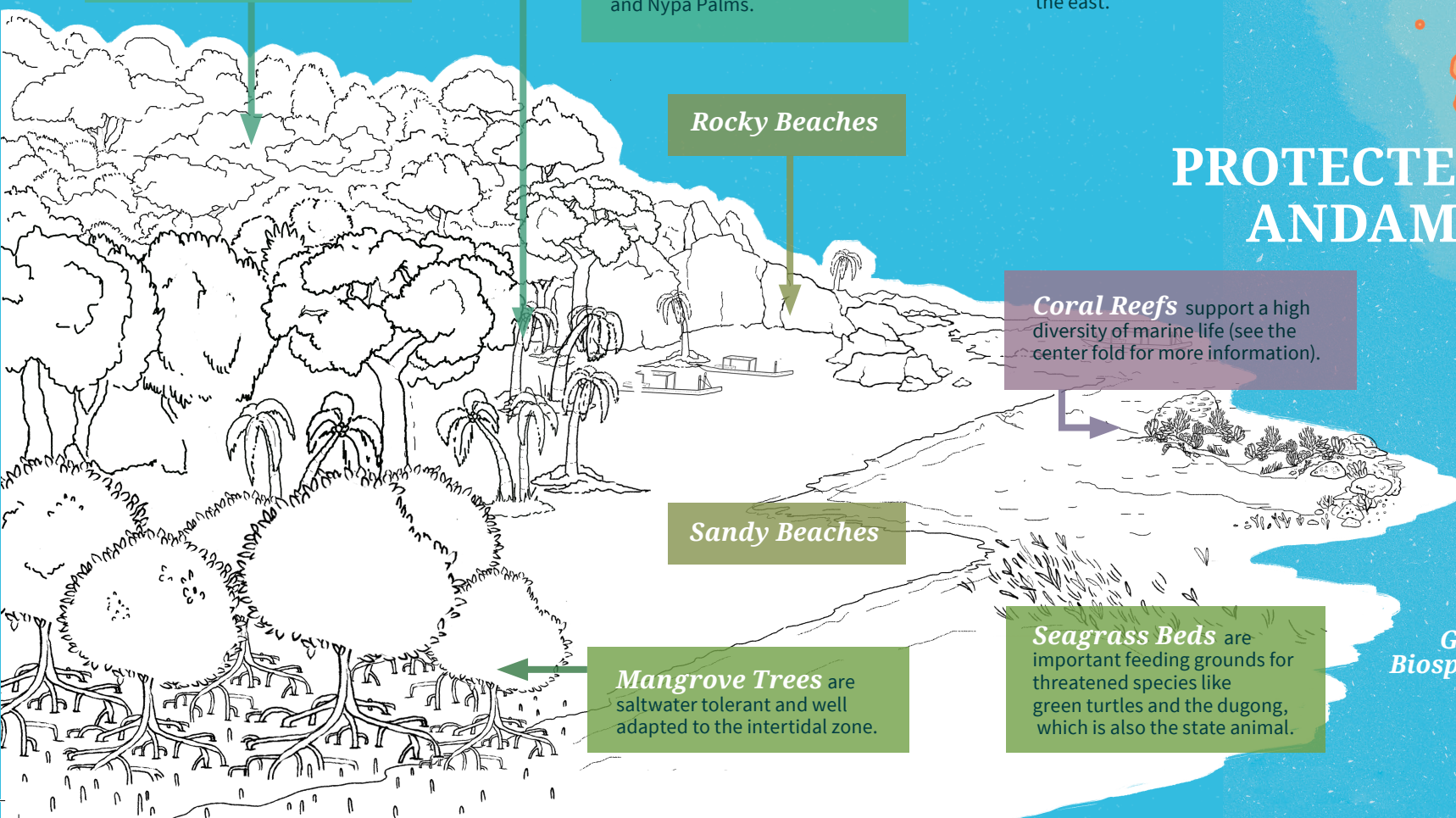
Lohabarrack Crocodile Sanctuary

Mahatma Gandhi Marine National Park

PROTECTED AREAS of the ANDAMAN & NICOBAR ISLANDS

Valid permissions from the Chief Wildlife Warden are required to enter protected areas. Use of plastics, lighting fires, damage to flora and fauna is strictly prohibited.

Great Nicobar Biosphere Reserve



Just like a forest ecosystem, the marine ecosystem contains a wide range of organisms that play specific roles in the **reef food pyramid**.



- Top predators
- Tertiary consumers
- Secondary consumers
- Primary consumers
- Primary producers



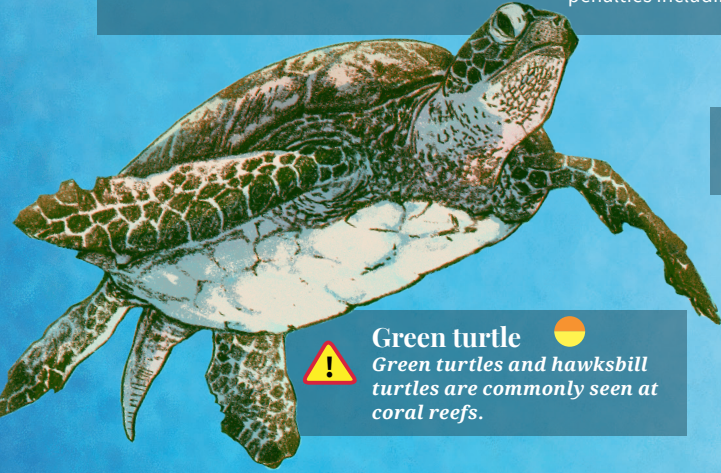
Hazardous

These are species that may possess stinging cells and venomous spines. Some, like barracudas and moustache triggerfish, are known to attack divers.



Protected species

These are scheduled species protected under the Wildlife Protection Act. Possession and trade of these species, dead or alive, results in heavy penalties including imprisonment.



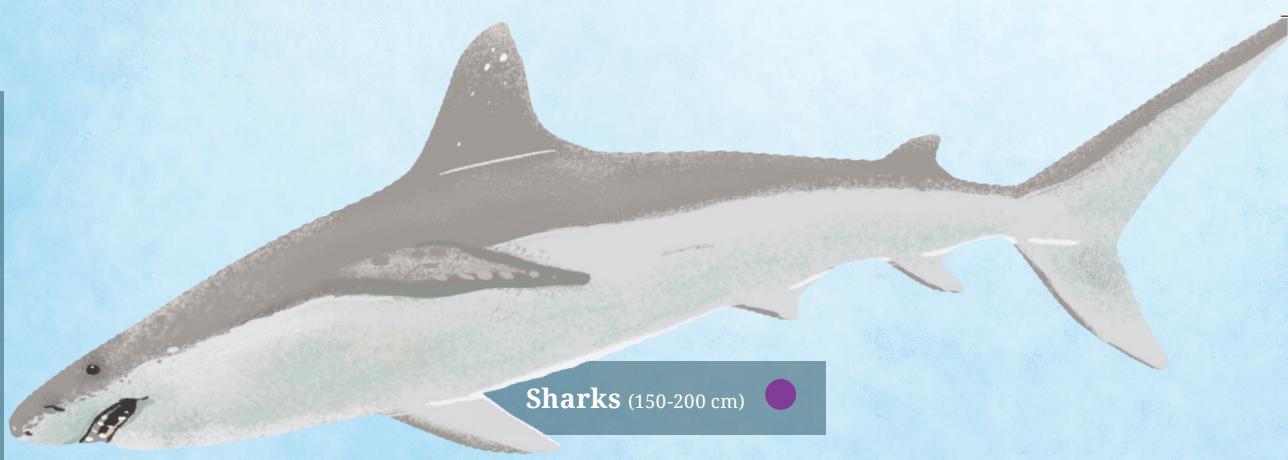
Green turtle

Green turtles and hawksbill turtles are commonly seen at coral reefs.



Barracudas

Family Sphyraenidae (80-120 cm)

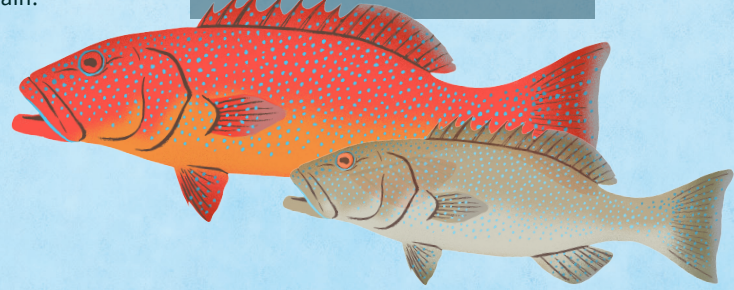


Sharks

(150-200 cm)

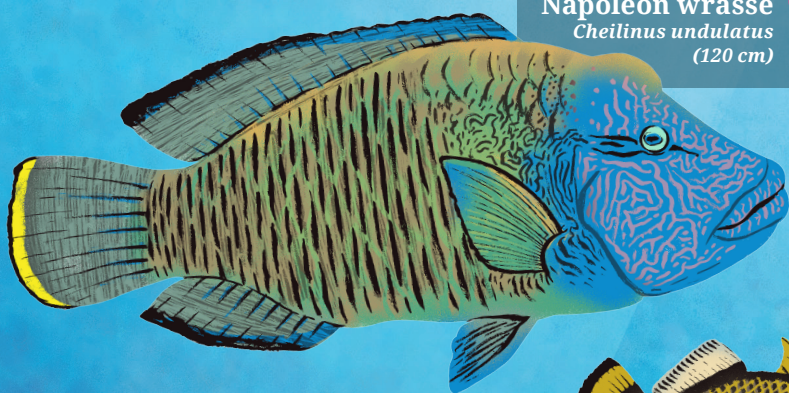
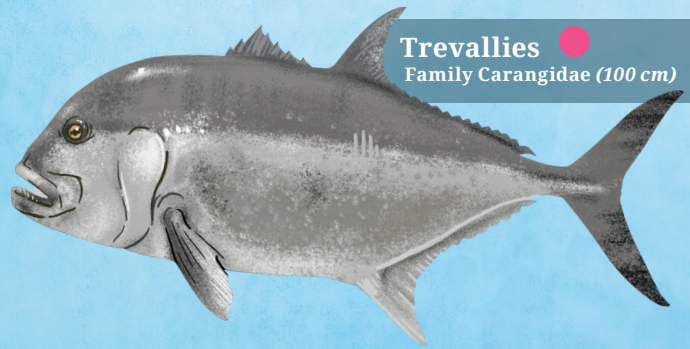
Leopard coral grouper

Plectropomus leopardus (60 cm)



Trevallies

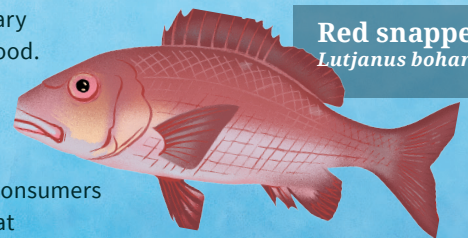
Family Carangidae (100 cm)



Napoleon wrasse

Cheilinus undulatus (120 cm)

Tertiary consumers, e.g. snappers and triggerfish, eat primary and secondary consumers as their main source of food.



Red snapper

Lutjanus bohar (50 cm)



Moustache triggerfish

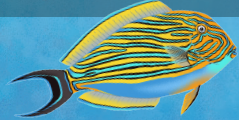
Balistoides viridescens (40 cm)



Secondary consumers eat primary consumers as their main source of food. They eat zooplankton (planktivores), fish (piscivores) and invertebrates (invertivores).

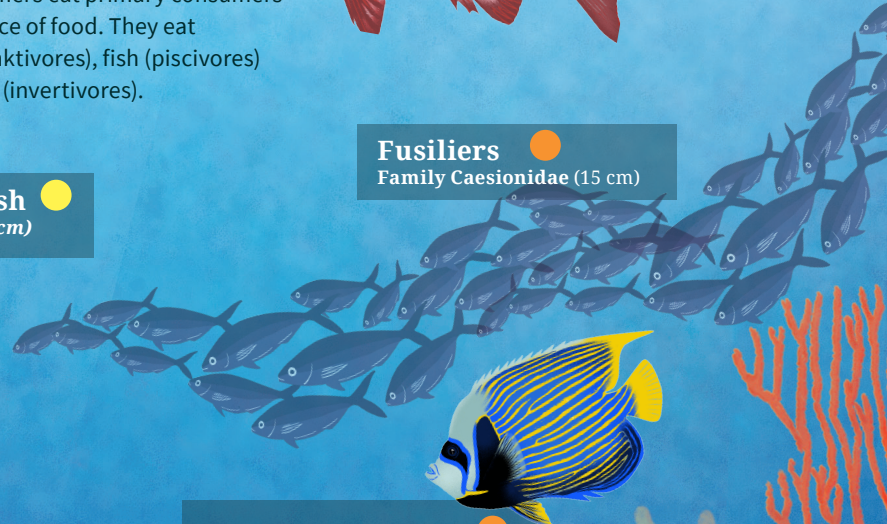
Striped surgeonfish

Acanthurus lineatus (20 cm)



Fusiliers

Family Caesionidae (15 cm)



Meyer's butterflyfish

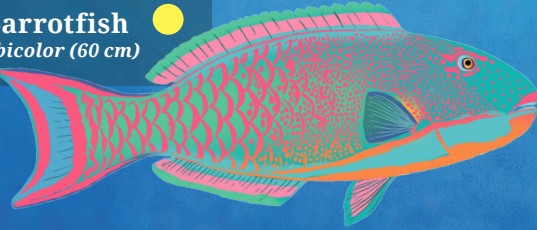
Chaetodon meyeri (12 cm)



Primary consumers are organisms that feed on the producers. These include herbivores such as zooplankton, parrotfish, surgeonfish, urchins, certain snails and sea stars. These may also include filter-feeding planktivores like sponges, anemones, as well as organisms that feed only on coral (corallivores) including the crown-of-thorns seastar and some butterflyfish.

Bicolor parrotfish

Cetoscarus bicolor (60 cm)



Emperor angelfish

Pomacanthus imperator (30 cm)



Branching coral



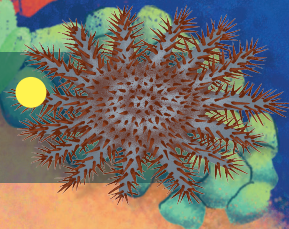
Redfin butterflyfish

Chaetodon trifasciatus (10 cm)



Crown-of-thorns sea star

Acanthaster planci (25 cm)



CORAL REEFS of the ANDAMAN and NICOBAR ISLANDS

Jewels of the islands, coral reefs are highly diverse and fringe the island coastline. Found in shallow water, reef-building corals are colonial animals closely related to jellyfish and are capable of creating a calcium carbonate skeleton. Coral grow in clear, nutrient poor waters thanks to a symbiotic relationship with single-celled algae called zooxanthellae that live within the coral animal tissue and produce food by photosynthesis.

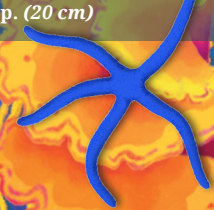


Sea fan



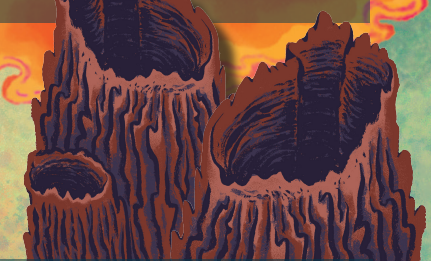
Long-armed sea star

Linckia sp. (20 cm)



Barrel sponge

Xestospongia testudinaria (50 cm)



Trochus snail

Trochus (5 cm)



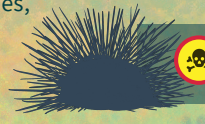
Spider conch

Lambis sp. (20 cm)



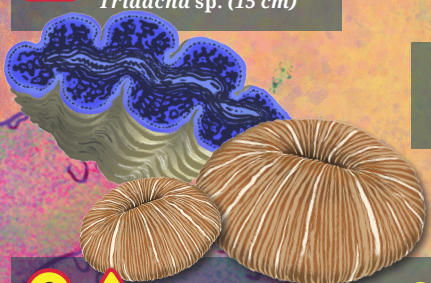
Urchin

(10 cm)



Giant clam

Tridacna sp. (15 cm)



Mushroom coral

Fungia sp. & *Ctenactis* sp. (15 cm)



Magnificent anemone

Heteractis magnifica (10 cm)

