

The Great Barrier Reef

The Great Barrier Reef is the world's largest coral reef system spanning over 2300 km of Queensland's coastline and covering an area of 348,000 km². The Reef's biodiversity reflects the evolution of the ecosystem over many thousands of years. This amazing biodiversity and the relationship between species and habitats make the Great Barrier Reef one of the most complex natural systems on the planet.

The Inshore Great Barrier Reef

The inshore area includes a diverse range of coastal and marine habitats such as coral reefs, islands, the lagoon floor, open water and seagrass meadows.

Some inshore species are particularly vulnerable to human-related threats due to their life history traits (e.g. long-living), specific food requirements and maintaining small home ranges.

Species under threat in the inshore Great Barrier Reef include several species of bony fish, dugong, dwarf minke and humpback whales, sea cucumbers, inshore dolphins, marine turtles, sawfish, sea snakes, seabirds and some sharks and rays.

The Reef relies on habitats and species that may not be part of the Great Barrier Reef World Heritage Area but are interconnected to it and are vital to its health.

Biodiversity is the variety of life on Earth at all its levels. It includes all living things and the way they interact with each other and their environment.



The time to focus on threats to inshore biodiversity is now

Around the world, biodiversity is under threat from human-related pressures such as coastal development and population growth. A changing climate adds further stress on ecosystems.

Since European settlement in Australia there have been significant changes to coastal ecosystems and landscapes caused by human use and development. Unfortunately, changes over the past 160 years have meant ecosystem health has been negatively impacted. This has resulted in loss of habitats, declines in species populations, disruption of connectivity between habitats or species and poor water quality. These changes can also impact the communities and industries that depend on the Reef being healthy e.g. fishing and tourism. Coastal development, declining water quality, climate change and some fishing activities particularly illegal fishing, pose a long-term risk to the inshore biodiversity of the Great Barrier Reef.

Great Barrier Reef catchment areas such as rainforest and salt marshes are all interconnected with the Reef and their health is vital to the overall health of the Great Barrier Reef.

reef guardians

The Great Barrier Reef Marine Park Authority's Reef Guardians program promotes schools, councils, fishers, farmers and graziers who are taking action to ensure long-term environmental benefits for the Great Barrier Reef.

Reef Guardians is a voluntary stewardship program where people are working together today to ensure the long-term health and resilience of the Reef for the future. Everyone can get involved in protecting the Reef, for example through recycling, rehabilitating natural environments, reducing your carbon footprint and putting your waste in the right place.

Stewardship is about taking care of something you don't own.

Hello, I'm Mindi

I'm Tiho. Come with us on our Great Barrier Reef adventure!

Join us on our adventure exploring the inshore Great Barrier Reef. We will be meeting lots of people who use or rely on the Reef and interconnected ecosystems, exploring an amazing range of habitats and species, and finding out more about what we can do to help protect the biodiversity of the inshore Great Barrier Reef.

Tiho and Mindi



I'm a Reef Guardian Farmer and I'm implementing best practices to minimise run-off and improve water quality in the Great Barrier Reef.



Uncle Bob said
Traditional Owners rely
on healthy wetlands
for food, resources
and cultural purposes.



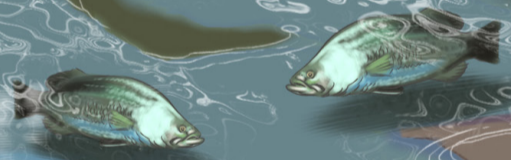
Did you know?

Commercial net fishers have modified their nets and the way they fish to maximise their catch while minimising the risk to protected species like dugong.





Reef Guardian
Councils are revegetating
river banks and beach dunes
to help stop erosion.



*Marine biologist Sue
taught us healthy
mangroves mean healthy
fish breeding grounds.*

Did you know?

The red emperor uses many different habitats of the inshore Great Barrier Reef during its lifecycle.



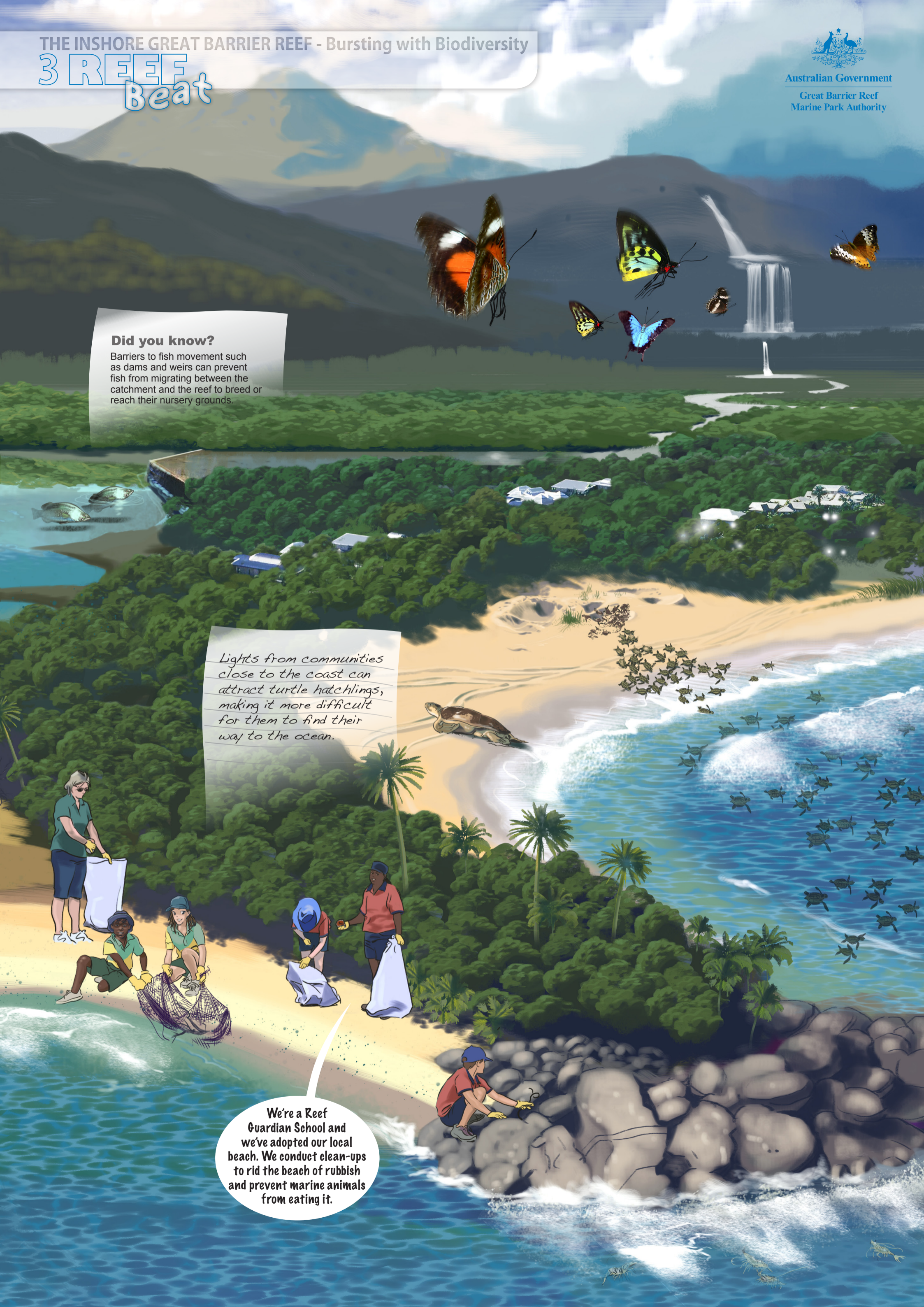


Did you know?

Barriers to fish movement such as dams and weirs can prevent fish from migrating between the catchment and the reef to breed or reach their nursery grounds.

Lights from communities close to the coast can attract turtle hatchlings, making it more difficult for them to find their way to the ocean.

We're a Reef Guardian School and we've adopted our local beach. We conduct clean-ups to rid the beach of rubbish and prevent marine animals from eating it.



4 REEF Beat

Today we learnt there are 22 species of seabirds that rely on islands of the Great Barrier Reef to nest. Activities like boating and camping are managed to minimise disrupting their feeding, breeding and nesting.

We keep a safe distance from islands when birds are breeding and nesting.

Did you know?

Pied imperial pigeons' droppings help fertilise and maintain ecosystems such as islands and mangroves.

5 REEF Beat



Did you know?

Australian snubfin dolphins are threatened by a range of impacts including loss of coastal habitat and coastal development.

Whales are one of the most remarkable sights on the Reef but we must keep our distance to ensure they can migrate safely through our waters.

Today we learnt humpback whales and their calves migrate to the warm waters of the Great Barrier Reef each year between May and September.



6 REEF Beat

The Great Barrier Reef offers many different fishing opportunities. As well as observing fishing and zoning regulations, it is important that fishers adopt responsible practices out on the water.

We use by-catch reduction devices in our nets to reduce catching non-target species of marine life.

Did you know?

Sea snakes may accidentally get caught in trawl nets. By-catch reduction devices in trawl nets help to reduce the human pressures on sea snake populations in the Great Barrier Reef.



7 REEF Beat

I always make sure I reduce my boat speed when I'm in turtle and dugong areas.

Turtle and dugong area
Go slow

We learnt seagrass diversity in Australia is amongst the highest in the world. Seagrass meadows are crucial habitat for at least 134 species of fish. They help capture and recycle sediments and nutrients from nearby catchments and stabilise the sea floor.

Did you know?

Seagrass beds are impacted by climate change, land-based run-off and events like storms and cyclones.



Australian Government

Great Barrier Reef
Marine Park Authority

8 REEF Beat

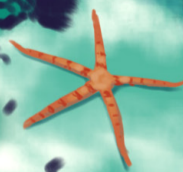
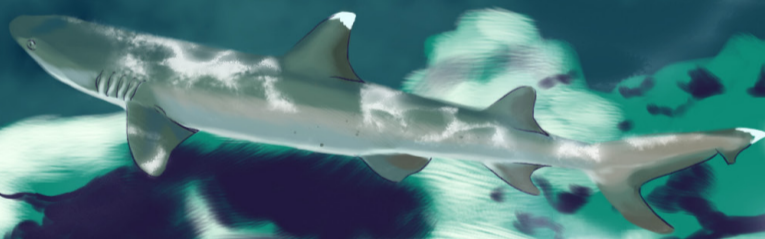
We're Reef Guardian Fishers and we fish in ways that minimise our impact on the Great Barrier Reef and fish populations.



Did you know?

As top-level predators, sharks help maintain the balance of species and the ecosystem.

Only about six per cent of the Great Barrier Reef Marine Park is coral reef. By protecting coral reefs and interconnected habitats we can help to maintain reef health, resilience and species diversity.



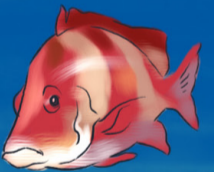
9 REEF Beat



We're a high standard tourism operator. We are eco-certified and use best practices to minimise our impact on the Great Barrier Reef.



We've had a great time exploring the inshore biodiversity of the Great Barrier Reef. We've learnt if we all work together today, we can help to improve the health of the Great Barrier Reef for tomorrow.



Did you know?

Crown-of-thorns starfish are marine invertebrates that feed on living coral tissue. When conditions are right for them to multiply, they can reach plague proportions and devastate hard coral populations on affected reefs.

