

Australia's Great Barrier Reef

Frequently Asked Questions

This document has been prepared by Tourism and Events Queensland to assist the tourism industry to respond to frequently asked questions about coral bleaching, reef health and to promote the contribution tourism makes to the Great Barrier Reef. This information is copyright free and we encourage industry to adapt it to suit their needs. This information has been prepared in good faith from official sources, and was correct at time of publishing.

The media is full of stories about coral bleaching, water quality and plastic pollution, but what does this all mean?

The Great Barrier Reef Marine Park Authority (GBRMPA) is the official Government source of scientific information. To learn more about Coral Bleaching check out GBRMPA's [Coral Bleaching Fact Sheet](#) or visit their [website](#).

The challenges facing the Great Barrier Reef are part of a global challenge affecting the world's coral reefs. Importantly, the Great Barrier Reef has fared better than many of the world's reefs due to its size and biodiversity.

Queensland is practising world-leading management of the Great Barrier Reef Marine Park. Commercial and recreational activities associated with the Reef are tightly regulated by the [Great Barrier Reef Marine Park Authority](#).

Is tourism to the reef detrimental?

For decades, our tourism industry has been proudly protecting and advocating for the reef through a range of significant environmental, educational, research-related and tourism generating initiatives.

The reef is an outstanding natural ecosystem and a complex living structure. Tourism operators play an important role in helping visitors to learn and understand about the reef, the variety of threats to it, the reef's resilience and recovery mechanisms and how management of the reef and its diversity contributes to its status as the best managed reef in the world.

Around two million tourists visit the World Heritage Area every year and around 80 per cent of all tourism activity occurs within 7 per cent of the Great Barrier Reef marine park.

Tourism dollars make an important contribution towards Reef management. Anyone who visits the Reef with a commercial tourism operator contributes to sustaining the Reef through an Environmental Management Charge (EMC).

Can tourists enjoy the reef without harming it?

By adhering to [responsible reef practices](#), yes, they can!

When visiting the Great Barrier Reef we encourage visitors to:

- Use a high standard tourism operator by looking for and booking with tourism operators who have EcoTourism Australia or EarthCheck certification. These are commercial operators who have adopted high standards for protection, presentation and partnership within the Great Barrier Reef Marine Park that enhance environmental protection, reef resilience and tourism sustainability.
- Don't let your litter bug our reef. Dispose of your rubbish properly and pick up debris from beaches and waterways.
- Protect coral ecosystems – places like mangroves and seagrasses are where many marine animals feed and breed, so be careful not to disturb or remove them.
- Look, but don't touch. When snorkelling enjoy the corals and other marine life – but keep your distance
- Share your experiences through hash-tagging Instagram pictures with #thisisqueensland and include @Australia @Queensland in Twitter posts.
- If boating, anchor away from corals. Anchor on a sandy bottom, so anchors and chains aren't dragged across corals.
- Follow zoning rules. Don't fish in green (no take) zones, they help protect the reef's rich biodiversity.

Australia's Great Barrier Reef

Frequently Asked Questions

Share what you see:

- The tourism industry plays a vital role as part of the Great Barrier Reef Marine Park Authority's early warning system, alerting the authority of impacts to reef health. Visitors and tourism operators can help through the [Eye on the Reef](#) program which includes an app that can be downloaded to record and relay observations, including photos, back to GBRMPA.

Diving and snorkelling are two of the best ways to take in the spectacular underwater views that the Great Barrier Reef has to offer, and to come face-to-face with its captivating marine life. By having good snorkel and dive practices, you'll be able to preserve this special world for others to experience:

- Enhance the quality of your dive experience by learning about the environment you will visit
- Practice buoyancy control over sand patches before approaching a reef - test buoyancy whenever you're using new equipment such as new wetsuits, buoyancy control devices (BCDs) and cameras
- Make sure you are properly weighed before diving near a reef
- Check that all your dive gear is secure before you get into the water so that it doesn't dangle and catch on the reef
- Move slowly and deliberately in the water, relax and take your time - avoid rapid changes in direction
- Avoid making sudden or loud noises underwater
- Avoid leaning on, holding onto or touching any part of the reef - this is particularly important when you are taking underwater photographs
- Avoid kicking up and disturbing the sand if you're over a sandy area
- Avoid touching any animals or plants
- Avoid feeding fish
- Stay more than one metre away from giant clams
- Keep clear of free-swimming animals (such as turtles, whales and sea snakes). In particular, do not chase, ride, grab or block the path of these animals
- Avoid relocating any marine life, particularly when taking photos and filming.

What role does tourism play in protecting the Great Barrier Reef?

The tourism industry is committed to responsible practices as well as actively participating in programs to protect Reef health and build resilience. A high percentage of Reef operators are recognised as [high standard operators](#): When you visit, choose businesses and operators who are eco-certified or accredited (look out for the Ecotourism Australia Advanced Accreditation, EarthCheck or Green Leader logos and/or Great Barrier Reef Marine Park Authority branding). To help you, Eco Tourism Australia has developed a [Green Travel Guide](#) which profiles operators who are following or setting best practice in climate change, eco or nature-based tourism practices.

Many skippers and crew have spent their entire lives living near and working in the Great Barrier Reef Marine Park and, as custodians of the Great Barrier Reef have exceptional knowledge about this complex structure. Many day trip vessels have marine biologists on board who provide up to date information and are available to answer your questions.

The tourism industry and visitors play a vital role in monitoring reef health and marine wildlife sightings. Visitors and operators can help through the [Eye on the Reef Citizen Science](#) program which includes an app that can be downloaded to record and relay observations, including photos, back to the Great Barrier Reef Marine Park Authority.

Since 2010, the [Association of Marine Park Tourism Operators](#) (AMPTO) has been working with unemployed youth, training them as recreational dive supervisors in the Crown of Thorns Starfish (CoTS) control program (operated through a contractual agreement with GBRMPA). The association also trains tourism operators and community-based organisations to search and lethally inject the coral-eating starfish, responsible for an estimated 40 per cent of the reef's total decline in coral cover.

Australia's Great Barrier Reef

Frequently Asked Questions

What is the Environmental Management Charge and how does it assist with sustainable management of the Great Barrier Reef?

The Environmental Management Charge (EMC) is a charge associated with some commercial activities, including tourism operations and non-tourist operations and facilities, operated under a permit granted by the Great Barrier Reef Marine Park Authority (GBRMPA).

For most tourism operations, visitors to the Marine Park participating in a tourist activity pay the EMC as part of their ticket price. For other operations in the Marine Park, such as those involving the hire of equipment, installation and operation of tourist facilities, underwater observatories, sewage outfalls and vending operations the permittee must pay fixed quarterly charges to the GBRMPA.

The funds the Australian Government receives from the Environmental Management Charge are vitally important in the day-to-day management of the Great Barrier Reef Marine Park and in improving its long-term resilience.

Can visiting the Great Barrier Reef help me understand what is going on?

It sure can! Before visiting this special World Heritage area, you can learn about the Marine Park, what it is and [what makes it special](#). There are many experiences offshore and onshore that offer visitors the opportunity to get involved in 'citizen science' and learn more about the Great Barrier Reef.

When planning a reef visit, look for and book with tour operators who are eco-certified or accredited (including Ecotourism Australia Advanced Accreditation, EarthCheck or Green Leader logos and/or Great Barrier Reef Marine Park Authority branding).

Many skippers and crew have spent their entire lives living near and working in the Great Barrier Reef Marine Park and, as custodians of the Great Barrier Reef, have exceptional knowledge about this complex structure. Many day trip vessels have marine biologists on board who provide up-to-date information and are available to answer your questions.

If you are one of the many recreational visitors who are not part of a commercial tourism operation to the Great Barrier Reef, it is important to learn about some of the areas of the Marine Park and understand what you can do and where you can go in the different zones of the Marine Park.

There are also many specialised tours available to visitors in multiple locations along the reef, including:

- Visit [Reef HQ](#), the world's largest living coral reef aquarium. As the National Reef Education Centre for the Great Barrier Reef Marine Park Authority, Reef HQ Aquarium in Townsville will open your eyes to an amazing world filled with thousands of charismatic marine creatures. With impressive exhibits, the aquarium offers an ever changing, always fascinating experience, showcasing rare and extraordinary features of the Great Barrier Reef. Education at the centre does not stop at encouraging responsible behaviour on the reef. Importantly, it advocates eco-friendly behavioural change in everyday life. For example, Reef HQ's turtle hospital has made some major inroads since opening in 2009. The facility has rehabilitated and released more than 70 sick and injured turtles back into the Great Barrier Reef, home to six of the world's seven species of marine turtle.
- Take a tour of the [Australian Institute of Marine Sciences](#) Townsville facility.
- [Lady Elliot Island Eco Resort](#), located at the Great Barrier Reef's southernmost tip, is as close as you'll get to a carbon-neutral model and offers behind-the-scenes tours of its uber "green" infrastructure. Professional Association of Diving Instructors (PADI) named Lady Elliot Island as one of the "Top 5" locations on the planet to dive with manta rays.
- Tour the new [Cairns Aquarium](#) to learn about the different habitats and wildlife in the reef catchments and in the marine park - a great way to build some understanding before heading out to the reef to experience it first-hand.
- Be a '[Marine Biologist for a Day](#)' with [Sunlover](#) Reef Cruises and take part in completing rapid monitoring surveys.

Australia's Great Barrier Reef

Frequently Asked Questions

- [Eye to Eye Marine Encounters](#) runs an eco-tourism expedition to see dwarf minke whales, tiger sharks and green turtles through the Coral Sea and Outer Reef with an inherent message to preserve what is being watched.
- November to March is turtle nesting and hatchling season. Mon Repos beach near Bundaberg supports the most significant population of endangered loggerhead turtles in the South Pacific. Each season, visitors can join a Queensland Parks and Wildlife Service ranger-guided turtle encounter at [Mon Repos Turtle Centre](#).

The Great Barrier Reef Marine Park is home to a network of internationally-acclaimed research stations. Opportunities exist to volunteer and/or tour facilities, offering a rare peek behind the scenes and interaction with some of the world's leading scientists:

- University of Queensland's [Heron Island Research Station](#) is the largest island research centre in the southern hemisphere. Guests at Heron Island Resort can tour the facility and choose from a range of complimentary activities including [guided reef and ecology walks](#).
- [Orpheus Island Research Station](#), operated by James Cook University, seeks volunteers to assist with station duties. The island is also home to the luxury [Orpheus Island Resort](#), where resort guests and other visitors can pre-arrange tours of the research station.
- The Australian Museum owns and operates [Lizard Island Research Station](#) which annually accommodates around 350 researchers from Australia and the world. Its doors are open to visitors who want to join the station volunteer program, assisting with general maintenance. Guests at the neighbouring luxury [Lizard Island Resort](#) can enjoy a special tour, with funds donated directly to the station.

Volunteer for The Reef:

- Join the [Eye on the Reef](#) program – this environmental monitoring and assessment program enables anyone who visits the reef to play an active part in its long-term protection. When visiting the Great Barrier Reef, simply download the smartphone app to send in real-time sightings of marine animals, reef health and incidents.
- Queensland National Parks offer visitors the chance to volunteer as campground hosts on [North West and Lady Musgrave Islands](#) in the Southern Great Barrier Reef during Queensland and peak holiday periods. In exchange for providing island interpretation, with a conservation message, volunteers receive free camping.
- Volunteer with the [Eco Barge Clean Seas](#) crew in The Whitsundays who are bona fide reef saviours. Collecting marine debris by day, caring for marine turtles by night, these dedicated anti-litter bugs are responsible for banishing more than 140,000 kilograms of sea-borne rubbish from The Whitsundays since 2009.
- Citizen scientists play a vital role in [Project Manta](#), a University of Queensland-led study of the ecology and biology of manta rays. Photos and videos of the underside of these graceful giants are needed for the project's success in tracking and protecting two endangered species in Australian and Indonesian waters. Anyone can share photos on Project Manta's Facebook page. Plus, if a new manta is identified, the photographer has naming rights.
- [Reef Check Australia](#), a not-for-profit organisation, works to protect reefs and oceans by empowering and engaging the community in hands-on research and education. Volunteers can literally dive in and train to become a coral reef surveyor (snorkelling or diving).
- The [Great Barrier Reef Citizen Science Alliance](#) can help take the leg work out of finding the right project on land or underwater, mapping opportunities across northern, central or southern stretches of the reef and throughout south-east Queensland. The alliance emerged from a 2012 study by the Great Barrier Reef Foundation, which identified the desire for "greater exposure, engagement and collaboration between citizen science groups and stakeholders".

Australia's Great Barrier Reef

Frequently Asked Questions

Helping from home

You can make good environmental choices at home, work, school and when you travel that also benefit the Reef. As far as marine debris goes, small shards of plastic, drink can rings, plastic bags and water bottles are some of the worst offenders threatening the Great Barrier Reef.

- take a natural fibre, reusable bag or basket to do your groceries;
- cut down on packaging by buying in bulk;
- buy fruit and vegetables loose instead of in plastic bags;
- support local farmers and visit your local farmers markets.
- If you like a cold brew or two, choose beer cans with eco-friendly rings (it's a thing now!) so there's less risk of a turtle mistaking them for food.
- Ban the Bottle - There's a reason that Lady Elliot Island was the first Great Barrier Reef island resort to ban the sale of plastic water bottles. Not only is bottled water production a big contributor to carbon emissions and climate change, discarded bottles end up as marine debris, and create hazards for the reef's sea-bound residents. Whether you are on the reef, or at home, choose a glass or aluminium, reusable water bottle filled with tap or filtered water.
- Reduce your carbon footprint – cut back on fossil fuels. Climate change causes ocean warming and ocean acidification, and is the biggest threat to the reef.
- Reduce fertilizer use – too many nutrients from fertilizer use cause algae to grow, blocking sunlight.
- Join the [Citizens of the Great Barrier Reef](#), a social movement to unite people from around the world to learn about and care about the Reef. The organisation works with industries, including the tourism industry, to find ways to address the global challenges the Reef faces.
- [Look for sunscreens](#) that have minimal impact on corals.

Why is the Great Barrier Reef the best managed reef in the world?

The Great Barrier Reef Marine Park sets a global benchmark for marine protected area management, with no-take zones covering about 33.5 per cent of the Marine Park or about 115,374 square kilometres.

UNESCO's "outstanding universal value" tag is bestowed on the basis that a site's disappearance "constitutes a harmful impoverishment of the heritage of all the nations of the world". Best practice management of the Marine Park and a firm commitment from the tourism industry to its conservation has ensured that it has remained resilient.

The Australian Government agency the Great Barrier Reef Marine Park Authority (GBRMPA) and the Queensland Park and Wildlife Service (QPWS) are charged with the responsibility of managing, protecting and conserving the Great Barrier Reef Marine Park.

GBRMPA is recognised as the global leader in the management of a coral reef system and best practice management tools are employed by GBRMPA and QPWS to ensure that the long-term resilience of the reef and islands is maintained. These include:

- Zoning - this helps to manage and protect the values of the Marine Park that people enjoy. Each zone has different rules for the activities that are allowed, the activities that are prohibited, and the activities that require a permit. Zones may also place restrictions on how some activities are conducted.
- Partnerships & innovative best practice initiatives
- Education and community awareness
- Research
- Policy and Legislation
- Permits and licenses
- Protected Area Management plans
- Site management

Australia's Great Barrier Reef

Frequently Asked Questions

An Outlook Report is compiled every 5 years to evaluate the state of the Great Barrier Reef. The Outlook Report released by the Australian Government concludes that tourism is effectively managed and a very low risk to the Great Barrier Reef. The diversity of the Great Barrier Reef can be attributed to the area's effective management and protection.

The Great Barrier Reef Marine Park stretches approximately 2300 km along the coast of Queensland in north-eastern Australia. This is about the same length as the west coast of the USA from Vancouver to the Mexican border. It is:

- bigger than Victoria and Tasmania combined;
- bigger than the United Kingdom, Switzerland and Holland combined;
- roughly the same area as Japan, Germany, Malaysia or Italy;
- approximately half the size of Texas; and
- slightly smaller than the entire Baltic Sea.

The Belize Reef off the Caribbean coast of Belize is the second longest barrier reef in the world at 290 km, while Ningaloo Reef off the West Australian coast is 280 km long.

Why is the Great Barrier Reef a UNESCO World Heritage Site?

This is the biggest structure ever built by living things and the only one visible from outer space and is home to one of the world's most complex and uniquely diverse ecosystems.

Bigger than 70 million football fields, the Great Barrier Reef is arguably the largest coral reef system that has ever existed. In 1981 it was the first to be inscribed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) on its World Heritage List, [topping all four natural criteria](#).

At the time of inscription, the International Union for the Conservation of Nature noted: "If only one coral reef site in the world were to be chosen for the World Heritage List, the Great Barrier Reef is the site to be chosen." World Heritage listing provides protection for the area's rich biodiversity, including internationally significant dugong and marine turtle habitat. As UNESCO notes, no other World Heritage Property contains such biodiversity.

The operational responsibility of its safeguarding rests with the [Great Barrier Reef Marine Park Authority](#) (GBRMPA), a Commonwealth government agency established as a statutory authority under the *Great Barrier Reef Marine Park Act 1975*.

Natural beauty and phenomena

- UNESCO considers the Great Barrier Reef's "superlative natural beauty above and below the water" as "some of the most spectacular scenery on earth."
- Due to the work of billions of tiny organisms known as coral polyps, the reef is not one continuous barrier, but a vast mosaic of some 3000 coral reefs, 600 continental islands, 300 coral cays and about 150 inshore mangrove islands.
- Many of the cays support "spectacular and globally important colonies of seabirds and marine turtles". Raine Island is recognised as the world's largest aggregation site for nesting green turtles.
- The reef's underwater wonderland is home to "spectacular coral assemblages" and a kaleidoscope of fish of every shape and size that rival the full Pantone colour scheme.
- UNESCO cites the natural beauty and phenomena of the internationally renowned Cod Hole, near Lizard Island; a magical dive site in the Great Barrier Reef's "Wild North" offering an opportunity to swim alongside 110kg potato cod.
- Visitors can similarly observe first-hand other phenomena including nesting turtles and migrating whales, with the opportunity to join swim-with-minke-whale encounters.
- The Mount Everest of reproduction in nature – the coral spawning phenomenon, first discovered by James Cook University researchers back in the early 1980s, which erupts on the Great Barrier Reef after a full moon in late spring or early summer.

Australia's Great Barrier Reef

Frequently Asked Questions

Major stages of Earth's evolutionary history

- UNESCO rates the Great Barrier Reef as "a globally outstanding example of an ecosystem that has evolved over millennia", noting that the area has been exposed and flooded by at least four glacial and interglacial cycles.
- Today, the Great Barrier Reef includes examples of all stages of reef development from inshore fringing reefs to mid-shelf reefs and shoals, exposed outer reefs and deep-water reefs. What's more, climatic conditions over many hundreds of years can be seen in old massive coral cores.
- Aside from the coral reefs, which comprise just seven per cent of the World Heritage Area, other important features include palaeochannels (past river channels that have filled in over hundreds of thousands of years by sediment); karstic features (landforms shaped by the dissolution of layers of soluble bedrock, such as limestone); submarine canyons and turbidite deposits.

Ecological and biological processes

- UNESCO notes that "biologically, the unique diversity of the Great Barrier Reef reflects the maturity of an ecosystem that has evolved over millennia".
- Globally significant marine fauna groups include a mind-boggling diversity of fish, molluscs, sponges, anemones, marine worms, crustaceans and many others.
- The reef's 150 inshore mangrove islands also provide important ecological services, while significant human interaction with the natural environment is illustrated by links between Aboriginal and Torres Strait Islanders and their sea-country.

Habitats for conservation of biodiversity

As UNESCO puts it: "The enormous size and diversity of the Great Barrier Reef means it is one of the richest and most complex natural ecosystems on Earth, and one of the most significant for biodiversity conservation."

Put simply, no other World Heritage property contains such biodiversity, including:

- 411 species of hard corals and at least 150 species of soft corals and sea pens;
- 39 species of mangroves;
- 15 species of seagrasses;
- More than 1600 fish species;
- 136 species of sharks and rays;
- Six of the world's seven species of marine turtles;
- More than 30 species of whales and dolphins;
- 3,000 species of molluscs;
- At least 500 species of worms;
- About 1,300 species of crustaceans;
- 630 species of echinoderms (starfish and sea urchins);
- 14 breeding species of sea snakes;
- 215 species of birds, including 22 nesting species of sea birds and 32 species of shorebirds;
- One of the world's most important dugong populations; and
- 120-year-old giant clams.

Can't make it to the reef?

Get the Great Barrier Reef live into your classroom or event! Wherever you are in the world, experience the wonders of the Great Barrier Reef with [Reef Videoconferencing](#).

During this underwater fact-finding mission, your classroom will be transported to the Coral Reef and Predator exhibits at Reef HQ Aquarium in Townsville, Australia.

Australia's Great Barrier Reef

Frequently Asked Questions

State-of-the-art technology unlocks unique teaching and learning experiences, including information delivered live by a scuba diver. Videoconferencing is a tool that allows users to see and hear the person they are communicating with. It is exciting, stimulating, easy to use and a great way to involve students in learning about the Great Barrier Reef.

Reef Videoconferencing is very different from other multimedia resources, such as video recordings or television presentations, because they are live and interactive. Reef Videoconferencing can be facilitated nationally and internationally and has won multiple international awards

Further Resources:

Visitor and Travel information

visit www.queensland.com

Official Government Source of scientific information

Great Barrier Reef Marine Park Authority www.gbrmpa.gov.au

Download the *Eye of the Reef* app on itunes or Google Play

Social Media

Travellers and tourism operators are encouraged to share their experiences via the Eye on the Reef app, and by using official hashtags and handles:

- Great Barrier Reef Marine Park Authority | @gbrmarinepark #lovethereef.
- Tourism & Events Queensland | @queensland #thisisqueensland
- Tourism Australia | @australia #seeaustralia
- Tropical North Queensland | @CairnsGBR #exploreTNQ
- Townsville North Queensland | @TownsvilleAus #townsvilleshines
- The Whitsundays | @WhitsundaysQLD #lovethewhitsundays
- The Mackay Region | @VisitMackay #meetmackayregion
- Southern Great Barrier Reef | @SouthernGBR #southerngreatbarrierreef

Citizens of the Great Barrier Reef

Citizens of the Great Barrier Reef is a social movement which uses digital technology to unite society to pledge support for the Great Barrier Reef. Individuals are encouraged to sign on to citizensgbr.org and join six simple and tangible planet-friendly actions. These actions feed into a global dashboard that tracks the cumulative impact that can be achieved with mass participation.

www.citizensgbr.org @citizensGBR #citizensGBR