

Factsheet

Queensland's Great Barrier Reef

THE Great Barrier Reef is the largest structure on the planet built by living organisms. It is the most extensive reef system in the world, stretching 2300km along the east coast of Queensland in the Pacific Ocean.

Starting just south of the Tropic of Capricorn between Gladstone and Bundaberg, the Great Barrier Reef goes all the way up to the Torres Strait near the coast of Papua New Guinea. The outer reef lies along the edge of the Australian continental shelf.

At 344,400km², the reef is bigger than New Zealand, larger than the total area of the United Kingdom and Ireland combined, and roughly equal to the size of Japan. It's enormous size makes it the only structure built by living organisms that is visible from outer space.

Changing Landscapes

The Great Barrier Reef includes a range of fascinating geographic forms ranging from fringing coastal reefs and lagoons, outer reefs and the open ocean, islands, estuaries and coastal beaches.

There are about 2900 separate reefs and 918 islands to explore. Of these islands, 618 are continental islands and 300 are coral cays, 230 of which have permanent vegetation. The remainder are beautiful small sand cays that shift in response to winds, waves and currents.

The coral rock that forms the base for the modern reef is between 20m and 500m thick in places, and mostly about two million years old - although in some northern parts, the reef's foundations date back more than 18 million years!

The reef contains nesting grounds of world significance for six of the world's seven species of marine turtles. All are regarded as endangered. During nesting season (from November to February) these fascinating animals lay their eggs on many reef islands and some parts of the coast. Then six to eight weeks later, hatchlings emerge from their nests and make their journey to the ocean.

The extensive seagrass beds are an important feeding ground for the dugong or 'seacow', a fascinating mammal species internationally listed as endangered.

The warm waters of the reef are also a whale breeding area. Between August and November every year the magnificent Humpback whales make their way up the coast from the Antarctic to give birth to their young.

Visitors can join one of the whale watching cruises for an experience of a lifetime. Both Antarctic and Dwarf Minke whales are also found in Great Barrier Reef waters.

Minke whales grow up to nine metres in length and weigh up to 6.8 tonnes. They can dive for up to 20-25 minutes, but usually make shorter dives lasting about 10-12 minutes.

Visitors have the opportunity to see curious creatures up close with the unique Minke Whale swim programs available with specialist operators on the reef.

Various reef islands are inhabited by koalas, echidnas, possums and fruit bats. The island reptiles and amphibians are represented by seven frog species, nine snakes and 31 lizard species.

A Birdwatcher's Paradise...

The islands and coral cays support around 215 bird species, many of which have breeding colonies there. Reef herons, osprey, pelicans, frigate birds, sea eagles and shearwaters are among the numerous sea birds that have been recorded.

Plenty of culture to explore...

This World Heritage area is also of significant cultural importance, containing many archaeological sites of Aboriginal or Torres Strait Islander origin. Examples include Lizard and Hinchinbrook Islands. Stanley, Cliff and Clack Islands feature spectacular galleries of rock paintings.

Some islands also have operating lighthouses of historical significance. Plus there are 30 historical shipwrecks in the marine park that can be explored by divers.

Diving and Snorkelling...

The many diving and snorkelling opportunities provide visitors with the best way of getting close to the reef's many wonders. Tour operators offer accredited dive courses, introductory reef dives and for the experienced, extended dive charters incorporating night or guided ecology dives.

If delving into the deep blue is not for you - there are semi-submersible craft, glass bottom boats and a variety of land-based reef attractions. Those wishing to stay overnight on one of the reef's islands can choose from amazing camping locations in a National Parks to luxurious lodges.

The reef can be accessed from numerous regions in Queensland, including Fraser Coast, Bundaberg, Gladstone, Capricorn, Mackay, the Whitsundays, Townsville, and Tropical North Queensland.

It takes 90 minutes to two hours to reach the outer reef on water.

Meet the wildlife

The reef is home to an amazing variety of fascinating wildlife, which inhabits the water, the mainland's shore and the reef's islands.

Thriving in the clear, shallow tropical waters, there is an abundance of marine life - including more than 1500 brilliantly coloured species of tropical fish and 300 species of hard corals. Other intriguing creatures include 4000 species of molluscs and 400 species of sponge. The variety of organisms found beneath a coral rock is astonishing, including sea squirts, delicate lace corals and scores of other colourful and oddly shaped animals.

How did the reef form?

The Great Barrier Reef is a mass of limestone made from skeletons of millions upon millions of tiny marine animals and plants...

Colonies of living coral polyps grow on the reef's surface. These animals are the main reef builders. They extract dissolved limestone from the water and lay it down as hard limestone around the lower half of their bodies.

The polyps can pull their whole bodies inside these limestone cups for protection, if necessary. The combined skeletons of many colonies of polyps form the large corals that can be seen on the reef. When coral polyps die, their limestone skeletons and the remains of other animals and plants are added to the framework of the reef.

World heritage listing

The Great Barrier Reef is the largest World Heritage Area...

In 1981, the Great Barrier Reef became Queensland's first World Heritage area. It is listed for being an outstanding example of a reef system, representing

- The major stages in the earth's evolutionary history;
- Significant ongoing ecological and biological processes;
- Superlative natural phenomena; and
- Important and significant habitats for in situ conservation of biological diversity.

Did you know??

World Heritage sites are those places, which are considered the most outstanding natural and cultural heritage areas in the world. Sites selected for World Heritage are inscribed on the World Heritage List only after carefully assessing whether they represent the best example of cultural and natural heritage on earth. The United Nations Educational Scientific and Cultural Organisation (UNESCO) provides the Secretariat for the World Heritage Committee.

What are coral cays?

Coral Cays are low sand islands that form on top of coral reefs. The sand on coral cays is composed of dead coral, shells and reef animal skeletons. Waves washing around reefs deposit sediments, ground by wave and wind onto the leeward side of the reef, initially forming exposed sandbanks. Cays continue to grow and become more stable as they accumulate sediment, which in turn, reacting with water flowing through the sediment layers, forms bedrock. Birds and tides bring seeds to the cay, gradually increasing the cays soil and plant cover.

To learn more about the Reef, visit -

Australian Department of Environment and Heritage - <http://www.deh.gov.au>

The Australian Government Department of the Environment and Heritage (DEH) develops and implements national policy, programs and legislation to protect and conserve Australia's natural and cultural heritage.


Great Barrier Reef Marine Park Authority (GBRMPA) - <http://www.gbrmpa.gov.au>.

GBRMPA provides for the protection, wise use, understanding and enjoyment of the Great Barrier Reef through the care and development of the Great Barrier Reef Marine Park. The website includes comprehensive information about the reef.

Queensland Holidays - <http://www.queenslandholidays.com.au>

The complete traveller's guide to accommodation, tours, hire companies, travel tales, events, tips and more.

Queensland Parks and Wildlife Services - <http://www.epa.qld.gov.au>



This website contains a database of National Parks in Queensland, featuring park descriptions and other up to date information. It includes information on National Park camping on the Great Barrier Reef Islands.

Reef Ed - <http://www.reefed.edu.au>

A Service of the Great Barrier Marine Park Authority. Inside this site, you'll find a wonderful collection of resources about the amazing animals, plants, habitats and features of the reef

UNESCO World Heritage Site - <http://whc.unesco.org>.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) provides the Secretariat for the World Heritage Committee, which oversees the World Heritage listings. The website features detailed information on Queensland's World Heritage sites.