

Great Barrier Reef, Australia

The world's most extensive coral reef ecosystem, the Great Barrier Reef is a globally outstanding and significant entity. It is one of a few living structures visible from space, appearing as a complex string of reefal structures along Australia's northeast coast.

What is the Great Barrier Reef?

The Great Barrier Reef is a site of remarkable variety and beauty on the north-east coast of Australia. It contains the world's largest collection of coral reefs, with 400 types of coral, 1,500 species of fish and 4,000 types of mollusc.

The entire ecosystem was inscribed as World Heritage in 1981, covering an area of 348,000 square kilometers, and is one of the seven wonders of the natural world.

What is the significance of GBR?

- The diversity of species and habitats, and their interconnectivity, make the Great Barrier Reef one of the richest and most complex natural ecosystems on earth.
- There are over 1,500 species of fish, about 400 species of coral, 4,000 species of mollusc, and some 240 species of birds, plus a great diversity of sponges, anemones, marine worms, crustaceans, and other species.
- It also comprises endemic species and threatened species as listed by the [International Union for Conservation of Nature](#) (IUCN)
- It is also one of the major tourist attractions in the country and contributes to the economic development of the country

Geographical Features of Great Barrier Reef

- GRB includes extensive cross-shelf diversity, stretching from the low water mark along the mainland coast up to 250 kilometers offshore. This wide depth range includes vast shallow inshore areas, mid-shelf, and outer reefs, and beyond the continental shelf to oceanic waters over 2,000 meters deep
- **Within the GBR** there are some **2,500 individual reefs** of varying sizes and shapes and **over 900 islands**
- **It is larger than the Great Wall of China**
- **99% of the GBR lies within Great Barrier Reef Marine Park:** at 344,400 square kilometers. The Great Barrier Reef Marine Park Authority, an independent Australian Government agency, is responsible for the protection and management of the Marine Park

GBR - Biodiversity, Animal Species & Ecological Aspects

- The Great Barrier Reef is home to some of the most unique creatures on the planet. A few of these include Manta-Ray, Green Turtle, Dugong, Whale Shark, Clown Fish, Mantis Shrimp, Humpback Whale, Giant Triton, Giant Clam, Blanket Octopus, etc.
- The waters also provide major feeding grounds for one of the world's largest populations of the threatened dugong
- At least 30 species of whales and dolphins occur here, and it is a significant area for humpback whale calving
- Six of the world's seven species of marine turtle occur in the GBR

Threats To Great Barrier Reef

- **Climate change is the greatest threat** being faced by the reef and a challenge that needs to be overcome
- The **growing combination of rising water temperatures, poorer water quality** from sediment run-off and pollution, as well as more **severe cyclones and crown-of-thorns starfish outbreaks**, are just some of the threats creating a perfect storm for GBR and the marine life that depends on it
- The cumulative effect of these threats weakens the Reef's resilience, affecting its ability to recover from serious disturbances predicted to become more frequent in the future