Impacts to reefs

Our everyday actions can have an impact on the health of reefs worldwide. Inshore, threats such as sediment runoff from



agriculture and poor land management practices can increase nutrient levels and turbidity, making it difficult for corals to survive and thrive. On the outer reef, corals could be subject to impacts from overfishing, poor anchoring practices, poor tourism management, predators (such as Crown of Thoms starfish and Drupella), and cyclones. All of these threats to the inshore and offshore reefs are - among other stressors - exacerbated by climate change and warming ocean temperatures, which can cause corals to bleach. Once bleached, they can recover if the optimum conditions for survival are regained.



Many human activities affect corals! You can help to protect them!

- Reduce, Reuse and Recycle
- Drive less, drive smart, take the bike
- Buy energy-efficient products
- Reduce your carbon footprint
- Avoid anchor damage use moorings
- Protect shorelines and river banks
- Plant a tree
- Get involved in a monitoring program such as CoralWatch



CoralWatch is a not-for-profit organisation, based at The University of Queensland, which integrates volunteer coral monitoring with community education about coral reefs. CoralWatch has developed a simple tool that anyone can use to measure coral health – the Coral Health Chart.



Coral Coast

Bundaberg - Queensland - Australia







CORALWATCH

www.coralwatch.org









Great Barrier Reef Foundation



THE UNIVERSITY OF QUIENSLAND

CoralWatch's 'Corals at Your Doorstep' project is supported by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation.

August 2020. Coral Watch "Corals at Your Doorstep - Coral Coast"
Photos: Jessica Cooke, Natalle Lobartolo, Chris Roelfsema

Did you know that the Coral Coast is home to more than 244 species of corals?









Snorkelling with a turtle at Lady Musgrave Reef

Variety of growth forms in Lady Musgrave Lagoon

Lady Musgrave Island

What are corals?

Corals are living animals related to jellyfish! A single animal is called a coral polyp. Many polyps together form a coral colony. Many colonies form reefs. Corals use calcium and carbonate molecules from the seawater to make a skeleton. There are more than 800 different species of hard coral around the world. The skeleton of each species is unique and they appear in different growth forms such as branching, boulder, plate and soft corals, among others. Soft corals are unique in that they do not create a calcium carbonate skeleton. Instead, they have spicules which help them to maintain their structure.

Tiny algae, called zooxanthellae, live in symbiosis within the coral polyps. Zooxanthellae occur in very high densities and provide the coral with the colour and nutrients through photosynthesis. Therefore, corals depend on sunlight and clean water. In return, the coral provides a safe home for zooxanthellae.

Coral Coast Corals

Along the Coral Coast, there are various rivers and creeks which flow from the mainland out to sea. the main ones being the Elliott and Burnett Rivers. What we do on the mainland can influence the health of corals, as sediments and nutrients run off the mainland into the water. Corals generally prefer clean, clear water. However the inshore corals along the Coral Coast are adapted to higher sediment runoff and poorer visibility than outer reef corals, such as those at Lady Musgrave Island. You can see these hardy corals all along the Coral Coast. Although corals are somewhat adapted to more challenging conditions, they still have a narrow disturbance tolerance, so it is important we are aware of our actions and the impacts they could have on inshore reefs. Head out and explore these beautiful inshore reefs during low tide in the safety of the rock pools or snorkelling when conditions are calm and safe.

Why are corals important?

Corals provide a home for fish and other marine creatures. Mangroves and seagrass are also important for marine life - they improve water quality by trapping soil and nutrient pollution, and provide 'nursery' areas for young fish. Research shows that protecting coral, seagrass and mangrove areas on the Coral Coast can support fish stocks and marine life.



Anemone fish hiding in anemone



Inshore soft corals at Hoffman's Rocks



Map of accessible reefs



Inshore rock pools and snorkel sites are accessible from shore

