

## Where do we find corals?

Steep headlands provide a stable rocky substrate on which coral larvae can attach and grow. As such many reefs have developed where the local geology forms steep headlands. Substrate availability is considered a key control on reef development together with light availability. Coral reef distribution is mostly limited to the shallow zones where suitable substrate and light penetration is available. However, coral reef development may be impeded by high volumes of sediments and freshwater discharge. Coral community and reef development are unlikely to be supported where the sea floor consists of soft deposits of mobile sediments.

Rat Island in the northern part of Port Curtis is the locality for *Petrophyllia (Archohelia) rediviva*, a hard coral without zooxanthellae that was thought only to exist in the fossil record until its discovery and description in 1979.



Lost fishing line can damage corals and other marine life.



High water temperatures and other stressors can make corals bleach.

## Many human activities affect corals! How 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 local monitoring programs such as CoralWatch

# ACT NOW

for the future of our reefs

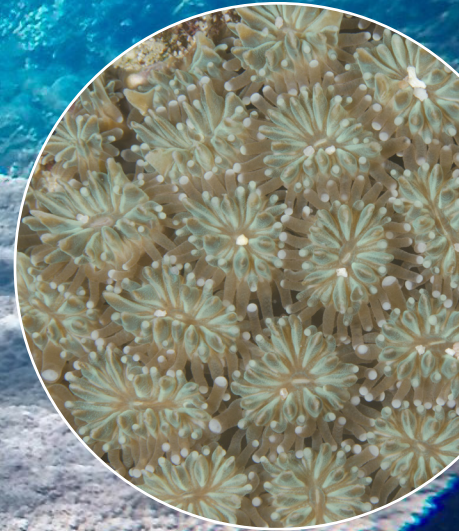
CoralWatch is a non-profit organisation which integrates volunteer coral monitoring with community education about coral reefs. Based at The University of Queensland, CoralWatch has developed a simple tool that anyone can use to measure coral health – the Coral Health Chart.

[WWW.CORALWATCH.ORG](http://WWW.CORALWATCH.ORG)



# Corals

## At Your Doorstep



  
**CORALWATCH**

  
**CORALWATCH**



This project is supported by Fitzroy Basin Association Inc., through funding from the Australian Government's National Landcare Program.

**Did you know that Capricorn Coast is home to more than 150 species of corals?**

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Photos: CoralWatch, Karen Hofman, Diana Kleine, Emma Kennedy



Hard coral inshore (plate, *Acropora* sp)



Epaulette shark hiding underneath branching *Acropora* corals



Hard coral close-up (boulder, *Goniastrea* sp)



Green turtle

## 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. Some corals don't make a calcium carbonate skeleton – these are called soft corals.

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.

Hard and soft corals (*Acropora* sp., *Sarcophyton* sp.)



## Corals in Capricorn Coast

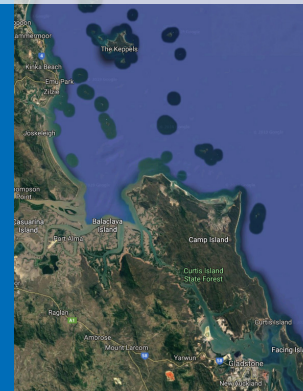
Close to the mainland and the mouth of the Fitzroy River, the water has lots of sediment run-off. Much of this comes from inland areas via our catchment and river systems. Too much soil in the water can limit sunlight penetration needed for photosynthesis. Because of this, only some species of coral can live in these inshore areas. Corals that tolerate murky water tend to be small, round corals. You can see these corals around Keppel Bay islands and Rat, Facing and Curtis islands in Port Curtis.

As you travel away from the mainland, you can see changes in water quality and types of corals. As the water becomes clearer and cleaner, you will see more diverse coral communities containing branching corals in the Capricorn Bunker groups of reefs, such as Heron Island.

Hard coral (*Favites* sp.)

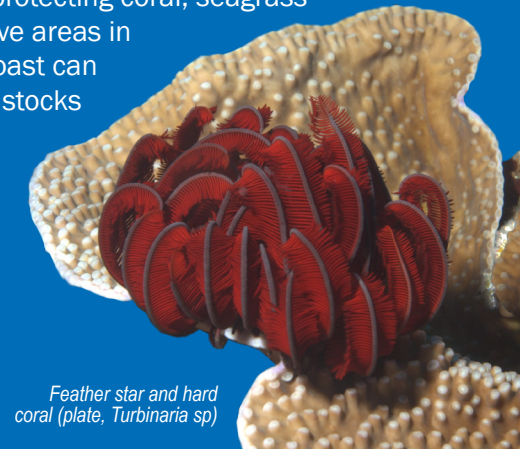


Reef areas



## 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 in Capricorn Coast can support fish stocks and marine life.



Feather star and hard coral (plate, *Turbinaria* sp)

Hard corals at Outer Rock, Keppel Islands.

