



The wonderful world of coral

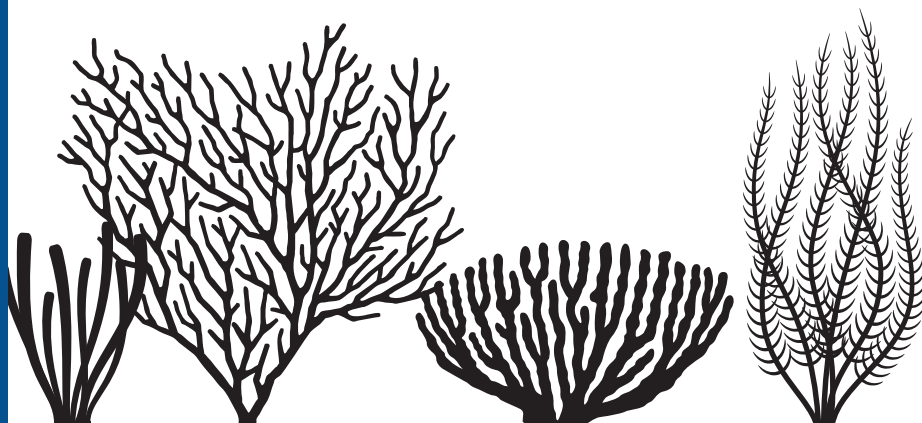
Although coral may look like a colourful plant that grows on the sea floor, it is actually a special type of animal called a 'Colonial Organism'. This is because a single piece of coral is actually made up of thousands of individual animals called polyps. Together, a group of different types of coral form a reef and these reefs provide food and shelter for about 25 percent of the world's fish. Without them, many fish would have nowhere to live or breed.

There are about six thousand different species of coral that can be found in oceans all over the world, except the Arctic Ocean, because it is too cold. Despite this, most coral reefs are generally located between the Tropic of Cancer and the Tropic of Capricorn, as reef-building corals prefer warmer waters between 20–28°C. Just like trees, corals have to be exposed to the sun in order for them to grow, which is why they are usually found in shallower water.

A coral polyp is shaped like a cylinder, with a mouth at one end, surrounded by tentacles. The arm-like tentacles gather food and sting creatures that threaten the coral. After food is digested, the polyp's waste exits through the mouth. Coral polyp bodies are usually clear. The bright colors that we see in photos or when we go snorkeling are actually various types of algae that grow in the polyp's tissue.

Coral reefs not only provide fish and other marine animals with protection and a home, but they also play an important role in assisting humans and our environment as well. Corals help balance the amount of carbon dioxide in the ocean because they act as a 'carbon sink', absorbing excess carbon dioxide. Corals also act as water filters, increasing water quality in the vicinity of the reef. Additionally, coral reefs protect humans and cities from storms by serving as a natural breakwater that reduces the force and impact of large waves and cyclones.

Sadly, many coral reefs are now under threat and declining in number due to global warming, rising sea temperatures and pollution. Scientists estimate that nearly 20% of the world's coral reefs have been lost! Both warmer water and pollution cause coral bleaching, a process where the coral gets stressed and gets rid of all the colourful algae that grows on their tissues. Without this algae, the coral is more prone to disease and has less access to food.



While there are a lot of researchers, scientists, businesses and community groups that are doing lots of great work to protect our coral reefs, more needs to be done to prevent pollution and global warming from causing even more damage to our reefs. We need to continue to educate people about the importance of coral reefs and fight to ensure that they are protected. There's also lots of actions we can do as individuals to help protect our reef. These include;

1. Look but don't touch. Keeping our distance from corals and marine life when swimming, snorkeling or boating.
2. Practise safe boating. Only anchor boats in sandy areas, away from coral and seagrasses so that the anchor and chain doesn't drag on nearby coral.
3. Wear reef-friendly sunscreen. Many common sunscreen ingredients have been shown to be toxic to coral reefs. Sunscreens that use non-nano zinc oxide as their active ingredients do not contribute to coral bleaching.
4. Be careful what you use on your lawn. You may not live right next to a coral reef, but the products you use on your lawn at home will eventually flow into the water system. Use green alternatives for fertilizer and pesticides that won't harm coral reefs and marine life.
5. Take part in local beach or reef clean-ups.
6. Leave no trace. When you visit the beach or head out fishing, don't leave unwanted rubbish, fishing nets or hooks lying around. Any kind of litter pollutes the water and can harm the reef and fish. If you see rubbish that someone else has left behind, pick it up and put it in the bin.
7. Save water and use only what you need. The less water you use, especially outside, the less runoff and wastewater will pollute our oceans.
8. Spread the word. Educate your family and friends about coral reefs or contact your local government member to see what your state is doing to protect coral reefs.

THINK ABOUT IT

1. We've learnt that corals are very helpful animals. How do they help each of the following?

Fish: _____

Humans: _____

The environment: _____

2. In which three Australian states would you be most likely to find coral off-shore and why?



3. What is coral bleaching?

4. Fill in the missing letters to create a vocabulary word from the article. Then write the full word on the line. Be sure you spell each word correctly.

a. **o r _ a n _ s _** _____

hint: another word for a living creature

b. **t _ n t i _ l _ _** _____

hint: the arm-like part of the coral

c. **_ o l _ p** _____

hint: the name of the animals that make up each piece of coral

d. **c _ r _ o n _ i n _** _____

hint: coral's ability to absorb carbon dioxide classifies it as this

e. **b _ _ a c _ _ n _** _____

hint: what causes coral to turn white

LEARN MORE ABOUT IT

We've learnt that coral reefs are home to thousands of different fish and marine animals. Pick a fish or animal that lives in coral in the Great Barrier Reef and use the internet to research the following facts about it and write a short report containing all of the information you have found.

1. What is the name and scientific name of the fish/animal.
2. Habitat: Where does it live?
3. Appearance: What it looks like, special body features?
4. Diet: What does it eat?
5. Predators: What animals does it have to watch out for? Are there any human-related threats?
6. Life cycle: How does it grow, change and breed?
7. Fun facts. Include two facts about the fish/animal that you find cool or interesting.



DO SOMETHING ABOUT IT

The passage listed several practical things we can do to help look after our coral reefs. Pick one of these actions that you would like to start doing and draw a poster that will encourage others to do this action too. You can then cut out your poster and hang it in your classroom. Be sure to make it bright and colourful so it draws people's attention.

