

Monitoring corals

Corals in coastal areas

In coastal areas water has lots of soil and sediment runoff. The main cause of high sediment levels is soil erosion from creeks and rivers, farming land and building construction sites via our catchment and river systems. Too much sediment in the water can limit the sunlight that corals and their zooxanthellae need for energy. Because of this, only some species of coral can live in these inshore areas. Corals that can tolerate murky water tend to be small, round corals. As you travel away from the mainland to more offshore areas, you can see changes in water quality and types of coral.



Monitoring coral health

Scientists monitor the health of corals to determine the health of the marine environment they are in. The health of a coral is determined by the number of symbiotic algae inside the coral cells. The brown/green zooxanthellae give the coral its brown/green colour. When corals are stressed they have less zooxanthellae and become pale or even white in colour, this is called coral bleaching. You can measure the level of coral bleaching by using the CoralWatch Coral Health Chart to identify coral colour.

Citizen science

CoralWatch scientists need your help! Citizens like you can help scientists collect valuable coral health data. Simply, use a CoralWatch Coral Health Chart to colour match a coral with the chart's colours and write down the matching code. Make sure you measure at least 20 corals each time and record the lightest and darkest colour codes for each coral colony. Also record the coral type, date, water temperature, weather condition, time of day, and your location (preferably GPS coordinates). Don't forget to enter your data into the global CoralWatch database. Visit www.coralwatch.org for more information.

Saving our corals

One way to reduce stress to corals is to reduce the amount of sediment in the water. Look at the website: <http://healthywaterways.org/report-card/focusareas> to see how south-east Queensland is reducing sediment loads entering Moreton Bay.

Questions

1. Draw and label a coral including the following labels: mouth, tentacles & zooxanthellae.
2. Why are corals important?
3. What is a symbiotic relationship? Explain the relationship associated with corals.
4. What is coral bleaching?
5. How can scientists measure coral health?