

Measuring coral health using random surveys

The **aim** of this activity is to monitor the health of corals using the Coral Health Chart in a random survey as research technique.

ACARA curriculum links

Science understanding (ACSSU116)

Science as human endeavour (ACSHE119, ACSHE223)

Science inquiry skills (AC SIS124, AC SIS125, AC SIS126)



Instructions

- The most important part of a random survey is that it is truly random: don't pick the corals you like or because they are bleached.
- This activity can be conducted snorkelling or reef walking.
- The CoralWatch Virtual Reef Activity is a useful preparation for using the Coral Health Chart in the field.
- The CoralWatch data slate contains all required survey details. You can also create your own data slates by transcribing all the information onto a blank waterproof slate. Make sure you don't miss any details!

Steps to take for a random survey

1. Read the instructions on the back of the Coral Health Chart.
2. Make sure you have all your equipment as listed.
3. Start with recording survey details on your data slate: name, date, time, GPS coordinates (if possible), water temperature, depth, activity and conditions.
4. Choose how often you will measure a coral colony (e.g. every 6 steps or 2 fin-kicks).
5. Begin in a clear direction drawing an imaginary line in your direction of travel.
6. Every 2 fin-kicks, measure the colour scores and coral type of the coral colony closest to you.
7. Repeat this for at least 20 corals.

Equipment

- If snorkelling - mask, snorkel and fins
- If reef walking - booties, hat and sunscreen
- Coral Health Chart
- Waterproof data slate (see picture) with pencil
- Thermometer
- Underwater camera (if available)
- Viewing tube (if available)
- GPS to record coordinates (if available)

Plot name and location		CORALWATCH					
Your name		CORAL CODE		CORAL TYPE			
Date and time		Depth	Temp	Activity	Condition	Notes	Photo
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Example of CoralWatch data slate.



This reef walker has chosen to survey a coral every 6 steps (or 2 metres). You can choose to survey your corals closer together or further apart - as long as the distance you choose is consistent throughout the survey.