

# Field Documents

Today's conditions				
Air Temperature (°C)	_____°C	<input type="checkbox"/> hot	<input type="checkbox"/> warm	<input type="checkbox"/> cool
Water Temperature (°C)	_____°C	<input type="checkbox"/> hot	<input type="checkbox"/> warm	<input type="checkbox"/> cool
Wind Conditions (km/hr)	_____km/hr	<input type="checkbox"/> gale	<input type="checkbox"/> windy	<input type="checkbox"/> still
Wind Direction				
Rainfall (Since 9am)	_____mm			
Wave Height (m) (To tenth metre/ 0.00m)	_____m			
Swell Height (m) (To one tenth of metre)	_____m			
Type of wave	<input type="checkbox"/> surging	<input type="checkbox"/> plunging	<input type="checkbox"/> spilling	
How does it look?	<input type="checkbox"/> flat	<input type="checkbox"/> even waves	<input type="checkbox"/> choppy	
UV prediction				
What specific hazards should you be aware of given the conditions today?				

## Qualitative Data

Qualitative data collection enables us to develop a broad understanding of patterns in the ecosystem and provides a descriptive snapshot of the abiotic and biotic features present in the ecosystem.

Qualitative data can include photos and videos of the environment as well as descriptions of species.




A qualitative method of estimating abundance of populations uses the CON scale.




Common      Easily found

Occasional      Found with careful searching

None      Species is absent

Complete the CON table below to estimate the abundance of various populations in different sections of the tidal zone. Use an x to mark how frequently a species is found in each tidal zone the first one has been completed for you

Species	C	O	N	Tidal Zone
 Neptune's necklace ( <i>Hormosira banksii</i> )			x	High
		x		Mid
	x			Low
 Sand anemone ( <i>Oulactis muscosa</i> )				High
				Mid
				Low
 Swift-footed crab ( <i>Leptograpsus variegatus</i> )				High
				Mid
				Low

Species	C	O	N	Tidal Zone
 Rough limpet ( <i>Siphonaria diemenensis</i> )				High
				Mid
				Low
 Blue periwinkle ( <i>Austrolittorina unifasciata</i> )				High
				Mid
				Low
 Black nerites ( <i>Nerita melanotragus</i> )				High
				Mid
				Low

Takes photos of your field study site and label the high mid and low tide areas

### Collecting Quantitative rockpool data

Quantitative data is numerical data that can be analysed to help support or reject the hypothesis

#### Equipment Required

- ✓ 30m Rope/ tape marked every metre
- ✓ 25 cm x 25cm quadrats
- ✓ Thermometer
- ✓ Field Identification guide in colour
- ✓ Measuring tape
- ✓ Ropes for transects

#### Transect Sampling Procedure:

1. Sampling should take place close to low tide
2. Place a 30 metre rope marked at each metre parallel to the splash zone close to the high tide mark
3. Use a random number generator (1-30) to determine the location of transects.
4. Run transects perpendicular from the rope at the marking specified by random number generator towards the low tide mark

5. Divide the transect (running from the rope to the low tide mark) into 10 equal sampling points. E.g. if the distance from the rope to the low tide mark is 50m samples will be taken every 5 metres.
6. Collect a sample at rock pool close to each of these sampling points. If the sampling point does not fall at a rock pool move to the closest rockpool within 5m. If no rockpool is within 5m record 0 for all measurements.
7. Place a 25cm x 25cm quadrat randomly in the rockpool, identify any species within this quadrat and record the number of individuals
8. Species half in, half out, include individuals which fall under 2 nominated sides.
9. Record the water temperature for the rockpool
10. Record the distance of the front edge of the pool from the low water mark in metres
11. Record the length and breadth of the rock pool to determine an estimated surface area the surface area (length x breadth in m<sup>2</sup>)
12. Collect data from 10 rock pools, share data where required.

