

- 1. Plan your trip to the shore at low tide.** Tide times can be found by looking in the weather information section of a newspaper, or on the MetService website at <http://www.metservice.com/marine/tides/index>.
- 2. Make your Metre Square (quadrat).** Make a square frame by tying 4 x 1 m lengths of bamboo canes together, or a 4 m length of rope or twine with three knots tied on it at 1 m intervals that can be arranged into a square shape on the shore.
- 3. At the seashore.** Randomly choose a position to lay your square down near the sea. **Never turn your back on breaking waves at the water's edge!** Record the shore level on the data sheet.
- 4. Take a photo.** Take a photo of your m<sup>2</sup> area with the top of your datasheet in the corner so that you can compare the features of your sample area with others.
- 5. Record your survey site information**
  - Describe the location of the site, (e.g. name of the beach or a local landmark). This can also be done using a GPS function on your phone.
  - Record the start time of your survey.
  - Record key features of the site, (e.g. presence of a fresh water stream, evidence of human influences).
  - It is useful to fill in as much information as possible before heading to the shore.
- 6. Record the type of ground surface (substrate) in your square (e.g. reef, boulder, etc.) in percentages.** This should add up to 100 %. If sand layered on top of reef – record the upper surface (in this case sand). Remember you can use your 10 cm<sup>2</sup> quadrat (1% of your m<sup>2</sup>) to help figure out the cover of substrate -- find out how to do this [here!](#)
- 7. Count animals and plants in your square**
  - Measure the abundance of **seaweeds using percentage cover**. This is the percentage of the square that is covered by the seaweed when looking down. You can use your 10 cm<sup>2</sup> quadrat to help you.
  - Start in one corner of your square and **count the animals** that you can see without moving any rocks or seaweed. Some small animals like barnacles can be found in very large numbers and it may not be possible to count all of these animals accurately inside your square. You can do a rough count in a small part of your square and scale this up using your 10cm<sup>2</sup> quadrat).
  - Look for hidden animals on and under seaweeds, inside rocky crevices and beneath small boulders. If you turn rocks over remember to return them gently to their original position. **Do not lift rocks that are larger than your head.**
  - If you find a species you cannot identify, write a description of it in the species list. If you can, take a photo of it with a ruler (if possible) in the shot to indicate its size. Write a brief description of where it was found and what it was doing. Email this information to [marinemetresquared@gmail.com](mailto:marinemetresquared@gmail.com) to help others to identify it later.
- 8. If you have any more questions** – contact us on email [marinemetresquared@gmail.com](mailto:marinemetresquared@gmail.com) or via Facebook!

**Don't forget to enter your information on the Marine Metre Squared website:**

[www.mm2.net.nz](http://www.mm2.net.nz)