


 Hauraki Gulf Forum
 Tikapa Moana

Introduction to Shellfish Monitoring

Preparing students to undertake a shellfish survey
 PART 2: How do we conduct a shellfish survey?

Part Two How do we conduct a shellfish survey?

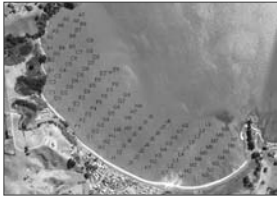

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Designing a sampling grid


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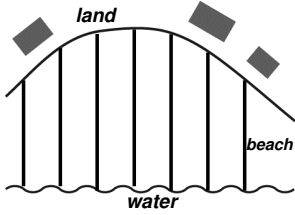
- We can't count all the shellfish on the beach so we estimate how many there are by taking samples
- A coordinator will help to design a beach sampling grid covering the intertidal area where there is suitable habitat for shellfish




Designing a sampling grid


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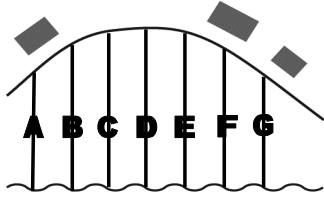
- **Transects** are parallel lines which run from high to low tide. The same transects are surveyed each year.




Designing a sampling grid


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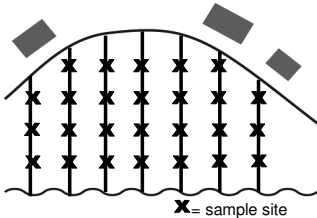
- We find where the location of each transect is by using objects around the beach, or a GPS
- Each transect is given a letter



Designing a sampling grid


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- The places where you will sample are spaced evenly along the transects at 20m, 50m or 100m intervals, depending on size of beach



x = sample site

Survey Method



- 1) Find a sample site and write the location on your data form.
- Can you describe the location of this sample site?



Survey Method



- Samples are taken using a QUADRAT
 - The quadrat is a square frame with an exact area - usually $\frac{1}{10}$ of a square meter (0.1m²)
- 2) Randomly place the quadrat & trace around the frame. Dig out the area inside.



Survey Method



- 3) Sieve using water to remove sand and mud



Survey Method



- 4) Identify and count all the live shellfish.



Survey Method



- 5) Measure all the live cockles and/or pipi



using a measuring stick



using a v-board

Survey Method



- 6) Record numbers and measurements on your data sheet. Use a new form for each sample site.

