

Investigating the Influence Vegetation has on Rivers

Aim:

We are going to investigate stretches along the River De Lank, where the vegetation has influenced the shape of the river channel.

Hypothesis:

In a pair, discuss how you think the vegetation beside the river may affect the width and depth of the river channel.

Equipment:

We will need to use a 20m tape to measure the width and a 1m rule stick to measure the depth.

Methods:

1. Find a site along the river where there is plenty of vegetation along the banks. The vegetation should be dense and include a variety of species.
2. *Measuring the width:* One person in your group stand on the left-hand bank, whilst a second member of your group stands on the right-hand bank. Using the 20m tape, measure the distance between the two banks. (Make sure your tape is tight). Record the width in the table below. Repeat this measurement 3 times. Work out the average width.
3. *Measuring the depth:* Whilst the people holding the 20m tape stay in position, the third group member needs to measure the depth of the river using the 1m ruler. You should measure the depth of the river every 50cm across the river. Record the depths in the table below. Repeat these measurement 3 times. Work out the average width.
4. Find a site along the river where there is very little vegetation along the banks. The vegetation should be sparse and include few species.
5. Repeat steps 2 and 3 for the sparsely vegetated site.

Conclusion:

Answer the following questions:

- a) Looking at your table of data what relationship is there between the amount of vegetation and the width of the river?
- b) Looking at your table of data what relationship is there between the amount of vegetation and the depth of the river?



Results:

	<u>Site 1 (densely vegetated)</u>	<u>Site 2 (sparsely vegetated)</u>
Width (Sample 1)		
Width (Sample 2)		
Width (Sample 3)		
Average Width		
Depth – 0.5m across the river.		
Depth – 1.0m across the river.		
Depth – 1.5m across the river.		
Depth – 2.0m across the river.		
Depth – 2.5m across the river.		
Depth – 3.0m across the river.		
Depth – 3.5m across the river.		
Depth – 4.0m across the river.		
Depth – 4.5m across the river.		
Depth – 5.0m across the river.		
Depth – 5.5m across the river.		
Depth – 6.0m across the river.		