Group 6: The effect of water flow rate to number of animal

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Assumption

- We think that the higher the river flow the higher the amount of animal in that area
- The reason is that we think that if the velocity of the water is higher, it provides a higher amount and range of material for the animal to survive.

Independent Variable

- Water depth: we chose three different sites
- Water flow :we choose the different water flow sites .
- Light intensity:we choose the sites both under sunlight directly or less sunlight

Dependent Variable:Methods used to measure and collect the date

- Water flow rate: use the water flow meter
- Number of animal species:Set up a quadrat and use brush and forcep
- Light intensity: light meter





Controlled Variable:methods that are same in sites

- Water temperature: digital thermometer
- Water <u>depth</u>:
- River bed:by observing

Result of the water flow rate

	Site A	Site B	Site C
Water flow rate	0.13ms	Oms	0.55ms

Results of number of animals

	Site A	Site B	Site C
Mayfly Nymph	2	1	0
Large Stream Snail	25	28	4
Bee Shrimp	0	1	0
Goby	6	2	0
Sucker belly Loach			

Analysis

- From data,Site A and Site B has more animals than Site C.
- The water flow rate of Site C is higher than Site B and Site A.
- The data shows that the higher the water flow rate, the less suitable environment for animals



Selected species:Large Stream Snail

- Long Conical shell
- Attach to the stone's surface
- Common in many sites of freshwater stream
- From data, Large Stream Snail is the most common animal(All 3 sites have)



Compare between the water flow rate and Large Stream Snail

	Site A	Site B	Site C
Number of Large Stream Snail	24	28	4
Water flow rate(ms)	0.13	0	0.55

Conclusion

- The higher the water flow rate, the smaller the number of animals
- Reason: Most animals cannot live because they will be washed away by the rapids ,so they will choose a low or 0 water flow rate site to live.

Thank You