



Yan Oi Tong Tin Ka Ping Secondary School

Correlation between
the velocity of water current & density of
Large Stream Snail,
in the freshwater stream.

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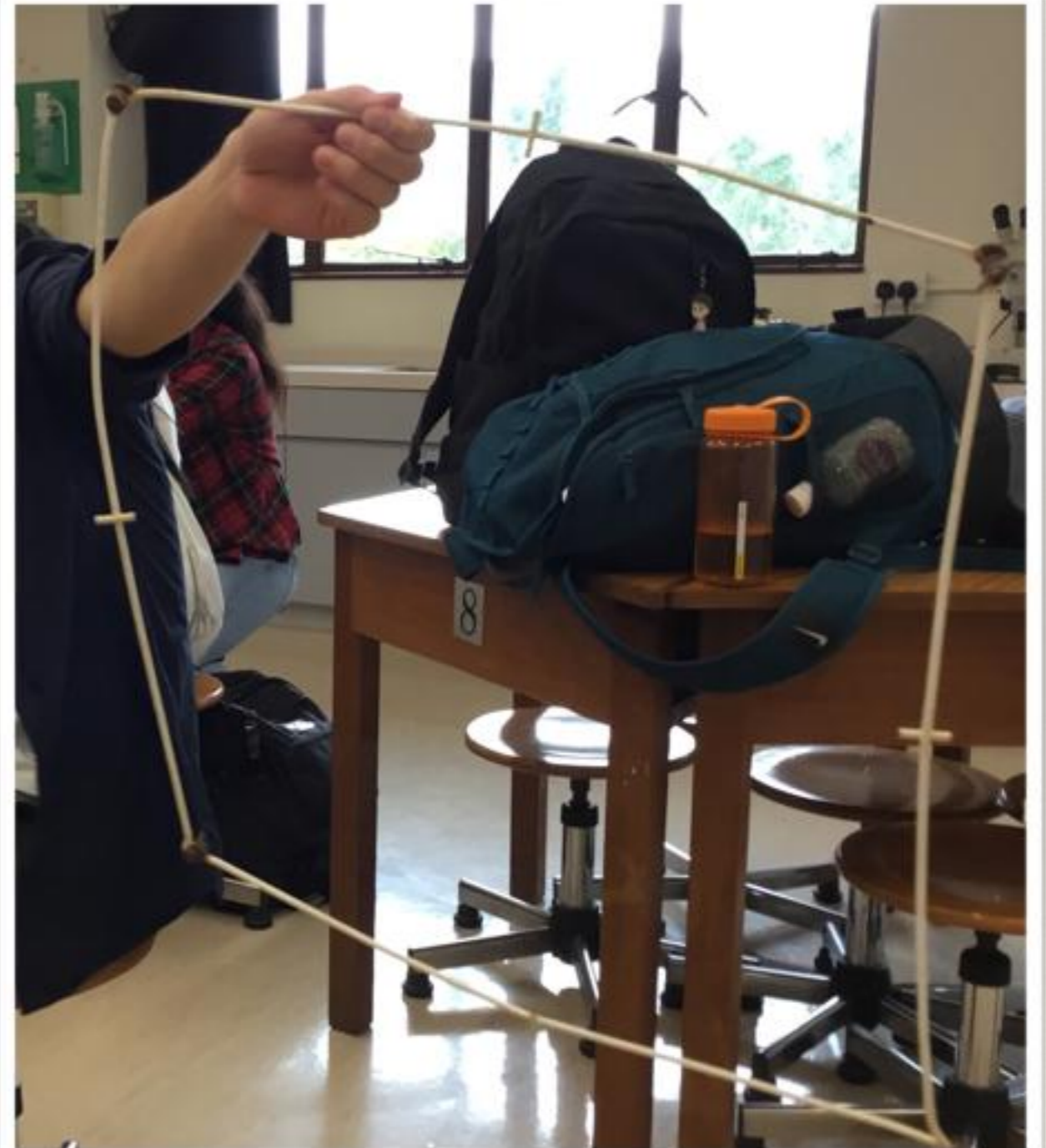
Independent variable

- ❖ Velocity of water current
- ❖ (m/s)
- ❖ Tool : water flow meter
- ❖ Measurement of 3 sites :
- ❖ 0m/s ; 0.3m/s ; 0.98m/s



Dependent variable

- ❖ Density of Large Stream Snail
- ❖ Tool : Quadrat 0.5x0.5m



Controlled variables

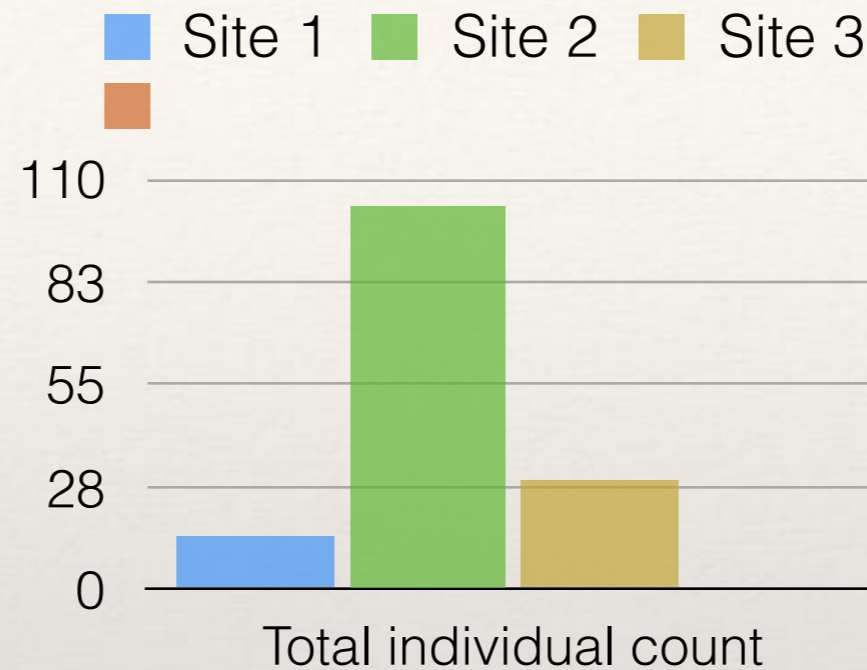
- ❖ Nature of substrate
- ❖ Depth of waterway
- ❖ Temperature ; digital thermometer
- ❖ Light intensity ; light meter
- ❖ pH value ; pH meter



Results

	Site 1 (0m/s)	Site 2 (0.3m/s)	Site 3 (0.98m/s)
Large Stream Snail (≤10mm)	11 (79%)	99 (96%)	22 (76%)
Large Stream Snail (>10mm)	3 (21%)	4 (4%)	7 (24%)
Total individual count	14	103	29

Graph of no. of Large Stream Snail



Large Stream Snail

- ❖ Long-conical-shaped
- ❖ Black and brown in colour
- ❖ Has large muscular foot
- ❖ Live in dark and clean water area
- ❖ Has hard shell





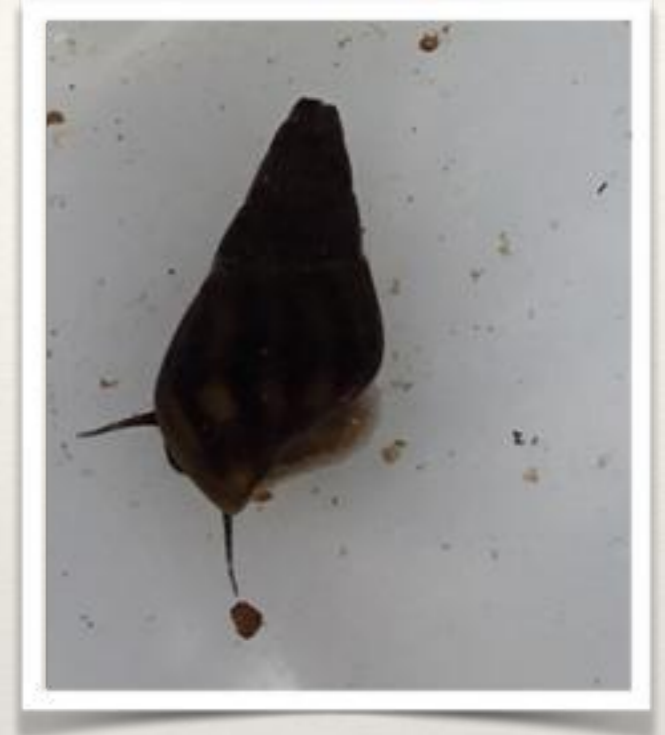
Conclusion



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- ❖ There is a positive relationship between low velocity of water current and the density of Large Stream Snail ,
 - ❖ and a negative relationship between high velocity of water current and the density of Large Stream Snail

Further analysis

- ❖ Possible reasons :
- ❖ Slow water current : Predation
+Competition ⬆
- ❖ Fast water current :
Food ⬇+wash away(<10mm)





The End!!

