# The Macroinvertebrate World

By: Alena, Alexa, Gabi, & Ally

# Research Question

How does the velocity affect macroinvertebrates in still pool areas versus fast pool areas?

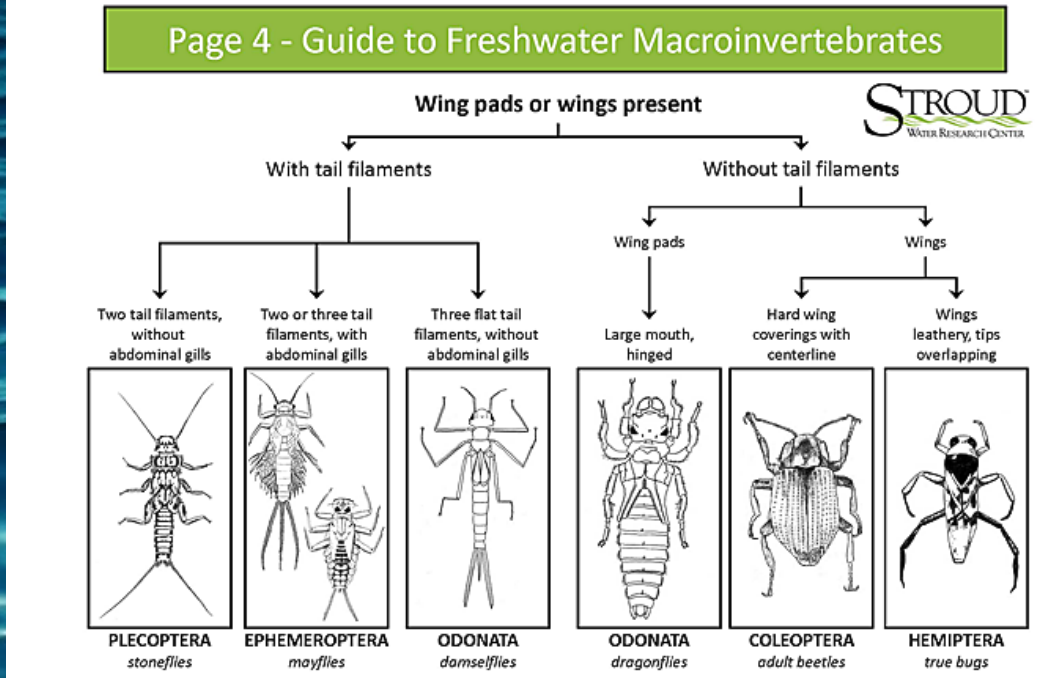
# Hypothesis

$H_O$ - There will be no difference between fast and slow currents in macroinvertebrate composition.

$H_A$ - There will be no difference between fast and slow currents in macroinvertebrates.

# Background for topic

- What is a macroinvertebrate: Organisms without backbones
- Studied macroinvertebrates in riparian areas
- Identification based on wings, tail filaments, gills, legs, & shell



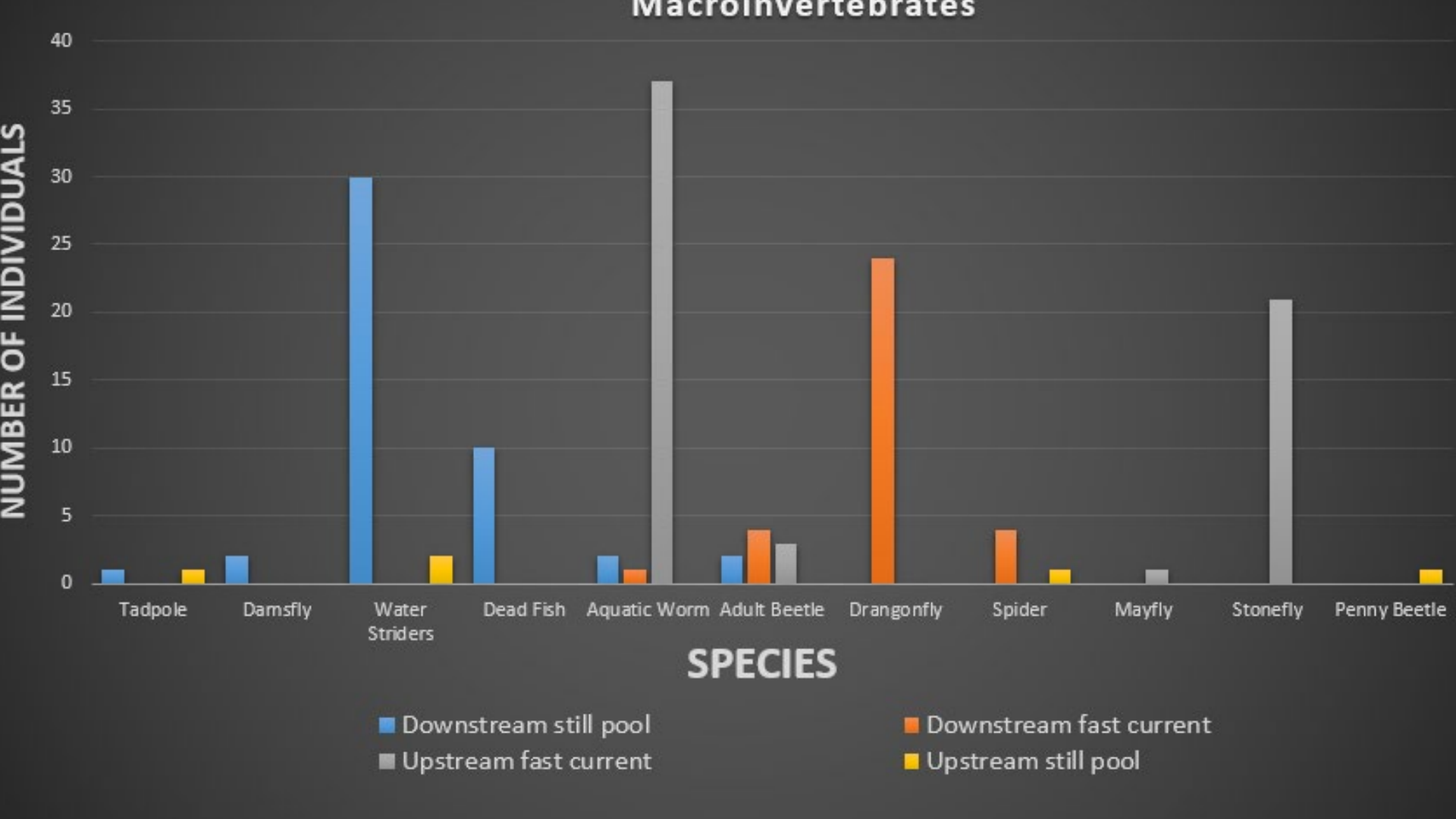
# Methods

Materials

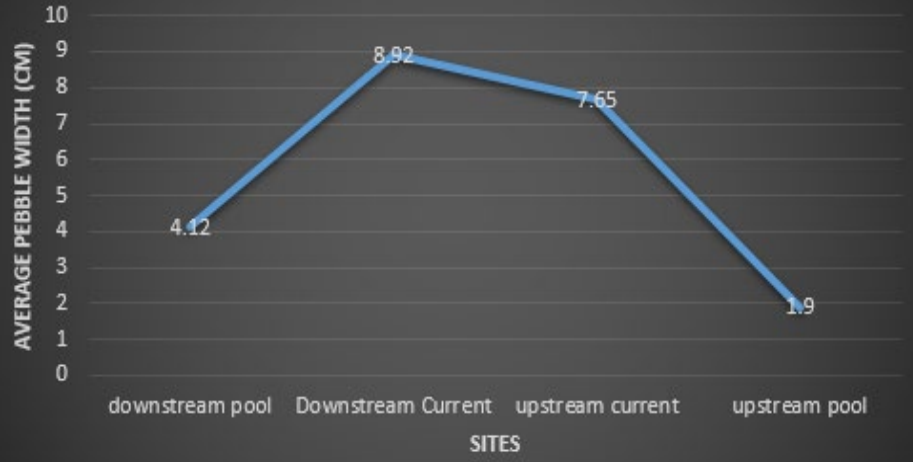
- Dip nets
- Species identification keys
- Thermometer
- Magnifying glass
- Tape measure
- Orange
- Walking stick

Procedure

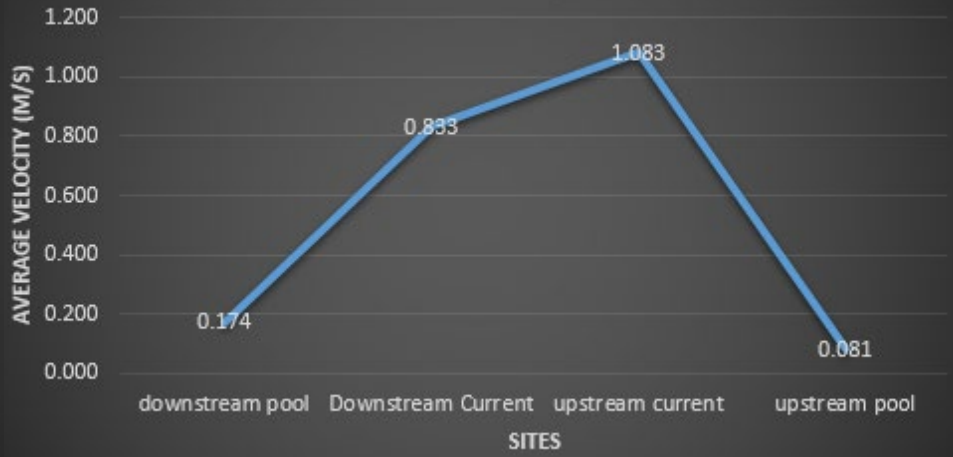
1. Go to each site
2. Take physical measurements (velocity, pebble size, depth, stream width)
3. Kick rocks for 10 seconds
4. Collect macroinvertebrates
5. Identify macroinvertebrates
6. Record & Analyze data


Macroinvertebrates
NUMBER OF INDIVIDUALS
40
35
30
25
20
15
10
5
0
Tadpole
Damsfly
Water Striders
Dead Fish
Aquatic Worm
Adult Beetle
Drangonfly
Spider
Mayfly
Stonefly
Penny Beetle
SPECIES
Downstream still pool
Downstream fast current
Upstream fast current
Upstream still pool

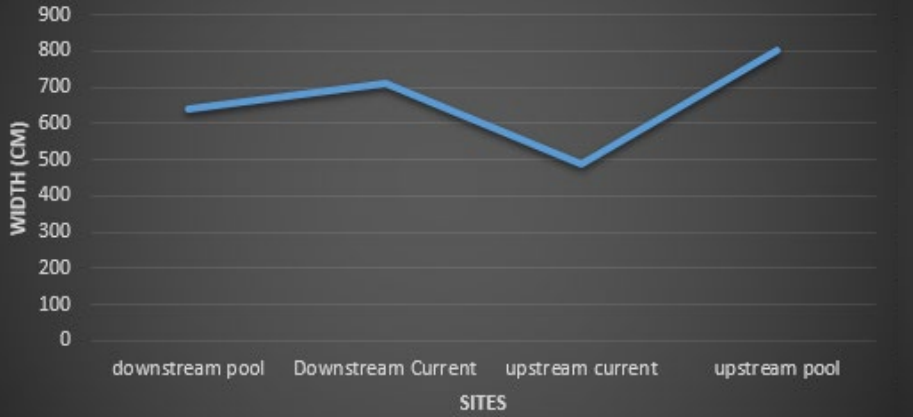
## Pebble Width




## Velocity




## Stream Width




## Depth

# Conclusion

To conclude our project we found more macroinvertebrates near the river bank on the surface of the water. This means the velocity of the water flow allows the macroinvertebrates to live there.