MACROINVERTEBRATES

ARTHROPOD ENVY ISN’T HEALTHY, BUT NEITHER IS OUR STREAM. COULD IT EVER “BECOME” AS GOOD AS DUCK OR BAIRD?

HINTS FROM A FROZEN RIVER

Tristan discovered that water quickly turned to ice in the go to a river
At least we couldn’t fall through!

The sun was small relief versus the bitter cold and biting wind. I don’t know what the worst chill was that day, but it felt pretty wicked to me & I was properly dressed for it.

The neighborhood kids and I came back to the Band rapids sampling site for an adventure

GROUP 1

- Tolerance to Pollutants
  - These are very conservative and sensitive to pollution
  - They typically respond to pollution by retreating to higher-quality sites or by perishing

GROUP 2

- Semi-sensitive to Pollutants
  - These have high pollution tolerance, but they do not like it
  - They can tolerate low or higher flow conditions

GROUP 3

- Semi-tolerant to Pollutants
  - These also have high pollution tolerance, but tend to be sensitive to changes in flow conditions:

GROUP 4

- Tolerant to Pollutants
  - These can tolerate very low oxygen levels and are experts at scavenging, maximizing any food opportunities, and making a home in unbalanced ecosystems

The Oxygen/Pollution Correlation

Streams plagued with pollutants, erosion, and unbalanced ecosystems will have more decay. More decay means more decomposers using up the oxygen day and night.

GROUP 1

- Biotic Index Value
  - Poor 1-2.0
  - Fair 2.0-3.0
  - Good 3-3.5
  - Excellent 3.5-

GROUP 2

- Biotic Index Value
  - Poor 0.5
  - Fair 1.0-2.0
  - Good 2.0-3.0
  - Excellent 3.0-

GROUP 3

- Biotic Index Value
  - Poor 1-2.0
  - Fair 2.0-3.0
  - Good 3-3.5
  - Excellent 3.5-

GROUP 4

- Biotic Index Value
  - Poor 0.5
  - Fair 1.0-2.0
  - Good 2.0-3.0
  - Excellent 3.0-

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Summer Sampling

Partnering with Stefanie Stainton’s Green Bay students to collect some long neglected data

The down side of doing all the monitoring in class is that no one is around in summer! These guys came in and did an awesome job with not only the water quality work, but the sometimes creepy & tedious macroinvertebrate work too.

Does absence make the score go higher?

Though we compared Baird & Duck’s overall diversity was higher and “weighted” off in Groups 2 & 3. Our streams also have lose, rocky substrates and only occasional sediment deposits on the inside curves of bends. They both flow through hilly terrain as they reach their terminus, and the “valley” is narrow and steep. I propose that strong flows stripped the Glacial Lake clay sediments from their bottoms. Our creek does not share that terrain, nor that “flushing effect” and thus we remain buried in thick clay sediments.

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Summer vs. Summer vs. Fall: A Significant Difference?

ASHWAUBENON CREEK MACROS IN 3 SEASONS

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by: Todd L, Ox