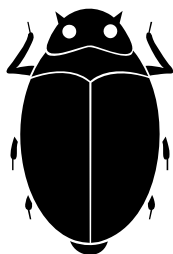


Macroinvertebrate Niches

Grade: Fifth



Location(s):

Creek or pond. This activity works well for fall and spring data comparisons.

Activity Length:

60 minutes

Materials:

- D-net or kick net (2)
- White pans (4)
- Tweezers (8)
- Pipette/turkey baster (8)
- Ice cube trays (4)
- Small nets (4)
- Magnifier (aquatic magnifier)
- Macro ID card or sheet
- Macro data sheet
- Waders/rubber boots (8)
- Garbage bag (encourage students to leave site better than they found it)
- Volunteers to help with activity

Preparation:

- Set the field trip boundaries and mark/flag them. Mark any hazards.

Activity:

- Discuss the concept that organisms occupy different niches in an ecosystem.
- Tell the students that abiotic factors influence type and number of organisms.
- Tell the students how to use the ID guide and how to collect macros using the nets. They can sort their macros using the ice cube trays. They should gently transfer their organisms to the ice cube units by sucking each organism and a small amount of water into the turkey baster. Tell them to be sure the water doesn't enter the bulb, as this could cause them to crush the organism when squeezing into the ice tray.
- Complete the aquatic macroinvertebrate sampling
- Discuss the students' findings
 - Which types of organisms were found?
 - How many are there?
 - What is the niche, role for each of the organisms (Scrapers, Grazers, Shredders, Predators, etc.)
- Complete this activity during two seasons to make seasonal comparisons and examine abiotic factors

Useful Resources:

Basic ID Info and Tolerance to Pollution Categories (Pages 14-20):
ftp://ftp-fc.sc.egov.usda.gov/OR/Technical_Notes/Biology/Biology12.pdf

Info on Feeding Groups etc.:

<http://www.csd509j.net/cvhs/bregard/2010-11/fb/mireading.pdf>

Compiled by FRJUSD teachers and Spring Rivers Foundation.



Name _____

Macroinvertebrate Data Sheet

Macroinvertebrate (Name)	Where was this macro found?	How many were found?	Ecosystem Role (shredder, scraper/grazer, collector, predator)

