

Name: _____ Date: _____

Invertebrate Biodiversity Worksheet

Question: In what habitat do we find the highest invertebrate diversity?

Prediction & Hypothesis:

Describe the experiment that will test your hypothesis:

Background information

Insects and other invertebrates are essential for any healthy ecosystem. Invertebrates aerate the soil, eat plant pests, pollinate flowers, and provide food for other organisms such as birds and small mammals. Ecosystems with high invertebrate diversity may be more stable over time and able to support a greater diversity of plants and animals. High diversity in an ecosystem can also affect ecosystem services. Ecosystem services are resources and processes generated by ecosystems that benefit humans. For example, food, water, energy, air quality, water purification, disease control, nutrient cycling, seed dispersal, and recreation are all ecosystem services.

STICKY TRAP PROCEDURE

Materials

- Invertebrate Guide
- Sticky Traps
- 1-meter high stakes
- Plastic wrap
- Camera to photograph unknown invertebrates

Instructions

1. Place a 1-meter high stake into a plot or other schoolyard location.
2. Attach the sticky trap to the top of the stake.
3. Leave sticky trap for 1 week.
4. After 1 week, collect sticky trap, wrapping it in plastic wrap or placing in ziplock bag.
5. Identify each invertebrate to order using the Invertebrate Guide.
6. Count and record the number of individuals of each order.
7. Photograph and describe any invertebrate you cannot identify. Identify this invertebrate later. List as Unknown Invert 1, Unknown Invert 2, etc.
8. Repeat for each plot.

Invertebrate Biodiversity Data Sheet

Name: _____

















School District: _____ Teacher & Fellow: _____

Date: _____ Time: _____ Weather: _____

School / Location Name: _____

Block Code: _____ Plot Treatment Description (Ex: P F UnH): _____

All insect orders are listed in the table below. Use the empty rows near the bottom of the table to write in any unknown invertebrates.

Insect Order Common Name (<i>Scientific Name</i>)	# Individuals
Ants, Bees, Wasps (<i>Hymenoptera</i>)	
Beetles & Weevils (<i>Coleoptera</i>)	
Bugs, Cicadas, Aphids (<i>Hemiptera</i>)	
Butterflies and Moths (<i>Lepidoptera</i>)	
Cockroaches (<i>Blattodea</i>)	
Dragonflies and Damselflies (<i>Odonata</i>)	
Earwigs (<i>Dermaptera</i>)	
Flies and Mosquitos (<i>Diptera</i>)	
Grasshoppers, Katydid, Crickets (<i>Orthoptera</i>)	
Lacewings (<i>Neuroptera</i>)	
Praying mantids (<i>Mentodea</i>)	
Termites (<i>Isoptera</i>)	
Walking Sticks (<i>Phasmida</i>)	
Springtails (<i>Collembola</i>)	
Mayflies (<i>Ephemeroptera</i>)	
Scorpionflies (<i>Mecoptera</i>)	
Caddisflies (<i>Trichoptera</i>)	