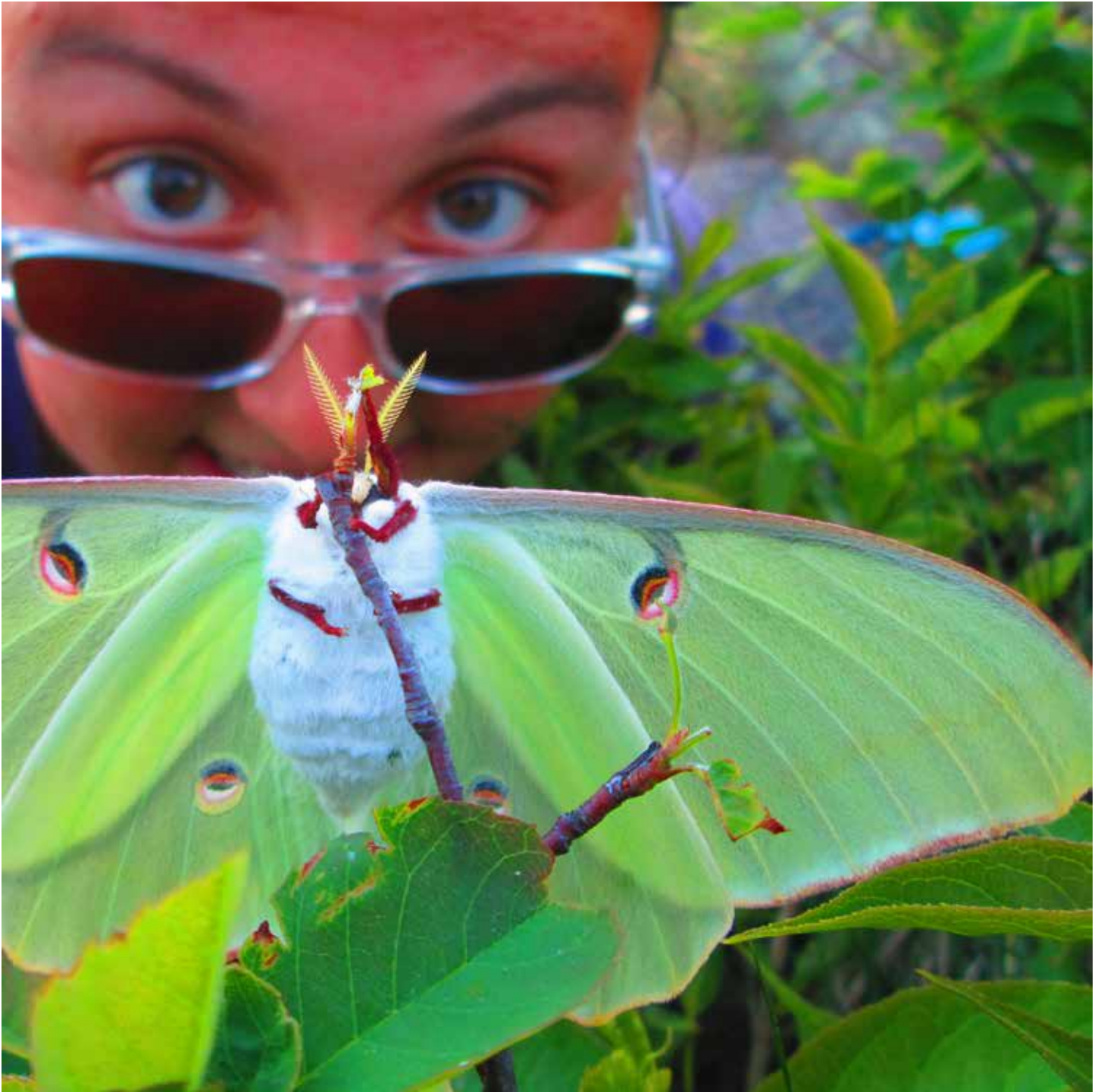


INVERTEBRATE LIFE

LESSON PLAN



WOLF RIDGESM
ENVIRONMENTAL LEARNING CENTER

INVERTEBRATE LIFE



CLASS DESCRIPTION: An Animal Class

Students will become familiar with common invertebrate life around Wolf Ridge by investigating the diversity of organisms they observe on an investigation hike. Emphasis will be placed on two groups of invertebrates: the insects, and the spiders. Students will learn to identify insects and spiders using field guides as they practice catch and release techniques around the fields and woods of Wolf Ridge. Appreciation for insect niches in the environment will be stressed.

Total time: 3 hours (two hours outdoors)

Audience: 6-20 students, 4th grade through adult

Activity level: moderate

Travel: 1 1/4 mile

Total uphill travel: 200 feet

GUIDING QUESTION

What invertebrates are found at Wolf Ridge and why are they important?

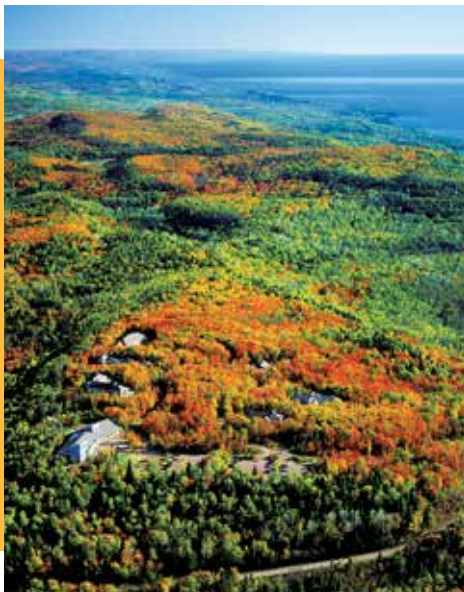
CONCEPTS

1. All living and non-living components of an environment interact with one another to form an ecosystem.
2. A complex natural system is more stable than a simple one, and more able to absorb disturbances.
3. All living things acquire physical and behavioral adaptations to be successful in their environment.
4. The variability of living organisms is called biodiversity.

OUTCOMES

Upon completion of the Invertebrate Life class students will be able to:

- Understand the concept of biodiversity and the global proportion of species that are invertebrates.
- Describe the diversity of insects found on the property of Wolf Ridge.
- Describe the roles insects and other invertebrates play in the ecosystem.



Our mission is to develop a citizenry that has the knowledge, skills, motivation and commitment to act together for a quality environment.

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Wolf Ridge Environmental Learning Center and the USDA are equal opportunity providers and employers.



Equipment

- biodiversity cards
- yarn
- invertebrate pieces
- ID guides
- insect nets
- large white sheet
- sound CD
- toys
- slug and snail photos
- posters
- jars
- shovels
- spray bottles

Appendices

- Glossary
- Additional Information
- Optional Activities
 - A. Metamorphosis
 - B. Research Project
 - C. Integrated Pest Management (IPM)
 - D. Galls
- References
- Cool Invertebrate Facts
- Spiral Learning Sheet
- Planning Outline

Set-up (10 min.)

- Classroom/class prep description
- Safety Management

I. What can we expect? (10 min.)

II. What is biological diversity? (30 min.)

- A. Diversity Line-up
- B. Biodiversity definition

III. How can we study invertebrates? (110min.)

- A. Build an Invertebrate
- B. Invertebrate Definition
- C. Survey of Wolf Ridge Invertebrates
- D. Exploration Hike

IV. What is invertebrates' role in nature (20 min.)

- A. Beneficial
- B. Harmful

V. What did we notice? (10 min.)

Clean-up (15 min.)