



Merry Lea

*Environmental Learning Center
of Goshen College*

Biodiversity

9th - 12th

Program Description

Students discover the diversity of life at Merry Lea firsthand by exploring multiple ecosystems on our trails. In each habitat, students identify native organisms and discuss the interconnections of mammals, insects, plants, humans and more. Assess the importance of biodiversity by flipping logs, interpreting abiotic features, and meeting the flora and fauna of Merry Lea.

Program Outline

1. Habitat Hike

Students spend a large portion of the day hiking and exploring the different ecosystems at Merry Lea including prairie, meadow, wetland, forest and lake. They participate in several activities including:

- **Habitat Study:** Students spend several minutes observing and comparing different ecosystems while filling out an ecosystem study sheet.
- **Forest Floor Diversity:** Students observe and explain how invasive species impact the diversity found on a forest floor.
- **Field Guide Exercise:** Students have an opportunity to practice using a variety of field guides to identify different plant and animal species.

2. Afternoon Options Include:

- Games
- Insect Search

Program Objectives

Students will:

- Explain the concept of biodiversity including its importance
- Define the terms producer, consumer, decomposer, prey, predator, herbivore, carnivore and omnivore
- Create a small food web using organisms at Merry Lea

Vocabulary

- | | | |
|-------------|------------|--------------|
| • Herbivore | • Prey | • Consumer |
| • Carnivore | • Predator | • Decomposer |
| • Omnivore | • Producer | |

Quick Facts

Season Fall: September - November
Spring: April - May
Summer: June

Grades 9th - 12th

Program Length 4 hours

Maximum # of Students 80 Students

Standards Correlation

9th-12th Grade

B.3.3 Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms...

B.5.5 Construct an explanation based on evidence that the process of evolution primarily results from four factors...

Env.2.3 Recognize and explain that the amount of life any ecosystem can support is limited by the available energy, water, oxygen, nutrients, and minerals...

Env.5.5 Identify the indirect and direct threats to biodiversity...

Env.5.6 Identify and explain the three levels of biodiversity...

Env.6.4 Explain how the carrying capacity of an ecosystem may change as availability of resources changes.