



Merry Lea

*Environmental Learning Center
of Goshen College*

Rock Cycle

9th - 12th

Program Description

Dig into northeastern Indiana's rich geological history! Students discover the impact glaciers had on this area by seeing glacial activity up close. Hike down an esker, move through layers of topsoil and glacial till to find a peat bog, explore and identify rocks in an abandoned gravel pit, and use models to understand how glaciers changed Indiana's landscape.

Program Objectives

Students will:

- Discover how the landscape in northeastern Indiana has changed over time
- Learn about the forces that changed the landscape
- Explore how the rocks and soil influence the plants and animals that live in this area

Program Outline

Students rotate in groups through four different activity stations:

1. **Lab Investigation:** Students learn about the history of the landscape and use microscopes to do some close-up investigation
2. **The Models:** Students try out models of changing landscapes and investigate how humans make use of rocks and gravel
3. **Gravel Pit:** Students explore an old gravel pit to look at rocks brought here from the last glacier and deposited in an esker
4. **Esker Hike:** Students hike a glacial feature called an esker and explore different ecosystems along the way

Vocabulary

- Landscape
- Esker
- Metamorphic
- Glacier
- Igneous
- Sedimentary

Quick Facts ←

Season Fall: September - November
Spring: April - May

Grades 9th - 12th

Program Length 4 hours

Maximum # of Students 80 Students

Standards Correlation

ESS2.C: The Roles of Water in Earth's Surface Processes: The abundance of liquid water on Earth's surface and its unique combination of physical and chemical properties are central to the planet's dynamics. These properties include water's exceptional capacity to absorb, store, and release large amounts of energy, transmit sunlight, expand upon freezing, dissolve and transport materials, and lower the viscosities and melting points of rocks. (HS-ESS2-5)