



Merry Lea

*Environmental Learning Center
of Goshen College*

Rock Cycle

3rd - 5th

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 3rd - 5th

Program Length 4 hours

Maximum # of Students 80 Students

Standards Correlations

3.ESS.3 Observe the detailed characteristics of rocks and minerals. Identify and classify rocks as being composed of different combinations of minerals.

3.ESS.4 Determine how fossils are formed, discovered, layered over time, and used to provide evidence of the organisms and the environments in which they lived long ago.

4.ESS.3 Describe how geological forces change the shape of the land suddenly and over time.

4.ESS.4 Develop solutions that could be implemented to reduce the impact of humans on the natural environment and the natural environment on humans.

See Standards Correlations for Rock Cycle for more academic connections.