

Buffalo Trace Education Box
Lesson 24
Indiana Fossils

Purpose: Students will discover fossils at Indiana locations and create a fossil model.

Standards:

4-ESS1-1: Earth's Place in the Universe: Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

4.ESS.2 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment

Discovering Indiana Fossil Locations:

1. Introduce fossils with one of the YouTube videos by Rick Crosslin: <https://www.youtube.com/watch?v=hdadB-2RkWw>).
2. Continue with a lesson from the Department of Natural Resources — Lesson 1 — Indiana's Ancient Seas, Activity 1 Fossil Match, featuring the Falls of the Ohio State Park: <https://www.in.gov/dnr/state-parks/cultural-resources-and-history/hoosier-history-and-indiana-state-parks/indianas-ancient-seas/>.

Materials Needed for Creating a Fossil Model — You will need a copy of the directions for:

https://energy4me.org/media/filer_public/14/c1/14c11ad8-0c46-4b23-9cd9-595dc9bb078a/fish_fossils_fuel_activity.pdf

For each group you will need: 3 slices of bread (one slice each of white, wheat, and rye), gummy sea creatures or plants, paper towels, heavy books, paper towels, magnifying lens, clear straws

Steps:

1. Guide students through the directions for “Bread Fossils — Discovering the Origins of Fossil Fuels.” This activity can last 1-2 days.
2. Photograph several of the models before cleaning up.

Resources:

- Colorful brochure with photographs of fossils: https://www.in.gov/dnr/state-parks/files/sp-Discovering_Fossils.pdf
- From the Indiana Ancient Seas lesson: <https://www.in.gov/dnr/state-parks/files/cent/sp-lesson-1-fossil-match.pdf>
- Indiana Geological and Water Survey has many resources about fossils: <https://igws.iu.edu/about> (Go to Outreach dropdown menu: Educational Resources).
- Research the history of the sinkhole at Pipe Creek, Marion County, for the fossils discovered there.