



NATURE PROGRAMS FOR ACADEMIC STANDARDS

Programs can be tailored to fit the needs and capabilities of each classroom. These programs may support more academic standards than listed here, especially for Kindergarten, so teachers are encouraged to contact the Park Naturalist for more information if a topic interests you.

For more information or to schedule a program, contact:
Park Naturalist Leslie Arnold 260-463-4022 or larnold@lagrangeparks.org

K.LS.2; 1.LS.2; 3.LS.3; 4.LS.3

Seed Survival:

Students will be introduced to several common, native seeds that have special external features to help them move or disperse. This program discusses why seeds need to travel for plant survival. Students will get to touch real seeds and make basic drawings. This program could be expanded into a conversation about the invention of Velcro.

Worm Study:

Using their senses, students will closely examine live earthworms. They will record observations of body shape, color, texture, and movement. By listening to worms move, students will attempt to answer the question, "Why is it so hard for a Robin to pull a worm out of the ground?" This program discusses why the bristles on a worm's body help it to survive.

Owls:

Discover Indiana's four native species of owls. The Naturalist will discuss the amazing adaptations of the owl and how it is designed to be a superior nocturnal hunter. Students will learn about talons, silent flight, and night vision. Optional: Students can dissect an owl pellet to reconstruct a skeleton. If the Naturalist orders the pellets, there is a \$2.00 fee for all students (even in LaGrange County) to cover the cost of pellet purchasing and shipping.

2.ESS.4

Our Blue Planet:

Students will toss an Earth beach ball, dividing into land and water groups, to determine the percentage of water on Earth. Students will learn about the different forms of water on Earth and how they are not all potable. Students will learn the three states of water and how they can be changed and reversed. This program discusses how every living being needs water in order to survive, and our freshwater supply is precious. Each student will get to take home a handmade leaf rubbing greeting card. (Greeting card activity is seasonal) This program has been adapted from an activity in "Getting Little Feet WET" available through Project WET.

K.ESS.3; 2.ESS.1; 5.ESS.2

Weather Study Trunk:

Includes classroom quantity of: Cloud Viewing charts, Sky Color Viewing charts, Cyanometers (for comparing shades of blue), Beaufort Wind Scales, Handheld Wind Meters (Dwyer brand), Humidity and Temperature weather center, and water thermometers. This trunk is available to all LaGrange County teachers to borrow for a two-week period with a first-come, first-served reservation. Teachers are responsible for replacing lost or broken items. Teachers can schedule the Naturalist to visit the classroom and assist in showing students how to use the weather study equipment.

3.ESS.4

Fossils:

Students will get to examine and touch real fossils from Indiana limestone. We'll discuss how fossils are made, how they are discovered, and how they help scientists learn about the past. Using air-dry clay, students will get to make a fossil-like mold to keep. This program follows the book *Fossils Tell Stories*.

4.ESS.3

Geologic Forces & Indiana Glacial Past:

This program begins by showing examples of various geologic forces around the world, then narrows in on the glacial past of Indiana. Using a table model, students will see how glaciers moved and shaped the surface of northeastern Indiana. They will become better familiar with the vocabulary words: moraine, kettle lake, glacial deposits.

3.ESS.3

Rock Hounds:

Students will learn the differences between minerals and rocks. They will see and handle real specimens of minerals and rocks found locally and abroad. They will play a matching game with rocks to better understand the differences between the three main types of rocks. They will become better familiar with the vocabulary words: mineral, igneous, magma, sedimentary, fossil, metamorphic, grainy/coarse.

1.PS.1; 2.PS.3; 3.LS.3; 6.LS.2; 6.LS.4

Maple Syrup Field Trip – Maple Wood Nature Center; MARCH ONLY

Morning tours begin at 9:00 a.m., and afternoon tours begin at 12:00 p.m. Each tour lasts approximately 2 hours. There are no Monday tours. Children will learn about photosynthesis, the important role of weather and temperatures, and the water cycle. Students will take a short walk in the woods to learn about sap and the tapping process, then visit the sugar shack to see sap boiled. They will be treated to storytelling and a syrup sample. No school will be double-booked.

This field trip can be easily expanded to meet other state standards. Teachers are welcome to contact Park Staff with specific science or history standards they would like us to incorporate, and we will do our best.

Schools outside LaGrange County will be invoiced \$3 per student.

4.LS.3; 5.ESS.4; 6.LS.3; 6.LS.4; 6.LS.5

Ecosystem Field Trip – Pine Knob Park; August, September, October, April, May ONLY

Students will be divided into small groups to discover the wetland, prairie, and forest ecosystems of Pine Knob. Students will complete journal pages at each location, learn about plants and animals living in each ecosystem, and observe evidence of human impact (both good and bad). Students will play a food web game. If your school would like to stay for the day, a canoeing rotation and/or fishing station can be added. Canoes and lifejackets for students and adults are provided. One adult must be in every canoe. Fishing poles and tackle will be provided. The Pine Knob Lodge is available as a lunch site and there are also picnic tables near the parking lot.