

Bradford Woods Environmental Resource Center

Education Modules

All modules are hands-on where students will be outside exploring and investigating the environment.

AVAILABLE YEAR ROUND:

AQUATIC LIFE: One of our most popular modules! Students explore the aquatic communities at BW by using chemical tests and collecting samples of macroinvertebrates. Studying these organisms may lead to a greater appreciation and understanding of the diversity of life forms, the interconnectedness of all species, and the need for responsible use and protection of water resources.

COMPASS: Students will become familiar with the parts of the orienteering compass and be given instruction in its use. Students then apply this knowledge in actual field situations through involvement in a variety of compass courses and activities.

DIRT ON DIRT: Get the low down on dirt, soil, and mud! Students learn about soil and its importance to the woods. By conducting a critter search, and studying the soil's composition, students gain an understanding of how soil is formed, soil properties, and what lives within the soil.

GEOLOGY: What shapes our world? Students learn about the geological history of Bradford Woods and south/central Indiana, including the influence of glaciers on local topography. The origin of sand (the source of the Bradford family's wealth) and limestone are discussed, and students search for samples of rock types.

HISTORY HIKE: Find out the history of the Bradford Woods' property! Students will learn when the area was settled, when the Bradford family arrived to the area, and how the Bradfords made their riches. Students will take a walking tour of the property to see the original buildings that the Bradford family lived in and used. Also, students will find out how Bradford Woods became a part of Indiana University and accessible to thousands of children.

INITIATIVES: Teamwork is key to much of our success. Students are challenged with problem solving activities that require the cooperation of the entire group. Communication and teamwork are central to successful completion of these challenges, and to larger environmental challenges which society faces.

INSTINCTS FOR SURVIVAL: Action learning in the woods! Students participate in an animal survival game. Students assume roles of herbivores, omnivores, and carnivores. How they play out these roles determines the outcome of the game. Students gain an understanding of food chains, food webs, and other factors relating to animal survival and adaptation.

NIGHT HIKE: Experience the night without a flashlight!

- Animal Focus: Students will learn about some of Indiana's nocturnal animals like bats, owls, and coyotes. Through discussion, activities, and games, students become familiar with special adaptations that enable night creatures to survive.

- Sensory Focus: When eyesight is compromised, other senses have heightened awareness. Students will experiment with night vision and learn about the rods and cones in our eyes. By experiencing night sounds, smells, and feels, students will gain a greater appreciation for the night.

OUTDOOR LIVING SKILLS: Take only pictures and leave only footprints. Good conservation practices are necessary for minimum impact camping. Students are introduced to the basic requirements for selection of a good campsite, basic equipment needs, fire building techniques, shelter building techniques, and leave-no-trace ethics.

TREES: What roles do trees play in the environment? The characteristics and functions of trees are emphasized in this module. Through examination of trees, both living and dead, students develop an understanding of the tree life cycle. Identification keys, close observation and sensory awareness activities aid in the student's recognition of several trees common to Indiana.

WILD EDIBLES: You can eat wild plants?! The primary objective is to increase students' awareness of wild edible plants available in south central Indiana. At the conclusion of this session, students should be able to identify those plants found and discussed, know which part of the plant is edible, and know how to prepare the food.

WILDLIFE IN THE WOODS: Big, small, furry, and scaly: they come in all shapes and sizes! Students will increase their awareness of the natural environment as they observe animal homes and signs. Students develop an understanding of animals, their habitats, and what is required for all animals to survive.

WINGS IN THE WOOD: What makes a bird a bird? Students are introduced to bird adaptations and bird identification as they investigate a variety of bird habitats at Bradford Woods. Students will identify common local birds by using field observation techniques and proper use of binoculars and field guides.

AVAILABLE SEASONALLY:

MAPLE SYRUPING: "Sisibaskwat" means "the time of the melting snow" in the Ojibwa language. This is a special time of year when the sap starts to run in the maple trees. Students have the chance to see tapped trees and learn the process involved in making maple syrup. *Available until April 2 only.*

WILDFLOWERS: Color, color everywhere! This module emphasizes observation, identification, function, and appreciation of wildflowers. Structural features serve as guidelines for identification. Students use a hand lens, field guides, clue charts, and perhaps their artistic ability to aid them in their investigation of Bradford Woods' wildflowers. *Available September, October, April, and May only.*



Indiana University's Outdoor Center