Plant Identification and Ecology
An Educational Program of the Environmental Interpretive Center
At University of Michigan – Dearborn

Teacher Information

Program Length, Season of Activity, and Appropriate Grade Levels

- The typical program lasts 4 ½ hours (length and content can be adapted to suit the needs of your group.)
- It is offered year-round
- Appropriate for Grade Levels 3-12.

Program Description and Activities

We will explore a forest community using the tools and concepts of plant identification, classification and ecology.

Based on the season of your group’s visit, curriculum connection requirements, and/or interests, there are two areas of program focus from which to choose:

1. Trees and Shrubs
2. Wildflowers

Depending on your selection, your students will be engaged in a multifaceted program experience that may include:

- Walking the nature trails to observe and identify trees, shrubs, or wildflowers.
- Investigating different leaf shapes, patterns, and textures.
- Distinguish between deciduous and evergreen trees, and learn to identify live specimens from each of those plant groups.
- Studying various wildflowers to determine their unique floral structures, habitat needs, adaptations for pollination and seed dispersal, and identification characteristics.
- Using the characteristics of the “three Bs” (bark, branches, and buds) to identify and classify trees and shrubs in the field.
- Using dichotomous keys to identify a small selection of trees and shrubs from twig and branch samples.
- Investigating plant communities including a “young” (early successional) forest, an “old” (late successional) forest, and a meadow.
- Observing the various “layers” of the forest from treetop to forest floor.
- Observing and discussing evidence of energy flow from plants-to-insects-to-birds and other animal life of the forest community.
- Observing and discussing ecological interrelationships between the native wildflowers we identify and their insect pollinators.
- Differentiating between plants that are native, non-native, and invasive in southeast Michigan.
- Using microscopes to closely examine identification features and adaptations of plants in our region.
- A sensory “scavenger hunt” of various trees and shrubs, and/or wildflowers.