Plant Identification and Ecology

Grades: 6-8

Standards
Michigan K-12 Standards in Science

Next Generation Science Standards

STEM Connection
Learn and identify the different adaptive strategies plants have devised to grow into thriving species.

Urban Futures Connection
Students will discuss the importance of plant identification, even in their own backyards.

Take Home
Activity worksheets are available via email upon request.

Overview

In this program students will learn the tools and techniques of plant identification, classification, and ecology while exploring different parts of a forest community.

Details

- This program lasts 1½- 2 hours and can be adapted to suit your needs
- Offered year round; plants observed will change seasonally
- Appropriate for Grade Levels 6-8

The Experience

In this program students will be engaged in a multifaceted program experience with activities that may include:

- Using investigative techniques to find different patterns, shapes, and textures of various species of trees and shrubs.
- Using a dichotomous key to identify a small selection of trees.
- Recognizing different types of native plants that are the most beneficial to local wildlife. .
- Observing various layers of the forest, the habitat it provides, and their ecosystem services.
- Exploring different forest types.

Helpful Hints

This program will be held in the great outdoors, rain or shine, please make sure students are dressed for the weather. You are welcome to take photos and ask questions along the way.

Science Standards

6th - 8th Grade

MS-LS2-2
Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems. **

- Students will be prompted to see patterns in various plant species while using a dichotomous plant identification key.

MS-LS1-4
Use arguments based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

- Students will observe and consider the ecological implications relating to a diverse array of plant structures.

MS-LS4-4
Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.

- Students will explore the adaptations of different plant species and discuss how one characteristic may be more beneficial than another.