Pond Explorations

Grades: 6-8

Standards
Michigan K-12 Standards in Science

Next Generation Science Standards

STEM Connection
Pond exploration lets students get their feet wet in all sorts of STEM focused activities; from species identification to habatat health the pond is filled to the gills with STEM systems.

Urban Futures Connection
Aquatic habitats can be found in both urban and rural areas alike. We will focus on how these habitats interact with the larger ecosystem and why they are an important aspect in our Urban Future.

Take Home
Activity worksheets are available via email upon request.

Overview
Pond programs will be held at the historical Rose Garden Pond on the former grounds of the Henry Ford Estate. This shallow, easily accessible pond is perfect for discovering native aquatic life.

Details
- This program lasts 2 hours and can be adapted to suit your needs
- Offered from mid-April to mid-November
- Appropriate for Grade Levels PreK-12th

The Experience
In this program students will be engaged in a multifaceted program experience with activities that may include:
- Using dip nets to capture and examine various pond creatures
- Discussing science terms and concepts such as adaptation, life cycles, biological diversity, food web and energy flow, ecological community, metamorphosis, carnivore, herbivore, and omnivore in relation to pond creatures captured and observed.
- Assess the health of the pond habitat and its community of living things, based upon our findings.

Helpful Hints
This program will be held in the great outdoors, rain or shine, please make sure students are dressed for the weather. While we practice pond safety please pay close attention while using dip nets.

Standards

6th - 8th Grade
MS-LS1-6
Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.

- Students will discuss how photosynthesis plays a foundational role in all ecosystems.

MS-LS2-3
Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem. **

- Students will learn how the cycling of nutrients is a crucial part of habitat life. .

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

- Students will be asked to correlate what they've learned in aquatic habitats to other habitats across the world.