Lesson Themes

The activities below are offered to assist teachers in designing a field trip program that enriches classroom study. Depending on lessons, field experiences could include observing, questioning, problem solving, communicating, note taking and sketching, as well as data collection and analysis. Some outdoor lessons are dependent on the season and weather.

Science

Aquatic Ecology & Watersheds (Sept/Oct & May/June):
Discover a fresh water pond by collecting, observing and identifying aquatic life from the shore or a study raft. Learning topics may include watersheds, the water cycle, water quality testing, and aquatic insects.

Birds:
Observe birds that reside at TOEC and explore their habitats. Topics may include identification, bird songs, migration, binocular and field guide use, data collection through the Cornell Lab of Ornithology’s Project Feeder Watch.

Energy Flow:
Learn about energy cycles in the natural world and how they are interconnected. Topics may include water, carbon and nutrient cycles, trophic levels, food webs and the interrelationships between their components.

Forest Ecology:
Explore TOEC’s forested ecosystem. Topics may include tree identification, succession, sustainable forestry practices, and the interrelationships between its inhabitants.

Mammals:
Learn about mammals that are commonly found at TOEC. Topics may include identification through examination of animal skins and skulls, adaptations for survival, interrelationships, tracks and signs of wildlife.

Night Walk:
A “sensory” nocturnal walk. This activity engages the five senses. Topics may include nocturnal animal adaptations, stars and constellations.

Soil Ecology (April – December):
Study the processes that produce soil and the life that lives within it. Topics can include the layers of soil, erosion, the nutrient cycle, decomposers, and adaptations of life underground.

Social Studies

Maple Sugaring (Feb & March):
Learn the history and techniques behind making maple syrup. Topics include tree identification, tapping a tree, collecting sap, boiling sap into syrup, sampling the product.

Outdoor Skills:
Topics may include basic needs for survival, fire building, shelter building, map and compass, low impact camping skills, and how to avoid a wilderness emergency situation.

Environmental Issues:
Investigate how humans impact our environment. Topics may include renewable and non-renewable resources, fossil fuels, pollution, invasive species, and endangered species.

Language/Arts

Nature Arts:
Learning to observe and record the natural world through a variety of artistic techniques, such as sketching, sculpting and writing.

Journaling:
Learning to observe, record and interpret the natural world though journaling. Topics may include phenology, stories, and poetry.

Team Building

Project Adventure - Low Ropes:
A low ropes course that challenges and encourages groups to strengthen problem solving, communication and cooperation skills.

Project Adventure - High Ropes (High School and up):
A high (30 feet into the forest canopy) challenge course that encourages individual participation, expanding personal comfort zones, and supporting others.

Cooperative Games:
Field activities dedicated to fun, energizing field games and get to know you activities.