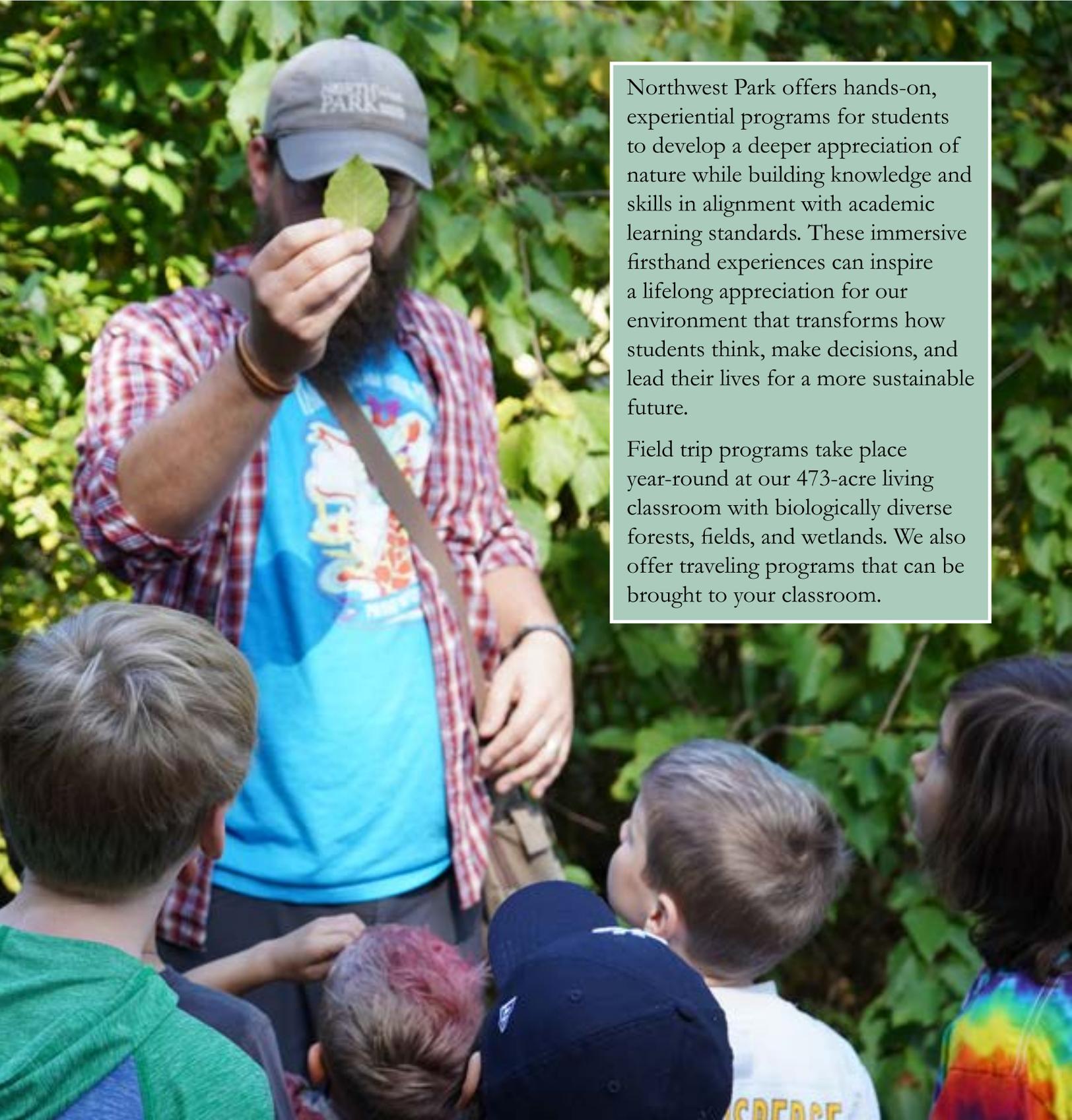


# NORTHWest PARK

## Environmental Education Programming



Northwest Park offers hands-on, experiential programs for students to develop a deeper appreciation of nature while building knowledge and skills in alignment with academic learning standards. These immersive firsthand experiences can inspire a lifelong appreciation for our environment that transforms how students think, make decisions, and lead their lives for a more sustainable future.

Field trip programs take place year-round at our 473-acre living classroom with biologically diverse forests, fields, and wetlands. We also offer traveling programs that can be brought to your classroom.



## K-Gr. 2 Programs

### **Sensory Saunter** 60 Min.

NGSS: K-ESS2-2; K-LS1-1, K-ESS3-1

There are many ways we can use our senses to explore Northwest Park. On this short hike, students will make observations through experiences such as feeling the texture of moss & tree bark, seeing signs of wildlife, hearing birds & insects and smelling pine needles in the fragrant forest as we look for signs of the season.

*Key Concepts: senses, habitat, living & nonliving, texture*

### **Built for Life** 60 Min.

NGSS: LS1.A

A suitable habitat satisfies a living thing's 4 basic needs: food, water, shelter, space. In order to be well suited for a particular habitat, an animal must have certain behavioral or physical characteristics (adaptations) that help them survive in their environment. Identify examples of adaptations through a series of hands-on investigations and meet a live animal to make further connections on how animals interact with their environment.

*Key Concepts: adaptations, survival, habitat, needs of living things*

### **Sun, Moon & Stars** 60 Min.

NGSS: 1-ESS1-1; 1-ESS1-2

The Sun, Moon and stars all appear to move slowly across the sky in a pattern. These movements affect important aspects of our daily lives, including night and day, our calendars, the availability of light and heat, and the appearance of the Sun and the Moon in the sky. Gaze into the night sky in our portable planetarium and hear stories of the seasonal constellations. The STARLAB® planetarium requires a room with a minimum space of 21x 21 feet. (A gymnasium works best.)

*Key Concepts: patterns, constellations, mythology, calendar, orbit*

### **Beavers: Nature's Engineers** 90 Min.

NGSS: 2-LS4-1; 2-ESS2-1, 3-LS4-4, 3-5-ETS1-2

Beavers are a keystone species because of their ability to create wetland habitats. Learn how beavers use their adaptations to influence their ecosystem and change the land by preventing water from flowing. Use this knowledge to design a dam using natural materials as we model how humans have taken the beaver's engineering skill and applied it to structures like Rainbow Reservoir Dam.

*Key Concepts: adaptations, keystone species, wetland habitat, engineering, modeling*

### **Lifecycles** 60 Min.

NGSS: LS1.B, 1-LS3-1

The series of stages in the growth and development of a plant or animal is called its lifecycle. Through interactions with various living organisms and models, explore a variety of life stages including those who experience metamorphosis as well as those who do not.

*Key Concepts: lifecycle, stages, metamorphosis, development, growth, mature*

### **Ecosystem Dynamics** 60 Min.

NGSS: 2-LS4-1

An ecosystem consists of all the organisms and the physical environment with which they interact. Animals have developed physical and behavioral characteristics to meet their needs known as adaptations. Determine which adaptations animals would need to thrive in a particular habitat through first-hand observation and hands-on exploration of our woodland forest and pond habitats.

*Key Concepts: needs of living things, adaptations, habitat, observe & predict*



**This symbol indicates programs that can only be taught at Northwest Park.**

## Gr. 3-5 Programs

### Paleobotany 60 Min.

NGSS: 3-LS4-1; 3-LS4-3

The past history of climate and life on Earth is apparent in fossil evidence. Through the observation of basic leaf structure and understanding the historical context of the geological Earth, students will begin to analyze fossil sets and climate data to make inferences about growing conditions during the late Eocene period.

*Key Concepts: fossilization, climate, geology, prediction, dichotomous key, evidence*

### Solar Motions 60 Min.

NGSS: 5-ESS1-1, 5-ESS1-2

Earth is part of a system of fast-moving objects in space. Model the arrangement of our solar system and predict the movement of superior and inferior planets through pattern (Kepler's Laws of Planetary Motion). Discover the connection between distance from the sun and rotation, size of planets, the length and speed of a planetary revolution as well as the phases of the moon. Gaze into the night sky in our portable planetarium and discover the mythological stories of seasonal constellations. The STARLAB® planetarium requires a room with a minimum space of 21x 21 feet. (A gymnasium works best.)

*Key Concepts: planetary motion, patterns, eclipse, ellipse, constellations, mythology*

### Habitats & Homes 90 Min.

NGSS: 2-LS4-1, 3-LS4-3

Take a guided hike through Northwest Park's forest and fields as we search for clues of wildlife and learn how their adaptations make them well-suited for their habitats. View artifacts and hear the common sounds of animals that call Northwest Park home.

*Key Concepts: wildlife, interrelationships, artifacts, shelter, suitable living space*

### Biomimicry 60 Min.

NGSS: 4-LS1-1, 4-ESS3-2, 3-5ETS1-1

Drawing inspiration from nature and the adaptations of animals, biomimicry encourages students to design a strategy to solve a modern era problem. Create a new shoe prototype to prevent slips and falls due to ice and other slippery surfaces. Production is limited by resources and available funding, challenging students to budget and plan out their design before "purchasing" supplies.

*Key Concepts: adaptation, biomimicry, solution, design, engineering, process, shape*

### Survival by Owl Means 90 Min.

NGSS: 3-LS4-2; 3-LS3-2

Owls are powerful apex predators. Discover the unique characteristics of an owl as we learn about the different species of owls found in Connecticut and observe taxidermy specimens. Through a hands-on dissection of owl pellets, students will then explore an owl's role in the food chain and compare what they find in their pellet to a bone chart as they determine their owl's diet.

*Key Concepts: predator/prey, food web, adaptations, dissection*

### Energy in Ecosystems 90 Min.

NGSS: 5-PS3-1, 5-LS2-1

Decomposers play an important role in the energy transfer of an ecosystem. Engage in hands-on exploration in the Northwest Park organic garden to better understand how energy is recycled through composting and how students can reduce their own carbon footprint.

*Key Concepts: decomposition, food web, compost, nutrient cycling, energy transfer*



## Specialty K-Gr. 8 Programs

### Maple Sugaring 60 Min.

NGSS: K-ESS2-1, 1-LS1-1, 2-PS1-4, 4-LS1-1, 3-ETS1-1

Learn the history of maple sugaring through hands-on activities. Discover the process it takes to turn tree sap into delicious maple syrup. This program includes: tree identification, a tree tapping demonstration, sap collection, and sap/syrup tasting. Experience the sights, smells, and sounds of Northwest Park's Sugarhouse during its seasonal operation.

*Key Concepts: tree identification, history, food products, sap, evaporation*

This program is only offered in March.

### Survival Skills 60-120 Min.

NGSS: ESS3.C

What would you do if you were lost in the woods? Prepare for the harsh outdoors by learning the basic survival skills necessary to keep your head in the game, stomach full and stay protected from the elements. Survival skills can be tailored to your learning objectives. Topics include: fire building, shelter building, water purification and/or navigation. Due to fire safety precautions and the materials used, this program is recommended for ages 8 and up.

*Key Concepts: shelter, LNT, fire building, rules of 3, navigation, preparedness*

### Water Distribution 90-120 Min.

NGSS: 5-ESS3-1, 5-ESS2-2, 5-ESS2-1

The Earth is a watery place. But just how much water exists on, in, and above our planet? Rotate through multiple activity stations to explore the water cycle and discover the importance of conserving this precious resource. Transform into a water molecule to identify the different places water can go as it moves through and around Earth. Determine how much fresh water is available on Earth and reflect on how much water we use on a daily basis from basic tasks such as showers and dish washing.

*Key Concepts: water cycle, conservation, limited resource, molecule, consumption*

### Animal Ambassadors 60 Min.

NGSS: LS1.A, LS1.C, LS3.A, LS3.B, LS4.B, LS4.C, ESS2.E

Through hands-on exploration of animal artifacts and up-close meet-and-greets with some of our favorite animal ambassadors, learn how animals' adaptations help them survive in their different habitats. Discover common misconceptions as we study each species with an emphasis on respect for all animals. This class can be tailored to complement your curriculum. Choose between our heritage breed farm animals (only offered at Northwest Park) or reptiles & amphibians.

*Key Concepts: adaptations, food chain, body structure, diet, camouflage*

## Program Fees and Scheduling

### At Northwest Park

60 Min: \$125

90 Min: \$150

### Offsite Location

60 Min: \$150

90 Min: \$175

Many of our programs can be adapted for any grade level, so if there is a particular program that you are interested in that is listed for a different grade level, please call to discuss options.

### Contact Information:

Field Trip programs must be scheduled at least two weeks in advance by calling Theresa Nodine, Environmental Education Coordinator at 860-285-1886 or by email [nodine@townofwindsorct.com](mailto:nodine@townofwindsorct.com).

## Scout Programming

Northwest Park is a 'natural' fit for scouts! Our programs are designed to provide the hands-on learning that scouting is geared toward. We offer programs that meet scouting requirements, are fun, educational, and encourage further exploration. From guided hikes to survival challenges, Northwest Park can help troop leaders and their scouts achieve their goals and enjoy every moment!

60 Min: \$8/scout

90 Min: \$10/scout

120 Min: \$12/scout

*The length of the program depends on the ages of the scouts and the programming chosen. Minimums apply.*