

# School Program Outdoor Class Descriptions

## **Scientific Field Investigations**

### **Aquatic Biologist**

How are these animals connected to my survival? What is the quality of the water in Halfmoon Pond or the Nubanusit River? What is water pollution? These questions and many others are answered as your students participate in Aquatic Biologist. Aquatic Biologist puts real science in the hands of students. Equipped with field investigation tools students set out to explore and discover the world of freshwater. Collecting macroinvertebrates, using a dichotomous key, performing pH and dissolved oxygen tests, are all used to evaluate the water quality at Sargent Center.

### **New England Forester**

Using Data Logger technology as well as traditional scientific tools, students participate in Sargent Center's long-term forest study, apply scientific procedures and draw conclusions about the quality of the forest at the Sargent Center.

### **Geologist Quest**

Through an inquiry based quest activity students hunt for geological features that weave together the story of Sargent Center. Students explore the property, and learn to read the landscape through clues and riddles that guide their quest. Along the way, students uncover secrets of the past, find evidence of the rock cycle, and investigate the effects of wind, rain, pressure, and time on earth's surface.

### **Entomologist**

Through a variety of hands-on interrelated activities, students explore the breadth and depth of insect life at Sargent Center. Using observation skills, collecting/recording data and conducting experiments are all part of Entomologist. Students develop an appreciation of the worldwide importance of insects in the process.

### **Research Explorer**

Winter in New England provides a unique time to explore the ecosystem at the Sargent Center. Students discover how plants and animals adapt to winter, and explore the properties of water, snow, and ice through several experiments. Students collect and record scientific data relating to the atmosphere, the areas covered by ice & snow, and the living organisms in these domains. Students gain a sense of how scientists study natural phenomena, and how researchers design scientific tools to gather evidence, test theories, and come to conclusions.

## **Adventure Activities**

### **Adventure I**

(Prerequisite to Ropes Course and Climbing Tower.)

This lesson provides students with hands-on experience identifying and refining group problem solving skills. While keeping both feet on the ground Instructors facilitate icebreakers, games, and initiatives in order to establish group norms, values and communication strategies.

### **Adventure II**

(Prerequisite to Ropes Course and Climbing Tower.)

This second step in the adventure progression focuses on trust-building, mastering group problem solving, and learning skills for a High Ropes or Climbing Tower experience.

### **All Day Hike**

The all day hike lesson is designed to be a continuing adventure consisting of a half-day or whole day hike with lunch cooked out in the field. Adventure enriches this lesson as students hike our trails or tackle the trek to Juggernaut Pond. Lower level elements and Scientific Field Investigations can be included.

### **Canoe Odyssey**

Build it and they will understand! Students apply teamwork, planning, and engineering skills as they construct their “Canoe Odyssey Vessels” for use on Halfmoon Pond. After construction, students (with life jackets) test their design by paddling across Halfmoon Pond and returning to their starting location.

### **High Ropes**

The Sargent Center has two High Ropes courses plus several other high adventure elements. On our Northern High Ropes students climb with a partner on the route of their choice, working as a team to successfully complete the course. Our Southern High Ropes Course is similar to the Northern course while offering a challenging vertical climbing element and the thrill of the Giant’s Swing! Under staff supervision, students are responsible for belaying (managing their peer’s safety ropes.) At least 2 teachers are required to fulfill designated responsibilities for each Ropes Course.

### **Climbing Tower**

The climb tower offers students a great opportunity to get the feel of putting on the harness, setting goals, and building trust as they manage each others safety ropes under the supervision of School Program Staff.

### **High Elements**

Our high elements are stand-alone high ropes elements which includes the Dangle Quad. This climbing element requires students to work together in pairs as they climb to reach their goal!

## **Outdoor Skills**

### **GPS Challenge**

Working in teams, students use maps, compasses, and GPS receivers to navigate 700 acres to find specific locations. By design, the *GPS Challenge* requires students to work as a team, logically solve problems and apply leadership skills.

### **Compass Challenge**

Through fun and engaging compass games students learn the basic fundamentals of operating a compass.

### **Orienteering**

Students learn the parts of a compass, compass operation, and how to read a map. Students then apply their new skills as they navigate our orienteering course.

### **Student Choice Electives (7<sup>th</sup> and 8<sup>th</sup> Grades)**

Students are given the opportunity to choose from a wide variety of activities as they take ownership of their School Program experience.

### **New England Pioneer**

What was it like to live in New England in the 1800s? What did one do to survive? Why do the land, forest and water look as they do at Sargent Center? Students learn about our land-use 100 years ago and discover how early settlers lived and prospered by participating in several pioneering activities.

### **Wilderness Skills**

Students learn basic human survival in the wilderness by learning proactive planning strategies and various trail skills including fire and shelter building, and what to do if they are ever lost in the woods.

### **Life in the Forest**

Students experience an interactive lesson on food webs as they assume the role of an omnivore, herbivore, or carnivore. Each student must “survive” as they search for food, water, and shelter while avoiding predators, pollution, and disease. This lesson concludes with a discussion of the relationship between animals and resources required for life.

### **Cross Country Skiing and Snowshoeing**

At Sargent Center, winter is a special time of the year and experiencing our property on skies or snowshoes is just another way we connect students with nature. Students receive instruction in the basic operation of the equipment and then it’s time to apply their new knowledge on the Sargent trails.

## **Evening Activities**

### **Astronomer**

Students explore the night sky with binoculars, telescopes, and activities focusing on stars, the moon, planets, and the sun.

### **Campfire**

Each instructional group prepares a skit, song, or other presentation to share with the group, making for a memorable evening of entertainment. Instructor's songs and stories cap the event.

### **Contra Dance** (*extra fee required*)

A local caller and musicians lead this popular social experience, teaching easy dances everyone can learn. Although students are initially skeptical, the overwhelming response at the end of the evening is, "That was great!"

### **Night Walk**

Night time in the forest is a wonderful, mysterious adventure! Students explore the nocturnal environment using their senses, and learn about adaptations to darkness. Students may also use our Owl tapes to call in one of our many Barred Owls if they are very quite and patient!