

SCHOOL PROGRAMS

**FALL FIELD TRIPS offered in
September and October.**

**CLASSROOM Programs offered
through the winter**

SPRING FIELD TRIPS offered April, May, June

Founded in 1898, the Connecticut Audubon Society's mission is to conserve Connecticut's environment through science-based education and advocacy with a focus on the state's birds and their habitats. Offering educational programming to all ages year round, Science in the Woods is our elementary, middle and high school piece. Student teachers from Eastern Connecticut State University train and teach with our staff. Together we cultivate a sense of wonder, nurture a life-long respect for the environment and ultimately foster an understanding of the complexities and interconnections that characterize our natural world. Accompanying each description are Connecticut Framework Codes (updated as of the 2008-09 school year), with subject codes and content standards.

Field Study Programs:

Guided Nature Walks, Grades PreK & K:

Well suited for half day school programs, these generally 2 hour walks introduce our youngest students to meadow and forest . CF- Sci.

Fall Follies, Grades K-2:

Children learn how plants and animals prepare for winter as they experience the sights, sounds, and smells that are unique to fall. Through games, hands-on activities, and discussion, youngsters increase their understanding of seasonal changes and cycles. (Offered September, October, early November.) CF-Sci. K.2, K.3, 1.1, 2.2

Signs of Spring, Grades K-2:

The world comes alive in the spring. The migration game, a trip to the vernal pool to see frog eggs, and the construction of a bird's nest are a few of the participatory activities that help students learn about the seasonal cycles of nature, the life cycles of organisms, and the delights of renewed spring life. (Offered April, May.) CF-Sci. K.2, K.3, 1.1, 2.3

Mammals of NE Connecticut, Grades 1-4:

This program focuses on local mammals and the signs they have left behind. Hands-on activities and games teach about track identification, habitat requirements, predator-prey relationships and adaptations. In the our Center, students observe skins, skulls, and mounts, and discuss mammal characteristics. (Offered spring and fall.) CF-Sci. 1.2, 3.2, 4.2

Bug Me, Please!, Grades 2-6:

Nets in hand, students will collect and release insects, become familiar with insect characteristics and behavior through direct observation, stories, and the creation of an insect using found items. Seasonal adaptations and cycles are taught through hands-on activities and games. (Offered early fall.) CF-Sci. 3.2, 4.2, 5.2, 6.2

Show Some Backbone! Vertebrate Characteristics, Grades 3-5:

Spend a day in the woods learning about Connecticut vertebrates. What makes an amphibian different from a reptile? What makes a bird different from a fish or a mammal? How are they the same? Hands-on activities, mounts, furs, skulls, and an exploration of the forest will teach students about adaptations, habitat needs and characteristics of some common Connecticut vertebrates. (Offered fall, spring.) CF-Sci. 3.2, 4.2, 5.2, 6.2

For the Birds, Grades 3-5:

Students will learn the basics of binocular use while observing birds in their natural habitat. Related games, discussion, and activities help students identify bird characteristics, adaptations, and behaviors while gaining respect for living things. (Available September, April, May.) CF-Sci. 3.2, 5.2, 6.2

NEW OFFERING this Spring:

Bird Banding, Bird Song and Bird Anatomy, Grades 5-8:

Students will get an up-close encounter with our local songbirds as part of our bird banding program. Valuable data will be collected. They will be identified, weighed, measured and released. Understanding bird anatomy and identifying the song of each bird will also be taught. CF-Sci. XXX

Early New England Farm Life, Grades 3-6:

Students will explore the relationship of colonial people to their environment through a combination of indoor and outdoor, hands-on activities. Students make soda bread and butter, dip candles, and visit a homestead where they use a map to explore, while determining the identity of the remaining structures. (Offered at Trail Wood in Hampton or the Church Farm in Ashford only, in spring, fall). CF-Sci. 3.2, 3.4; CF-SSt. 9,2

Freshwater Ecology, Grades 3-6:

Following a stream watershed, students will compare and contrast several distinct aquatic habitats. The lesson will include measuring and recording pH, temperature, and dissolved oxygen at each site. Students will collect a variety of aquatic organisms to observe and identify at each site. Through discussion, students will describe and enumerate the adaptations that help them survive in their habitat. (Offered September, October, April, May, June.) CF-Sci. 3.2, 4.2, 5.2, 6.1, 6.2, 6.4; Math 5-10 (N&PR) 5-7 (Geo), 6-9 (Geo); CF-SSt. 10

NEW OFFERING this Spring

OUR WATERS: Groundwater, Surface Water & Stormwater, Grades 4-6:

Understanding and seeing the impact of human activity and our pollution on our landscape. An overview of surface water and groundwater will be provided and then stormwater sources will be mapped and the impact on local waters will be evaluated CF-Sci.

Native Americans and the Environment, Grades 3-6:

Through the study of habitat (food, water, shelter, and space), students will explore how Connecticut's Native Americans made their living off the land in pre-colonial and colonial times. Activities include games, cooking, and structure building. (Offered fall, spring). CF-Sci. 3.2, 4.2, 5.4, 6.2; SSt. 2, 3, 9

Beginning Botany, Grades 3-6:

Explore the meadows and forest with your students and examine the plant diversity of Connecticut. Students will learn plant anatomy, adaptations, and physiology. The program will also teach the differences between herbaceous and woody plants, as well as deciduous and coniferous plants. Plant characteristics

and the use of keys to identify common trees will also be covered (Offered early fall, late spring). CF-Sci. 3.2, 4.2, 5.2, 6.2, 6.3

Orienteering, Grades 4-6:

Students learn the parts of the compass and how to use one accurately. In small groups, they create compass trails for their classmates to follow and, in turn, follow compass trails made for them. This program encourages teamwork and provides students with ample opportunities to practice giving and following directions (literally!). (Offered fall, spring). CF-Math 5-11 (Geo), 6-4 (Geo); SSt. 9

Seaside Ecology, Grades 2-5:

This program takes place at Bluff Point State Park in Groton (or Rocky Neck State Park in Niantic), one of the last tracts of undeveloped land along the Connecticut coastline. Students visit two distinct marine habitats: a rocky shore and a salt marsh/lagoon. At each site, the characteristics of that habitat are identified, followed by an exploration of the site and collection of organisms. Students discuss the animals' adaptations, then classify and identify the organisms, and if there is time, place them on the food chain. Additional transportation fee is 50 dollars per day. (Offered September, October, May, June). CF-Sci. 3.2, 4.2, 6.2, 6.3, 6.4; SSt. 10

COMING THIS SPRING

Saltwater Ecology, Grades 7-8

NEW OFFERING

LIGHT, Camera, Write, Grades 5 & 6:

The classroom program on Light is strongly suggested prior to this field trip. Light principles discussed in the classroom program will be demonstrated in various field activities. Hiking Teale's trails, students will become familiar with writings of Teale which incorporate light, observe and photograph his favorite writing locations and work on their own expressive writing. Held at the Edwin Way Teale Memorial Sanctuary in Hampton, CT. Fall, winter, and spring field trips can stand alone or work as a series, exploring light adaptations at different times of the year. CF-Sci. 5.1,

NEW OFFERINGS FOR MIDDLE AND HIGH SCHOOL STUDENTS

CITIZEN SCIENTIST MONITORING - Grades 7 to 12

Vernal Pools:

Amphibian Paradise: In early spring, visit vernal pools which are critical breeding habitats for a unique community of amphibians linked to forest ecosystems. Students will learn how to identify various species based on egg masses and recently hatched young. Program offered in late March and early April. Classroom and Field Trip lessons

Water Quality:

Rapid Bio Assessment: Aquatic stream insects are remarkably good water quality indicators. Students will learn the suite of macroinvertebrates found in local streams as well as the collection techniques and data analysis necessary to perform rapid bio assessments for those streams. Offered in September and October. CF-Sci

Mammal Tracking & Monitoring:

Mammals of northeastern Connecticut require specific habitat andStudents will learn the basics of tracking and how to properly document forest mammal sign such as black bear, otter, fisher, bobcat and moose. Program ideally taught January – March. Classroom and Field lessons

Wildlife Habitat Management:

Undeveloped lands can be managed for maximum productivity. Students will learn the often overlooked value to open space as well as observe the various techniques employed to enhance bird and wildlife populations in northeastern Connecticut. Successional habitats and the use of strategic food plots are integrated into the program. CF-Sci

COMING THIS SPRING

Song Bird and Grassland Bird Habitats

Classroom Programs offered November through March

The fee for classroom programs is \$90.00/hr/classroom. (The Food Chain & Webs program has an additional charge of \$30 per one-hour program, which reflects the cost of owl pellets.) Programs typically run for one hour and take place indoors (exceptions noted). Schools can schedule two to four programs per day. Please schedule one classroom per one-hour program. Classroom programs are available Tuesday through Friday, primarily during the months of November through early March.

Old Man Winter (Grades K-2):

Children will learn about the different adaptations animals of New England use to survive winter conditions. Real fur and other materials will be used to teach about migration, hibernation, and dormancy. CF-Sci. K.2, K.3, 1.2

Science in Your Schoolyard & Nature Trail: Grades K-2:

Using all their senses, students explore their own schoolyard, searching out hidden natural wonders. CF-Sci. K.1, K.2, 1.2, 2.2 Outdoor program.

Bird Follies- Grades K-2:

Students will become familiar with the characteristics that make a bird a bird through the use of stories, bird mounts, bird songs, and movement. CF-Sci. K.2, 1.2; Math PK-5

NEW OFFERING – THE SOIL SERIES

Soils Part 1: Don't Call Me Dirt, Grades 1-2:

Students will be introduced to the ground below them. How soils are formed in different landscapes and how they influence human activity. Please be prepared for messy hands-on activities. CF-Sci.

Soil Part II : Worms, Nature's Plow, Grades 1-6:

Working in pairs, students will learn about the anatomy, life cycle, and behavior of worms through experimentation and direct observation. Their importance in soil formation and structure will also be discussed. Messy. CF-Sci. 1.2, 3.2, 4.2, 5.2, 6.2

Soils Part III: Mother Earth, Grades 1-2:

Soils of our land can have very different characteristics. These characteristics determine what plants can grow where and ultimately what foods we can nurture to sustain us. Students will evaluate a variety of soils and predict and analyze various characteristics. Messy. CF-Sci.

Down by the Sea – Grades K-2:

Young children are introduced to many of the creatures that live in Connecticut’s marine habitats. Shell classification and games teach about the habitats and adaptations of marine species in Long Island Sound. CF-Sci. K.2, 1.2, 1.3

Plant Parts – Grades K-3:

Understanding plants is integral to understanding the environment. Through the creation of an edible plant parts salad and hands-on activities utilizing seeds, leaves, tree sections, and other plant parts, students will learn the basics of plant life. CF-Sci. K.2, 1.2, 2.2, 3.2

Going to Seed – Grades K-3:

Seed anatomy and physiology are presented to students via dissection of dry and soaked seeds. Students observe, compare, contrast, and identify the various seed parts, while learning about pollination and the basic needs of a plant. Students will plant seeds in clear, plastic cups so they can observe the changes that occur as a seed grows into a seedling. CF-Sci. K.2, 1.2, 1.3

Skins & Bones – Grades K-6:

This lesson in animal adaptations allows students to explore the relationship between food preference and the skulls of herbivores, carnivores, and omnivores. Groups of students receive a collection of skulls and skins. Using their listening, observation, problem-solving, and deduction skills, students will determine what animals they come from and what those animals eat. CF-Sci. K.2, 1.2, 3.2, 4.2, 5.2, 6.2

Fur, Feathers, Scales, and Slime: Vertebrate Characteristics-Grades 3-6:

Student curiosity is piqued in this program that introduces the various characteristics of the five vertebrate animal groups. Through hands-on experience with live animals, mounts, furs, and skulls, students will

learn about adaptations, habitat needs, and characteristics of some common Connecticut amphibians, reptiles, mammals, birds, and fish. CF-Sci. 4.2, 5.2, 6.2

Nightlife- Grades 2-5:

Animal mounts help teach this lesson about the behavior and adaptations of nocturnal animals. Students learn about sensory adaptations for seeing, hearing, and touching that help animals survive in the dark. Games help students test their own non-visual sensory abilities. CF-Sci. 1.2, 3.2, 5.2

Trees – Grades 2-5:

Hands-on activities and an examination of tree parts will teach students about the anatomy, physiology, and life cycle of trees. A discussion of how we and other animals use trees will demonstrate their importance to humans and wildlife. CF-Sci. 2.2, 3.2, 4.2

Track Tales – Grades 3-6:

Track Tales introduces students to the art of identifying and interpreting animal tracks and signs. Students “read” and interpret the track sequences of various animals found on the track sheet and then write stories explaining the movements and actions of each animal. CF-Sci. 3.2, 4.2, 5.2; LArts 3

Birds & Their Beaks – Grades 3-6:

After an introductory discussion of bird adaptations, students take part in a trial-and-error problem solving activity to determine which tool (and, by analogy, which type of bird beak) works best with differing food resources. Bird mounts provide real examples of different beak types and lead to discussion about the relationship of beak type and food preference. CF-Sci. 1.2, 3.2, 4.2, 5.2, 6.2

NEW OFFERING in January

Birds, Bats and Sound – Grades 3-5:

Through various hands-on activities, students discover the nature of sound. Students discuss how sound is heard and the significance of sound in a variety of settings. CF-Sci. 5.1, 5.2 others

NEW OFFERING in January

Light: Rainbows and Prisms – Grades 5 & 6:

A wonderful introduction the Light, Camera, Write field trip, this program incorporates an understanding of light, how it travels, is reflected, refracted, and absorbed by various surfaces. CF-Sci. 5.1, 5.2

Hot Air Balloons – Grades 4-6:

Students construct a five-foot high hot air balloon from tissue paper while learning the physics and history of hot air balloons. Class ends with a flight of the balloon, preferably outdoors. Schools should reserve a room with a high ceiling for the flight in case of bad weather. 40 minutes indoors, 20 minutes outdoors. CF-Sci. 3.1, 4.1

Winter Sky – Grades 4-6:

Working with star wheels, students explore the seasonal variations of the constellations in the night sky, focusing on the five circumpolar constellations which are visible year-round. Students utilize skills in listening and following directions as they create a mini-planetarium. CF-Sci 5.3

CSI: Aquatic – Grades 4-6:

Students are sucked in immediately. They must figure out who killed what and when. Adaptations and behaviors of aquatic organisms are explored via small group investigation of various suspects in an aquatic murder mystery. Students evaluate a written file of a particular suspect, support the innocence or guilt of that suspect, and present the case to the class. Critical thinking, public speaking, discussion, cooperation, and collaboration are emphasized in this program. CF-Sci. 3.2, 4.2, 5.2, 6.2, 6.4

COMING THIS SPRING to a classroom near you: CSI: Terrestrial!

Rockin' Out – Grades 3-6:

This lesson teaches students the basic skills of rock identification. Working in pairs, students examine nine rock specimens, noting their color, streak, luster, hardness, and edges. After recording their data, students use a rock key to identify the specimens. CF-Sci. 5.4; SSci. 9; Math 5-27

The Scientific Process: Grades 4-6:

After discussing the steps in the scientific method, students have a hands-on opportunity to use it. Pairs of students are given a worm and asked to conduct a few experiments to determine the environmental preferences of the worm. The class compiles the data and discusses possible reasons for the outcomes. Students develop skills in prediction and observation while gaining respect for living things. CF-Sci. 4.2, 5.2, 6.2

Food Chains and Webs – Grades 3-6:

In pairs, students will dissect sterilized owl pellets (balls of fur and bones coughed up by owls) and identify the remains of the animals eaten by the owls. This hands-on activity is a great way to teach about predator-prey relationships, the differences between herbivores, carnivores, and omnivores, and how the food chain works. CF-Sci. 3.2, 4.2, 5.2, 6.2; Math 1,2. (This program has an additional charge of \$30 per hour.)

Customized Field Trip and Classroom Programming:

Is there a topic you do not see listed? Let us know and we no doubt have someone on staff with the expertise to design it.

Registering for Programs:

To register for a program, call Science in the Woods at (860) 377-3477, Monday through Friday, 8:30 a.m. to 4:30 p.m.

Programs must be scheduled at least two weeks in advance, however, we suggest you register for fall programs before September 20th for spring programs before January 15th and receive a 5% discount! Early registration also increases your chances of getting the programs and dates you desire.

After registering, you will receive written confirmation. If you are traveling to one of our sites, you will be sent field trip guidelines, a map and written directions to the field site, and a packet of pre- and post-program materials.

If you are unable to keep a scheduled program date, please notify us as soon as possible. Programs will be held rain or shine, although severe weather cancels. Cancellations within 24 hours of the program for reasons other than severe weather will incur a \$25 cancellation fee. The Connecticut Audubon Society will make every attempt to re-schedule programs cancelled due to severe weather.

Please have the following information on hand when you call:

- Name of the teacher responsible for the group and an evening phone number.
- Name, address and phone number of your school.
- Name of program(s) you wish to schedule.
- Dates & alternate dates for scheduling.
- Grade level of your students.
- Number of students in your group.
- Names of other teachers who will be participating.
- Special educational or physical needs of your students.
- Arrival and departure times.

School Program Fees:

Classroom Programs: \$90.00/hour.

Field Study Programs at our site \$75.00/hour/class

Field Study Programs at your school:

\$90.00/hour/class

Homeschoolers and Non-traditional Groups:

Please call for per student rates.

Discounts!

5% discount for scheduling programs for more than one grade level at one time.

5% discount for scheduling Fall & Winter programs before Sept. 20th & Spring programs before Jan. 15th.