



Outdoor Environmental Education Program



Where Learning Comes Naturally

Outdoor Environmental Education Program

The ecosystems of Long Island offer students and teachers a myriad of learning opportunities. Since the study of students' local environment and environmental literacy have been shown to be powerful learning experiences, the Western Suffolk BOCES Outdoor Environmental Education Program (OEEP) incorporates the geography, plants, animal species and aquatic life that surround us into a multi-disciplinary approach to promote efficient and effective learning. By employing direct observation and hands-on learning experience outside the classroom, the OEEP enriches and strengthens the existing school curriculum, and provides children the opportunity to explore and connect with the natural world. The program also fosters the rational use and preservation of the natural environment by laying the foundation for responsible action.

Where

Here are some goals the program can help your district meet:

- conduct authentic science activities that directly and effectively support the NYS Core Curriculum for Science and each district's learning objectives.
- provide students with first-hand, interactive experiences with nature.
- utilize natural resources in inter-disciplinary projects where students must observe, hypothesize, experiment, collect, analyze and interpret data, and draw conclusions.
- integrate environmental concepts into the instruction of language arts, math, social studies, science and the arts.
- help students meet the Common Core Learning Standards established by the New York State Education Department.
- provide teachers with the in-service training, curriculum development and special program services that they need for effective instruction.
- help students meet the Next Generation Science Standards through exciting and engaging hands-on, inquiry science investigations.



Special Services

At field sites throughout Long Island, OEEP staff guide students through customized, first-hand investigations of the natural world, providing a variety of unique, authentic science experiences. Individually mentored programs for secondary honor students have involved original research and domestic and international travel. Outdoor Education Specialists can also customize programs for individual school districts.

GRADES 1 THROUGH 3

- Ecology Awareness - 8 days
- Marine Studies II - 5 days
- Nature Discoveries - 5 days

GRADES 4 THROUGH 6

- Art and the Environment - 5 days
- Bay Investigations - 1 day
- Exploring Long Island's Secret Wilderness - 5 days
- Field Natural History - 8 days
- Fire Island Ecology - 1 day
- Greenbelt Interpretive Hike - 3 days
- Marine Studies II - 2 - 5 days
- Introduction to Intermediate Level Science - 3 days
- Studies in Long Island History - 5 days
- StarLab® Planetarium and Earth Balloon
- Mapping Invasive Species of Long Island - 5 days
- Human Body Systems and the Natural World - 7 days

GRADES 7 THROUGH 12

- Environmental Education Assistantship Program - 8 afternoon sessions + 2 full days
- Exploring Long Island's Fisheries Resource - 5 days
- Farming the Sea: A Mariculture Project - 5 days
- Insects - 6 afternoon sessions + 3 full days
- Long Island Herpetology - 5 days

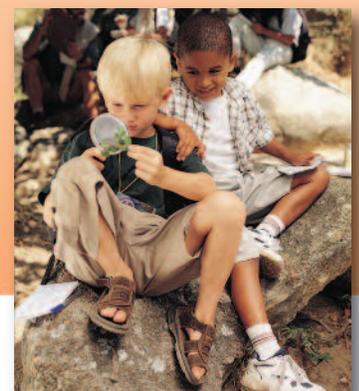
- Marine Ecology Research - Restoring Eelgrass Communities - 7 days
- Marine Mammals - 2 days
- Ornithology - 3 afternoon sessions + 3 days
- Whales: Study and Research - 2 days
- Field Research Expedition Program
- Interpretive Canoe Programs

Summer Enrichment Programs

- ### GRADES 1 THROUGH 3
- Nature Discoveries

- ### GRADES 4 THROUGH 6
- Adventure Education

- ### GRADES 7 THROUGH 9
- Long Island: Past, Present and Future
 - Marine Studies Enrichment Program
 - Summer Marine Biology Consortium



Day Use

Expanding The Classroom Into The Natural World

Teacher In-service Training

Because teacher participation is the most important factor in the success of this program, teachers participate in a week-long intensive environmental education training program during the summer. Training provides teachers with professional resources and experience. Throughout the week, teachers are involved in activities relating to:

- New York State Science Core Curriculum
- Marine, freshwater, and terrestrial ecology
- Math in the out-of-doors
- Orienteering
- Language arts
- Natural history interpretive techniques
- Strategies for enhancing and revitalizing the elementary classroom curriculum

Each teacher is presented with a Curriculum Guide of materials pertinent to the specific environment site in which they are enrolled. Teachers then imple-

ment lessons during three to five school days making use of the equipment, resources and our instructional staff at our outdoor laboratory.

Caleb Smith Outdoor Learning Laboratory
Located in the 543 acre Caleb Smith State Park Preserve, the laboratory contains numerous displays and serves as a stepping-off point for exploring the deciduous woodland and ponds.

Sunken Meadow Outdoor Learning Laboratory
Located in a secluded section of Sunken Meadow State Park, the lab offers a wealth of interpretive displays and aquaria. The 1,226 acre park provides a unique learning environment containing a salt marsh, beach and dune habitat.

Connetquot Outdoor Learning Laboratory
Located in the Connetquot River State Park Preserve, this laboratory is housed in the historic Snedecor Inn. The Pine Barrens ecosystem of the park contains freshwater streams and a working trout hatchery.



Learning Comes Naturally



Residential Program

Teachers and students live and learn together at sites on or off Long Island. This intensive experience allows classes to focus on the natural environment and traditional curricula. Residential programs are preceded by in-service training and planning guidance. Includes staff assistance.

On Long Island

DOROTHY P. FLINT

*Cornell Cooperative Extension/
4H Div., Riverhead*

- Features: woodlands, a working farm, and a boardwalk/trail to the seashore.
- Facilities: science center, open-air arts and crafts building, and 40 cabins. (Fall/Spring)

CAMP QUINIPET

*United Methodist Church,
Shelter Island*

- Features: woodland property on Peconic Bay.
- Facilities: 7 heated guest houses, indoor recreation and arts/crafts facility, meeting rooms, modern dining hall. (Fall/Winter/Spring)

Off Long Island

ASHOKAN CENTER

Kingston

- Activities: Pioneer Homestead, Indian Village, Blacksmithing, Forest Ecology.
- Features: 372 acre campus in the Catskill foothills.
- Facilities: bunkhouses, dining hall. (Fall/Winter/Spring)

FROST VALLEY ENVIRONMENTAL EDUCATION CENTER

Frost Valley YMCA, Oliverea

- Activities: Project Adventure, geology, and orienteering.
- Features: 4,500-acre Catskill Forest Preserve.
- Facilities: winterized facilities, two program centers, 45 cabins and 9 lodges, dining hall. (Fall/Winter/Spring)

GREENKILL OUTDOOR/ENVIRONMENTAL EDUCATION CENTER

*YMCA-YWCA Camping Services of
Greater New York, Huguenot*

- Activities: wildlife studies, Project Adventure, forest ecology.
- Features: deciduous and coniferous forest, fields and ponds.
- Facilities: activity lodges, modern dormitories, dining hall. (Fall/Winter/Spring)

SHARPE RESERVATION

The Fresh Air Fund, Fishkill

- Activities: hiking, camping, fresh-water studies.
- Features: 2550-acre site in southern Dutchess County.
- Facilities: self-contained residences, dining hall. (Fall/Spring)

Science Enrichment Excursions

Through cooperative agreements with other agencies, the OEEP can broaden program offerings and help participating districts choose an education experience that matches their curriculum or enrichment objectives.

Science Enrichment Excursions

GRADES K THROUGH 12

Excursions from Manhattan to Montauk and beyond. BOCES staff will discuss and offer assistance with all science-based excursions. The OEEP works with museums, Cornell Cooperative Extension, the Riverhead Foundation for Marine Research and Preservation, aquariums, etc.

SUNY STONY BROOK

- Biotechnology Teaching Laboratory – Grades 7-12

LOCAL HISTORY

Led by historians or scholars at historic sites, students truly become immersed in historical archaeology and Native American Studies.

- Colonial Life and Technology (Blydenburg Park) – 1 day
- Native New York (Caleb Smith) – 1 day
- Cultural History Workshop (School Site) – 1 day

- Technology Workshop (School Site) – 1 day
- Native Life and Archaeology (Hoyt Farm) – 1 day

NYS SCIENCE AND ENGINEERING FAIR



For further information contact



Outdoor Environmental Education Program

810 Meadow Road
Smithtown, NY 11787
631-360-3652

In recent years this program has been recognized by:

National Environmental Program Exemplar

Presented by the National Science Teachers Association (NSTA) in cooperation with the Council of State Science Supervisors and the National Science Supervisors Association as part of NSTA's Search for Excellence in Science Education

Excellence In Science Education

Selected as the New York State environmental education program exemplar by the New York State Education Department

Outdoor Education Program Award

Presented by the New York State Conservation Council, Inc.

Institute of Museum Services

General Operating Support Grant Recipient



The OEEP is conducted under a Cooperative Agreement between State Parks and Western Suffolk BOCES.

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