

NYS Parks-Long Island School Programs

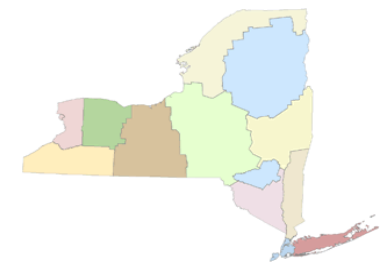
Discover the Wonder

Through Hands-On
Educational Programs



Environmental
Education
Programs

- Elementary
- Intermediate
- High School



Aligned with
New York State
Learning Standards

New York State Office of Parks, Recreation, and Historic Preservation

Regional Environmental Education Office

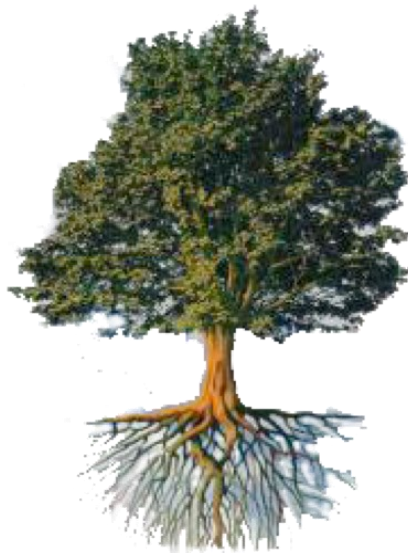
P.O. Box 247

Babylon, NY 11702

(631) 581-1072



"Long Island State
Parks & Nature"



*"The objective is to teach the student to see the land,
to understand what he sees, and enjoy what he understands."*



When Visiting Parks:

- For your safety, remain on trails to avoid ticks and poison ivy.
- Help keep wildlife healthy - do not feed wild animals.
- Leave only your footprints - take only your memories.

Registration:

Field Trip Reservations	The following programs are available to help teachers meet the New York State Curriculum Standards for science. The emphasis will be a hands-on approach to learning. Children will practice problem solving skills, develop a positive attitude toward science, and increase their scientific literacy. Content and duration of educational programs can be adapted to meet your needs.
Cancellations	If you are unable to keep your reservation, please call and cancel so others may have the opportunity to attend. Failure to do so may result in loss of reservations for future programs.
Fees	\$4.00 per person. Fees apply to all students and chaperones. There is no charge for teachers. Parking fees may apply.
Mailing List	If you would like to receive our public quarterly environmental education brochure, please call (631) 581-1072 or text “osprey” to 42828 to receive it electronically.

Winter Bird Exploration

Available November-March

Your class will identify the wide variety of waterfowl and birds that visit the Park’s waterways during the winter months. We’ll set up spotting scopes and survey the birds’ feeding areas to observe our feathered friends. Using costumes, survival adaptations are explored.

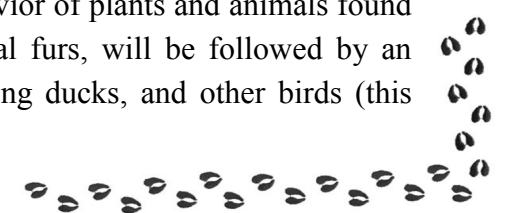


Elementary Science	Intermediate Science	High School Science
Standard 1: S1, S2	Standard 1: S1, S2	Living Environment Standard 4: 1.1b
Standard 4 (PS): 1, 2, 4, (LE): 1, 2, 3.1, 3.2, 4, 5, 6	Standard 2: I1	Can be adapted
Standard 5: I6	Standard 3: N2	
Standard 6: E1, P5	Standard 4 (PS): 1, 2, 4	
Social Studies	(LE): 1, 2, 3.1, 3.2, 4, 5, 6	
	Standard 5: I6	
	Standard 6: E1, P5	

Winter Wildlife Safari

Available September-March

Your class will discover the winter survival behavior of plants and animals found in the park. Activities, such as observing animal furs, will be followed by an outdoor safari to look for signs of deer, wintering ducks, and other birds (this program is completely outdoors at some parks).



Elementary Science	Intermediate Science	High School Science
Standard 1: S1	Standard 1: S1	Living Environment Standard 4: 1.1a, b, c, d, 3.1g, 6.1a, d
Standard 4 (PS): 1, 2 (LE): 1, 3.1, 3.2, 4, 5, 6	Standard 4 (PS): 1 (LE): 3.1, 3.2, 4, 5, 6	Can be adapted
Standard 6: S1, S4	Standard 6: S1, S4	
Social Studies	Social Studies	

Trees are Terrific

Available All Seasons



Through hands-on activities student will learn about the structures of trees as well as develop identification skills. A short hike will follow to explore the forest in the park where students can put their skills to the test.

Elementary Science	Intermediate Science	High School Science
Standard 1: S1, S3 Standard 4 (PS): 2 (LE): 1, 3, 4, 5, 6, 7 Standard 6: S1, S2 Standard 7: C1	Standard 1: S1, S3 Standard 4: P2 L1, L3, L4, L5, L6, L7 Standard 6: S1, S2 Standard 7: C1	Living Environment Standard Standard 1: 1, 2 Standard 4: 1.1a, b, 3.1g, 5.1a, b, 5.2a, b, 6.1a, b, c, d, e Can be adapted

Wet & Wild

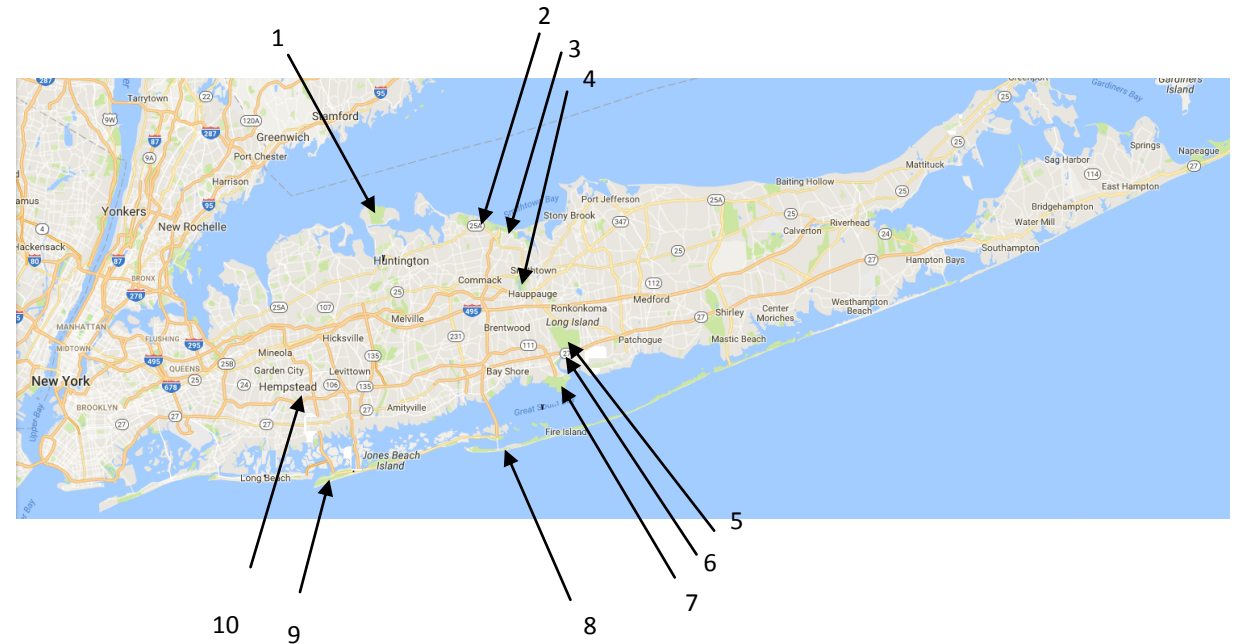
Available April-October



Students will discover the underwater world of ponds through hands-on sampling and field observations. Water chemistry and testing can be added for higher grades. After visiting the pond, the class will go indoors to look at microscopic organisms and discuss their role in the food chain (attendance limit).

Elementary Science	Intermediate Science	High School Science
Standard 1: S1, S3 Standard 4 (LE): 1, 2, 3, 4, 5, 6, 7 Standard 6: S1 Standard 7: C1, S2	Standard 4 (PS): P2, P3 (LE): 1, 2, 3, Standard 7: C1, S2	The Living Environment Standard 4: 1.1a, d, f, 3.1g, 5.1a, b, 6.1a Can be adapted

New York State Parks that offer school programming:



KEY:	FOR RESERVATIONS, CALL:
1. Caumsett State Historic Park Preserve	(631) 581-1072
2. Sunken Meadow State Park	(631) 581-1072
3. Nissequogue River State Park	(631) 581-1072
4. Caleb Smith State Park Preserve *	(631) 265-1054
5. Connetquot River State Park Preserve	(631) 581-1072
6. Bayard Cutting Arboretum	(631) 581-1002
7. Heckscher State Park	(631) 581-1072
8. Robert Moses State Park	(631) 581-1072
9. Jones Beach State Park*	(516) 780-3295
10. Hempstead Lake State Park	(631) 581-1072

* call the park to discuss other programs offered.

<u>PROGRAMS</u>	<u>PROGRAM AVAILABLE AT THE FOLLOWING STATE PARKS:</u>
Butterflies and Moths	Nissequogue, Caleb Smith, Connetquot, Jones Beach, Hempstead
Creature Creations	Nissequogue, Caleb Smith, Connetquot, Jones Beach, Hempstead
Geology Rocks	Nissequogue, Caleb Smith, Connetquot, Jones Beach, Hempstead
Long Island Sound Saunter	Sunken Meadow, Nissequogue
Native American History and Games	Nissequogue, Caleb Smith, Connetquot, Jones Beach, Hempstead
River Walk	Caleb Smith, Connetquot
Salt Marsh Biology	Sunken Meadow, Nissequogue, Caumsett
Seashore Biology	Sunken Meadow, Nissequogue, Robert Moses, Jones Beach, Caumsett, Heckscher
Seasonal Nature Walks	Sunken Meadow, Nissequogue, Caleb Smith, Connetquot, Robert Moses, Jones Beach, Hempstead Lake, Caumsett, Heckscher
Sound Studies (Bay Studies*)	Sunken Meadow, Nissequogue, Caleb Smith, Caumsett, Robert Moses*, Jones Beach*, Heckscher*
Trees are Terrific	Sunken Meadow, Nissequogue, Caleb Smith, Connetquot, Caumsett, Heckscher
Wet & Wild	Caleb Smith, Connetquot, Hempstead
Winter Bird Exploration	Sunken Meadow, Nissequogue, Caleb Smith, Connetquot, Robert Moses, Jones Beach, Hempstead Lake, Caumsett, Heckscher
Winter Wildlife Safari	Sunken Meadow, Nissequogue, Caleb Smith, Connetquot, Jones Beach, Hempstead Lake, Caumsett, Heckscher

Seasonal Nature Walks

Available All Seasons

You and your class will enjoy a leisurely walk through the woodland trails to discover the changes taking place throughout the year.



Fall: Study leaf changes, and discuss the different ways plants and animals prepare for winter.

Winter: What are mammals and birds doing at this time of year? Where can they be found?

Spring: As the days grow, see animals and birds returning to their favorite State parks!

Summer: Discover the diversity of trees on Long Island while exploring the forest.

Elementary Science	Intermediate Science	High School Science
Standard 1: S1	Standard 1: S1	Can be adapted
Standard 4 (PS): 1, 2 (LE): 1, 2, 3, 4, 5, 6, 7	Standard 4 (PS): 1, 2 (LE): 1, 2, 3, 4, 5, 6, 7	
Standard 6: S1	Standard 6: S1	

Sound/Bay Studies

Available All Seasons

Students learn about the water cycle and gain an awareness for conserving and protecting our natural resources. They discover the different ways people use and influence the Long Island Sound and the Great South Bay. The importance of clean water and other related



issues, such as pollution, can also be addressed.

Elementary Science	Intermediate Science	High School Science
Standard 1: S1.1, S1.3, T1.1, Sys 6.1	Standard 1: S1.1, I3.2	Living Environment
Standard 4 (PS): 2.1, 3.1d, e, 3.2, 4.2a, 5.1a-e	Standard 4 (PS): 2.1h, I, j (LE): 5.1, 6.1, 7.1, 7.2	Standard 1,2,3
(LE): 1.1, 1.2, 3.1, 4.1, 5.2, 6.1, 6.2, 7.1		Standard 4: 1, 3, 4, 7
		Earth Science: Standard 4: 1.1a, I, 1.2f, g

River Walk



Available All Seasons

We will examine the importance of clean water, the role the pine barrens play in keeping our groundwater clean, and how humans influence the environment. Students will explore the Connecticut or Nissequogue River with a walk through the various habitats.

Elementary Science	Intermediate Science	High School Science
Standard 1: S1	Standard 1: S1	Living Environment Standard 4: 1.1b
Standard 4 (PS): 1, 2, 4, 5 (LE): 1, 6, 7	Standard 4 (PS): 1, 2, 4, 5 (LE): 3, 6, 7	Can be adapted
Standard 5: 5	Standard 5: 5	
Standard 6: 1	Standard 6: 1	

Salt Marsh/Seashore Biology



Available April-October

As students explore the marsh they will gain a better understanding of this fascinating ecosystem. Children will learn about the importance of wetlands, and how plants, animals, and people depend on wetlands for their well-being.

Elementary Science	Intermediate Science	High School Science
Standard 1: S1.1a, S1.1b, S1.2a, S1.3, 6.1	Standard 1: S2.1, I3.2	Living Environment Standard 1.1
Standard 4 (LE): 1.1, 1.2, 3.1, 3.2, 4.1, 4.2, 5.1, 5.2, 6.1, 7.1 (PS): 1.1, 2.1, 3.1g, 3.2	(PS): 1.1e, 2.1h, I, j (LE): 1.1, 3.2, 5.1, 6.1, 7.1, 7.2	Standard 4: 1, 3, 4, 7 Earth Science Standard 4: 1.1a, I, 2.1, 2.2 Can be adapted

BAYARD CUTTING ARBORETUM STATE PARK:

School Programs: (also offers guided tours)

The Arboretum – Walk through the gardens

Westbrook Manor – Discover the history of the 1886 manor house

CSA Farm – A 14-acre garden that offers a seasonal hands-on activity

Standards Key:

Standard 1: Analysis, Inquiry, and Design. M=Mathematical, S=Scientific

Standard 2: Information Systems. I=Information Systems

Standard 3: Mathematics. N=Numbers, M=Measurements

Standard 4: Science. PS=Physical Setting, LE=Living Environment

Standard 5: Technology. I=Impacts

Standard 6: Interconnectedness, Common Theme. P=Patterns of Change, O=Optimization, ST=Systems Thinking, E=Equilibrium & Stability

EDUCATION PROGRAMS

Butterflies and Moths

Available April-October

Students will unlock the secrets of the life cycle of these insects, discover the amazing ways that they ward off enemies and how they survive the winter. There will be an indoor presentation with some surprises followed by a short hike to allow students to observe these insects in the wild.



Elementary Science	Intermediate Science	High School Science
Standard 6: 1,3,4 Standard 4 (LE): 2.1a, 2.1b, 3.1a, 3.1c, 4.1a-g, 5.1b, 5.2b-e	Standard 4 (LE): 1.1g, 1.1h, 4.3d, 5.1a, 5.1b	Living Environment Standard 4: 1.1b, 3.1g, 4.1a

Creature Creations

Available All Seasons

Learn how the physical features of a species are shaped by its environment during a discussion of animal adaptations (high school classes will discuss natural selection and survival of the fittest). Using simple materials, in small groups, students will be challenged to create a brand new bird species that must fit a particular habitat and diet.

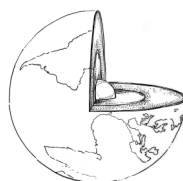


Elementary Science	Intermediate Science	High School Science
Standard 1:T1.1, T1.3, T1.4 Standard 6: 1, 3, 4 Standard 7: 1, 2 Standard 4(LE): 2.1a, 2.1b, 2.2b, 3.2a, 3.2b, 5.1b	Standard 1: S1.2, S1.3, S1.4 Standard 7: 2.1 Standard 4 (LE): 1.1g, 1.1h, 2.2a, 3.1b, 5.1a, 5.1b, 5.1d	Living Environment Standard 1: 1.1b, 1.4a Standard 4: 3.1a, 3.1e, 3.1f, 3.1g, 3.1h, 3.1i, 3.1l, 6.1e

Geology Rocks

Available All Seasons

Students will be introduced to the basics of geology using a variety of hands-on activities and simple experiments. They will explore the properties of rocks, including density, conductivity, and magnetism. We will wrap up with an eye-opening discussion on the practical uses for rocks and minerals in our daily life.



Elementary Science	Intermediate Science	High School Science
Standard 1: S1.1, S1.2, S1.3 Standard 4 (PS): 2.1d, 3.1c, 3.1d, 3.1f, 4.2b Standard 7: 1,2	Standard 1: S1.1, S1.2 Standard 7: 2.1 Standard 4 (PS): 2.1c, 2.1d, 2.1e, 2.1g, 2.2f, 2.2g, 2.2h,	Earth Science: Standard 4: 1.2i, 2.1s, 3.1 Standard 6: 2

Long Island Sound Saunter

Available April-October

The perfect program for a view of the sound! With a Park Naturalist as your guide, you will explore the geology and ecology of the Long Island Sound along your hike. The bus can drop you off at either Nissequogue River or Sunken Meadow State Park and hike from one park to the other, approximately 3 miles . Bring lunch and enjoy a picnic at the Park where the bus will pick you up or make it a round trip.



Elementary Science	Intermediate Science	High School Science
Standard 4 (LE): 1, 2, 3, 4, 5.2, 6.1	Standard 1: 1 Standard 4 (PS): 2.1g, h, I, j (LE): 3, 5, 7.1	Can be adapted to meet your needs

Native American History and Games

Available All Seasons

Students will explore the land once traveled by the Secatogue Indians on a short hike. They will discover how Native Americans learned survival skills and played games using local resources. Students will understand where Native Americans got their clothing, and food, and how very little of their resources were wasted.



Elementary Science	Intermediate Science	High School Science
Standard 4 (PE): 3,4 (LE): 1, 2, 3.1, 4, 4.2, 5.1, 5.2, 5.3, 6, 7 Standard 6: ST1, E 4 & 5 Social Studied: S1.1, 1.2, 3.2	Standard 1: S1.1a&b Standard 4 (PS): 1 (LE): 1, 2, 3.1, 3.2, 4, 4.2, 5.1, 5.2, 5.3, 6, 7 Standard 6: ST1, E4&5	Not age appropriate