

# A Teacher's Guide to Delaware State Parks

2018-2019



Delaware State Parks











State of Delaware  
Department of Natural Resources and Environmental Control  
**Delaware Division of Parks and Recreation**  
89 Kings Highway  
Dover, Delaware 19901

Dear Colleague:

The Department of Natural resources and Environmental Control's Division of Parks and Recreation is a valuable resource for teachers and students. With 16 parks, five historic sites and stunning natural areas, Delaware's state parks are great places for students and teachers to explore. Our mission is to offer quality learning experiences for students of all ages and abilities.

I invite you to explore this guide and to visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for more detailed information. Please keep in mind that these are not the only programs we offer. We can create custom programs and align experiences to the needs of specific groups of students. Our hands-on programs can be based in the parks, at our school, or at an alternative location.

Delaware State Parks Interpreters:

- Make difficult concepts easier to learn and to remember
- Incorporate differentiated teaching methods to support the various learning styles and abilities of today's students
- Provide a refreshing break from the classroom while continuing to address required standards
- Help students make connections between what they're learning and everyday life
- Expose students to new career options

Do not allow funding to prevent your students from participating in our programs. We may be able to cover or defray costs through scholarship and grant opportunities. If you encounter challenges offering one of our programs, contact me directly. I welcome the opportunity to speak to your school or district leadership team to provide more information and answer questions.

I look forward to continued collaboration and wish you the best this school year.

Yours in education,

A handwritten signature in black ink, appearing to read "J. Wickert".

Jonathan Wickert, Ed.D.  
Chief of Interpretation, Delaware State Parks  
(302) 739-9184  
[Jonathan.wickert@state.de.us](mailto:Jonathan.wickert@state.de.us)





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Visit [www.goape.com/groups](http://www.goape.com/groups) to request a quote for larger groups.

**Lums Pond State Park |** 1042 Howell School Rd  
Bear, DE 19701

Offer valid until 5/19/2019. Discount code must be entered at time of booking. Only valid at Go Ape Bear, DE. See our website for course info, participation details, and adult supervision requirements.



# Fort Delaware/Fort Miles Artillery Math



In the first half of the 20th century, using an artillery piece effectively required a lot of complex mathematic equations. This program combines in-school outreach programs with a field trip for your school. A staff member from Fort Delaware State Park will come to your classroom and walk your students through the geometry and trigonometry of aiming a cannon. In this part of the program, they will learn the equations necessary for long-range artillery. For the second part of the program, your class will take a field trip to Fort Miles Historic Area at Cape Henlopen State Park. Here they will use what they learned about math to actually simulate a firing problem (using the models set up by Fort Miles staff).

This program reinforces mathematical principles such as graphing points, solving triangles, and calculating angle of reach. In addition, it works in historical information about the artillerists working at Fort Miles and Fort Delaware from the 1890s through World War II.

**Grades Upper level high school students who have studied trigonometry and/or physics.**

**1 hour per portion (can be done on different dates)**

**Cost: \$95, plus \$5 per student for the field trip portion.**





# How to Use This Guide

This guide is intended to provide teachers an overview of our school programs for field trips and classrooms. Inside are listings of programs, arranged by park, and the accompanying content standards. Each park page provides you with park information, programs offered and contact information to get started on booking your field trip. For complete descriptions of programs offered, please visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups).

This list does not include all programs offered; programs can be customized for your group. The programs are designated with the following icons:



Field Trip – takes place in the park



Outreach – takes place at your school



Climate Change – Programs with this icon support climate change education and awareness.

## Understanding the Standards

Each program offered by Delaware State Parks is aligned to Delaware's Educational Standards. For more information regarding program specifics or to verify alignment to the Common Core or other standards, please contact the park directly.

Each category of standard has its own format:

- Next Generation Science Standards
  - 3-PS2-2 is read as Grade Level-Subject Area-Standard
  - Full standards can be found at <http://www.nextgenscience.org/search-standards>
- Delaware Social Studies Standards
  - H4.45a is read as Subject Standard (H=History, G=Geography and so on).  
Grade Range  
(K-3, 4-5, 6-8, 9-12)
  - Full Standards can be found at <http://www.doe.k12.de.us/domain/392>

Some programs are aligned to more than one category of standards – For example, Cape Henlopen State Park's Coastal Defenders Field Trip is aligned to both Common Core State Standards and Delaware Social Studies Standards.



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Special thanks to the Department of Natural Resources and Environmental Control and the Delaware Department of Education for their help in making this guide possible.



# Auburn Heights Preserve

Call (302) 239-5687 to register

We specialize in helping students learn about energy transference, how a steam engine works and how people have solved society's practical problems by inventing new technologies.



## MACHINERY MANSION TOUR

Grades 3 – 5

1 hour

Tour the first floor of the Auburn Heights mansion. Learn about the mansion's construction and its amenities which were very modern in 1897. We will emphasize the furnishings that include simple machines and how they work. Students will see a live steam demonstration, with a focus on how water and steam can create power, the phases of matter and how they relate to water and the operation of a mill. Space is limited to one class at a time (about 25 maximum).

Standard:

3-PS2, 3-ELA.W.3, 3-ELA.SL.3, H2.K-3, H3.K-3, H4.K-3	4-PS3, 4-ESS3, H1.4-5, H2.4-5, H4.4-5	5-PS3
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\$5 per student

\$65 program minimum



## HIKE ON HISTORY

Grades 1 – 5

1 hour

Hike the Trolley Trail and discuss transportation and Yorklyn-area industry. Students will learn how a mill race creates power, the different states of water and how a mill's production can be affected by weather. We will also learn how people who worked at the mill traveled to nearby towns and compare that to students' experiences. Space is limited to one class at a time (about 25 maximum).

Standard:

H2.K-3, H3.K-3, H4.K-3	2-PS1, ELA.W.28, H2.K-3	3-PS2, 3-ELA.SL3, ELA.W.3-8, H2.K-3 H3.K-3, H4.K-3	4-PS3, 4-ESS3-1, H1.4-5, H4.4-5	5-PS1, 5-PS2, 5-PS3; H1.4-5, H2.4-5, H4.4-5
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\$5 per student

\$65 program minimum



## INSECT DETECTIVES

Grades 5 – 6

1 hour

Insects can tell us a lot about the health of an aquatic system. During this program, students explore the Red Clay Creek and examine the varieties of aquatic larvae present in the water. Using insect ID resources, they will track the health of the water as indicated by the species found, and learn about the creek's industrial past, the role insects play in ecosystems, and how to help keep our water clean.

Standard:

5-ESS3, 5-LS2	MS-LS2, MS-ESS3
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\$5 per student

\$65 program minimum



## WHAT'S IN THE WATER?

Grades 3 – 4

1 hour

What remains from Yorklyn's industrial past? Students will learn about the local history of the mills around Yorklyn, observe water from the Red Clay Creek, and perform various tests to determine the health of the creek long after the mills ceased operation. We will also discuss how we can help to keep our waterways clean.

Standard:

3-LS4, 3-ESS3	4-ESS3
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\$5 per student

\$65 program minimum



## CHILDHOOD IN THE AGE OF STEAM

Grades K - 5, 9 - 12

1 hour

Childhood has changed throughout the ages, but some of its aspects are universal. Students will learn about childhood as it existed in the 1900s-1930s by examining historical materials and artifacts. They'll also learn about the daily life of children and families in the northern Delaware region, including their similarities and differences to today. Students will also get the opportunity to use reproduction toys of the time.

Standard:

DE History Standard 1: K-3a;	History Standard 2: K-3a, 4-5b;	History Standard 3: K-3a;	History Standard 4: K-3a; K-3b; 9-12a; 9-12b
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\$5 per student, \$65 minimum





## WATER WORKS

**Grades K - 3**

**45 minutes / 1 hour**

Water is all around us in different forms. How can people use water to work for them? Through hands-on activities and demonstrations, students will learn about the properties of water. We will show how water and steam can be harnessed to make machines operate. Student Learning Goals: Students will learn that materials exist in one of three states; solid, liquid, or gas. Students will learn that the physical properties of materials can be changed by adding water or heat, or by mixing. Through the demonstrations, students will learn that heat energy is a form of energy that makes things warmer and heating the water may cause a change in its physical properties. Students will be shown that moving water has energy because of its movement and that energy can be transferred to other objects.

### Standard:

**NGSS: PS1.A, PS1.B, PS2.A, PS2.B, PS3.A, PS3.B, PS3.C, PS3.D, ESS3.A**

**Common Core: W.2.8, W.3.8, SL.3.3**

**Outreach \$95 per program**

**Field Trip \$5 per student**

**\$65 minimum**

## THE FRIENDS OF AUBURN HEIGHTS PRESERVE ENVIRONMENTAL EDUCATION

The Friends of Auburn Heights Preserve offer a range of field trips and programs that they can bring to your school. For more information or to schedule programming, contact:

B. Michelle Nowling, Education Director  
Marshall Steam Museum and Friends of Auburn Heights Preserve (302) 239-2385 or  
[education@auburnheights.org](mailto:education@auburnheights.org)



## FIELD TRIPS AT THE MARSHALL STEAM MUSEUM

### STORYTIME AT THE MARSHALL STEAM MUSEUM

All programs run 45 minutes to an hour and include hands-on activities and a craft.  
**\$4 per student**

<b>Pre-K and older</b>	<b>Early Travelers K - 3</b>
<b>Drivers and Racers Grade 4 and older</b>	<b>Auto Engineers Grade 5 and older</b>

Combine a Museum program with a Delaware State Parks program for more fun at Auburn Heights. Add train rides to your field trip of 40 students or more for an additional \$3 per student.

## MARSHALL STEAM MUSEUM PROGRAMS AT YOUR SITE

Storytime programs are book-based and run 45 minutes to an hour. Elementary programs are

<b>Storytime T is for Track Ages 3 - 8</b>	<b>Engineer it! Ages 3 - 8</b>	<b>Queen of the Road Ages 5 - 8</b>	<b>Storytime or Elementary Bridge Builders Ages 4 - 12</b>
<b>Elementary Cars, Trips and Me K - Grade 3</b>	<b>Early Engineers Grade 3 and older</b>	<b>Amazing Automobile Race Grade 3 and older</b>	

discussion-based and run 60 - 80 minutes.

All programs include hands-on activities and a craft. Program costs vary; contact Education Director for pricing.

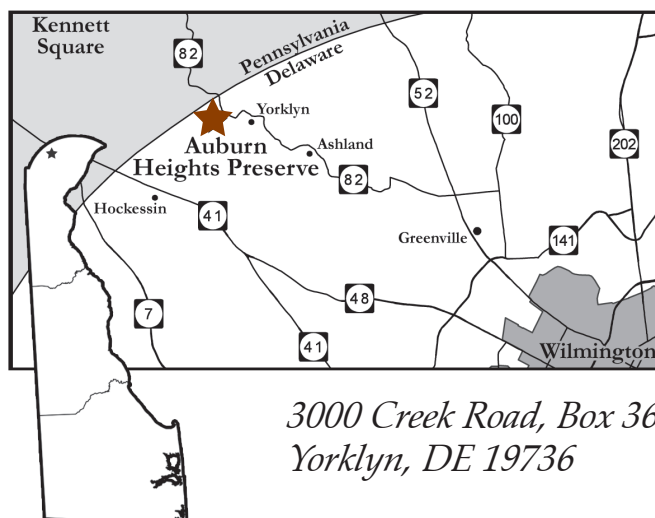
### WHEN OUR POWERS COMBINE...

**Grades 3 - 4**

**1 hour**

How did the local mills operate? What was their power source? How did that power source change over time, and what effects did that have on our environment? This program looks at three different sources of power, what was good about them, what was not so good, and potential sources of energy for the future.

**\$4 per student**



*3000 Creek Road, Box 36  
Yorklyn, DE 19736*

**These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.**



# Bellevue State Park

*Call (302) 761-6963 to register*

Bellevue State Park provides a natural laboratory where students learn about biology, ecology and the properties of matter. Playgrounds and picnic tables allow time for play while learning. Some discounts apply for multiple programs.



## ORGANISMS ARE EVERYWHERE

**Grade 1**

**2 hours**

Students will observe the various life forms at the park. Through an interactive discussion, they will discover what makes something “alive,” and what plants and animals need to survive. They will also use dip nets to find and examine organisms that live in the pond.

**Standard:**

**1-LS1, 1-LS2, 1-LS4**

**\$6 per student**



## TREES UP CLOSE

**Kindergarten**

**1 hour**

Students will take a nature walk around the park to learn, observe, describe and compare trees found throughout Bellevue. They will identify the parts of a tree, what a tree needs to survive and how trees are like them. Students will use their senses to describe leaves and bark, and learn facts about some of the trees in the park.

**Standard:**

**K-LS1, K-LS2, K-ESS3**

**\$5 per student**



## EXPLORING ECOYSTEMS

**Grade K – 3**

**2 hours**

Students will compare, learn about and see the park’s ecosystems in action. They will learn about and identify the relationships among producers, consumers and decomposers.

**Standard:**

**5-PS3, 5-LS1, 5-ESS3**

**\$6 per student**



## WATER WONDERS

**Grade 3**

**2 hours**

Students will become experts on Bellevue’s water systems using hands-on techniques to collect data and compare the pond and stream environments in the park. They’ll learn about organisms found in each environment, flow of water, erosion, sediment types and man-made impacts on the environment.

**Standard:**

**3-PS1, 3-LS2, 3-ESS2**

**\$6 per student**



## LIFE CYCLE SAFARI

**Grades K – 3**

**2 hours**

Students will enjoy a multi-sensory exploration into the life cycles of three different organisms: butterflies, dragonflies and frogs. We will compare their life cycles, and students will dip in the pond and search the meadow for these organisms in their habitats.

**Standard:**

<b>K-LS1, K-LS2, K-LS3, K-LS4</b>	<b>1-LS1, 1-LS2, K-LS3, 1-LS4</b>	<b>2-LS1, 2-LS2, 2-LS3, 2-LS4</b>	<b>3-LS1, 3-LS2, 3-LS3, 3-LS4</b>
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**\$6 per student**





## SOIL SCIENTISTS

**Grade 4**

**2 hours**

We'll discuss where soil comes from, types of soils, how to describe soils and how soil interacts with water. We will even take a look at the park's compost pile and discuss how soil affects our everyday lives.

**Standard:**

4-LS2, 4-ESS3

**\$6 per student**



## CLASSROOM PAPER MILL

**Kindergarten**

**1 hour**

Students will use their senses to examine the physical properties of wood and products that come from trees. They will learn the fundamentals and importance of recycling by creating their own recycled paper.

**Standard:**

K-PS1, K-ESS3

**\$95 per program**



## SOLIDS AND LIQUIDS

**Grades 2 – 5**

**1 hour**

Students explore the differences between the physical properties of solids and liquids through experiments that examine what floats and what sinks, how solids and liquids mix, and the creation of some special solids and liquids right before their eyes.

**Standard:**

2-PS1v	3-PS1	4-PS1	5-PS1
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**\$95 per program**



## MIXTURE MADNESS

**Grade 5**

**1 hour**

Our scientists will “stir up” your students’ interest by creating some fascinating mixtures and solutions. We’ll also “break apart” everyday mixtures (like ink) for some surprising results!

**Standard:**

5-PS1

**\$95 per program**



## WIGGLY WORMS

**Grade 2**

**1 hour**

Students will explore worms up close! We bring our “worm bin” to your classroom to discuss the lives of worms. Students will also discover how worms help us by creating soil!

**Standard:**

2-LS1, 2-LS2, 2-ESS3

**\$95 per program**



## WACKY WATER SCIENCE

**Grade 3**

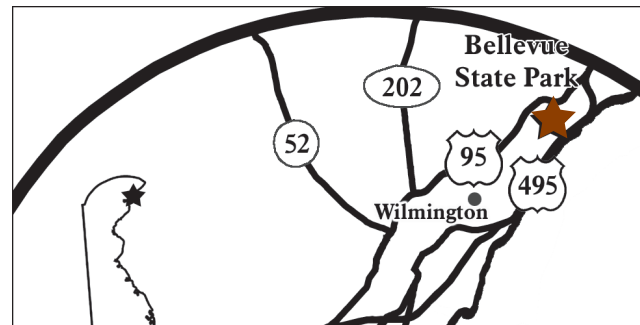
**1 hour**

In this engaging demonstration, students will assist staff with exciting experiments designed to explore the world of water. Topics include basic properties of water, chemical testing and “dry ice!”

**Standard:**

3-PS1

**\$95 per program**



800 Carr Road  
Wilmington, DE 19809

*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*



# Brandywine Creek State Park

Call (302) 655-5740 to register

Brandywine Creek offers unique opportunities to experience ecosystems and riparian habitats, and to learn about watersheds, weather, wildlife and more.



## INSECTS

Grade 2

1.5 hours

Discover insect adaptations, life cycles and survival needs through a series of interactive tasks. In the field, students will collect insects, make observations, and record data.

**Standard:**

2-LS4
-------

\$5.50 per student



## STREAM STUDY

Grades 3 – 4

1.5 – 2 hours

Let's get our feet wet while we learn about the creek. We will determine the health of our stream using a macro invertebrate study. Learn about watersheds, riparian buffer zones, point source and non-point source pollution, and land-use impacts. Program meets at the Thompson's Bridge Parking Lot. This program can be done in conjunction with a Canoe Excursion (program will be modified to grade level).

**Standard:**

3-LS1, 3-LS4
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4-LS1, 4-ESS2
---------------

1 hour: \$5 per student, 2 hours: \$6 per student



## ECOSYSTEMS: ORGANISMS AND THEIR ENVIRONMENT

Grade 5

1 – 2 hours

Examine the biotic and abiotic factors affecting our ecosystem and determine how organisms in an ecosystem are linked to one another by the flow of energy. Learn how organisms are specially adapted to live in this environment. We will play education games, solve food chain puzzles. In the two-hour program, we will record organism data.

**Standard:**

5-PS3, 5-LS1, 5-LS2
---------------------

1 hour: \$5 per student; 2 hours: \$6 per student



## ORIENTEERING

Grades 6 – 12

1.5 – 2 hours

Ever wonder how people find their way in the wild? They use a compass and a topographical map. Students will learn how to use a compass, read map legends, recognize symbols on a map, and relate them to physical features on the landscape. Then teams of students will sharpen their map and compass skills by navigating the park's orienteering course.

1 – 40 students: \$5.50 per student;

40+ students: \$6 per student



## ORGANISMS OF DELAWARE

Grade 1

1 hour

Learn about the lives of organisms firsthand as we discover life cycles and survival needs. Students will compare living and non-living things in two different habitats. We will use scientific tools to study the organisms we collect.

**Standard:**

\$5 per student

1-LS1, 1-LS3
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## ANIMAL ARCHITECTS

**Grade 2**

**1.5 hours**

Ever wondered what animal built that nest in the tree or carved open a hole in the trunk? Animals build homes for a variety of reasons. Students get to explore some animal homes in the forest, learn why different species build different structures, and design their own bird nests to see which one can hold the most weight.

**Standard:**

2-ETS1, 2-LS4

**\$5.50 per student**



## WATER CYCLE

**Grade 3**

**45 minutes**

How would you feel if you found out that the water you're drinking today is the same water that the dinosaurs used? We'll learn how our limited water supply is just cycling around the planet through the various steps of the water cycle. Pretend you're a water drop and take this water cycle journey yourself by playing a fun game and see where you end up!

**Standard:**

3-ESS2, 3-ESS3

**\$95 per program**



## LENAPE OF DELAWARE

**Grades pre-K – K**

**45 minutes**

Students will discover some tools that native people used to survive in Delaware thousands of years ago. They will see and touch some of the tools and clothing used by the Lenape. Students will also be introduced to early American culture by playing musical instruments and a game enjoyed by young Lenape children.

**Standard:**

K-ESS2, K-ESS3, H2.K-3, H3.K-3, H4.K-3

**\$95 per program**



## ANIMALS IN WINTER

**Grades pre-K – K**

**45 minutes**

What do animals do in the winter? Students will be introduced to the concepts of migration, acclimation, and hibernation through a series of engaging activities. Learn how some of the native animals of Delaware survive the chilly weather.

**Standard:**

K-LS1, K-ESS2, K-ESS3

**\$95 per program**



## WETLAND HYDROLOGY

**Grades 6 – 8**

**1 hour**

Wetlands are a critical but disappearing part of our ecosystems. In this program, students will discover the functions of a wetland and why these special habitats deserve our protection. Students will also get to exercise their engineering brains and get hands-on by trying to design the most effective wetland model.

**Standard:**

MS-ESS3, MS-ETS1

**\$95 per program**



## WEATHER: YOUNG METEOROLOGISTS

**Grade 1**

**1 hour**

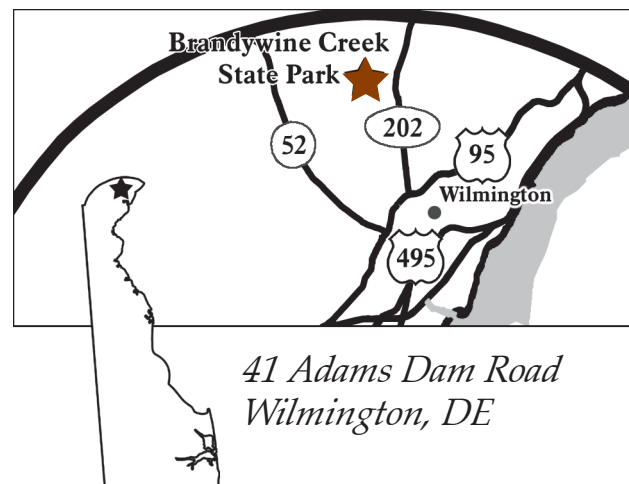
Learn the ways that weather influences how wild animals survive and how it impacts our daily lives. Gain hands-on experience using scientific instruments to measure weather. We will record the data and learn about the type of weather we have here in Delaware and throughout the country.

**Standard:**

1-LS1, 1-ESS1

**\$5 per student at the park,**

**\$95 per program at your site**



41 Adams Dam Road  
Wilmington, DE

*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*



# Brandywine Zoo

*Education@BrandywineZoo.org*

*(302) 571-7850 ext. 207*

Students can compare animal anatomy or learn about the challenges of wildlife conservation and efforts to protect endangered habitats around the globe.

**On-Site Programs:** \$7 per person (September – March) or \$8 per person (April – August) at the zoo (not including Animal Behavior STEM and Special Event for Schools Programs)

Contact [Education@BrandywineZoo.org](mailto:Education@BrandywineZoo.org) for more information about pricing

Add a 30 minute guided tour for \$2/person

**Traveling Zoo (outreach) Programs:**

Ranging from \$190-\$400 plus travel fees depending on group size and program type.

Visit [brandywinezoo.org/zooschool](http://brandywinezoo.org/zooschool), email [Education@BrandywineZoo.org](mailto:Education@BrandywineZoo.org) or call (302) 571-7850 ext. 207 for more information on pricing and to schedule.



## A DAY IN THE LIFE OF A ZOOKEEPER

**K – Adult**

**45 minutes – 1 hour**

Enter the fascinating Zoo world with us. Students will learn which courses to take in school and the types of careers studying or working with animals. They will learn about the role zoos play in conservation, including specialized captive breeding programs, with an emphasis on genetic diversity.

**Standard:**

K – HS-LS4, TPA2.01, AS1.02
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## ANIMAL SKELETONS

**Grades 3 – 5**

**1.5 – 2 hours**

Explore skeleton and body structures of humans and other animals, comparing people's and different animals' bodies. Students will be able to name various skeletal structures of the human anatomy. They will observe live animals and draw conclusions about their skeletal structure and function (aligns with Human Bodies Unit).

**Standard:**

3-LS1, 3-LS2, 3-LS3	4-LS1, 3-LS2, 3-LS3	5-LS1, 5-LS2, 5-LS3
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## STORY BOOK PROGRAMS

**Grades pre-K – 3**

**30 minutes**

During story book programs, we'll read a story and discuss relevant themes paired with some animal friends and touchable artifacts from the story. Choose from several themed story books that focus on animals in winter, nocturnal animals, movement, and more. Visit [BrandywineZoo.org/zooschool](http://BrandywineZoo.org/zooschool) for available books.

**Standard:**

K-LS1, K-LS3	1-LS1, 1-LS3	2-LS1, 2-LS3	3-LS1, 3-LS3
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## FIVE SENSES

**Grades Pre-K – K**

**1 – 1.5 hours**

Different animals use their senses in different ways to see, hear, smell, taste, and touch the environment around them. Students will identify the five senses and compare their senses with animals' senses. Students will be able to describe how important the five senses are to an animal's survival (aligns with Senses Unit).

**Standard:**

K-LS1, K-LS2
--------------





## LIVE ANIMAL ENCOUNTER

All Ages

30 minutes

Meet some of the Zoo's ambassador animals and learn about their amazing adaptations that help them survive in the wild. The program's focus can be customized by request, for example: camouflage, fur patterns, defense mechanisms or other adaptations. If requested, program can be focused specifically on the following classes of animals: reptiles, mammals, amphibians. This program is great for classrooms with special needs and audiences of all ages.

Standard:

K – HS-LS1, K – HS-LS4



## NATIVE ECOSYSTEMS

All Ages

30 minutes

We learn about the different Delaware habitats and meet some animals that are local and exotic from around the world! Students will be able to identify specific adaptations that certain animals have to help them survive different ecosystems (aligns with Ecosystems Unit).

Standard:

5-LS2, 5-LS4



## ANIMAL BEHAVIOR STEM

Grades 4- high school

35 participant max per program

Use our lesson plans to compliment your classroom. Learn the basics of animal behavior science using observation studies, or ethology, and develop skills in observation, inquiry, data collection, statistical analysis, and writing. In this program, students learn how to conduct a behavioral analysis of animals from the zoo's teaching collection. Please contact Educationa@BrandywineZoo.org" Educationa@BrandywineZoo.org for more information on the Animal Behavior programs and other STEM opportunities for students.

LS2.A, LS2.C,  
LS1.C, LS2.A,  
LS2.B, LS4.C,  
ESS2.C,  
ESS2.E;

SS3.A;

E ESS3.C



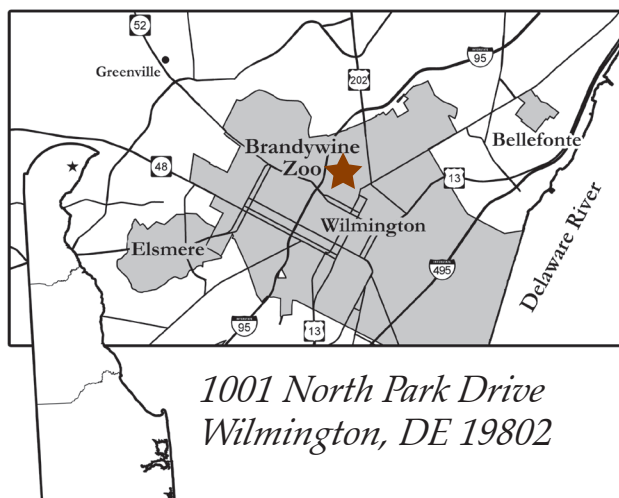
## SAFE ENVIRONMENTS

All Ages

50 minutes

This program takes a new approach to anti-bullying programming and helps students better understand each other using animals that are often misunderstood or feared, such as insects, spiders or reptiles. We'll learn about how students can cultivate safe environments not only for each other, but also for the animals around us.

LS1.A, LS1.C, LS1.D, LS2.A, LS4.B



*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*



# Fort Delaware State Park

Call (302) 834-7941 to register

Students explore the fort, its rooms and its artifacts. Cost for ferry ride to the island is included in program fees.



## LIVING HISTORY AT FORT DELAWARE

Grades 2 – 12

**70 minutes** (total visit time from your bus to your return to the mainland 3.5 hours)

Learn about history through primary historical research materials. Students will become participants in the living history program. Your class may meet “people from the past” in first person character, including a Union garrison soldier, a prisoner, a school teacher, and a blacksmith. After your program, your class will have time for lunch and fort exploration.

**Standard:**

H1.4-5, 6-8	H2.K-3, 4-5, 6-8	H3.K-3, 4-5, 6-8	H4.K-3
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**\$7 per student, teachers and chaperones pay student rate**



## A FORT DELAWARE SOLDIER: PRIVATE ALEXANDER HAMILTON

Grades 4 – 8

**45 minutes**

Meet Private Alexander J. Hamilton, who lived at Fort Delaware during the Civil War and kept a diary of his experiences there. Students will compare life today with life in 1864, and can start their own diary for the sake of posterity.

**Standard:**

H1.4-5, 6-8, H3.4-5
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**\$95 plus travel fee of 51 cents/mile over 30 miles round-trip**



## HISTORY SLEUTHS!

Grades 4 – 12

**45 minutes**

An historian brings artifacts and copies of primary and secondary research documents to the classroom, including diaries, journals, letters, military records, and photographs. Students get a hands-on opportunity with these resources to learn how historians tell the story of the people who lived and worked at Fort Delaware during the Civil War.

**Standard:**

H1.4-5, 6-8, 9-12	H2.4-5, 6-8, 9-12	H3.4-5, 6-8, 9-12
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**\$95 plus travel fee of 51 cents/mile over 30 miles round-trip**



## CAN YOU STOP THE CIVIL WAR?

Grades 7-12

**45 minutes**

The American Civil War is one of the most significant events in human history, but some think that it could have been avoided altogether. Is that really the case, or does it oversimplify things? In this program, students will get the chance to make some of the decisions facing United States politicians, to see if they could prevent the war from happening. This "Choose Your Own Adventure" style program teaches students about the events leading up to the Civil War, and ultimately about the cause of the war itself.

**Standard:**

H1.4-5a; 6-8a; H4.k-3b, 4-5b, 6-8a, 9-12a.
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**\$95 plus travel fee of 51 cents/mile over 30 miles round-trip**



## FORT DELAWARE POW WEEKENDS

Did your students enjoy their visit to Fort Delaware? Would they like to learn more about what life was like during the Civil War? Encourage them to bring their families back to enjoy one of the special POW Weekends during the summer at Fort Delaware.

They will be transported to a time when this was a bustling fortress with prisoners, soldiers, teachers, laundresses, cooks and more. They will enjoy even more first-person living history and how different the officers' lives were from the enlisted men, staff and prisoners.

Students and families may join a musketry demonstration, learn how supplies made it to Pea Patch Island and to cap it all off, hear and feel the power of the mighty Columbiad being fired!

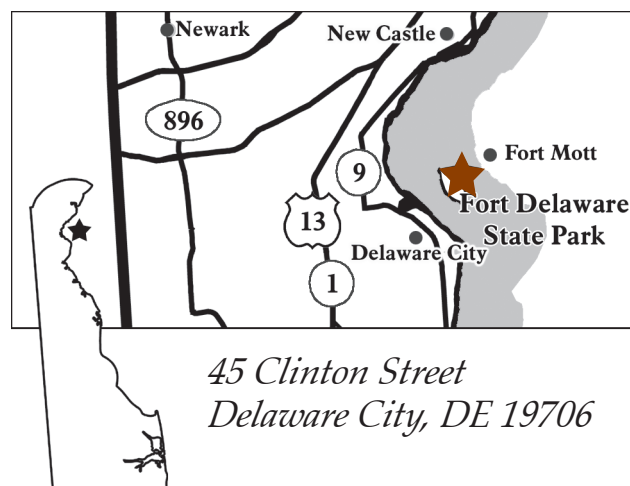
### *Even more Fort Delaware!*

Boy Scouts, Girls Scouts and other organized youth groups can camp overnight on select weekends at Fort Delaware! They will cook over a campfire, have a special tour of the Fort after dark and sleep in the Prisoners Barracks.

**More information about these programs is available by calling (302) 834-7941 or visiting [destateparks.com/FtDelaware](http://destateparks.com/FtDelaware).**



*"Our school had a wonderful time visiting Ft. Delaware. The staff was fantastic, particularly the tour group staff at the Fort."*



**We are partnering with Fort Miles!  
See program details on p. iii.**

*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*



# Lums Pond State Park

Call (302) 368-6989 to register

Lums Pond's Nature Center highlights the park's diverse habitats and its inhabitants, and include dip-netting in the pond, sweep-netting on land and exploring the park's vernal pools.



## POND STUDY

Grades K – 5

1 hour

Investigate the pond and all its inhabitants through an interactive pond study. Learn to dip net, identify the abundance of wildlife that can be found in and around the pond and how they make adjustments for survival.

**Standard:**

K-LS1, K-ESS2, K-ESS3	1-LS1	2-LS4	3-LS1, 3-LS2, 3-LS3, 3-LS4	4-LS1, 4-ESS2	5-LS2, 5-ESS3
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\$5 per student



## INSECT LIFE CYCLE

Grades K – 5

2 hours

Using sweep nets and dip nets students will collect and compare the diversity of insects and other organisms in two different habitats, the field and the pond, and investigate differences in life cycles, structures, and their functions.

**Standard:**

K-LS1, K-ESS3	1-LS1	2-LS2, 2-LS4	3-LS1, 3-LS2, 3-LS3, 3-LS4	4-LS1	5-LS2
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\$6 per student



## ANIMAL ADAPTATIONS

Grades K – 5

1 hour

Meet live frogs and turtles while exploring life cycles and investigating how weather effects local organisms. Students will compare how these animals use their senses for survival in ways that differ from human beings.

**Standard:**

K-LS1, K-ESS2, K-ESS3	1-LS1	2-LS4	3-LS1, 3-L-1, 3-LS3, 3-LS4	4-LS1, 4-ESS2	5-LS2, 5-ESS3
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\$5 per student, \$95 outreach



## ECOSYSTEM CONNECTIONS

Grades 5 – 8

2 hours

Students will use dip-nets to observe interactions between organisms and determine watershed health at the pond's edge, explore food webs during an up-close animal encounter at the nature center, and investigate how climate is interconnected to wildlife beside the vernal pool. This program demonstrates how humans can have a positive or negative effect on our ecosystem and that the choices we make today can make a difference.

\$6 per student



## AMPHIBIAN LIFE CYCLE

Grades K – 5

1 hour

Students will learn about the stages of metamorphosis that an amphibian goes through to become an adult. They will also meet some live amphibians from Lums Pond. This program ties into the Insect Life Cycle field study.

**Standard:**

K-LS1, K-ESS3	1-LS1	2-LS2, 2-LS4	3-LS1, 3-LS2, 3-LS3, 3-LS4	4-LS1	5-LS2
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\$5 per student





## ANIMAL SURVIVAL: BONES AND FUR

1 hour

Grade K-5

Animals have adaptations for survival like night vision, sharp teeth, and warning coloration. Explore the food web while examining animal artifacts (skulls, shells, and fur) of local consumers and producers. Students will compare the bones of native wildlife to the human body and investigate the function of different structures.

K-LS1, ESS2, ESS3, ESS3	1-LS1, LS1, LS3	2-LS4	3-LS1, LS2, LS3, LS4	4-LS1, PS4	5-LS1, LS2, ESS3
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\$5 per person in the park,

\$95 per program at your site



## STRUCTURES OF POND ORGANISMS

1.5 hours

Grades 1-4

Students will collect organisms at the pond's edge with nets and compare structures of crayfish, insects, and other aquatic creatures under a dissecting microscope, predicting answers to questions about the organism's basic needs, life processes, and structures that develop and change over time.

1-LS1, LS1, LS3	2-LS4	3-LS1, LS2, LS3, LS4	4-LS1, PS4
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\$5.50 per student



## WATERSHED SOLUTIONS (AND MIXTURES!)

1.5 hours

Grades 5-7

Student will analyze and sort solids and liquids and explore natural mixtures and solutions that represent real world issues related to human impact, water pollution, and the watershed then predict the effect or recommend a solution to a problem.

5-ESS3, LS2, PS1, ETS1	MS-ESS1
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\$5.50 per student in the park,

\$95 per program at your site



## FORCES AND MOTION ON THE WATER

2 hours

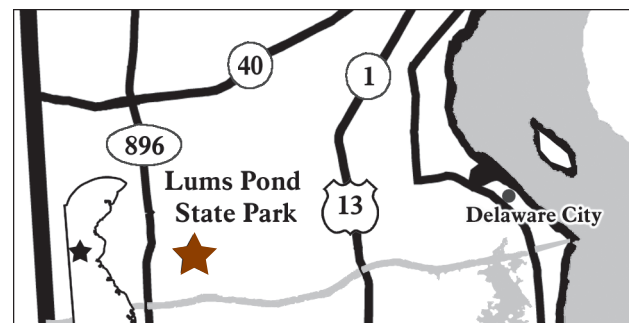
Grades 5-12

Using paddleboats and/or kayaks students will experience the feel of force and motion first hand on the pond! \*Scheduling in September and May only. Additional chaperones required.

5-ESS3, LS2, PS1, ETS1	MS-ESS1, PS2
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\$15 per student

*"Thank you so much for a wonderful field trip! I had so much fun learning about the frog life cycle and how different frogs do different things in response to change of climate."*



*1068 Howell School Road  
Bear, DE 19701*

*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*



# White Clay Creek State Park

Call (302) 368-6900 to register

White Clay Creek State Park offers programs on geology, biodiversity, water quality, ecosystems, and more. The site is unparalleled for hands-on geology and riparian zone studies.



## LIVING ORGANISMS OF THE CREEK, FOREST AND FIELD

Grades 1 – 2

3 hours (includes 1/2-hour lunch)

Discover the rich diversity of life in the forest and creek as we explore the life cycles and basic needs of organisms. Students will observe plants and animals, use dip nets, and participate in an interactive hike.

**Standard:**

1-LS1	2-ESS2, 2-LS2, 2-LS4
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\$6.50 per student



## WHITE CLAY, SAND AND SOIL

Grades 2 – 4

3.5 hours (includes 1/2-hour lunch)

Get those hands dirty in this one-of-a-kind program. Students will explore and compare the sandy beach and riparian forest along the creek while investigating the properties of soil (sand, clay and humus) to determine their effects on plant and animal life.

**Standard:**

2-ESS1, 2-ESS2, 2-LS4	3-LS4	4-ESS1, 4-ESS2
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\$7 per student



## GEOLOGY

Grades 3 – 6

2 hours

Students will become junior geologists by exploring different mineral properties. Equipped with geology hammers, students will learn to sort rocks on a gravel bar along the creek. Maximum Group Size: 60. Bus must remain at the park for the duration of the program and is used to transport children within the park.

**Standard:**

3-ESS2	4-ESS2	5-ESS2	MS-ESS2
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\$6 per student



## EXTENDED GEOLOGY

Grades 3 – 5

3.5 hours (includes 1/2-hour lunch)

Students will explore different mineral properties. Equipped with geology hammers, they will sort rocks on a gravel bar along the creek. This expanded program incorporates additional stations on earth materials and how water shapes the land and can accommodate up to 100 students. Bus must remain at the park for the duration of the program and is used to transport children within the park. Time includes a 1/2-hour lunch break. A two-hour Geology program is also available.

**Standard:**

4-ESS2, 4-ESS3	5-ESS2
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\$7 per student



## LIFE, LAND AND WATER

Grades 4 – 6

3.5 hours (includes 1/2-hour lunch)

Students will collect and identify aquatic riparian organisms observing their structures and functions that help them survive. They will model water's power to shape the landscape within the White Clay watershed focusing on erosion, deposition and slope. Maximum student number: 60. Bus must remain at the park for the duration of the program and is used to transport students within the park.

**Standard:**

4-ESS2, 4-ESS3; 4-LS1	5-ESS2, 5-PS3, 5-LS1, 5-LS2	MS-ESS2, MS-ESS3, MS-LS1, MS-LS2, MS-LS3, MS-LS4
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\$7 per student



## SENSING WILDLIFE

Grades Preschool – K

30 – 45 minutes

Animals use their senses to communicate and survive in the wild. Students will learn about animal senses, sort and compare natural items using their senses and gage how animals use their senses to survive.

**Standard:**

1-LS1
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\$95 per program (up to 25 students per program).  
Discount available for multiple back to back programs.



## OWL ADAPTATIONS, PELLETS AND BONES

**Grades 3 – 5**

**45 minutes**

Students will learn how owls' adaptations help them survive. Then, using large mammal bones as models, we will dissect sterilized owl pellets in search of similar tiny bones in the owls' prey. Program uses owl taxidermy, owl wings, talons, mammal skulls, bones, dissecting tools and ID charts. School provides owl pellets. Additional fee charged if we supply pellets. This program is available from December through March.

**Standard:**

<b>3-PS2, 3-LS1, 3-LS4</b>	<b>5-PS2</b>	<b>H4.6-8</b>
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**\$95 per program (up to 25 students)**



## WEATHER, CLIMATE AND ECOSYSTEMS: IMPACTS IN A PIEDMONT WATERSHED

**Grades 8 - 9**

**45 minute in-school**

3 1/2 hour in-park (includes 1/2 hour lunch break)

This two-part program consists of a 45 minute in-school presentation about climate change vs. weather and a 3 1/2 hour in-park field experience about extreme weather's impact on living organisms and human structures. Engineering practices, modeling, abiotic factors, plant and animal adaptive structures or behaviors are all part of the field experience. Bus must remain at the park for the duration of the program and is used to transport students within the park.

**Standards:**

**Middle School LS2, LS4; ESS3; ETS1**

**\$8 per student**



## MYSTERY MINERALS

**Grades 3 – 5**

**45 minutes**

Rocks are made up of minerals that can be sorted by their properties. Students will become junior geologists when they explore minerals. In stations around your classroom, your students can test samples for properties such as luster, magnetism, and streak to identify their mystery mineral. Available November through April.

**Standard:**

<b>4-ESS2</b>	<b>5-ESS2</b>
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**\$95 per program (up to 25 students)**



425 Wedgewood Road  
Newark, DE 19711

*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*



# Wilmington State Parks

Call (302) 577-7020 to register

Using diverse urban locations, our programs are sure to energize your students as they learn about waterpower and energy, city wildlife, plate tectonics, conservation, rock climbing, and more exciting topics.



## WILDLIFE IN THE CITY

Grades K – 1

1 hour

Students will learn the difference between living and non-living things, discover what all living things need to survive and how wildlife changes to survive in a city.

**Standard:**

K-LS1	1-LS1
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\$5 per student



## WATER'S POWER TO CHANGE (STEM)

Grades 3 – 5

1.5 hours

Students will connect energy and geology concepts to the topography of the Brandywine Creek in addition to exploring the creek's pivotal role in Wilmington's transition from an agricultural to industrial city.

**Standard:**

3-LS4, H4.K-3, G2.K-3, G3.K-3	4-PS3, 4-ESS3, H4.4-5, G2.4-5, G3.4-5	5-LS2, 5-ESS2
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\$5 per student



## STADIUM SCIENCE

Grades 4 – 6

1.5 hours

Using Baynard Stadium within Wilmington State Parks as their laboratory, students will explore how forces apply to sports and affect the motion of the objects around them.

**Standard:**

3-ETS1	4-ETS1	5-ETS1, 5-PS2	MS-PS1, MS-PS2, MS-PS3, MS-LS2, MS-ETS1
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\$5 per student



## EARTH'S DYNAMIC SYSTEMS

Grades 6 – 8

2 hours

At the Alapocas Run State Park quarry, students will examine the properties of rocks and minerals, the forces responsible for changing the Earth's crust, and will use GPS units to connect the park's geology to its history.

**Standard:**

MS-ESS1, MS-ESS2, MS-ESS3, H4.6-8
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\$6 per student







## ANIMALS IN THE NEIGHBORHOOD

**Grades K – 1**

**30 minutes**

Students will review the parts of a tree, learn how it grows from a seed to mature tree and discover what living things need to survive.

**Standard:**

**K-LS1**

**1-LS1**

**\$95 per program**



## ENERGY IS EVERYWHERE (STEM)

**Grades 1 – 4**

**40 minutes**

Students will discover how different forms of energy are used in our everyday lives. For grade 4, there will also be a demonstration of how electric circuitry is used in alternative energy.

**Standard:**

**1-PS4**

**4-PS3, 4-PS4**

**\$95 per program**



## THE POWER OF WATER (STEM)

**Grades 3 – 4**

**40 minutes**

Using the scientific method, students will examine water as a source of power and how flow and pressure affect water.

**Standard:**

**3-PS2**

**4-PS3, 4-PS4**

**\$95 per program**



## FORCES IN MOTION (STEM)

**Grades 4 – 6**

**40 minutes**

Through experiments using Kinex® cars, students will observe how gravity and friction affect the motion of objects. Students will also discuss inertia using real world examples.

**Standard:**

**4-PS3, 4-PS4, 4-ESS3**

**MS-PS1, MS-PS2,  
MS-PS3, MS-LS2,  
MS-ETS1**

**\$95 per program**



## PHYSICS OF PLAY

**Kindergarten**

**40 minutes**

Through hands-on activities using items they play with every day, children will begin to explore the world of physics and how objects move and fall. Please note: this program needs a location with enough space to conduct physics experiments.

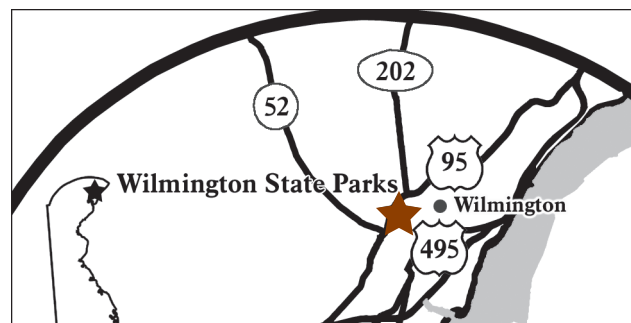
**\$95 per program**



## TURNING UP THE HEAT

Students will participate in a variety of hands-on experiments and activities to explore how climate change and urban heat islands can affect a plant's or animal's ability to survive in its habitat.

**\$5 per student**



*1021 West 18th Street  
Wilmington, DE 19802*

*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*





# First State Heritage Park

Call (302) 739-9194 to register

Students will visit the buildings and sites where Delaware laws and history are made. Costumed interpreters bring our state's history to life, teaching a wide range of subjects.

Most programs are free for school groups. Outreach programs are available on a limited basis.



## GROWING UP IN THE 18TH CENTURY

**Grades K – 8**

**30 minutes**

Life was different in Colonial America. Students will learn about what life was like for the average Delawarean during the 1700s. Students will learn about when colonial times occurred; they will also learn about the available technology and cultural mindset. Students will be given several objects and be asked to use their reasoning skills to decide what the object would have been used for in colonial times. Students will also be able to see and touch articles of reproduction clothing.

**Standard:**

**H2.K-3, 4-5, 6-8**



## LEGISLATIVE HALL TOUR

**Grades 3 – 12**

**30 – 45 minutes**

Every student should know where the laws of their state are made. This guided tour of Legislative Hall emphasizes the building as Delaware's capitol, but also Dover as Delaware's capital city. Along the tour, students will participate in activities that help engage their understanding of the building they are in and its purpose. This program will describe the legislative process, procedure, and powers as they apply in Delaware. During the tour, emphasis is placed on how citizens are able to affect change.

**Standard:**

**C1.K-3, 4-5, 6-8, 9-12**



## DOVER'S HEROES OF THE REVOLUTION - WALKING TOUR

**45 minutes**

**Grades 6 – 12**

Dover was a hotbed of revolutionary and loyalist activity during the struggle for American Independence. While suspicion was cast on some of its residents, others would achieve national acclaim for their actions during this trying time. Visit the final resting places of such valiant figures as John Haslet and John Patton, and see the locations around The Green associated with other early military heroes including Caesar Rodney and Dr. James Tilton. Each walking tour will take place around The Green in Dover, led by a historic interpreter in period dress.

**Standard:**

**H2.6-8, 9-12**

*"Thank you for letting us come to...downtown Dover...it was so fun that I didn't want it to end. I liked [Legislative Hall] because we got to see how they made new laws."*





### SLAVERY AND FREEDOM - WALKING TOUR

**45 minutes**

**Grades 6 – 12**

Learn about Delaware's complicated positions regarding freedom and slavery, and its role as a border state during the Civil War. Find out how a brave group of runaway slaves known as the Dover Eight made a daring escape from the Dover Jail. Hear about famous African-American Richard Allen and his connections to the Golden Fleece Tavern. Each walking tour will take place around The Green in Dover, led by a historic interpreter in period dress.

**Standard:**

**H4.6-8, 9-12**



### STORIES OF THE GREEN - WALKING TOUR

**45 minutes**

**Grades 6 – 12**

For 300 years, The Green has been the center of commerce, politics, and civic life in Dover. Guided walks through the historic district reveal the people and events that left their mark on Dover's history. Beginning at the John Bell House, each walking tour will take place around The Green in Dover, led by a historic interpreter in period dress.

**Standard:**

**H4.6-8, 9-12**



### WOMEN OF THE GREEN - WALKING TOUR

**45 minutes**

**Grades 6 – 12**

Many women were innkeepers, political leaders and social figures throughout the history of The Green. Learn about the lives and contributions of these often forgotten figures. Beginning at the John Bell House, each walking tour will take place around The Green in Dover, led by a historic interpreter in period dress.

**Standard:**

**H4.6-8, 9-12**



### ARTS, CULTURE AND HERITAGE (ARCH) PRESERVATION FIELD DAYS

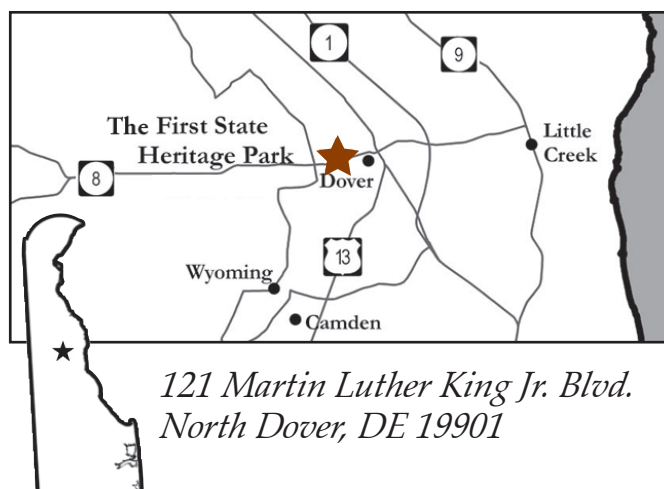
First State Heritage Park partners with Delaware State Parks, the Division of Historical and Cultural Affairs, the First State National Historical Park, Delaware State Park's Time Travelers Program and many other public and private organizations to present Arts, Culture and Heritage (ArCH) Preservation Field Days.

These free, one-day educational events for fourth grade students throughout the state are offered free of charge. The event was first held in Delaware in 2016 to coincide with Preservation 50, a national year-long celebration of the 50th anniversary of the National Historical Preservation Act of 1966.

Students take to the Dover Green for the day to participate in stations that focus on Next Generation Science Standards and the Common Core State Standards in Fine Arts and Delaware History. Subject matter experts introduce students to hands-on activities such as stone-ground tools, historic firearms, using primary and secondary sources, Native American heritage and artifact analysis, to name just a few.

These annual field days have been a great success and are anticipated by both students and teachers alike. Transportation grants are available through the National Park Foundation. For more information on how to bring your students to ArCh, call (302) 739-9194 or visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups).

**Free**



*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*



# Killens Pond State Park

Call (302) 284-4299 to register

Programs feature Delaware's reptiles and amphibians and often include watersheds, ecosystems, dip-netting, live animal demonstrations or visiting the Nature Center's collection of native "herps."



## MY LIFE AT THE POND

Grades K – 1

3 hours

Students will use dip-nets and hands to capture pond organisms for closer observation and identification before they are returned to the pond. Shoes and clothing will get wet and muddy! Students will meet the park's live reptiles and amphibians and explore their habitat needs and what makes a reptile's needs different from an amphibian's. Then we will hike the Pondsides Trail searching for the animals that make their homes along the pond's edge.

**Standard:**

K-LS1, K-LS2

1-LS1, 1-LS2

\$7 per student



## INSECTS ABOUND

Grade 2

3 hours

Students will dip net in the pond, sweep net in the meadow, and comb the forest floor for insect inhabitants. They will learn about an insect's life cycle, the different phases of metamorphosis, and what makes an insect different from all other organisms. Shoes and clothing that can get wet and muddy are suggested for this activity.

**Standard:**

2-LS1, 2-LS4

\$7 per student



## AMPHIBIAN OR CANARY?

Grades 6 – 12

3 hours

Students take a kayak trip to explore the world of amphibians, acquire a biotic sample of pond life to learn the health of the pond, and meet the park's live amphibians. We will discuss how amphibians (and other aquatic organisms) are "canary species" for aquatic health. The impact of pollution on an ecosystem is huge, but there are things we can do to help and we will discuss how individual students can make a difference in the big picture.

**Standard:**

MS-LS4, MS-ESS3, MS-ETS2

\$12 per student



## KENT COUNTY WATERSHEDS

Grades 3 – 4

3 hours

Students will learn the concepts of a watershed, ecosystem health, and factors that may affect water quality. We will "build" a mini watershed and introduce common pollutants that affect watersheds. We will discuss things that can be done to make a watershed a healthy place to live. In addition to hands-on learning with the enviro-scape model, students will create a bio-assessment of the sampling and identify aquatic organisms. They will also use microscopes to learn about the diversity of plants and animals in a pond environment. They will classify and sort the animals and plants they find and learn about the importance and complexity of a pond ecosystem. Students should wear clothes that can get wet and muddy.

**Standard:**

3-ESS2, 3-ESS3, 3-LS2

4-ESS2, 4-ESS3, 4-LS2

\$7 per student





## PLANTS ARE EVERYWHERE!

**Grades K – 1**

**2.5 hours**

Through hands-on activities and learning experiences, students will learn about seed anatomy and seed travel, and will discover how the plants of the park manage to grow from their tiny beginnings. In the spring, students will learn about the different parts of a flower, and what they are for as well as dissect a flower to observe its parts and talk about its function. In the fall, we will do leaf rubbings and dissect a leaf. Students will become trees and get to plant a seed to take with them!

**Standard:**

**K-LS1, K-LS2**

**1-LS1, 1-LS2**

**\$6 per student**



## DELAWARE'S HERPS

**Grades 4 – 5**

**3 hours**

What is the difference between a reptile and an amphibian (herps)? How do they communicate with each other? How many herps are there? Find the answers when you meet the Killens Pond live reptile and amphibian collection! This three-part program will focus on the different adaptations of herps, how they communicate with each other, and the huge biodiversity of the reptile and amphibian world and why these amazing animals are disappearing in Delaware.

**Standard:**

**4-LS1, 4-LS2, 4-LS4**

**5-LS1, 5-LS2, 5-LS4**

**\$7 per student**



## REPTILES RULE

**Grades K – 5**

**45 minutes**

This live reptile program brings turtles, snakes, and lizards into the classroom for students to experience hands-on! They will learn how reptiles adapt to survive in certain habitats and which physical characteristics make reptiles similar to each other, and which characteristics create the different orders.

**Standard:**

**K – 5-LS1, K – 5-LS2**

**\$95 per program**



## AMPHIBIAN ADAPTATIONS

**Grades K – 5**

**45 minutes**

Students will be delighted with live frogs, toads, and salamanders. Amphibian life cycles, adaptations, and physical structures will be discussed and how different types of amphibians interact with their environment. We will also discuss how a change in the environment of amphibians may (and has) affected entire populations.

**Standard:**

**2-LS1, 2-LS4**

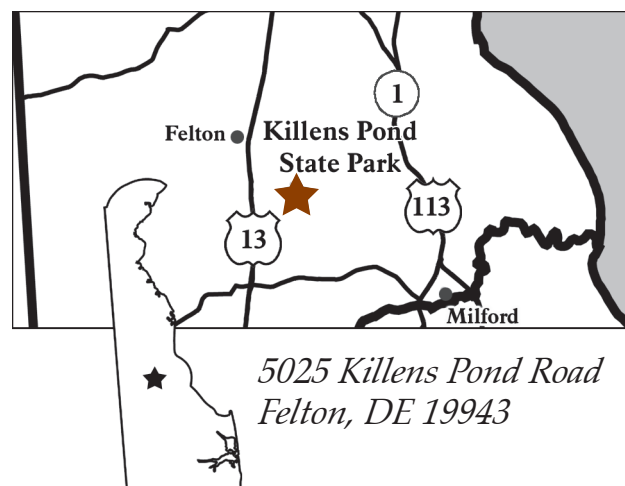
**\$95 per program**

## HEALTHY KIDS DAY

Since the first Healthy Kids Day at Killens Pond State Park in 2016, hundreds of third grade students from schools in Kent County, Delaware have participated in the program. Typically held in October, Healthy Kids Day is free for third grade students from both public and private schools in the county.

Healthy Kids Day spread the word about healthy living and get kids excited about being outdoors through games, activities, and tips for a healthy lifestyle. The aim of the program is to encourage students to return to the park, practice outdoor recreation, living a healthy lifestyle and building a sense of ownership that they will carry forward.

The program is offered through a partnership between Delaware State Parks and the Division of Public Health.  
**Free**



*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*



# Cape Henlopen State Park

Call (302) 645-6852 to register

The Seaside Nature Center's large salt-water aquariums and touch tank introduce students to species and habitats found at Cape Henlopen. Programs include beach exploration, hiking, seining and more.



## PINELANDS HIKE

Grades K – 3

1 hour

Students hike the maritime forest using their senses and powers of investigation to study the soil and the environment and discover how plants and animals survive in this habitat.

**Standard:**

K-LS1, K-LS2, K-LS4,	1-LS1, 1-LS2, 1-LS4,	2-LS1, 2-LS2, 2-LS4,	3-LS1, 3-LS2, 3-LS4,
K-ESS2, K-ESS3	1-ESS2, 1-ESS3	2-ESS2, 2-ESS3	3-ESS2, 3-ESS3

\$5 per student, \$65 minimum



## SAND DUNE DYNAMICS

Grades 4 – 12

1.5 hours

Through observation and inquiry, students learn about the interaction between the living and non-living components of sand dunes and how energy drives this change. Students will develop an appreciation for the important role dunes play in the coastal ecosystem.

**Standard:**

4-LS1, 4-LS2, 4-ESS2, 4-ESS3	5-LS1, 5-LS2, 5-ESS2, 5-ESS3	MS-LS1, MS- LS2, MS-ESS2, MS-ESS3
---------------------------------	---------------------------------	---

\$5 per student or \$78 minimum



## HORSESHOE CRAB ECOLOGY

Grades 4 – 8

1 hour

Students explore the world of the horseshoe crab by examining live specimens and learn how the species is key to the Delaware Bay ecosystem.

**Standard:**

4-LS1, 4-LS2, 4-ESS2, 4-ESS3	5-LS1, 5-LS2, 5-ESS2, 5-ESS3	MS-LS1, MS- LS2, MS-ESS2, MS-ESS3
---------------------------------	---------------------------------	---

\$3 per student, \$65 minimum



## R.E.E.C.H. PROGRAM (RESIDENTIAL ENVIRONMENTAL EDUCATION AT CAPE HENLOPEN)

Grades 7 – 8

2 days, 1 night

During this two day, one-night program students will explore our coastal ecosystem, its many habitats and its organisms. Can't commit to two full days? Schedule a program focused on a coastal habitat. Find more information about REECH on page 29.

**Standard:**

MS-LS2

\$65 per participant (two teachers visit free); funding may be available for qualified schools





## BEACH DETECTIVES

Grades K – 3

1 hour

Students scour the beach and use powers of observation and identification to solve an ecological puzzle connecting organisms to their habitats and energy of movement.

**Standard:**

K-LS4, K-ESS2, K-ESS3	1-LS4, 1-ESS2, 1-ESS3	2-LS4, 2-ESS2, 2-ESS3	3-LS4, 3-ESS2, 3-ESS3
-----------------------------	-----------------------------	-----------------------------	-----------------------------

\$5 per student, \$65 minimum



## SEASHORE SAFARI

Grades K – 4

1 hour

Discover how many different plants and animals survive in their Delaware Bay habitat by collecting and comparing live specimens caught in a seine net. Available mid-April to mid-October.

**Standard:**

K-LS1, K-LS2, K-LS4, K-ESS3	1-LS1, 1-LS2, 1-LS4, 1-ESS3	2-LS1, 2-LS2, 2-LS4, 2-ESS3	3-LS1, 3-LS2, 3-LS4, 3-ESS3	4-LS1, 4-LS2, 4-LS4, 4-ESS3
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\$5 per student or \$65 minimum



## WET & WILD ANIMALS

Grades K – 2

1 hour

Students meet live aquatic animals, handle real props, and create an aquatic animal in order to discover the amazing adaptations these creatures have to live in their water habitats.

**Standard:**

K-LS1, K-LS4, K-ESS3	1-LS1, 1-LS4, 1-ESS3	2-LS1, 2-LS4, 2-ESS3	3-LS1, 3-LS4, 3-ESS3
----------------------------	----------------------------	----------------------------	----------------------------

\$95 for one program; discounts for multiple programs may apply; travel fees may apply for programs at your site



## BUG OUT – INSECTS!

Grades K – 3

1 hour

Students use their senses and exploration skills to learn about insects, their life cycles and how they survive, using puppets, props, fun activities and live insects. Program at the park is offered seasonally.

**Standard:**

K-LS1, K-LS4, K-ESS3	1-LS1, 1-LS4, 1-ESS3	2-LS1, 2-LS4, 2-ESS3	3-LS1, 3-LS4, 3-ESS3
----------------------------	----------------------------	----------------------------	----------------------------

\$5 per student, \$65 minimum at the park

\$95 for one program; discounts for multiple programs may apply; travel fees may apply for programs at your site.



## REPTILES: SNAKES AND TURTLES

Grades K – 8

1 hour

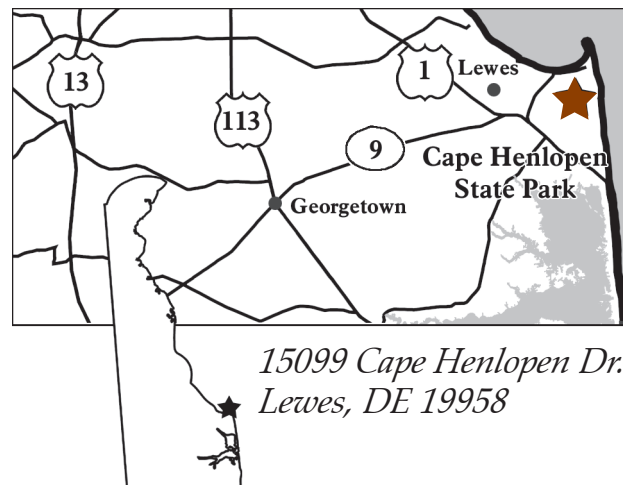
Students experience live snakes and turtles to discover the diversity of design and learn why these native reptiles are an important part of our ecosystem.

**Standard:**

K – MS-LS1, K – MS-LS2, K – MS-LS4, K – MS-ESS3
---

\$5 per student or \$65 minimum at the park

\$95 for one program; discounts for multiple programs may apply; travel fees may apply for programs at your site



These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.



**Encourage parents to choose Delaware State Parks as part of their child's summer to help reduce or prevent summer learning loss. Summer Camps are available from June to August at the following state parks:**

**Alapocas Run**

**Bellevue**

**Brandywine Creek**

**Brandywine Zoo**

**Cape Henlopen**

**Killens Pond**

**Lums Pond**

**Trap Pond**

**White Clay Creek**

Information will be posted on the Delaware State Parks website after January 1. Visit [destateparks.com/summercamp](http://destateparks.com/summercamp) for information and registration. In many cases, scholarship funding is available. Most locations offer before and after care.



**To get Summer Camp Guides  
in your school, e-mail  
[Jonathan.Wickert@state.de.us](mailto:Jonathan.Wickert@state.de.us).**



# REECH – How We Teach at the Beach!

Residential Ecosystem Education at Cape Henlopen (REECH) is a two-day, one-night program for students in grades 7 and 8 at Cape Henlopen State Park. Students will enjoy hands-on investigations of Cape Henlopen's coastal ecosystem; courses are designed to meet state standards.

Cape Henlopen State Park's 5,000+ acres makes it the perfect place to explore diverse habitats. Students will take an in-depth, project-based learning approach to assess the health and function of the Cape Henlopen ecosystem, with programs that include marine ecology of Delaware Bay, nocturnal ecology of the dune habitats, and exploration of maritime forest and coastal ecosystems.



Indoor programs take place at the Cape Henlopen's Seaside Nature Center's auditorium, and can accommodate up to 60 participants; however, most of the time, students are out in the park, exploring the environment.

Students and teachers stay in dorm-style housing, with separate bathhouse facilities (toilets and showers). A mess hall is located within the youth camp boundaries. Participants provide their own bedding, towels and toiletries. The REECH facilities are accessible and a beach wheel chair is available to provide some access for most of the field programs.

Meals are catered and served buffet style.

To find out whether your school is qualified for funding through the Jim O'Neill Scholarship or the Thatcher Education Fund, or for more information on REECH, visit [destateparks.com/SchoolGroups/REECH](http://destateparks.com/SchoolGroups/REECH).



Show your students how fun learning can be...try REECH at the beach!



# Fort Miles Museum and Historical Area

## at Cape Henlopen State Park

Call (302) 645-6852 to register

Students will discover Battery 519, the Cantonment Area and even a Fire Control Tower as they step back to the days of World War II and the Cold War and learn what it was like to guard the eastern seaboard.



### FORT MILES - COASTAL DEFENDERS

Grades 4 – 12

1 hour

Learn how Fort Miles protected Delaware Bay during World War II and discover the role of Battery 519 in defending our coast.

**\$5 per student, \$65 minimum**



### FORT MILES - TOWERS AND GUNNERS

Grades 5 – 9

1 hour

What did it take to accurately operate the artillery at Fort Miles? Students will work as a team to target, plot and "fire" the guns.

**\$5 per student or \$55 minimum**



### PIRATES, PISTOLS & PLUNDER

Grades 3 – 5

1 hour

Learn about the pirates who prowled the Delaware coast and use basic mapping skills to uncover the myths and mysteries of this bygone era. Can also be presented at your site.

**Standard:**

H1.4-5, H2.4-5, H3.4-5, H4.4-5
--------------------------------

**\$5 per student or \$65 minimum**



### GEOCACHING THE CAPE: HISTORY'S TREASURES

Grades 4 – 8

1 hour, 15 minutes

Use Global Satellite Position (GPS) technology to explore the natural and cultural history of Cape Henlopen and discover its hidden histories. Using found artifacts, students will learn about historical events and put them into geographical context. Maximum 16 students.

**Standard:**

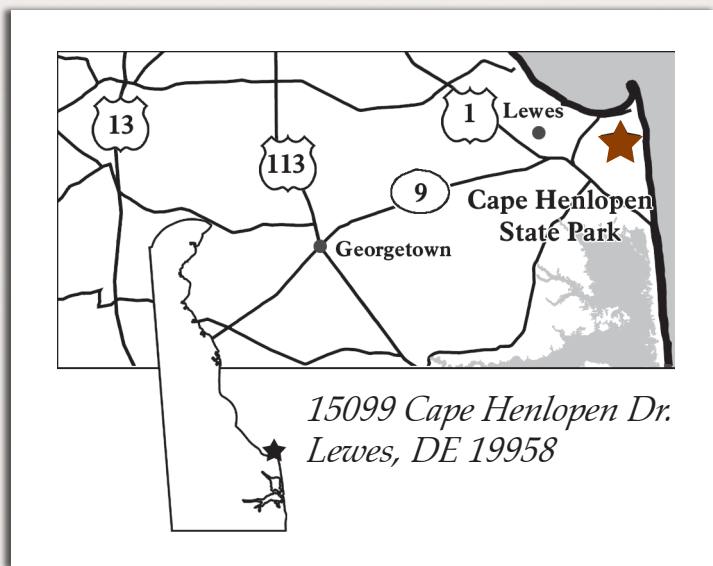
H4.4-5, 6-8	G3.4-5
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**\$5.50 per student or \$65 minimum**



**We are partnering with Fort Delaware!**  
See program details on p. iii.





***These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.***



# Delaware Seashore State Park

Call (302) 227-6991 to register

Tidal estuaries and marine habitats are the focus of the park's environmental programs, while the U.S. Life-Saving Service takes center stage in history programs.



## SEINING THE BAY

Grades 1 – 4

1 hour

Pull a 30-foot net through the shallow waters of Rehoboth Bay. Gather critters and plants and get an up-close view of the creatures that call the bay home. Learn about their habitats and special adaptations before returning them to the bay.

**Standard:**

1-LS3	2-LS4	3-LS1, 3-LS2, 3-LS4	4-LS1
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\$5 per student



## MARSH WALK

Grades 2 – 12

45 minutes

Learn about the importance of wetlands in Delaware's Inland Bays as you make your way through the muddy waters of a salt marsh. Students will learn how to identify marsh grasses and their various adaptations to living in such a harsh, salty environment. With some luck, the group may get to see Osprey, herons, horseshoe crabs or even a diamondback terrapin along the way.

**Standard:**

2-LS4, 2-ESS2	3-LS4	4-LS1, 4-ESS2, 4-ESS3	5-LS2
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\$5 per student



## SHIPWRECKS & BURIED TREASURE

Grades 4 – 9

1 hour

Students will learn about Delaware's maritime history and will venture outside with GPS units and geocaching skills to locate "buried treasures" on the beach.

**Standard:**

H1.4-5, 6-8, 9-12
-------------------

\$5 per student



## LIFE OF A SURFMAN

Grades 4 – 10

45 minutes

Learn about the day-to-day life of a surfman while touring the Indian River Life-Saving Station, one of the oldest buildings along the coast!

**Standard:**

H1.4-5, 6-8, 9-12
-------------------

\$5 per student



## SQUID DISSECTION: FROM PEN TO INK! (STEM)

Grades 2 – 8

1 hour

Study one of the most specialized invertebrates of the sea! A park naturalist will guide participants in a dissection, and at the end of the program, students will cook up our study specimens and enjoy them as calamari! Can also be scheduled as a field trip.

**Standard:**

2-PS1, 2-LS4	3-LS1, 3-LS4	4-LS1	MS-LS1
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\$6 per student





## BUILD & FLY A KITE (STEM)

Grades 3 – 6

45 minutes

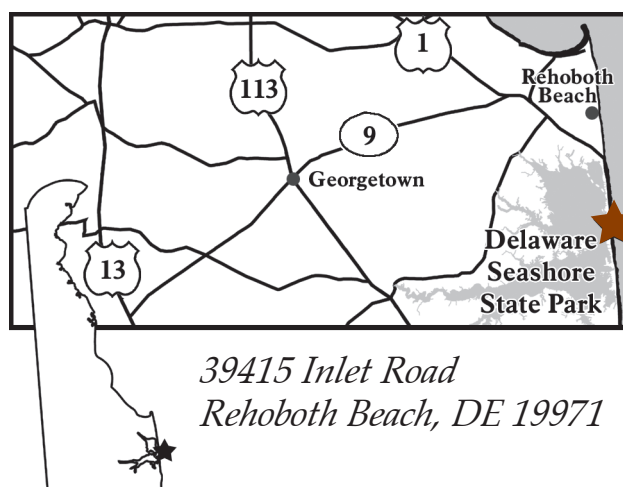
Have fun while learning about modern uses of wind energy, updrafts and the physics behind flight. Each student will make their own kite to take home. Can also be brought to your site.

**Standard:**

3-PS2	4-PS3, 4-ESS3, 4-ESS3	5-ESS3	MS-ESS2
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\$6 per student

*This program was a great fit with our curriculum...great way to see the vocabulary we are teaching used out in the world!*



39415 Inlet Road  
Rehoboth Beach, DE 19971

**These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.**



# Project WILD!

Through the use of balanced curriculum materials and professional training workshops, Project WILD accomplishes its goal of developing awareness, knowledge, skills, and commitment.

To do this, Project WILD coordinators in each state offer workshops for educators, both formal and informal, for grades K through 12. These workshops provide interdisciplinary conservation and environmental education materials focusing on wildlife, and are designed to be used in classrooms, for youth groups, and in nature centers.



## JOIN US TO RECEIVE TRAINING IN THIS WIDELY RECOGNIZED ENVIRONMENTAL EDUCATION PROGRAM THAT CORRELATES TO NGSS.

- Participate in fun, interactive activities
- Network with other educators—share ideas, strategies, and stories!
- Expand your knowledge of Delaware's wildlife.

Attend a K – 12 workshop and receive the Project WILD and Aquatic WILD K – 12 Activity Guides plus other great resource materials. The workshop fee of \$20 includes all of the Project WILD curriculum materials.

**Workshops are scheduled through a Project WILD state coordinator. To schedule a workshop, or for additional information, call (302) 793-3046 or e-mail [Claire.Mickletz@state.de.us](mailto:Claire.Mickletz@state.de.us).**

**PROJECTWILD.ORG**

# Project Learning Tree!

The Delaware Department of Agriculture's Forest Service offers Project Learning Tree (PLT) workshops. At the PLT workshop, you will have access to instructional resources for PreK to 12. These include practical, hands-on, and fun activities that are aligned with academic standards, including the Next Generation Science Standards, Common Core State Standards, and more. In addition, PLT connects with non-formal education programs such as scout groups and others.



PLT's professional development helps educators learn how to integrate environmental education into their teaching and become comfortable teaching outdoors—in urban, suburban, and rural environments. Besides workshops, training can include in-service days, a semester-long series of classes, or an online course for early childhood, K – 8 and tips on how to become a GreenSchool.

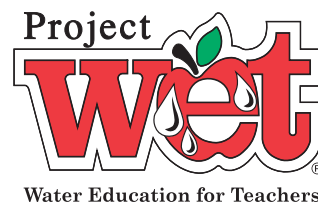
**To learn more about Project Learning Tree, contact the state coordinator call (302) 698-4551 or e-mail [Ashley.Melvin@state.de.us](mailto:Ashley.Melvin@state.de.us).**

**PLT.ORG**

**Interested in both programs? These workshops can be scheduled at the same time. Just let the ProjectWILD or Project Learning Tree coordinator know when you schedule your workshop.**

# ProjectWET

ProjectWET seeks to provide teachers, students, parents and communities the value of water and how to take action to preserve the waterways. The curriculum includes activities focused on watersheds, water quality, floods, water conservation, and more. By attending a workshop, formal and informal educators will have access to maps, posters, and other resources about diverse water topics that are appropriate for all grade levels.



Educators who attend the workshops receive the Curriculum and Activity Guide, access to web resources including how the program relates to Next Generation Science Standards and Common Core Standards, lunch, and the opportunity to join a worldwide network of teachers and educators.

**Call (302) 875-5163 or e-mail [William.Koth@state.de.us](mailto:William.Koth@state.de.us) to schedule a group of 10 or more.**

**PROJECTWET.ORG**



# Mobile Science Lab

Science at Your Door!  
Let us bring our Mobile Science Lab to you!

Naturalists from Trap Pond State Park are ready to bring a laboratory to your school for exciting programs for your students in grades 3 to 9. They will stay for one 45-minute program or up to three hours presenting four different topics and save you the trouble of arranging a field trip. Students will conduct experiments, collect data and learn how different forces impact the watershed.

The Mobile Science Lab costs \$15 per student, per program.

Call (302) 875-5153 to schedule a visit to your site for one or all of these programs:

## THE POWER OF WATER

Although this program was designed for students 8 – 14, it has something to offer everyone. Using fun activities and experiments, students will learn how mass and velocity affect the energy in moving water. They will also learn about erosion and water pollution.

## WATER QUALITY TESTING

Students will get a brief introduction to water testing parameters including pH, dissolved oxygen, salinity, and turbidity using the latest equipment. We will bring our 80-gallon water tank to demonstrate. Students will learn how these parameters affect the environment and their importance in water management.



## AQUATIC ANIMALS

Students will see and handle aquatic invertebrates, fish, and insects that inhabit Trap Pond. They will learn about the animals' habitats, adaptations, life cycles and importance to the environment.

## WATERSHED/NONPOINT SOURCE MODEL "ENVIROSCAPE"

Designed for all ages, this hands-on interactive demonstration shows the sources and effects of water pollution, and demonstrates ways to prevent it. Students will see how storm water runoff carries pollutants through the watershed and the best management practices to prevent this type of pollution from occurring.

### Addresses these standards:

K-LS1-1

2-LS4-1

3-LS3-2

5-PS3-1, 5-LS2-1, 5-ESS2 (1, 2), 5-ESS3-1,

5-PS1 (2, 3, 4)

Math 3.OA.C.7



# Trap Pond State Park

Call (302) 875-5163 to register

Programs at Trap Pond focus on watershed habitats, ornithology and biology, and may include hikes on land or an exploration of the baldcypress swamp by pontoon boat. Or, let us bring our science lab right to your school!



## SCIENCE AT YOUR DOOR

Grades 3 – 9

45 minutes – 3 hours

We will bring our Mobile Science Lab right to your school! Students can learn about The Power of Water, Aquatic Animals, Water Quality Testing and Watershed/Nonpoint Source Model “EnviroScape.” Park interpreters will help students conduct experiments, collect data and learn how different forces impact the watershed. The Mobile Science Lab costs \$5 per student, per program. See page 35 for details and how to arrange a visit to your site.

**Standard:**

K-LS1	2-LS4	3-LS3	5-PS1, 5-PS3, 5-LS2, 5-ESS2, 5-ESS3	Math 3.0A.C.7
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## EXPLORING A SOUTHERN SWAMP, PONTOON TOUR

Grades K – 6

1 hour

Hop aboard our pontoon boat and discover the Baldcypress Swamp. The unique habitat has made it an attractive place for people and animals alike to make their homes.

**Standard:**

K-ESS3, G1.K-3, G2.K-3, H1.K-3	2-LS2, 2-LS4	3-LS4
4-ESS3, G1.4-5, G2.4-5, H1.4-5	5-LS2	MS-LS2, MS-LS4, MS-ESS3, G2.6-8, H1.6-8

\$5 per student



## FRESHWATER SEINING OR DIP NETTING

Grades K – 2

2 – 4 hours

Examine some of Trap Pond’s underwater life during this fun program. Students and chaperones may get a little muddy as they learn about lifecycles and the environment.

**Standard:**

1-LS1	2-LS2
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\$6-7 per student



## TRACKS AND TRACES

Grades K – 2

1 hour

This program introduces students to the types of animals that can be found in the park. On this guided hike students will find clues that will help them discover what animals live here and gain some helpful hints for viewing wildlife.

**Standard:**

K-LS1, K-LS2	1-LS1, 1-LS2	2-LS1, 2-LS2
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\$5 per student





## WATERS OF THE CHESAPEAKE

Grades 3 – 5

2.5 hours

Students will explore the Baldcypress Swamp aboard our pontoon boat. They will follow an imaginary water drop from Trap Pond as it makes its way to the Chesapeake Bay. The program also includes exercises in outlining watersheds and a brief introduction to water quality testing that will show the importance of water management and pollution control.

**Standard:**

<b>3-LS4, G1.K-3, G2.K-3, H1.K-3</b>	<b>4-ESS2, G1.4-5, G2.4-5, H1.4-5</b>	<b>5-ESS2</b>	<b>MS-LS2, MS-ESS2, MS-ESS3, G1.6-8, G2.6-8, H1.6-8</b>
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**\$12 per student**



## USING A MAP AND COMPASS

Grades 6 – 10

1 hour

Countless generations have used maps to help understand the land around them. Students will learn how to read and use maps to explore the park.

**Standard:**

<b>MS-ESS3, M.7.G.1; H3.6-8, G1.6-8, G2.6-8</b>	<b>HS-ESS3, H3.9-12, G1.9-12, G2.9-12</b>
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**\$5 per student**



## NIGHT HUNTERS

Grades 3 – 6

45 minutes

Almost all of an owl's adaptations help it to live and hunt at night. Our traveling naturalist will bring taxidermy and lots of presentation materials that your students can see, handle and hear while learning many of the unique adaptations of our "night hunters." For a small additional materials fee, we can also have your students dissect an owl pellet to learn about the owl's diet.

**Standard:**

<b>3-LS4</b>	<b>5-LS2</b>	<b>MS-LS2, MS-LS4</b>
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**\$95 +materials (additional mileage charge for 25 miles or more travel)**



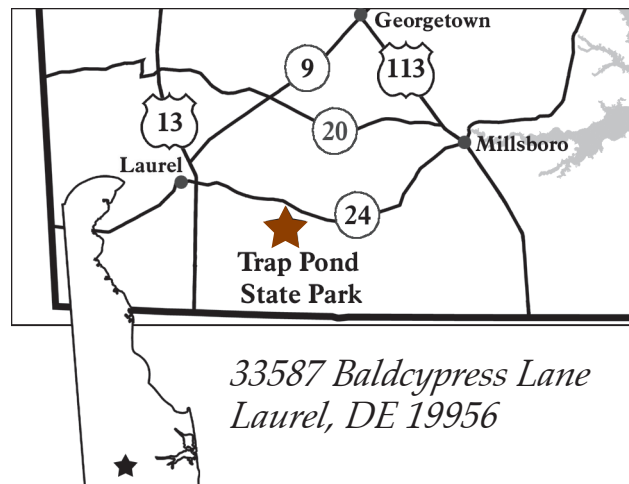
## HEALTHY KIDS DAY

Each year since 2008, Trap Pond State Park has hosted Healthy Kids Day. The program, typically held in April or May is free for fourth grade students in Sussex County Delaware. Children attend demonstrations and participate in activities that promote a healthy lifestyle. Thousands of students have participated since the program began.

Children attend a stage show featuring the Nutrition Magician who informs students about healthy eating. Each student participates in field games and activities to introduce them to various forms of physical play. Thousands of children, representing the majority of students in Sussex County, Delaware schools have attended Healthy Kids Day. Those students continue to come to the park, practice outdoor recreation, living a healthy lifestyle and building a sense of ownership that they will carry forward.

The program is offered through a partnership between Delaware State Parks and the Division of Public Health.

**Free**



*These are not the only programs we offer. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a full listing.*



# Delaware Coastal Programs

## **St. Jones Reserve**

818 Kitts Hummock Road  
Dover, DE 19901

## **Blackbird Creek Reserve**

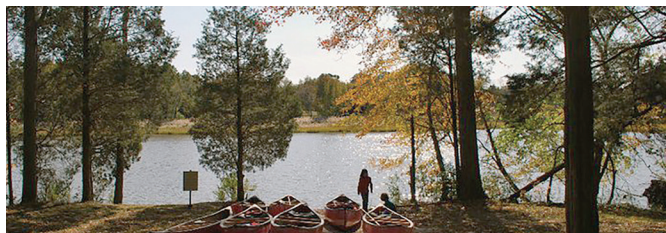
801 Blackbird Landing Road  
Townsend, DE 19734

## **Education Coordinator:**

(302) 739-6377 • <https://de.gov/dcpeducation>



The Delaware Coastal Program (DCP) is made up of the Delaware Coastal Management Program and the Delaware National Estuarine Research Reserve and is tasked with protecting and enhancing Delaware's coastal resources. To help achieve this mission, DCP offers educational field trips, outreach into classrooms, and teacher professional development workshops for K – 16 based on the research DCP scientists complete within the Delaware Bay estuary. All programs are offered free of charge, however some require a deposit that is returned after the completion of the activity.



## **LAND, WATER, AND DELAWARE HISTORY**

### **Grade 4**

This field trip is provided in partnership with the neighboring John Dickinson Plantation and includes three activities that focus on land and water interactions at the St. Jones Reserve and three activities at the John Dickinson Plantation on colonial uses of water in Delaware. These trips are offered on Tuesdays and Wednesdays, September – June.

## **MOCK MARSH TRANSECTS**

### **Grades 8 – 12**

This activity can be completed both on-site at the St. Jones or Blackbird Creek Reserve, or can be brought into your classroom. Students build and use a model to study how sea level rise will affect Delaware's coastal marshes. Upon completing this activity students will understand the drivers of climate change and sea level rise, the effect sea level rise will have on coastal marshes and Delaware communities, and basic wetland ecology.



## **HORSESHOE CRABS**

### **All Ages**

Depending on the age of the students there are a variety of activities centered on the Delaware state marine animal the Atlantic horseshoe crab available to choose from. These include experiments with LAL, labs to study their anatomy, their connection with migratory shorebirds, and how researchers study the crabs and track their numbers in the Delaware Bay. Depending on the time of year, live crabs will be on hand to share with the students. All activities can be done as a field trip or at your site the classroom.

## **TEACHERS ON THE ESTUARY (TOTE) TEACHER PROFESSIONAL DEVELOPMENT**

A research and field-based teacher training initiative of the National Estuarine Research Reserve System (NERRS). The goal of TOTE is to improve teachers' and students' understanding of the environment using local examples and to provide resources and experience to support the incorporation of estuary and watershed topics into classroom teaching. The course is also designed to promote stewardship of watersheds and estuaries. The teacher workshop includes lessons from the National Estuarine Research Reserve's Estuaries 101 Curriculum in which students become more "oceans-literate" by increasing their knowledge of coastal and estuarine science and their awareness of how coasts and oceans affect their daily lives. All activities are aligned to NGSS and cover a different topic from year to year. <http://de.gov/dnerrpd>



*DNREC Division of Fish and Wildlife*

# Aquatic Resources Education Center (AREC)

*2520 Lighthouse Road  
Smyrna, DE 19977*

The new Aquatic Resources Education Center is a featured stop along the scenic Delaware Bayshore Byway. It offers sweeping views of the marshlands at the Woodland Beach Wildlife Area east of Smyrna plus an array of resources that teachers can use to enrich their educational programs focused on aquatic themes. The AREC complex has a new building, four ponds, a picnic pavilion, and a 900-foot boardwalk for viewing the marsh. Resources include the Eco-Explorers field trip program for fifth grade students, teacher workshops on the *Green Eggs and Sand* (horseshoe crab-shorebird) curriculum, and wetland activity and monitoring kits that teachers can borrow to use in their classrooms.

There is also the rustic 40-bed Mallard Lodge for overnight trips, and the *Take a Kid Fishing!* program for families.

For more information, visit [www.de.gov/arec](http://www.de.gov/arec) or contact Mary Rivera at [mary.rivera@state.de.us](mailto:mary.rivera@state.de.us).

The Delaware Division of Fish and Wildlife also offers Hunter and Boater Education courses that are open to students. For more information on opportunities for Hunter Education, visit <http://de.gov/huntersafety> and for more information on opportunities for Boater Education visit [www.de.gov/boatsafety](http://www.de.gov/boatsafety)



## DuPont Nature Center Slaughter Beach

*2992 Lighthouse Road  
Milford, DE 19963  
(302) 422-1329*

Visitors can learn about horseshoe crabs, migratory shorebirds, waterfowl and the Delaware Estuary. Interior exhibits include the history of Slaughter Beach and the famed Mispillion Lighthouse, and educational information on horseshoe crabs, shorebirds, waterfowl and plant life of the Salt Marsh. The DuPont Nature Center is open April 1 through September 30.

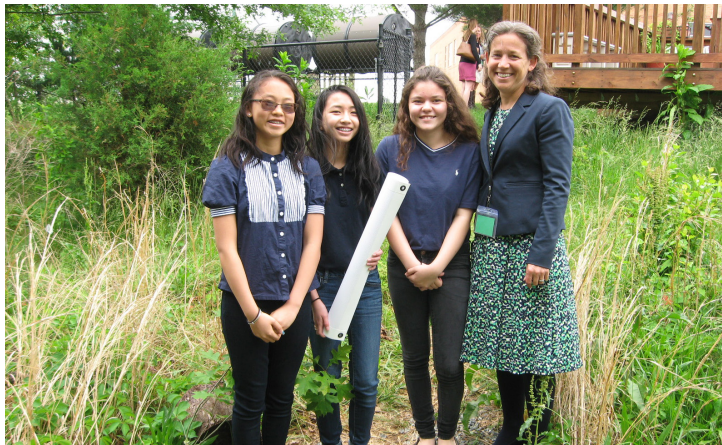


# Solid and Hazardous Waste Management Section (SHWMS), Recycling Program 🏢

*89 Kings Highway  
Dover, DE 19901  
(302) 739-9403 x8*

SHWMS offers no cost, on-site waste assessments to schools throughout Delaware to assist teachers and staff with implementing and expanding recycling programs. These assessments are offered to any public, private, or charter school, to entire school districts, and colleges and universities, including technical colleges and trade schools.

We are available to come to your school to offer no cost, on-site waste assessments to assist your school with implementing and expanding recycling programs; to perform waste audits; offer presentations; or other instructional services related to recycling and trash reduction and reuse.



Our goal is to effectively reach all schools in Delaware with our outreach and no-cost waste assessments to instill in students the importance of recycling and waste reduction in our state.





Department of Agriculture

# Delaware Forest Service

*[dda.delaware.gov/forestry](http://dda.delaware.gov/forestry)*

**Blackbird Forest  
Education Center**

*20 Cedar Brae Lane  
Townsend, DE 19734*

**Redden Forest  
Education Center**

*18074 Redden Forest Drive  
Georgetown, DE 19947  
[Ashley.Melvin@state.de.us](mailto:Ashley.Melvin@state.de.us)*



Operated and managed by the Delaware Forest Service, both Education Centers house a variety of interactive displays showcasing Delaware's forests and their management. Visitors can learn about the lifecycle of a forest, beneficial insects and invasive species, forest products, urban forestry, wild land firefighting, tree identification, wildlife and more. Each features classroom space for students and teachers to participate in environmental activities in conjunction with an outdoor educational trail. Programs are offered to all groups at no cost.

The Blackbird and Redden Forest Education Centers are open by appointment for private tours and programs upon request. The buildings can also be reserved for teacher professional development retreats and meetings.





# PLANNING YOUR FIELD TRIP

Here are some tips to help you negotiate the registration process and pre-trip preparation to make your field trip a success. If at any time you have questions or requests, talk to the park interpreters; they want the best experience for your group.

## PREPARE YOUR STUDENTS

An outdoor field trip may be new to some students. Set them up for success by visiting the park's website and sharing what they will see and do.

### Clothing

Students, teachers, and chaperones should dress for the weather and be prepared to get dirty. Wear flat, closed-toe shoes (like sneakers). If it's rainy or snowy, everyone should come prepared for wet and muddy feet. If your program takes place on or near water, your students will get muddy feet even on a sunny day.

### Pre-Visit Activities

Bring a park interpreter to your classroom to complement your field trip; you may qualify for a discount. In any case, talking to your students about what they will be doing will enhance their experience and help them grasp what they will be learning.

## CONTACT DELAWARE STATE PARKS TO REGISTER FOR A PROGRAM

Delaware State Parks has made it as easy as possible to schedule your field trip. Visit [destateparks.com/SchoolGroups](http://destateparks.com/SchoolGroups) for a complete list of program descriptions, park information, policies, and contact information.

### Choose a Date

Springtime weather is great for a field trip, but testing and other activities often interfere. The fall can also be a popular time to book trips as the weather begins to change. Plan early to make sure you get the dates you want for your group.

Consider booking your field trip in the late fall, winter or early spring. If your program is not specific to the season, you may have more flexibility than in more popular months.

If you are planning to visit during the peak field trip months, consider an afternoon start time. Most schools visit in the morning; if you have some flexibility or are registering for an overnight program where available, an afternoon start time will ensure more program dates.

### *Field Trip Checklist*

#### **What you will need before you call the park that you plan to visit:**

- ☐ Several possible dates
- ☐ Time frame the group can be at the park
- ☐ Programs or subjects of interest
- ☐ Potential numbers of students and parents
- ☐ Special needs or requirements from the group

#### **What you will need to do before your visit:**

- ☐ Gather final attendance numbers
- ☐ Arrange for funding and payment
- ☐ Complete the school bus exemption form at [destateparks.com/downloads/busform](http://destateparks.com/downloads/busform)
- ☐ Complete registration paperwork
- ☐ Prepare your class for what to expect and appropriate clothes to wear
- ☐ Make plans for lunch location and time



## HOW TO DEFRAY YOUR COSTS

Your district or PTA may have guidelines and approved sources for funds. Here are a few suggestions for alternative ways to raise funds for your school's outdoor learning experience.

Get the most for your field trip dollar by booking multiple programs at parks each other. The park interpreters will work with you to coordinate programs like these.

### Scholarships

Some of our parks offer scholarships to cover student participation fees. Some even have money available to cover bus costs. These funds are available through the park Friends groups. Check with the interpreter to learn more about who qualifies and how to apply.

### Take a Walk

Consider walking your students to a nearby park. Map your walk ahead of time and ask the park interpreter about any short cuts. If you are close enough to walk to the park, you can visit multiple times. Children will enjoy being outside in addition to a fun field trip experience.

## ARRIVALS

Buses should arrive on-site 15 minutes before the scheduled program. The park interpreter will let you know where to meet and details about bus parking when you call to register.

## LUNCHES

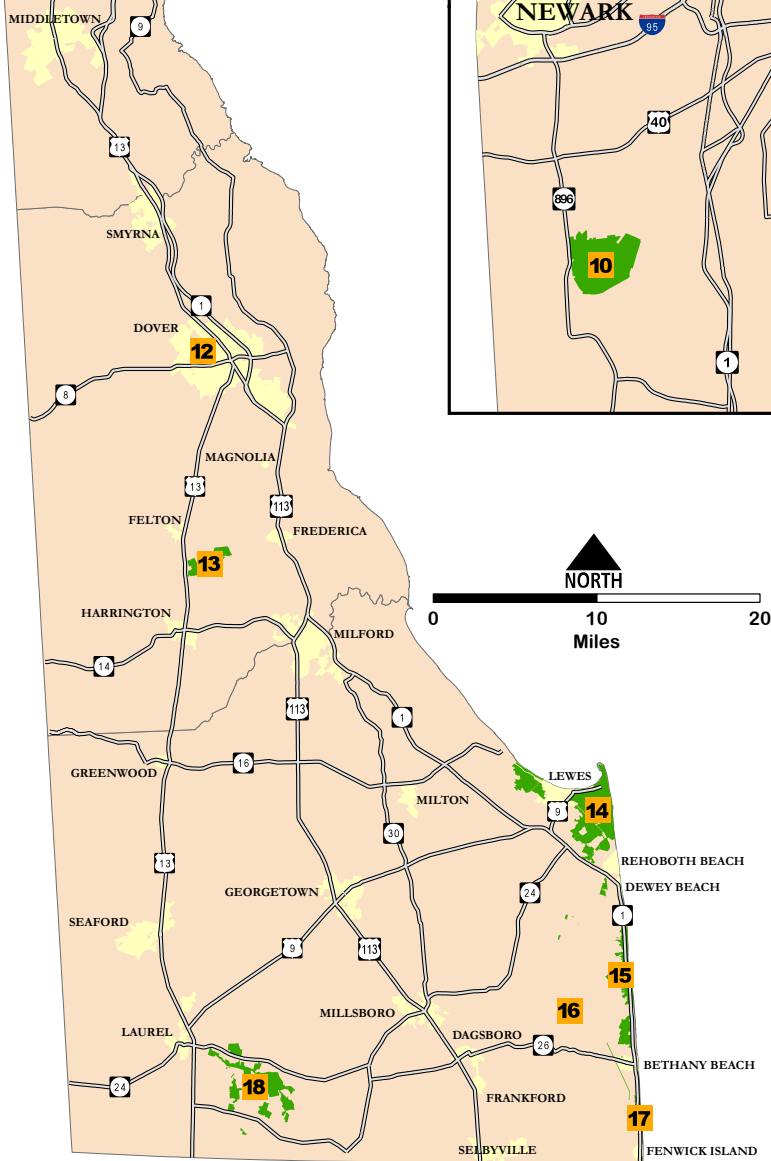
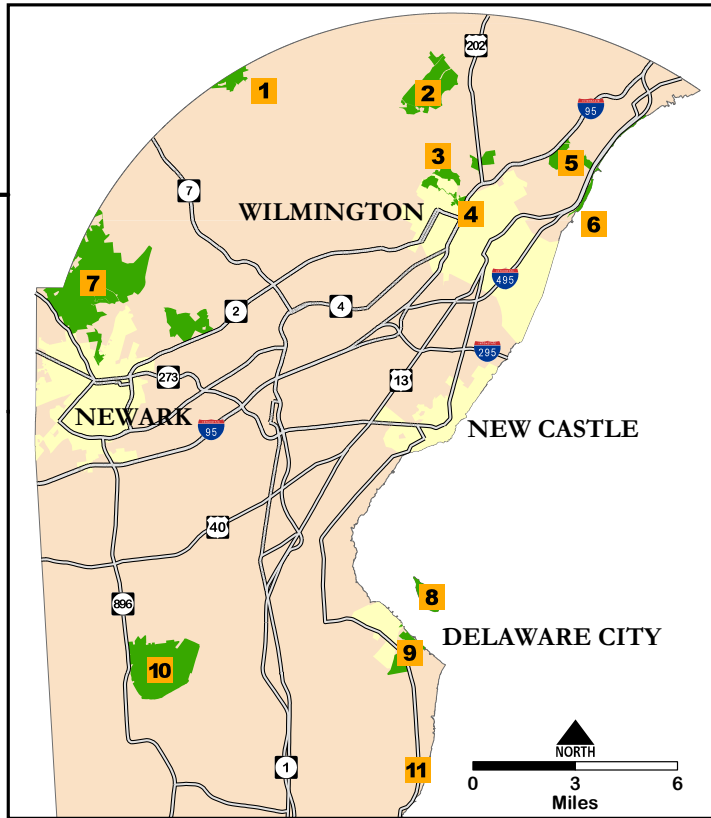
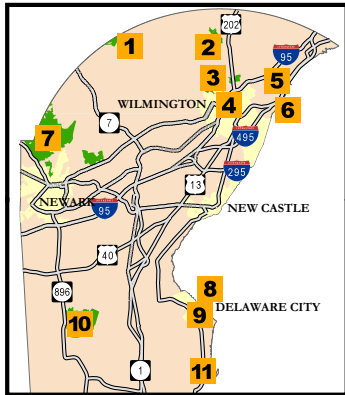
Make lunch a part of the program! The park interpreter can identify areas available to your group to eat and play. Pavilions are available for rent to ensure a sheltered spot to eat lunch.

## TRASH FREE PARKS

All Delaware State Parks have a carry-in, carry-out trash policy. Trash collection is part of the pavilion rental fee, so if you're not using a pavilion, bring bags for your lunch trash so you can take it with you.







- 1** Auburn Heights Preserve
- 2** Brandywine Creek State Park
- 3** Alapocas Run State Park
- 4** Wilmington State Parks/  
Brandywine Zoo
- 5** Bellevue State Park
- 6** Fox Point State Park
- 7** White Clay Creek State Park
- 8** Fort Delaware State Park
- 9** Fort DuPont State Park
- 10** Lums Pond State Park
- 11** Port Penn Interpretive Center
- 12** First State Heritage Park
- 13** Killens Pond State Park
- 14** Cape Henlopen State Park
- 15** Delaware Seashore State Park/  
Indian River Marina/  
Indian River Life-Saving Station
- 16** Holts Landing State Park
- 17** Fenwick Island State Park
- 18** Trap Pond State Park







# Set Your Students on their Path to a Career

## Volunteer

Tweens,  
Families,  
Clubs, Groups



## Youth Conservation Corps

Summer jobs and  
outdoor experiences for  
16- to 21-year-olds statewide.



## Internships

College-level experiences  
in a variety of fields —  
environmental education, history,  
and business, among others.

 Delaware State Parks



Help Your Park  
**VOLUNTEER**



**(302) 739-9193**

**[destateparks.com/volunteers](http://destateparks.com/volunteers)**

**[DNREC\\_HelpYourPark@state.de.us](mailto:DNREC_HelpYourPark@state.de.us)**

The Department of Natural Resources and Environmental Control  
is committed to affirmative action, equal opportunity  
and the diversity of its workforce.

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