

Directions to the Richard M. Nixon Environmental Education Center

I-83 to exit #14 (Leader Heights).

Take Leader Heights Road west to South George Street.
(Follow signs from Leader Heights Road)

Turn left on South George Street.

Turn right on Valley Road in Jacobus.

Follow road .8 mile to bottom of hill and turn right onto
Nixon Drive.

Go one block, turn left and follow to park.

Administrative Headquarters

400 Mundis Race Road

York, PA 17406-9721

phone: (717) 840-7440

FAX: (717) 840-7403

website: yorkcountyparks.org

Open Monday - Friday
8:30 a.m. to 4:30 p.m.

Teacher's Handbook

The Richard M. Nixon Environmental Education Center



5922 Nixon Drive, York, PA 17403 (717)428-1961

e-mail: nixoncountypark@york-county.org

website: yorkcountyparks.org



Biodiversity Day



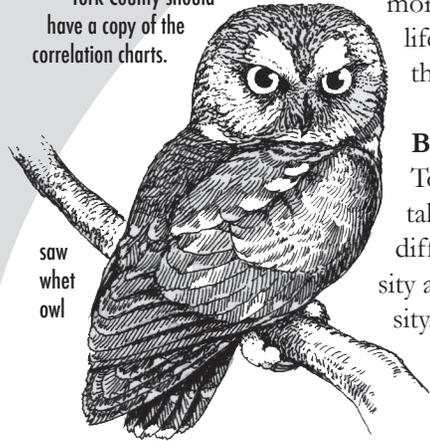
broad winged hawk

4th Grade & Up

Our programs have been correlated to the Environment and Ecology Academic Standards. Each school building in York County should have a copy of the correlation charts.

Bioblitz Survey

A park naturalist will lead the students in exploring, in great detail, one small square of a natural area within the park, taking an inventory of all living things within the square. Students will develop observation and identification skills as they identify plants, animals, fungi, and more. They will become aware of the variety of life in their park in addition to understanding the interaction of these living organisms.



saw whet owl

Biodiversity Hike

To understand the bigger picture, students will take a hike in the park, exploring several different habitats, discussing threats to biodiversity and learning how to help preserve biodiversity. Past, present and future environmental impacts on changing biodiversity will be examined.

Biodiversity Scavenger Hunt

There are indoor and outdoor versions of this scavenger hunt. A booklet of questions focuses the students' attention on the variety of life in our world and the interaction of different life forms. They will examine habitats, food chains, endangered species, and helpful and harmful natural interactions. Teachers will need to supervise the students during this activity.

Biodiversity, or biological diversity, is the sum total of the variety of life and its interactions and can be divided into genetic diversity, species diversity, and ecosystem diversity. Students will participate in different activities to enhance their understanding of the variety of life and interconnectedness of living things in our world. Each program is one hour long.

deer mouse



Attention Teachers

HOURS

Tuesdays-Saturdays
8:30am-4:30pm

Sundays
Noon-4:30pm

Mondays & Holidays
Closed

All questions and scheduling may be directed to one of the naturalists at (717) 428-0356.

The Richard M. Nixon Environmental Education Center in York offers a variety of guided nature tours and environmental education programs.

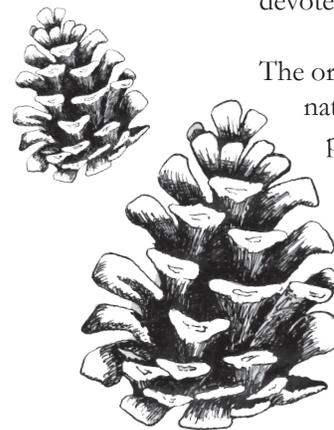
Professional naturalists and trained volunteers provide these programs. This booklet includes scheduling information, indoor and outdoor program lists, and other pertinent information. We hope the information provided will answer questions you may have.

If you or your classes have not visited recently, or if you have never taken advantage of our facilities, you are in for a treat. You will want to come visit us ahead of time to prepare for your field trip.

History

In accordance with the Americans with Disabilities Act (ADA), those individuals needing accommodations for access within York County Parks should please call the County of York at (717) 771-9099.

The 161 acres of Nixon Park are located in the southeast uplands of York County near Jacobus, PA, in the piedmont physiographic province. The grounds include portions of three watersheds, ridge top and riparian forests, old fields and meadows making it well suited to the study of a wide range of physical, environmental and biological science topics in an outdoor setting. Established in 1968, Nixon Park was named in honor of the newly elected President and is the only one out of the ten York County Parks devoted solely to environmental education.



The original Nature Center, which highlights Pennsylvania's natural history, was built in 1978. In 1992 a spectacular private collection of animals from around the world was added in dramatic three-dimensional dioramas. The displays are perfect teaching tools for discussions on physical adaptations, habitat preservation, the importance of conservation, geography, politics, and economics.

Registration Costs & Fees

All groups of 10 or more, whether scheduling for a field trip or visiting on your own, must pre-register. To do so, call the Nature Center at (717) 428-0356 and ask to speak with a naturalist.

Field trips are free for York County Schools. As a York County Park, we are proud to offer area residents a quality educational experience free of charge. Donations are always appreciated.

The cost for schools outside of York County is \$2.00 per student. There is no charge for teachers or chaperones. Checks can be made out to Nixon County Park Nature Center.

Pre & Post-Trip Lesson Plans

Pre and post-trip lesson plans are now available on CD to enhance field trips to Nixon Park. The lesson plans have been developed by teachers for use in the classroom. The activities are divided by topic and grade level (Grades K-2, 3-5, and 6-8). When you schedule your field trip, we will mail the appropriate CD to you. Please use the lessons before or after your field trip to make the students' experience more meaningful.

The lessons are .pdf files and can be viewed and printed with the use of Adobe Reader. A copy of Adobe Reader is included on the CD if you do not have it. Please remember to keep the CD on file for use with future visits.



My Side of the Mountain

My Side of the Mountain Review and Journaling

A park naturalist will review the story with the students and discuss the importance of Sam's journal. Students will then go out to individual spots along the trail to make nature observations in their journal.

Edible Plants Walk

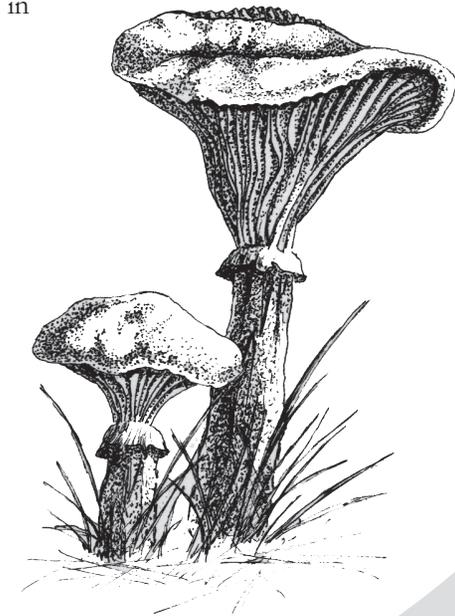
Students will take a walk to discover edible plants, teas, and seasonings. They will discuss the foods that Sam found on his mountain and will sample various edible plants in season.

Birds of Prey

Sam raises and trains a young peregrine falcon he names Frightful. Frightful not only catches food for Sam, but becomes a companion as well. This program will cover the natural history of raptors as well as their physical adaptations and role in nature.

4th Grade & Up

Students will have to read Jean Craighead George's Newberry Medal winning story *My Side of the Mountain* before the field trip. After following the adventures of young Sam Gribble and his falcon, Frightful, in their year of survival in the Catskill Mountains, they will visit Nixon Park for a day of related programs. Each program is one hour long.



Theme Days

Watershed Day

4th Grade & Up
Limit: 60

Students will learn about watersheds and water pollution, explore the Nixon Park watersheds, and investigate the quality of water in our stream.

Select up to 4 of the following hour-long programs:

Introduction to Watersheds

Explore watersheds and sources of pollution with the three-dimensional "Enviroscape" watershed model. Students become game pieces in the "Really Big Watershed Game" as they travel downstream and learn the natural and human sources of water pollution.

Watershed Walk

Students take a hike throughout the watershed to identify characteristics of the watershed and the human, plant, and animal actions that affect it.

Watershed Field Investigation: Physical and Chemical Data

Students determine water quality through chemical testing and gather physical data such as velocity, temperature, depth, width, and slope.

Watershed Field Investigation: Biological Sampling

Students collect and examine aquatic organisms to determine water quality. It is recommended that students bring a change of clothes and shoes.

Watershed Journaling

Classroom teachers lead this journaling exercise to help students appreciate and understand natural areas in a watershed.



common whitetail



mayfly

Pre-Registration Checklist

School Name _____

Phone _____

Teacher's Name _____

Grade Level _____

Number of Students _____

Three Date Choices _____

Arrival Time _____ Departure Time _____

Which programs have you chosen?

Will you be eating lunch at the Center? Yes / No

Will you be creating your own scavenger hunt, or do you need one of ours?

Would you like a pre/post trip activity CD to enhance your field trip experience? Yes / No

Will you have any students with special needs or allergies? Please explain.



Remember we are closed Mondays and Holidays.

Please know exactly when your bus must leave the park to return to school.



raccoon tracks



Pointers for a Better Trip

Our programs have been correlated to the Environment and Ecology Academic Standards. Each school building in York County should have a copy of the correlation charts.

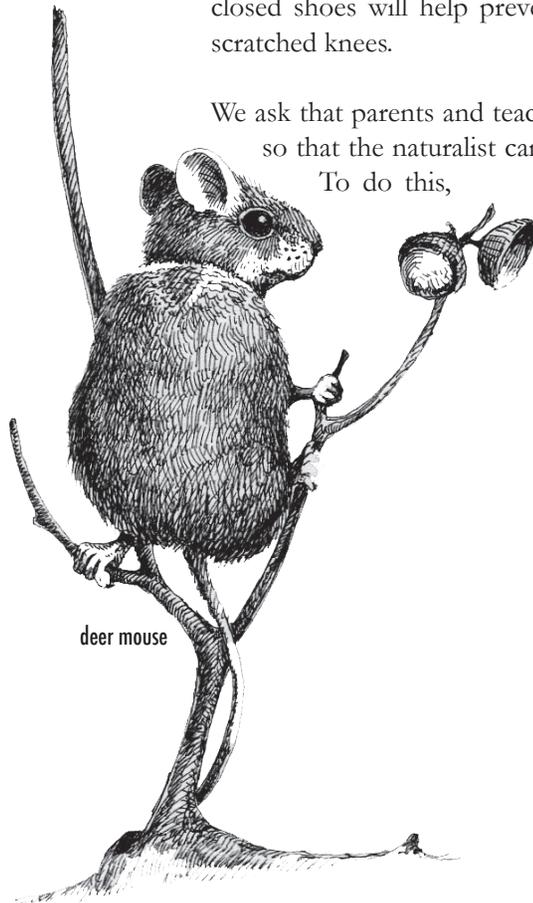
We do not have picnic facilities, but we encourage you to enjoy a quiet lunch on our lawn. York County Parks has a carry in/carry out policy. This means that you must take your trash back with you. Lunches may be kept in cardboard boxes inside the nature center during the programs.

Nametags will help improve the interaction between the naturalists and students. It is also important for students to remain quiet and respectful of the leader even during outside programs.

Dress for the weather. We cannot offer rain dates but will modify programs if possible. Layers are very important when moving into and out of the building. Long pants and closed shoes will help prevent bug bites, poison ivy, and scratched knees.

We ask that parents and teachers help us enforce our rules so that the naturalist can concentrate on the program.

To do this, we require a ratio of 1 chaperone to 12 students. This ratio does not include Nixon staff members.



deer mouse

Going Batty!

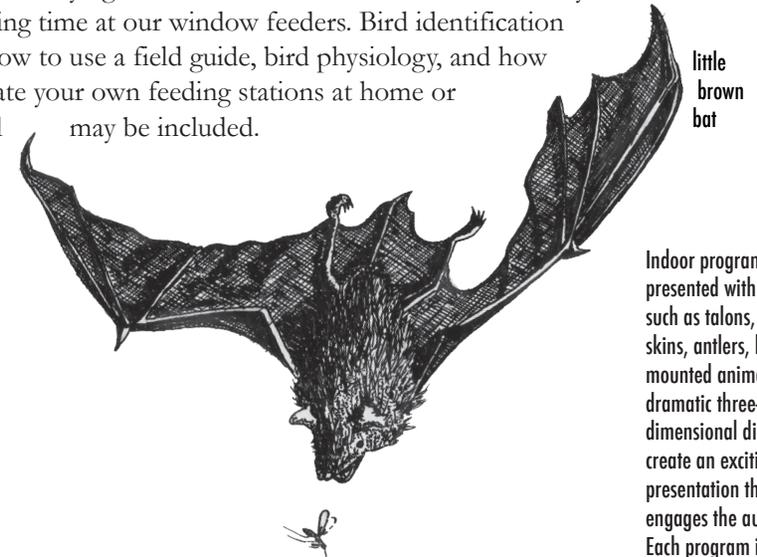
Promotes bat conservation by dispelling the myths about bats and revealing the fascinating facts about these creatures.

3rd Grade & Up

Birds at Your Feeder

A winter program for small groups (20 or less). A slide show identifying common winter birds will be followed by spending time at our window feeders. Bird identification tips, how to use a field guide, bird physiology, and how to create your own feeding stations at home or school may be included.

3rd Grade & Up



little brown bat

Indoor programs are presented with props such as talons, skulls, skins, antlers, life-size mounted animals, and dramatic three-dimensional dioramas to create an exciting presentation that engages the audience. Each program is approximately one hour in duration.

Our programs have been correlated to the Environment and Ecology Academic Standards. Each school building in York County should have a copy of the correlation charts.

Indoor Programs

All Ages **Northwest Territory**
Examines the physical adaptations for sight, sound, and smell that help these animals survive. Under the shadow of the ten-foot Kodiak bear, we will examine claws, teeth, horns, antlers, and furs.

All Ages **An African Safari**
Journey across the Atlantic to the dust, heat, and drama of Africa. From the mighty bull elephant to the elegant impala, we will learn about predators and prey, camouflage, when a tooth becomes a tusk, the art of speed, teamwork, and more.

All Ages **An Arctic Adventure**
Challenges groups to compare their own survival skills with those creatures inhabiting this cold, dry, diverse region of the world. Polar bears, musk ox, wolves and more will accompany us.

3rd through 5th Grade **Insects in Your World**
Explains the habitats, life cycles and fascinating characteristics of insects, our most abundant wildlife. Can include hands-on collecting and identification of insects depending on season.

3rd through 6th Grade **Birds of Prey**
What are the unique characteristics of birds of prey? This program covers the natural history of raptors as well as their physical adaptations and role in nature.

3rd Grade & Up **Reptiles**
Features reptile natural history with a focus on sssnakesss! Explains behavior, life history, the importance of these animals, and how to identify venomous vs. non-venomous snakes.

black swallowtail



Guidelines for Field Trips

by Grade Level

Fox Story-time for Pre-School

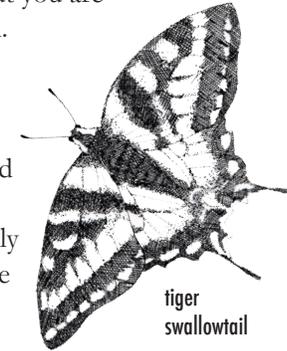
Time: 1 hour

The Story-time includes a delightful nature story and time to freely explore the Center. In winter months (by special arrangement) we offer animal stories by Seneca Indian Gerald Dietz in authentic costume. Snacks and outdoor walks are not part of the schedule, but you are welcome to do activities on your own.

Kindergarten

Time: 1.5 hours

We will take a one-hour general nature walk. The walk will be followed by a brief introduction to the Center and approximately 30 minutes to freely explore the exhibits inside. Snack time is on your own.



tiger swallowtail

1st & 2nd Grade

Time: 3.5 hours

This age group may choose 1 topic from our Outdoor Program list and 1 topic from our Indoor Program list. A Scavenger Hunt may also be chosen. Students will be broken into small groups and rotated through simultaneous sessions. Depending on when you are scheduled, lunch may be taken between sessions.

3rd Grade through High School

Time: 3.5 hours

This age group may choose 1 topic from our Outdoor Program list, 1 topic from our Indoor Program list, and a Scavenger Hunt. Students will be broken down into small groups and rotated through simultaneous sessions. Lunch is part of the schedule.

4th grade and up can also choose one of the theme days: Watershed Day, Biodiversity Day, or My Side of the Mountain. Programming may last up to 4.5 hours, and there is a limit of 60 students.

Outdoor Programs

Outdoor programs include nature walks and environmental studies and last about one hour. These programs serve as an introduction to improving observation skills and increasing one's appreciation of the natural world.



black-eyed susans

All Ages

General Nature Walk

This is an excellent program during all seasons. It gives the naturalist the freedom to discuss what is happening that day and that moment. Upon request, the naturalist can concentrate on habitats, predator/prey relationships, wildlife, or seasons.

K-2nd Grade

Five Senses Walk

Who sees farther? Who smells best? This walk is designed to teach children how animals use their senses and how people can use their senses to improve observation skills.

3rd Grade & Up
Boots or sneakers are necessary.

Geology Walk

A one-mile walk (very steep hill) to discuss the geology of the area. Covers erosion, the role of water, rock and soil formations, minerals and crystals, soil content and value.

3rd Grade & Up

Botany Walk

A walk to discuss the role of plants in natural and human environments. These topics include the differences between herbs, shrubs and trees, why flowers are produced, seed dispersal, basic needs of plants, plant uses, plant structure, etc.

3rd Grade & Up
Closed-toed shoes are required.

Aquatic Study

A program that allows students to explore the stream and/or pond. Includes discussions on the properties and importance of water, special features of a water habitat, physical adaptations of aquatic species, and hands-on collection of aquatic life. It is recommended that students bring a change of clothes and shoes.

Landscaping for Wildlife

Concentrates on how students can create habitats in their backyard or school grounds to provide for the seasonal needs of native wildlife. Covers habitats, natural foods, bird feeders, nesting boxes, butterfly gardens, brush piles, nest site and territorial needs, water, etc.

3rd Grade & Up

Soil: We Can't Live Without It

Discusses the formation of rocks, the differences between rocks and minerals, fossils, geologic time, and soil formation. Also may feature a short slide show on the role of soil in our lives. A nice companion for the Geology Walk.

3rd Grade & Up

Tree Walk

A one-mile walk (with hills) to focus on identification of trees, forest ecology and the role of forests in our lives. This walk can be presented as an introduction to tree identification or as a more advanced lesson including the use of tree keys.

6th Grade & Up

Succession Walk

A one mile walk (with hills) to discuss succession in nature. See various stages of this ecological process as nature modifies habitats. Discuss how wildlife populations change during this process.

6th Grade & Up



spring peeper

Outdoor programs include nature walks and environmental studies. Nature walks and studies are generally at a leisurely pace and last an hour. These programs serve as an introduction to improving observation skills and increasing one's appreciation of the natural world.