WildlandsConservancy

www.wildlandspa.org

90-MINUTE PROGRAM

GRADES PROGRAM GUIDE

School-age children seek to increase their understanding of the world around them, as well as their place in it. Through programs developed by Wildlands Conservancy, children will gain knowledge about the environment while simultaneously building on skills such as literacy, science, math and more. We benefit more than 18,000 school-age children annually, from engaging them in environmental education through wildlife presentations to group-specific field trips and after-school enrichment. All of our offerings encourage children as active, growing learners and future environmental stewards.



Standard-based Learning

All of our program offerings are in line with both Common Core STUDENT State and Next Generation Science standards and aligned with PA Academic Standards. From coming up with curious questions to drawing evidence-based conclusions, these lessons will help guide your students through exciting scientific investigations.

Wild About Watersheds: Field Studies at **Dorothy Rider Pool Wildlife Sanctuary**

These inquiry-based experiences offer meaningful, authentic, place-based learning. Themed hikes and education animals are easily tailored to meet your curriculum needs.

GRADES K-2, 90-MINUTE PROGRAM Habitats

The eastern deciduous forest of North America undergoes seasonal change, allowing every hike to be uniquely themed. Explore the ecology of our pond, meadow and forest habitats. Animal presentations augment the experience and emphasize interactions between a community of living organisms and their nonliving environment. Focus options are as varied as your imagination and curricular demands.

Insect Safari

Hang on to your butterfly nets and bug boxes – we're taking a bumpy ride through Dorothy Rider Pool Wildlife Sanctuary in search of pollinators and decomposers. Our expedition will lead us around a pond, through a wildflower meadow, under a log to a demonstration beehive. Every stop will provide tactile opportunities for learning. Focus is on insects' physical and behavioral adaptations, lifecycles and niche in the ecosystem. Create a seed bomb to extend the experience back at home.

PROGRAM GUIDE GRADES K-5

Plants: Seed to Tree

From seed to tree, plant species range from earth to sky. On a discovery hike, students will investigate plant lifecycles, niches and lore and learn that species are as varied as the habitats in which they grow. We'll hike to seek out plant contributions in aquatic, meadow and forest habitat. Plant anatomy will be viewed under microscopes. An up-close and personal animal encounter will demonstrate a food web from producer, levels of consumers, then to decomposers. To make the issue personally relevant, we'll wrap up by participating in a stewardship project to remove invasive species.

Pioneers in Ecology

We journey back to a time when hard work, ingenuity, and nature provided all that was necessary for survival. Interactive activities, like creating a Native American medicine bag, forming a wildflower seed bomb, and identifying wild, medicinal edible plants are used to highlight our connection to nature and showcase what it can provide and inspire. This program includes an experience with our live education animals and nonnative plant species removal.

Birds of a Feather

From wispy down feathers to nictitating membranes, our resident birds will reveal their physical and behavioral adaptations. Participants will hike through a bird's natural habitat while learning about survival, nesting and migration. A take-home bird feeder will continue the observation opportunities in their own backyards.

GRADES 3-5, 2-HOUR PROGRAM

Exploring Ecosystems

Explore the myriad of ecosystems at Dorothy Rider Pool Wildlife Sanctuary: lotic and lentic environments, meadows and forests. Meet some of our education animals who live in these habitats and discover the interdependence of the biotic and abiotic components through the growth-death-decay cycle. Hands-on experimentation highlights point/nonpoint source pollution. Young scientists practice using a macroinvertebrate biotic index to determine the health of the Little Lehigh Creek.

Invasive Species

Invasive species are non-native species that cause economic, environmental and/or human health-related harm. Each year, billions of dollars and millions of hours are spent dealing with invasive species around the globe. The goal of this field experience is to raise awareness about a particular plant or animal species invading our own backyards and to turn that awareness into action. This is accomplished by sharing the story of the invasive species, actively observing its effect on local habitats and participating in the mitigation of its impact though environmental stewardship. Such actions enable students and educators to work together to prevent and manage current and future invasions.



A Slick Solution: Cleaning an Oil Spill

Applying their knowledge of ecosystems and food webs, students will test water quality and also the oil-absorbing properties of different materials as they engineer a process for cleaning up an oil spill. This STEM program introduces students to the field of environmental engineering through research-based learning. Scientific inquiry and natural and human influences on ecosystems in our watershed are emphasized.

Canoeing 101

(four-hour program, grades 4-5)

Learn basic canoeing skills in a controlled environment while learning about water-quality issues and point/nonpoint source pollution through hands-on scientific investigation. Our adventure is based at Canal Park in Allentown, where students experience our nationally award-winning canoeing program.

Note: Students paddle in a slow-moving section of the Lehigh River or Lehigh Canal.

VLERA, LOCAL ELEMENTARY SCHOOL STUDENT:

"THANK YOU FOR LETTING US PLANT THE SEED. I LIKED THAT. I LIKED LOOKING IN THE MICROSCOPES! IT WAS AWESOME!!! I JUST LOVE WILDLANDS! IT WAS SO MUCH FUN! I WILL COME THERE WITH MY FAMILY!"

200

Surviving the Web of Life

Just three generations ago, our forebears knew far more than we do today in terms of what could be gathered from nature to sustain and enhance human life. They were not as dependent upon manufactured goods as we have become. The observations they made to decipher nature can be made once again. That knowledge hasn't been completely lost. Using the concept of being lost in the wilderness, interchangeable components of the Outdoor Skills program can be used to build a recreation or survival program, including snowshoeing, tracking, foraging, navigation, shelter building and signaling for help.

Wild in Your Classroom

Wildlands comes to schools in these interactive, one- to two-hour-long programs built for the classroom. All activities are presented at an age-appropriate level.

Wildlife

These presentations are flexible and are made to meet curriculum-based demands.

Plants and Microscopes

Easy-to-focus microscopes are used to examine the parts of a plant after a review of plant anatomy. Can include flower and seed dissection.

Seed Bombs

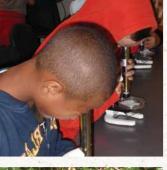
Participants make seed bombs broadly used in the United States in the 1970s greening of Harlem. Seed bombs are made from clay, soil, and wildflower seeds and are used to support our troubled pollinators.

Worms

Children examine worms in an inquiry-based activity before learning about composting and worm anatomy as we dress a student as a worm.

Macroinvertebrates

Aquatic macroinvertebrates will be provided in trays and will be used to examine physical and behavioral adaptations of these interesting organisms. A biotic index survey will be applied to determine the quality of the body of water sampled. For the health of these organisms, this activity is available for locations within 10 miles of Dorothy Rider Pool Wildlife Sanctuary and no more than 2 hours in length.







PROGRAM GUIDE | GRADES K-5

GRADES 3-5

Wildlife Forensics

Students encounter a crime scene of a different sort. Using science and tracking skills, students will navigate clues and utilize observation and reasoning skills to solve a wildlife mystery.

STEM Sprouts

Students know that plants need sunlight, soil, space and water to survive. But this program will provide students with a deeper understanding of how these substances work together to nourish life, which, in turn, sustains us. Local climate and geography, as well as a STEM greenhouse activity, will leave students feeling rooted to their community and inspired by their own ingenuity.

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Water Webs

The variety of aquatic species found in a body of water is indicative of water quality. Beyond that, the bizarre adaptations that designate a species' place in an aquatic food web are unimaginable. Identification of macroinvertebrates can often be done with the naked eye. Field microscopes allow students the enhanced view of each species' physical and, oftentimes, behavioral adaptations. Students identify biological niche and conduct a simple biotic index from their classroom.

Wildlands in Flight: In-school Assemblies

One-hour-long assemblies bring our live animals to multiple classrooms or grades at your school. Suitable for all grade levels.

Birds of Prey

Students are introduced to the distinguishing features of birds, including their feathers, beak and talons. Live birds of prey are used to emphasize adaptations and role in the web of life. Program is easily tailored to complement themes of innovation and biomimicry, with hands-on experiments related to flight.

Wildlife of the Watershed

An animal overview of our watershed, with special attention paid to the natural controls that lead to an ebb and flow in populations along with a discussion on the natural predator/prey cycle. Live education animals will demonstrate the benefits of being nocturnal, diurnal, feathered, furry and omnivorous, among other things, while exploring adaptations, animal coverings and anatomy.

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Wildlands Conservancy

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