

Environmental Resource Guide



January '05
Southwestern PA, EE Resources Guide



Pennsylvania Resources Council, Inc.

"Working to protect the environment since 1939."

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Air and Waste Management Association

Air and Waste Management Association

Carrie Hartz
Education Programs
Coordinator

One Gateway Center
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Pittsburgh, PA 15222

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chartz@awma.org

Services Provided:

Teacher Training
Workshops

Air & Waste Management Associations Environmental Resource Guide (ERG) --Air Quality series and Environmental Resource Guide--Nonpoint Source Pollution Prevention series give teachers a technically accurate resource for educating students in kindergarten through twelfth grade about "real world" environment topics.

The ERG--Nonpoint Source Pollution Prevention series explores the impact of land use on the quality of water, including landfills, fertilizers, pesticides, erosion and other topics. The ERG--Air Quality series addresses air pollution topics including acid rain, ozone, indoor air pollutants, auto exhaust emissions and more.

Each ERG includes approximately 15 lessons with clearly stated educational objectives, background information, preparation instructions, hands-on activities and extension activities which are

Cost:

Free
Minimum
10 to 25
participants

Time:

1/2 day and
full day
workshops

Every lesson has undergone rigorous technical review by environmental experts to ensure that it has a sound scientific basis.

designed to be integrated with general science, language arts, math, social studies and art curricula. Fact sheets provide accurate scientific information on related environmental topics in layman's terms, to give teachers a solid knowledge base upon which to present the lessons. A glossary clearly defines terms and concepts used in the lessons and fact sheet.

Lessons center on activities and class participation that make the information interesting and memorable and teach students what they can do on their own to help protect the environment. The activities are also designed to develop critical thinking skills, including observation, comparison, analysis and problem solving.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|--|---|
| <input checked="" type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input checked="" type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input checked="" type="checkbox"/> Environmental Health | <input type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Environmental Laws & Regulations | <input checked="" type="checkbox"/> Watersheds & Wetlands |
| <input checked="" type="checkbox"/> Humans & the Environment | |



Allegheny County Health Department Recycling Division

Allegheny County Health Department Recycling Division

Peter Previte
Allegheny Recycling
Coordinator

phone: (412)578-8047
fax: (412)587-8053

Services Provided:

In-School Programs

Support Materials

Allegheny County Health Department can provide teachers with free information on a variety of topics including recycling, waste minimization, composting and household hazardous waste. The materials supplied are ideal for providing supplementary information for student research projects or presentations.

The Health Department also provides specific information on the current recycling programs in municipalities across the region. To access this information, contact the County Recycling Coordinator for more information.

Allegheny Recycles Together is a useful handbook produced by the Health Department and available to educators free of charge. The handbook includes an up-to-date list of locations to drop off computers, tires, aluminum cans and other products that are recyclable. The Allegheny County

Grade:

K-12

Cost:

Free

Other:

Valuable information about local recycling supplied

Allegheny Recycles Together provides an up-to-date list of locations to drop off computers, tires, aluminum cans and other products that are recyclable.

Recycling Coordinator is available for presentations for students during special events such as Earth Day, America Recycles Day or Career Days.

Finally, the Recycling Division is working with Pennsylvania Resources Council to offer an extensive in-school resource conservation program for Allegheny County schools. Contact the Allegheny County Recycling Coordinator for more information or for scheduling for the 2004-05 school year.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Environmental Laws & Regulations



Threatened, Endangered & Extinct Species



Humans & the Environment



Watersheds & Wetlands



ALCOSAN

Allegheny County Sanitary Authority

ALCOSAN

Twila Simmons
Scholastic Outreach
Specialist

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(412) 732-8045
fax: (412) 734-8715

Nancy Barylak
Manager of Public
Relations
3300 Preble Avenue
Pittsburgh, PA 15233

Services Provided:

printed educational
materials

videos,
teacherreference
material,
hands-on activities

Located along the Ohio River on Pittsburgh's Northside, the Allegheny County Sanitary Authority (ALCOSAN) treats an average of 200 million gallons of wastewater daily. ALCOSAN serves almost 320,000 customers in 83 communities including the City of Pittsburgh. The 56 acre treatment plant is currently undergoing a \$400 million capital improvement program designed to address odors, treatment capacity and wet weather flow issues.

ALCOSAN is governed by a seven member Board of Directors with three appointed by the County Executive, three by the mayor of Pittsburgh, and one joint appointment. Incorporated in 1946 under the State Municipality Authorities Act, ALCOSAN receives no tax monies, with revenues generated solely by rates.

Grades:

K-12

Through the ALCOSAN Public Relations Department, a number of informational items can be obtained free of charge, including free classroom presentations about wastewater treatment. Information pertaining to explaining the wastewater treatment process, ALCOSAN operations, specialized programs, water quality issues and activities are available for all age groups.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Threatened, Endangered & Extinct Species



Environmental Laws & Regulations



Watersheds & Wetlands



Humans & the Environment



Alleghenies Watershed Network

Alleghenies Watershed Network

Jen Novak
Director

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Pittsburgh, PA 15203

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fax: (412)481-9401

email:
jmnovak@Stargate.net
www.alleghenywatershed.org

Services Provided:

Support Materials

The Alleghenies Watershed Network, a project of the Pennsylvania Environmental Council, offers support materials for educators working on watershed projects in western Pennsylvania. The Network produces a quarterly newsletter, Network Notes, which discusses the groups, projects, and events in the Allegheny and Monongahela River Watersheds. It also hosts two watershed websites: the Network's home site (www.alleghenywatershed.org), which offers project information, and the Watershed Atlas of the Allegheny and Monongahela Rivers (www.watershedatlas.org). The Watershed Atlas blends science, history, and current events, to tell important and entertaining lessons about our watersheds. It's a useful tool for teachers of all levels as it has information relating to many academic standards. In 1999, the Network published

Grade:

5-12

Cost:

Varies
(charge for
some
postage
or conference
fees)

Mission: To increase the knowledge and appreciation of our water resources.

A Watershed Primer for Pennsylvania: A collection of essays on watershed issues. This document contains essays by more than thirty experts on water quality or water quantity. Although there are limited copies in stock, the Primer can be found in the Resource Center of www.watershedatlas.org. Throughout the year, the Network hosts a variety of educational opportunities, such as an annual watershed conference.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Threatened, Endangered & Extinct Species



Environmental Laws & Regulations



Watersheds & Wetlands



Humans & the Environment



Audubon Society of Western Pennsylvania

Audubon Society of Western Pennsylvania

Patricia L. Harger
Dir. of Education
Beechwood Farms
Nature Reserve

614 Dorseyville Rd.
Pittsburgh, PA 15238

phone:(412)963-6100
fax: (412)963-6761

aswp@aswp.org
www.aswp.org

Services Provided:

- Field Trips
- In school Programs
- "Seasonings" Teacher Newsletter
- Teacher Resource Center
- Support Materials
- Professional Development
- Program Scholarships

The Audubon Society of Western Pennsylvania (ASWP) plays a dynamic role as one of the largest environmental education organizations in the region. Headquartered at Beechwood Farms nature Reserve in Fox Chapel, PA, ASWP provides year round environmental education opportunities for students, teachers, organized groups, children, families and adults. Our mission is to inspire and educate the people of southwestern PA to be respectful and responsible stewards of the natural world!

ASWP's Outdoor Discovery Programs are a unique blend of outdoor adventure and hands-on learning designed for students from Kindergarten to High School! Our naturalists are trained to lead small groups of students through participatory activities along the trails while utilizing student discoveries to gain greater awareness of program themes.

Free:

Teacher newsletter
"Seasonings"

Access to
Resource
Library

Cost:

\$4.25/student
(2 hour
program)
\$8 per/student
(Extended
Programs)

"The discovery approach used by our staff and volunteer naturalists draws on students' inherent curiosity to explore the natural world."

The approach used by our staff draws on students' inherent curiosity to explore the natural world. Our natural forests, field, pond and stream habitats provide those worlds of discovery. Programs can be scheduled throughout the year. Programs, lengths and prices vary. Maximum number of students per program: 72.

A limited number of full & partial ASP program scholarships are available on a competitive basis to qualifying schools with demonstrated financial need. Full scholarships include transportation to and from Beechwood Farms! Call ASWP for details.

PA Academic Standards for Environment & Ecology Addressed

Agriculture & Society

Integrated Pest Management

Ecosystem and Their Interactions

Renewable & Non-Renewable Resources

Environmental Health

Environmental Laws & Regulations

Threatened, Endangered & Extinct Species

Humans & the Environment

Watersheds & Wetlands



Carnegie Museum of Natural History

Carnegie Museum of Natural History

Patrick McShea

Patty Dineen
Division of Education
4400 Forbes Ave.
Pittsburgh, PA 15213

phone: (412)622-3283
fax: (412)622- 3419

email:
MNHEducation@
clpgh.org
MCSHEAP@
carnegiemuseums.org
[http://www.clpgh.org/
cmnh](http://www.clpgh.org/cmnh)

Services Provided:

In-School Programs
Out of School Programs
At Our Facility
Support Materials
Teacher Training
Traveling Trunks
Native Plant Game

The Carnegie Museum of Natural History offers a variety of programs at our facility, in schools around the city and through our educational loan series. Programs offered at the Carnegie Museum cover a variety of topics, vary in time commitments and involve all grade levels. The diversity of our programming helps educators find the appropriate program for their subject and their students.

Docent-guided tours at the Carnegie encourage interaction and exploration of natural history topics. Hands-on opportunities and an exciting learning environment help students get the most out of a museum visit. Similarly, time spent in the Discovery Room enhances any museum visit. The hands-on objects and exhibits make learning fun and science an exciting adventure. You can reserve the Discovery Room for the exclusive use of your class, so your students can learn through touching and observing

**Programs
available for
grades K-12
and special
needs
audiences**

**Programs
range from
1\2 hour
presentations
to multiple
sessions.**

Docent Guided Tours: 1 hour--\$3.50-4.00
1 1/2 hour--\$4.00-4.50 per student
Children's Classes: \$4.50-6.50 per student
Discovery Room: \$25.00 per 40 min. session
In-School Program: \$30-40 per session

objects up close. In-school programs bring trained volunteers to the classroom with programs based on the museum's collections. Each presentation uses specimens and artifacts, colorful visual aids, and touchable materials.

For students from preschool to middle school, classes at the Carnegie Museum investigate our world and its inhabitants. Your students can take classes on a wide range of natural history and anthropological topics. Classes are designed to uphold the emerging standards in social studies and science.

Finally, the Educational Loan Collection provides objects from the museum's collection for classroom use. The museum provides teachers with background information, lesson plans, activities, and in some cases, audiovisual materials.

PA Academic Standards for Environment & Ecology Addressed

Agriculture & Society

Integrated Pest Management

Ecosystem and Their Interactions

Renewable & Non-Renewable Resources

Environmental Health

Threatened, Endangered & Extinct Species

Environmental Laws & Regulations

Humans & the Environment

Watersheds & Wetlands



Clean Water Action

CleanWater Action

Myron Arnowitt
Western PA Director

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Pittsburgh, PA 15222

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org

Services are Free

Clean Water Action is a national citizens' organization working for clean, safe and affordable water, prevention of health-threatening pollution, creation of environmentally safe jobs and businesses, and empowerment of people to make democracy work. Clean Water Action organizes strong grassroots groups, coalitions and campaigns to protect our environment, health, economic well-being and community quality of life.

Currently, Clean Water Action is leading the Campaign to Reduce Pesticide Exposure in Schools. This includes working to pass the Pesticide Notification Act (HB 1105 in the PA House/ HB601 in the PA Senate) which would protect students from unnecessary exposure to pesticides. Clean Water Action is also working with school districts in the Southwestern Pennsylvania region to adopt and implement Integrated Pest Management (IPM), a less toxic

To learn more about the Campaign, please contact Rober Silber at Clean Water Action in Pittsburgh

Immediate effects of pesticide poisoning include headaches, dizziness, weakness, muscle tremors, nausea, cramps, diarrhea and blurred vision. Children are especially at risk.

pest control approach. This effort depends on the support of faculty, staff, administrators, and parents who are concerned about pesticide use in and around schools.

Several surveys have found overuse of pesticides in Pennsylvania schools. A 1996 survey of 28 school districts by Clean Water Action found:

- 64% of the districts responding used at least one pesticide containing a toxic chemical that could damage the health of students and teachers
- 73% of the districts applied pesticides at times that could expose students and staff
- Only 34% notified students or parents when pesticides were to be sprayed

PA Academic Standards for Environment & Ecology Addressed

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| <input checked="" type="checkbox"/> Humans & the Environment | |



CLEAR Corps

CLEARCorps

Alice Maunz
Education Coordinator

64 South 14th St.
Pittsburgh, PA 15203

phone: (412)431-4449
ext. 229
fax: (412)431-4558

email:
alicem@ccicenter.org

Services Provided:

Puppet show for preK-2.
Prevention program for
3-5th graders.
Adult discussion and
information sessions.
Equipment
Needed:
One Classroom

CLEARCorps (Community Lead Education and Reduction Corps) is an AmeriCorps program inviting community members to spend a year serving the needs of Allegheny County. Established to empower communities to address lead hazards in their neighborhoods and homes, education is an essential part of the program.

Through the use of literature and an interactive show, students become aware of LEAD as an environmental hazard. Prevention of lead poisoning is taught by reinforcing positive habits, which link a healthy environment to a healthy body. Nutrition, hand washing, and environmental awareness are elements of the program.

Lead causes decreased I.Q., hyperactivity, and learning disabilities. 83% of Pittsburgh's housing was built prior to 1978, when lead paint was used. We are excited to explore with students how environmental health hazards can be prevented.

Grades:

PreK-5
Adults
Teen Parents

Cost:

Free

Time:

one class
period long

CLEARCorps offers educational programs for community organizations and schools while providing free lead hazard reduction services for low income families.

Our education curriculum ranges from youth to adult. For elementary aged children, we offer a presentation which lasts approximately one class period. For K-2nd graders, we have a puppet show where students can meet Captain CLEARCorps and friends to learn about how to keep themselves lead free. Third through fifth graders can also learn about lead poisoning through interactive games and activities. Adults, especially parents, can meet to discuss how they can prevent lead poisoning from happening to their children.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|--|---|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input checked="" type="checkbox"/> Environmental Health | <input type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Watersheds & Wetlands |
| <input checked="" type="checkbox"/> Humans & the Environment | |



**Conservation
Consultants,
Incorporated**

**Green
Neighborhood
Services**

**Indigo Raffel
Education & Outreach
Coordinator
64 South 14th St.
Pittsburgh, PA 15203**

**phone: (412)431-4449
ext. 214
fax: (412)431-4558**

**email:
indigor@ccicenter.org**

Services Provided:

**In-School
Programs
Support
Materials
Use of the
CCI-Center**

Conservation Consultants, Inc. Green Neighborhood Services

**Responsible energy use in homes and other
buildings**

Conservation Consultants, Incorporated, is a regional nonprofit organization specializing in energy efficiency, environmental education and sustainable urban redevelopment. Located in Pittsburgh's historic Southside, Conservation Consultants, Inc., houses classrooms, demonstration spaces, and a library open for public use as well as other environmental non-profit organizations. The recently renovated building is modeled after sustainable design focusing on the principles of non-toxicity, energy efficiency, recycling, and cost-effectiveness.

One of CCI's most successful programs, the Pittsburgh Green Neighborhood Services, focuses on energy and resource conservation. Green Neighborhood Services is a combined effort of several organizations, programs and funding sources that focus on

**The
CCI-Center
is an
educational
tool for
educators,
providing
resources,
tours and
interactive
displays
about
resource
conservation**

**The Green Neighborhood Services
provides energy and resource
conservation hands-on activities for
students of all grades**

boosting the economy of Pittsburgh neighborhoods, reducing a community's negative impact on the environment, and making improvements on the overall appearance of localities.

The education division of the program targets neighborhood schools, offering free resources to teachers and students and hands-on activities in the classroom and at our facility. Green Neighborhood Services also works with schools to address issues of indoor air quality, natural day-lighting levels, environmental awareness and grounds beautification.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Environmental Laws & Regulations



Threatened, Endangered & Extinct Species



Humans & the Environment



Watersheds & Wetlands



Creek Connections

Creek Connections

Nicole Mason
Project Coordinator
Box 10
Allegheny College
Meadville, PA 16335

phone: (814)332-5351
fax: (814)332-2789

email:
creek@allegheny.edu

Website:
<http://creekconnections.allegheny.edu>

Services Provided:
In-School Programs

Out of School Programs

Support Materials
Teacher Training

Scientific Equipment

Training Assistants

Creek Connections, has forged an effective partnership between Allegheny College and regional K-12 schools to turn the French Creek Watershed in Northwest Pennsylvania and Western New York, and waterways in the Pittsburgh area into outdoor environmental laboratories. Emphasizing an investigation of local waterways, this project involves a hands-on, inquiry based, natural science education for over 40 schools in the region.

Allegheny College staff and students provide the framework and assistance for school-based investigative research in local watersheds. Equipment and teacher development is provided at a teacher summer workshop. School classes or clubs then begin to conduct water quality tests at their local field site at least once every three weeks.

Grade:

5-12

Cost:

Free

Time:

Water sampling every three weeks

Through the project, "students strengthen quantitative skills and gain a better appreciation for the quality of the waterways in their own communities".

Data is compiled into the Creek Connections web site for schools and the public to review. Using a provided equipment stipend, participating classes also design and implement independent field research projects on their local waterways. The culminating event of each April is the Student Research Symposium where participating students across the region convene to share their research findings with each other and the public.

Information is available on the project's website about their loaner equipment program, watershed education resource materials, teacher development workshops, and background information about water quality testing. Creek Connections provides an authentic science research opportunity that strengthens students' quantitative skills and helps them gain an appreciation for the waterway health in their own communities.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|--|--|
| <input checked="" type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
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| <input checked="" type="checkbox"/> Environmental Health | <input checked="" type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input checked="" type="checkbox"/> Environmental Laws & Regulations | <input checked="" type="checkbox"/> Watersheds & Wetlands |
| <input checked="" type="checkbox"/> Humans & the Environment | |



Department of Environmental Protection

Department of Environmental Protection

Betsy Mallison
400 Waterfront Dr.
Pittsburgh, PA 15222

phone: (412)442-4182
fax: (412)442-4194

website:

www.dep.state.pa.us

Services Provided:

Support Materials

Teacher Training

Equipment Needed:

Internet Access

A Computer with a
Sound Card

A 28.8 Modem
(minimum)

The Department of Environmental Protection has a wide variety of resources available to teachers at no cost. These include curricular materials on air quality, waste management, energy efficiency and pollution prevention. Teachers can browse through a complete list of DEP materials on the DEP website.

DEP's new Interactive Learning Center presents teachers with an opportunity to access information on activities, issues, problems and solutions throughout the state. Students, while in the comfort of their classroom, can hear presentations on environmental issues going on hundreds of miles away.

The process is simple. Interested teachers download a free video player and are ready to see and hear video and narrated presentations.

DEP is using state of the art technology which minimizes wait

Program:
Interactive Learning Center

Cost:
Free

Other:
Teachers in all subjects and grade levels can benefit from the program

"DEP also schedules 'live' events or briefings and will notify interested teachers of upcoming events when requested to do so..."

time. The Interactive Learning Center includes training sessions so that teachers can catch a workshop they may not have been able to otherwise attend, or observe a conference on specific environmental or regulatory topics and review all training materials and handouts.

DEP can help teachers, students and administrators work on improving their in-school environment, providing information on issues like indoor air quality, waste minimization, nontoxic cleaning products and integrated pest management. This information can be used to turn schools and school districts into Green School models. DEP can work with districts to demonstrate how going Green is not only an environmentally friendlier and healthier way to be, but that is also cost effective.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Threatened, Endangered & Extinct Species



Environmental Laws & Regulations



Watersheds & Wetlands



Humans & the Environment



The E House Company

The E House Company

David Shiller
1511 East Carson St.
Pittsburgh, PA 15203

phone: (412)488-7455
fax: (412)381-7720

email: [theehouse@
southsidepgh.com](mailto:theehouse@southsidepgh.com)

Services Provided:

At Our Facility

Equipment
needed:

The E House Company is a "green" retail store offering environmental products to the greater Pittsburgh area, while serving as a catalyst for positive change in our community. We provide quality products that benefit the environment and are healthier for you! The philosophy at The E House Company is known as the dual bottom line. This means that in addition to the regular dollar bottom line that all businesses have, we are also committed to operating in a socially just and environmentally responsible manner. Some examples of our dual bottom line approach include:

- Remodeling the store using least-toxic finishes, energy efficient lighting, and weatherizing the building for efficient heating and cooling.
- Recycling between 80 and 90 percent of the store's waste, and serving as a recycling drop

Grade:

9-12

Cost:

Free

Minimum:

Six
Students for
programs



The Store Tour

- Recycling between 80 and 90 percent of the store's waste, and serving as a recycling drop off site for household and watch batteries
- Store fixtures constructed from scrap iron and reclaimed barn wood
- A commitment to provide the greater Pittsburgh area with products that minimize ecological degradation and maximize environmental awareness

The E House Company helps educators and encourages students to think about products that can be reused or recycled. The E House is open for tours, and can be a resource for students and educators interested and involved in recycling.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Threatened, Endangered & Extinct Species



Environmental Laws & Regulations



Watersheds & Wetlands



Humans & the Environment



Lake Erie- Allegheny Earth Force

Lake Erie- Allegheny Earth Force

Southwest PA Office
Wendy Ruano, Program
Director
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Pittsburgh, PA 15233

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Fax: 412-321-5484
LEApgh@earthforce.org

Northwest PA Office:
Tel: 814-899-2572
LEAerie@earthforce.org

Services provided:

Educator training,
quality program
materials for educators
and youth, ongoing
technical assistance,
youth leadership
training, annual youth
summit.

What is Earth Force?

· A national program that enables youth to create lasting solutions to environmental problems in their communities. From working with townships to begin more frequent street sweeping in order to decrease toxins in run-off; to launching a campaign to install water filters in homes with lead-contaminated drinking water; Earth Force youth learn to create lasting solutions by addressing the root causes behind environmental issues.

· A process that can address any environmental issue. The Earth Force Process consists of six steps: Community Environmental Inventory, Issue Selection, Policy and Practice Research, Options for Influencing Policy and Practice, Taking Action, and Looking Back and Ahead.

· Four programs: CAPS (Community Action and Problem Solving), GREEN (Global Rivers Environmental Education Network) and Earth Force After-School, and the YAB (Youth Advisory Board).

Grades:
Pre-K through
College
students

Cost: School membership, which includes training, materials and ongoing support for an unlimited number of teachers: \$500. Grants are available to cover part or all of the membership fee for qualified schools.

How is Earth Force unique?

- Provides quality materials, training and ongoing support for educators.
- Provides the link between schools and the community to solve real-world issues.
- Enables educators to meet the PA Academic Standards in Environment and Ecology; Reading, Writing, Listening and Speaking; Science and Technology; Civics and Government through project-based learning.
- Develops civic engagement and encourages active citizenship.
- Incorporates service-learning with environmental problem-solving.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Threatened, Endangered & Extinct Species



Environmental Laws & Regulations



Watersheds & Wetlands



Humans & the Environment



Environmental Fund for Pennsylvania

Environmental Fund for Pennsylvania

Greenworks for Pennsylvania

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Producer
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Suite 300A
Philadelphia, PA 19107

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fax: (215)922-3082

email:
efpa007@aol.com

Services Provided:
VHS tapes

Equipment Needed:

VCR and Television

Green Works for Pennsylvania is a television program about positive steps Pennsylvanians are taking to protect and preserve our environment. Produced by the Environmental Fund for Pennsylvania (EFP), in cooperation with the Pennsylvania Department of Environmental Protection, Green Works spotlights individuals and groups that are taking action to address environmental problems in the hopes of inspiring viewers to do the same.

The program is 30 minutes long, produced monthly and shown on 74 public television and access cable stations throughout the commonwealth. Each show focuses on a different topic. In the first season, shows covered topics on air quality, land use, pollution prevention, environmental education, environment in your home, recycling, and more. For fall 1998, a special edition of Green Works is in production, concentrating on Pittsburgh and the surrounding counties.

Grade:
6th-8th
& 9th-12th

Cost:
\$5.50 per tape
(includes shipping and handling)

Time:
1/2 hour per episode

"Green Works for Pennsylvania is a television program about positive steps Pennsylvanians are taking to protect and preserve our environment..."

The southwest special is the first Green Works program to have a regional focus, helping area residents better understand the role of environmental protection and conservation in their community. The southwest special will highlight the environmental programs that include the development of gardens in urban areas, the preservation of polluted waterways, and other successful programs.

The Environmental Fund for Pennsylvania, in addition to producing Green Works, educates the public about environmental issues and raises funds for its twenty-one member organizations.

PA Academic Standards for Environment & Ecology Addressed

- Agriculture & Society
- Ecosystem and Their Interactions
- Environmental Health
- Environmental Laws & Regulations
- Humans & the Environment
- Integrated Pest Management
- Renewable & Non-Renewable Resources
- Threatened, Endangered & Extinct Species
- Watersheds & Wetlands



Environmental Protection Agency EETAP

Environmental Protection Agency

Kathleen MacKinnon
EPA Project Officer

phone: (202) 260-4951

email:
mackinnon.kathleen@
epamail.epa.gov

website:
www.epa.gov/enviroed

The **Environmental Education and Training Partnership (EETAP)** is the second phase of a US EPA mandate which awards multi-year cooperative agreements to a consortia of universities and non-profit organizations to deliver training and related support to education professionals. The first phase was initiated in 1992 with a three year award of \$5.4 million to the National Consortium for Environmental Education and Training (NCEE). The NCEE conducted research to assess needs, developed the EE toolbox, and provided training. EETAP is the second phase of the program with a 5 year award of \$9 million to a consortium of non-profit organizations and universities led by the North American Association for EE (NAAEE). This program builds upon and includes initiated by NCEET. EETAP expects to deliver training to over 50,000 teachers and other education professionals during first three years.

Grades:

K-12

Cost:

Other:

EETAP Partners include:

Council for EE/Project WILD, NAAEE, Nat'l Project WET, Northern Illinois University, Ohio State University, Project Learning Tree, University of Michigan, University of Wisconsin, West-Ed

Training is delivered to teachers primarily by building on established training programs. Access to quality EE info and materials is improved by EETAP by expanding and linking existing databases through "EE-Link". Also, EETAP is developing and disseminating three sets of guidelines for EE materials. EETAP also involves itself in partnership, state-level capacity building, education reform, diversity, quality, technology, and synergy.

Each year EPA awards more than 200 grants between \$2 million and \$3 million to support quality EE projects throughout the US. The grants are usually very hard to come by.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|---|---|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input type="checkbox"/> Environmental Health | <input type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Watersheds & Wetlands |
| <input type="checkbox"/> Humans & the Environment | |



Environmental Resources Information Center: ERIC

ERIC

website:

www.accesseric.org:81/

email:

askeric@askeric.org

This is a federally funded, nationwide information network designed to provide individuals with ready access to education literature. The ERIC system is part of the US Department of Education's National Library of Education and consists of 16 ERIC clearinghouses, 11 Adjunct clearinghouses and additional support components. ERIC clearinghouses collect, abstract, and index education materials for the ERIC database; respond to requests for information in their subject areas; and produce special publications on current research, programs, and practices. ERIC is the largest education database in the world, containing more than 950,000 bibliographic records of journal articles, research reports, curriculum and teaching aides, conference papers, and books. The ERIC database is available in many formats including printed indexes, CD-ROM and online.

Grade:

All

Cost:

Free

The mission of ERIC is to "improve American education by increasing and facilitating the use of educational research and information to effect good practice in the activities of learning, teaching, educational decision making, and research".

Wherever you run a search through ERIC, the result will be an annotated bibliography of document and journal literature on our chosen topic.

To conduct your own tour of ERIC on the web, start with the ERIC system-wide site at <http://www.accesseric.org:81/> The section called "ERIC sites" contains links to all ERIC-sponsored web sites and allows you to send e-mail to ERIC clearinghouses.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|---|---|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
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| <input type="checkbox"/> Environmental Health | <input type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Watersheds & Wetlands |
| <input type="checkbox"/> Humans & the Environment | |



Frick Environmental Center

**Frick
Environmental
Center
David Jett
Director**

2005 Beechwood Blvd.
Pittsburgh, PA 15217

Phone: (412) 422-6538
Fax: (412) 422-6532

Services Provided:

- Field Trips
- Service Learning Projects
- Team Building Activities

Frick Environmental Center provides environmental education experiences for students pre-K through 12th grades. Programs take place within Frick Woods Nature Reserve, a 151-acre urban reserve within the City of Pittsburgh, and focus on local natural history.

Kindergarten and first graders are invited to the Center in January for the "Winter Bridge". This 1 and ½ hour fieldtrip begins with a story slideshow, followed by a walk through the winter woods.

March offers pre-K through fifth graders the opportunity to learn about the history and process of maple sugaring through "Maple Days", a two hour, outdoor school festival.

Sixth through 12th graders can work on teamwork, cooperation and communication skills through the "Cooperative Course", a low ropes program offered in fall and spring. A "Junior Cooperative Course" is available for 3rd - 5th graders.

Grade:

K-12

Cost:

Varies

Teachers of grades 6-12 can arrange service learning opportunities for their students through ecological projects in Frick Woods Nature Reserve. These sessions give students hands-on involvement and may include projects such as pond construction, removal of invasive species, controlling stream erosion and planting of native plants.

Teachers can call and make reservations for any of the above programs.
Program

PA Academic Standards for Environment & Ecology Addressed

- | | |
|--|--|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input checked="" type="checkbox"/> Ecosystem and Their Interactions | <input checked="" type="checkbox"/> Renewable & Non-Renewable Resources |
| <input type="checkbox"/> Environmental Health | |
| <input type="checkbox"/> Environmental Laws & Regulations | <input checked="" type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input checked="" type="checkbox"/> Humans & the Environment | <input checked="" type="checkbox"/> Watersheds & Wetlands |



Global Learning and Observations to Benefit the Environment (GLOBE)

GLOBE

744 Jackson Place
Washington, DC 20503

phone: 1-800-858-9947

e-mail: info@globe.gov

website:
www.globe.gov

Services Provided:

extensive
educational
materials

Materials Required:
scientific measurement
instruments meeting
GLOBE specifications.

Cost- \$400 for
elementary and \$600
for middle/high. Most
schools may already
have the equipment
available.

GLOBE is a hands-on, international environmental science and education program. The program links students, teachers, and the scientific community in an effort to learn more about our environment through student data collection and observation. Students from 5 to 15 years of age throughout the world conduct a continuing program of scientifically meaningful environmental measurements. GLOBE students transmit their data to a central processing facility via the Internet, receive vivid images composed of their data, acquire information from a variety of sources, and collaborate with scientists and other students in using these data for education and research. GLOBE provides educational materials to enrich the learning experience of participating students. These materials include

Grade:

K-12

Cost:

Free

Using state-of-the-art technology, GLOBE creates a forum for students to communicate with their peers around the world, thus fostering alliances among students and increasing their environmental understanding.

a wide variety of classroom and field activities to help students place their measurements in a broader context and relate their own local observations to global environmental issues. GLOBE student measurements include observations in Atmosphere/Climate, Hydrology, Land Cover/Biology, and Soils.

PA Academic Standards for Environment & Ecology Addressed

- Agriculture & Society
- Ecosystem and Their Interactions
- Environmental Health
- Environmental Laws & Regulations
- Humans & the Environment
- Integrated Pest Management
- Renewable & Non-Renewable Resources
- Threatened, Endangered & Extinct Species
- Watersheds & Wetlands



Green Building Alliance

Green Building Alliance

Ryan Snow
Resource Coordinator
(412) 431-0709

64 South 14th St.
Pittsburgh, PA 15203

phone: (412)431-4457
fax: (412) 431-1432
info@gbapgh.org

Services Provided:

Resource Center

Educational Programs

Lectures,
information
for teachers

While the Green Building Alliance focuses primarily on building professionals, we seek to encourage high school students who are considering fields such as architecture, engineering or business in the development of a "green ethic" that they can carry into their careers. It is important to reach these students now, as their work will have a tremendous impact on our future environment. Properly designed buildings also improve our ability to be productive and stay healthy, while decreasing environmental damages and pollution. The GBA works to integrate environmentally responsible -- and high-performance - design, construction and operating practices into the Greater Pittsburgh market. As a result, GBA will increase the human health, economic, environmental, and social value of new and existing development.

GBA's Primary Goal:

"...to integrate environmentally responsible - and high performance - design, construction and operating practices into the Greater Pittsburgh market."

"Speaking engagements and presentations can be arranged for any relevant audiences that have and interest in green building"

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Threatened, Endangered & Extinct Species



Environmental Laws & Regulations



Watersheds & Wetlands



Humans & the Environment



Group Against Smog and Pollution

Group Against Smog and Pollution

Rachel Filippini
Program Manager
P.O. Box 5165
Pittsburgh, PA 15206

phone: (412)441-6650
fax: (412)661-9984

email:
gasp@gasp-pgh.org

www.gasp-pgh.org/monitor.html

Services Provided:

In-School Programs

Support Materials

Teacher Training

Equipment Needed
(Preparation):
Training to use the monitor

GASP, Group Against Smog and Pollution, received a grant from the Howard Heinz Endowments to purchase an educational monitoring system available for school and community use.

The GASP air monitor called the GASPER comes in a portable suitcase and can be set up quickly by students. It includes physical sensors which capture, display and store scientific data with easy-to-use analytical software.

Preconfigured and precalibrated, the collection of data is as simple as turning on the data logger and pushing a button.

The software component is unique in that it contains EPA and other regulatory limits enabling the automatic generation of analytical reports and graphs which put the data collected into a context which immediately shows the users how the data compares with established standards.

Grades:

6-12

Cost:

\$30 for use of the monitor

Time:

1 to 2 weeks in school

Guidebooks and suggested investigations are included in the training.

We are entering our seventhfifth year with the monitor. The program provides a one to two week use of the monitor (depending on the teacher's needs) with training, delivery/pick up of equipment and guide books with suggested investigations and use instruction. You are free, of course, to pose your own hypotheses and investigations. At the end of the year, we invite a team of students from each participating school to present their most interesting investigation at the GASPER Air Congress. (Attending the Air Congress is an exciting part of the program but not required.)

PA Academic Standards for Environment & Ecology Addressed

- | | |
|--|---|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input checked="" type="checkbox"/> Environmental Health | <input type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input checked="" type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Watersheds & Wetlands |
| <input checked="" type="checkbox"/> Humans & the Environment | |



Lutherlyn Environmental Education Program

Lutherlyn Environmental Education Program (LEEP)

Todd Garcia-Bish
or
Heath Gamache

Camp Lutherlyn
Box 355
Prospect, PA 16052

phone: (724)865-9079
fax: (724)865-9794

email:
leep@lutherlyn.com

Services Provided:
Day and Overnight
Field Trips

Teacher Training
Workshops

Tours of Sustainable
Life-style Homestead

Ropes Course

In-school Programs

The Lutherlyn Environmental Education Program (LEEP) is an excellent resource for teachers who are looking for a way to challenge their students to open their eyes and explore the natural world. It is also a creative way to introduce, examine or review the content areas found in the Pennsylvania Department of Education's academic standards for Environment & Ecology, Science & Technology, Mathematics and Reading/Writing/Listening.

LEEP is flexible enough to customize every field trip to meet your educational needs, and is appropriate for all age levels. The program offers a selection of carefully developed and integrated activities focusing on a variety of topics including: animals, awareness of the natural world, ecosystem, geology, history, nature at night, outdoor skills and group building, plants, stewardship of resources, and water cycles and systems. It is sure to be informative and lots of fun!

Cost:

From \$8.30
per student
for day trips

From \$60 per
student for
overnight trips

Field trips are available in the fall and spring. LEEP also offers Maple Sugaring field trips in February and March. The Maple Sugaring Program provides an interdisciplinary opportunity to practice tree identification, learn about tree biology and explore the cultural significance of maple syrup in the lives of Native American tribes and early American settlers. Students actually identify maple trees and tap them, collect the sap, take part in the evaporation process and taste the end result. It's an amazing way to liven up the winter.

Teacher Workshops are offered in the fall and spring at Lutherlyn to train teachers in the use of a variety of curriculum supplements including: Project Learning Tree, Project Wild, Keystone Aquatic Resource Education (KARE), Project Archaeology, PA Songbirds, and the Leopold education project.

Camp Lutherlyn is located in Prospect, PA, about seven miles west of Butler and 40 miles north of Pittsburgh. Educational groups can come for the day or stay overnight in comfortable cabins, but the available dates fill up quickly. Educators are encouraged to schedule well in advance.

PA Academic Standards for Environment & Ecology Addressed

Agriculture & Society

Integrated Pest Management

Ecosystem and Their Interactions

Renewable & Non-Renewable Resources

Environmental Health

Environmental Laws & Regulations

Threatened, Endangered & Extinct Species

Humans & the Environment

Watersheds & Wetlands



McKeeever Environmental Learning Center

McKeeever Environmental Learning Center

Fran Bires
Director
55 McKeeever Lane
Sandy Lake, PA 16145

phone: (724)376-1000
fax: (724)376-8235

email:
info@mckeeever.org
website:
www.mckeeever.org

Services Provided:

At Our Facility
School Programs
Teacher Training

Equipment
Needed:

Vocabulary Lists for
Students

Research Units

Assignments, for
Overnight Trips

Realizing that we have a responsibility for the world in which future generations will live, the Commonwealth of Pennsylvania created the McKeeever Environmental Learning Center in 1974. Its primary purpose is to provide programs to assist citizens of all ages to become better stewards of the earth's resources. The McKeeever Center is administered by Slippery Rock University on behalf of the State System of Higher Education.

Each school year, over 5,000 elementary students from 70 schools participate in the environmental education programs that are offered at the McKeeever Center. The center offers a number of programs including Day Use Programs, Web of Life, Earthkeepers, Sunship Earth, and Sunship III.

Cost:

Day
programs:
\$7/student

Web of Life:
\$50.70/student

Earthkeepers:
\$71/student

Sunship Earth:
\$125/student

Sunship III:
\$83/student

Programs

Day Programs K-12
Web of Life (2 days) 3rd&4th grades
Earthkeepers (3 days) 5th grade
Sunship Earth (5 days) 5th&6th grades
Sunship III 7th&8th grades
Forest Ecology Camp 6th-9th grades

The McKeever Center complex includes three lodges (sleeps 150 people), dining hall, auditorium, office/classroom building, conference room, outdoor classrooms and an outdoor amphitheater. Over 4 and ½ miles of trails meander through the 205 forested acres at the center with one trail connecting the McKeever Center to nearby Lake Wilhelm and Goddard State Park.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Environmental Laws & Regulations



Threatened, Endangered & Extinct Species



Humans & the Environment



Watersheds & Wetlands



National Aviary in Pittsburgh

National Aviary in Pittsburgh

Verna McGinley
Allegheny Commons
West Pittsburgh, PA
15212

phone: (412) 323-7235
fax: (412)321-4364

website:
<http://www.aviary.org>

Services Provided:

At Our Facility

Support Materials

The National Aviary in Pittsburgh, America's only independent indoor nonprofit bird zoo, is located in historic North Side's West Park. Home to over 500 birds of 200 species, many endangered or threatened, the National Aviary collection offers visitors a kaleidoscopic view of the bird in natural and free-flight exhibits. They represent every continent except Antarctica, with a particular emphasis on rainforest and wetlands.

The National Aviary is a respected environmental education resource for this region. Our education philosophy is that all visitors should leave the Aviary with a greater understanding of the bird world, avian ecosystem, and the role of humans in the environment. The education staff uses games, plays, stories, music and other materials to convey ecological information to visitors of all ages and backgrounds. In our daily Animal Encounters program, the Education Department introduces birds such as parrots, owls and hawks to visitors to give up-close and personal glimpses into bird world. Our 'Wings in Motion' van brings live birds, slides, and artifacts

**The
National
Aviary
houses
500 birds
of 200
species!**

"The National Aviary's mission is to be the leader in avian education, conservation and recreation. Our primary purpose is saving the birds of today for the generations of tomorrow."

to environmental groups, seniors, community groups, special needs individuals, and youth organizations. The overall intention of our education program is to convey a new understanding of the intricate web of life and to simulate a desire in people of all ages to protect wildlife resources.

PA Academic Standards for Environment & Ecology Addressed

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|---|--|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input type="checkbox"/> Environmental Health | <input checked="" type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Watersheds & Wetlands |
| <input type="checkbox"/> Humans & the Environment | |



Nature Observer News

Nature Observer News

Chuck Tague
432 Olympia Rd.
Pittsburgh, PA 15211

phone: (412)488-8760

email:
bluejay@city-net.com

Services Provided:

In-School Programs

Nature Observer News focuses education efforts on birds, bird lifecycles, birds' natural habitats, and needs and challenges of birds. Chuck Tague, the owner of Nature Observer News offers a variety of live bird demonstrations that keep children from grades K-8 on the edge of their seats.

Nature Observer News programs last 45 minutes, and can be repeated 5 times in a given school day. They are available to any number of students at a time.

Programs include a kindergarten and first grade presentation that introduces birds and includes a live bird demonstration, a second and third grade "Hummingbird Journey" program with a live bird demonstration, a third and fourth grade "Habitat Exploration" program with live birds, and a sixth through eighth grade program that investigates birds of prey. The programs are self-contained and require no prior set up. The program can support current classroom activities with prior consultation with the Nature Observer News staff.

Grade:
K-8

Cost:
\$150 for
classroom
presentations
\$300 for
assemblies

Time:
45 minutes

**Nature Observer News
programs last 45 minutes, and
can be repeated 5 times in a
given school day.**

PA Academic Standards for Environment & Ecology Addressed

Agriculture & Society

Integrated Pest Management

Ecosystem and Their Interactions

Renewable & Non-Renewable Resources

Environmental Health

Threatened, Endangered & Extinct Species

Environmental Laws & Regulations

Humans & the Environment

Watersheds & Wetlands



PA CLEANWAYS OF ALLEGHENY COUNTY

PA CleanWays of Allegheny County

Carol Popp,
Executive Director
120 North Shore Drive
Pittsburgh, PA 15212

phone: (412) 322-6681
fax: (412) 322-6678

email:
pacw.ac@verizon.net
Website:
www.pacleanways.org/allegheny

Services Provided:

- Strategies for illegal dump
- cleanups and assessment
- Strategies for enforcement and prevention of dumping and littering
- Educational curriculum for K-12 age appropriate
- Non-state maintained roadway adoptions
- Beautification projects such as the Tree Bank
- Placement Contest for students in 4-6 grades
- Illegal Dump Survey training for municipalities and watershed groups

PA CleanWays of Allegheny County is a non-profit organization that empowers people to eliminate illegal dumping and littering in PA. Our comprehensive approach includes facilitating community cleanups, addressing problem disposal items, as well as offering education and beautification opportunities. PA CleanWays helps people facilitate cleanups in their communities. Pa CleanWays provides the team-building approach and framework necessary to help communities win the war on illegal dumping.

Of Special Interest to Educators:

Open Your EYES to Litter

Since February '02, more than 9,000 copies of Open Your Eyes to Litter have been provided to schools throughout Allegheny County. Here is a list of school districts who have participated in the Open Your Eyes to Litter Program: Baldwin-Whitehall, Bethel Park, Brentwood, McKeesport, Moon Area, Mt. Lebanon, North Hills, Penn Hills, Pittsburgh Public, South Fayette, South Park, Steel Valley, Upper St. Clair, West Jefferson Hills, West Mifflin, Woodland Hills.

Open Your Eyes to litter is an environmental educational curriculum

Grades:

K-12

Cost:

Free

Time:

We're working together for Cleaner Ways.

that follows the PA state educational standards. The material is intended for use by grades K-6, however other grades may benefit as well. A new theme in the series was launched in March 2002, OYETL: Our Littered Past Focuses on the issues associated with the problem of littering in a historic sense. This booklet is appropriate for grades 4-6. If you are an educator and would like to find out more information about the OYETL series, please contact the office at 412.322.6681. The materials are provided free of charge

Watershed Assessments

PA CleanWays of Allegheny County was recently awarded a Growing Greener Grant for education and outreach efforts in 9 waterway areas in Allegheny County. The grant will enable the chapter to understand and quantify the challenge of illegal dumping throughout Allegheny County. For more information contact Carol Popp, Executive Director.

PA CleanWays primary lessons plan is to teach by example - open everyone's eyes to the amount of trash lining our roads show how together we can make a difference.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|---|---|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input type="checkbox"/> Environmental Health | <input type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Watersheds & Wetlands |
| <input type="checkbox"/> Humans & the Environment | |



PA Wildlife Center

PA Wildlife Center

Brooke Pegher
Director of Education

6000 Verona Road
Verona, PA 15147
Phone: (412) 793-6900

Services Provided:

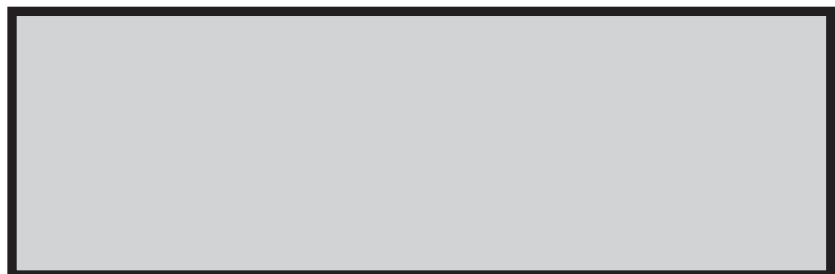
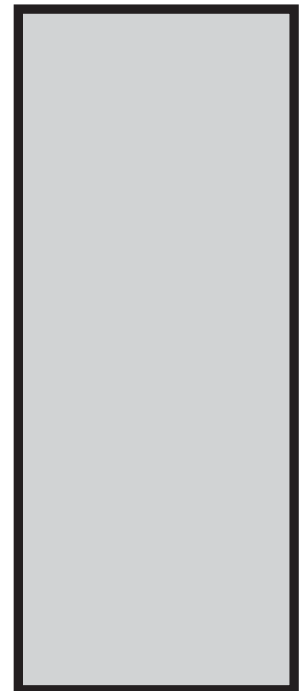
Monthly workshops

In-school presentations

Scout badges

on-site programs

The PA Wildlife Center is a non-profit hospital and rehabilitation center for native Wildlife. We are dedicated to conservation, education, research and professional veterinarian care. We provide leadership to individuals and institutions by fostering an appreciation for wildlife and the environment.



PA Academic Standards for Environment & Ecology Addressed

Agriculture & Society

Integrated Pest Management

Ecosystem and Their Interactions

Renewable & Non-Renewable Resources

Environmental Health

Threatened, Endangered & Extinct Species

Environmental Laws & Regulations

Humans & the Environment

Watersheds & Wetlands



Pennsylvania Center for Environmental Education

Pennsylvania Center for Environmental Education

Slippery Rock University
Slippery Rock, PA 16057

phone: (724)738-4555
fax: (724)738-4502

email: pcee@sru.edu
website: www.pcee.org

Services Provided:

At Our Facility

Support Materials

Teacher Training

Website activities

The Pennsylvania Center for Environmental Education (PCEE) is a collaborative effort of 13 Pennsylvania entities established by Executive Order of the Governor in 1996. The center was formed to maximize statewide environmental education (EE) resources and efforts to ensure continued access to quality EE for all commonwealth citizens. Our services are available to all including: Pennsylvania schools, environmental and EE organizations, business and industry, and community and civic groups.

The PCEE works in partnership with PA individuals, state agencies and non-government organizations to promote the EE process as a tool. This mission is accomplished through collaboration with the partners; providing access to quality resources and services; identifying needs and trends;

PCEE is currently working on curriculum for the Environmental Education Standards as well as other helpful teaching materials for educators in Pennsylvania.

"The Pennsylvania Center for Environmental Education is...a comprehensive, on going, professional development information source..."

enhancing and complementing the effectiveness of existing programs; and facilitating partnerships.

What can the PCEE do for you?

- Supply specific EE information via our Web site at : www.pcee.org
- Offer workshops on EE
- Publicize your EE events
- Create partnerships and networking opportunities
- Supply technical assistance in EE
- Help to match individuals and organizations with appropriate grant funders

PA Academic Standards for Environment & Ecology Addressed



**Agriculture &
Society**



**Integrated
Pest Management**



**Ecosystem and
Their Interactions**



**Renewable
& Non-Renewable
Resources**



**Environmental
Health**



**Threatened,
Endangered
& Extinct Species**



**Environmental
Laws & Regulations**



**Watersheds
& Wetlands**



**Humans &
the Environment**



PENNSYLVANIA FISH & BOAT COMMISSION

PA FISH & BOAT COMMISSION

Dennis Tubbs
Aquatic Resources
Program Specialist
SW Region
236 Lake Road
Somerset, PA 15501

phone: (814) 443-9841
fax: (814) 445-3497

Website:
www.fish.state.pa.us

Services Provided:

Teacher Workshops
Educational Materials

The mission of the PF&BC is to provide fishing and boating opportunities through the protection and management of aquatic resources.

The Pennsylvania Fish & Boat Commission offers instructor training in boating safety, fishing skills, and aquatic resource education.

You might be aware that the Commission stocks fish, protects PA's amphibians, reptiles, aquatic insects and invertebrates, and works to keep anglers and boaters safe. But were you aware that the Commission produces brochures, posters and fact sheets and makes them available to educators and youth group leaders--free of charge? Did you know you can borrow a video for use in your classroom?

Grades:

K-12

Cost:

Free

Time:

Varies

Of Special Interest to Educators:

Keystone Aquatic Resources Education Workshop (KARE)

PA Amphibians and Reptiles Workshop

Educational Resources Catalog - www.fish.state.pa.us

Pennsylvania League of Angling Youth (PLAY)

PA Academic Standards for Environment & Ecology Addressed



Agriculture &
Society



Integrated
Pest Management



Ecosystem and
Their Interactions



Renewable
& Non-Renewable
Resources



Environmental
Health



Threatened,
Endangered
& Extinct Species



Environmental
Laws & Regulations



Watersheds
& Wetlands



Humans &
the Environment



Pennsylvania Game Commission

Pennsylvania Game Commission

Joseph V. Stefko
Wildlife Education
Supervisor

Pennsylvania Game
Commission
Southwest Regional
Office
4820 Route 711
Bolivar, PA. 15923

phone: (toll free)
1 -(877) -877-7137
fax: (724) 238-5127

www.pgc.state.pa.us

Services Provided:

In-School Programs

Out of School Programs

Teacher Training

Equipment Needed:
(preparation)
Some pre-reading
material and prior
viewing of videos
by educator

The Pennsylvania Game Commission offers a variety of materials and activities to educators to incorporate outdoor study into current curriculum. Publications, handouts and audiovisual catalogs are available on a range of topics and free for educators to use in the classroom.

The PA Game Commission also works with educators to provide programs and outdoor study activities. The programs provide a wide array of wildlife related programs that can be adapted to students of all ages and grade levels. These programs can include specific curriculum subjects or general education materials. Specific programs can include information on biology, physiology, habitat, and management. The PA Game Commission can also provide programming on the Commission's duties, responsibilities and employment requirements for school Career Days. All of the materials, equipment and handouts necessary for these programs are provided free of cost.

Grades:

K-12

Cost:

Free

Time:

Programs are set up to fit classroom time frames; single sessions 45min-1hr; multiple sessions upon request

"We can provide a wide array of wildlife related programs that can be adapted to students of all ages and grade levels. These can include specific curriculum subjects or general education materials."

We also provide teacher workshops in both the Project Wild and PA. Songbirds curriculums as well as a specialized Black Bear Workshop through local Intermediate Units for academic Credit or Act 48 hours. These workshops can also be set up as part of a teacher in service day at individual schools. PA Game Commission officers are available for assistance during non-peak law enforcement periods. Officer scheduling requires at least a 30 day written request to ensure participation.

PA Academic Standards for Environment & Ecology Addressed

- Agriculture & Society
- Ecosystem and Their Interactions
- Environmental Health
- Environmental Laws & Regulations
- Humans & the Environment
- Integrated Pest Management
- Renewable & Non-Renewable Resources
- Threatened, Endangered & Extinct Species
- Watersheds & Wetlands



Pennsylvania Resources Council

Pennsylvania Resources Council

Hal Kaufman
Education Coordinator
64 South 14th St.
Pittsburgh, PA 15203

phone: (412) 431-4449
x246
fax: (412) 488-7492

email:
halk@ccicenter.org
website: www.prc.org

Services Provided:

In-School Programs

Support Materials

Environmental Education Traveling Trunks

Equipment Needed:

Interested Students
Creative Teachers

The Pennsylvania Resources Council (PRC) the second oldest grassroots nonprofit environmental organization in PA offers a variety of environmental education programs to schools throughout the region. All programs are aligned with the PA Academic Standards for Environment & Ecology as well as other relevant standards. Most programs are presented to the schools free of charge through funding from the Allegheny County Health Department, the City of Pittsburgh, and the PA Department of Environmental Protection as well several foundation grants.

The Resource Conservation Program (RCP), PRC's signature education program, is an interactive, in-school program for grades four through nine. The program brings a PRC staff person into the classroom for four to eight sessions and is designed to provide students with a hands-on approach to resource conservation and recycling. RCP provides in-classroom presentations on the uses of natural resources, recycling, composting and landfills, and students have the option of engaging in a school waste audit.

For their culminating activity students have the opportunity to participate in a variety of activities such as recycled papermaking, a "Buy Recycled" Fashion Show, or a Recycling Olympics. Teachers receive training and materials to replicate the program on their own with future classes. The program is an entertaining and educational way to teach environmental science, social studies, and communication skills, all with an environmentally friendly message.

Assembly Programs - PRC's whole school assemblies bring a professional magician to the schools to present the following programs:

- The "Recycling and Magic" Show - a fun and entertaining way for students to learn about "Closing the Recycling Loop" and waste reduction

- The Litter and Magic Show - introduces students to the issues of litter in their community in an exciting and entertaining format

PRC's Watershed Education Program: Non Point Source Pollution and Human Impacts on the Watershed is a two-session program designed for students in 4th thru 9th grade. The program covers the following topics: defining what a watershed is; overview of the properties of water and the water cycle; watersheds within Allegheny County; human uses of water and human impact on the watershed and watershed conservation practices.

In-school Anti-Litter Program

PRC has been involved with raising public awareness about the issues around litter since its inception as the PA Roadsides Council in 1939. The in-school Anti-Litter Program is designed to:

- teach students from third to sixth grade about litter and why it is a problem in their community and how it effects their quality of life
- inform students about the amount of litter occurring in Pennsylvania and ways they can help reduce it
- encourage students to Take the Pledge Not to Litter and make posters to raise awareness about the issue of litter at their school and in the surrounding neighborhood

**In-School
Programs:**
grades 4-12

**Traveling
Trunks:**
grades k-12

Cost:
Free

Length of Programs:

--In-School Program 6-8 weeks
(1 meeting a week)

--Traveling Trunks loaned for 2 week
periods

Backyard Composting Workshop - This three-session workshop engages students in hands-on composting experiments that teach:

- how to maintain a healthy compost bin
- the role of decomposers in recycling organic matter
- ways to reduce the waste stream.

Participating schools will receive an Earth Machine Compost Bin to compost schoolyard waste. Teachers will also receive extension activities for further classroom learning.

Worm or Vermi-Composting Workshop - During this three-session workshop, students will have the opportunity to:

- set up a classroom worm bin
- study worm anatomy and behavior
- learn how to maintain a healthy worm composting bin

Participating classes will receive a worm bin complete with a ½ pound of red wiggler worms, and an activity book for further classroom learning. For more details on the in-school composting programs contact Corinne Ogrodnik at (412) 431-4449 x325

Traveling Trunks (for middle school students): self-contained individual thematic units covering a specific environmental topic and designed to address PA Academic Standards for Environment & Ecology. Trunks are available on the following topics: Recycling, Healthy Home Alternatives, Environmental Shopping and Energy and Resource Conservation.

EE Workshops for Teachers - PRC offers numerous teacher workshops on environmental issues pertinent to this region. These workshops are designed to provide teachers with the resources to more effectively address the PA Environment and Ecology Standards as well as providing them with an assortment of related hands-on activities they can take back to their classrooms. All workshops are approved for hours or credits towards PA Dept. of Education Act 48 accreditation.

For the past several summers PRC has offered an in-depth multi-day EE workshop for teachers, which has included fieldtrips to local parks and sites of environmental relevance, some lecture and discussion and presentations by representatives from local environmental organizations on resources they offer for schools and teachers.

PRC will be offering teacher workshops in the '04-'05 school year on Air Quality in collaboration with PA Department of Environmental Protection, The Southwest Air Quality Partnership Inc. and The Group Against Smog and Pollution (GASP). The workshops will focus on ground-level ozone and particulate pollution and their impact on human health as well as behavioral changes people can make that can minimize emissions and exposure.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Environmental Laws & Regulations



Threatened, Endangered & Extinct Species



Humans & the Environment



Watersheds & Wetlands



Phipps Conservatory and Botanical Gardens

Marjorie Radebough
Head of Education
One Schenley Park
Pittsburgh, PA 15213

phone: (412)622-6915
ext. 6925
fax: (412)622-7363

email:
education@
phipps.pgh.pa.us

Services Provided:
In- School Programs

At Our Facility:

Teacher Training
Outdoor Learning
Laboratory

Support Materials

Phipps Conservatory and Botanical Gardens

Phipps Conservatory and Botanical Gardens, which now includes Phipps Garden Center (formerly Pittsburgh Garden Place), offers a wide range of programs for both teachers and students. A visit to the Conservatory allows students the opportunity to see botany in action through a variety of hands-on, student-tested programs. Take part in one of many programs at the Conservatory such as The Great Kapok Tree, Butterflies: A Flower's Best Friend, The Dynamic Desert, Plant Diversity, The Tropical Rainforest, Discover the World Through Plants, Petals and Pollinators, Native American Gardening, The Seed and Fruit Connection and Pests and Predators. Follow this with a self-guided docent-led tour of the Conservatory. Cost for programs is \$4 per student. The opportunities at Phipps allow schools to introduce students to a world class facility in the heart of Oakland.

Grade:

K-8

Cost:

\$3.00- \$4.00/
student

Time:

2 hours

Some of the programs currently offered include: The Great Kapok Tree, Butterflies: A Flower's Best Friend, The Dynamic Desert, Plant Diversity, The Tropical Rainforest and many more!

Or, let us come to your school and present one of our Green & Growing programs such as Seed Startling, Worms, Wonderful Worms, Bulbs or Plant Propagation. Cost for most programs is \$2.50 per student.

Teacher In-Service Programs are offered through the Allegheny Intermediate Unit and are approved for ACT 48 credit. Teacher In-Service programs may also occur on school grounds, customized for the educator and the school. These programs vary in theme, covering topics such as practical horticulture for the classroom, comparative forest studies, the amazing amazon, designing customized outdoor learning laboratories and creating successful school gardens.

Phipps works with schools in Pittsburgh and beyond.

www.phipps.conservatory.org

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Environmental Laws & Regulations



Threatened, Endangered & Extinct Species



Humans & the Environment



Watersheds & Wetlands



The Pittsburgh Herpetological Society

The Pittsburgh Herpetological Society

Dolly Ellerbrock
Cofounder
c/o The Pittsburgh Zoo &
PPG Aquarium
One Wild Place
Pittsburgh, PA 15206

phone: (412)361-0835
fax: (412)665-3661

email:
phs@trfn.clpgh.org

Services Provided:

In-School Programs

Support Materials

Equipment
Needed:

Movie screen

Slide Projector

Tables

PA system

The Pittsburgh Herpetological Society is a nonprofit, nonvenomous organization dedicated to fostering an appreciation of all reptiles and amphibians through husbandry, conservation and education.

Meetings are held at the Pittsburgh Zoo Education complex the second Tuesday of the month at 7:30 PM. Members receive twelve newsletters a year and are encouraged to submit articles and information to the newsletter editor.

The Showcase of Reptiles and In-School Programs are an exciting educational tool for members as well as participants. The PHS also maintains an award-winning website (<http://trfn.cipgh.org/phs>) as a resource for members and program participants.

At the present time, our organization is in the process of raising funds to help build the new exhibit for the new Komodo Dragon at the Pittsburgh Zoo. The "Up the Creek" Conservation Project is

Grade:

3rd-5th
6th-8th
9th-12th

Cost:

\$50.00

Time:

1 Hour

"Our Showcase of Reptiles and In-School Programs are an exciting educational tool..."

dedicated to native species in the region, and monthly water-testing and inventory of species will continue in this ten-year project.

The PHS has completed our program with the Carnegie Library that sponsored the purchase of an expanded herpetology section, providing up-to-date information on a variety of reptiles and amphibians.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|--|--|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input type="checkbox"/> Environmental Health | <input checked="" type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input checked="" type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Watersheds & Wetlands |
| <input type="checkbox"/> Humans & the Environment | |



Pittsburgh Parks Conservancy

Pittsburgh Parks Conservancy

Mary Beth Steisslinger
Program Coordinator

242 McKee Place
Pittsburgh, PA 15213

phone: (412)682-7275
fax: (412)622-0160

pkscnsv@hotmail.com

Services Provided:

Teacher Training
Act 48 Approved

The Summer Teaching Institute encourages teachers to bring the beauty, history and biodiversity of Pittsburgh's city parks into the classroom. The workshop takes place in Pittsburgh's four largest parks: Schenley, Riverview, Highland and Frick. Participating teachers receive field guides designed to help students learn to identify the variety of life forms in the park as well as new Project Learning Tree and Project WILD curriculum materials and training. These programs help teachers to adapt outdoor and environmental education activities to all facets of academic study. Upon completion of the workshop, participants will also receive a free bus voucher for a class field trip to Schenley, Riverview, Highland, or Frick parks. Teachers participating in this workshop are eligible for ACT 48 credit.

Grades:
K-12

Time:
5 day sessions

Cost:
free

"Our Program focuses on the use of urban parks in science, social studies, art and interdisciplinary curricula..."

PA Academic Standards for Environment & Ecology Addressed

Agriculture & Society

Integrated Pest Management

Ecosystem and Their Interactions

Renewable & Non-Renewable Resources

Environmental Health

Environmental Laws & Regulations

Threatened, Endangered & Extinct Species

Humans & the Environment

Watersheds & Wetlands



Pittsburgh Voyager

Pittsburgh Voyager

Ann Tipper
1501 Reeddale St.
Suite 2001
Pittsburgh, PA 15233

phone: (412)231-2712
or 231-2876
fax: (412)231-2880

email: atipper@pittsburghvoyager.org

Services Provided:

At Our Facility

Teacher Training

Equipment
needed:
(Preparation)

2 day teacher
training program

Pittsburgh Voyager is a nonprofit, educational organization whose mission is to provide opportunities for motivating students and developing critical thinking skills using hands-on approaches and technologies. To develop in students a better understanding and appreciation for science, mathematics and technology, Voyager has developed unique and innovative, river-based educational programs to generate excitement about learning and inspire academic excellence. Voyager's programs combine a multi-disciplinary classroom program with an experiential learning program on Pittsburgh's greatest natural resources --the Allegheny, Monongahela and Ohio Rivers.

While onboard, students become scientists, measuring chemical components of the water such as pH, dissolved oxygen levels, temperature and turbidity. They also sample water

Cost:
varying with
programs

Time:
1 day

Maximum:
33 students; 2
teachers

Programs

Environmental Science on
the Three Rivers--Grades 5-12

Boats, Bridges & Water--Grades 6-8

for macro and microinvertebrates using plankton tows and ponars, then use state of the art equipment to identify organisms and further investigate the river ecosystem.

The Voyager Environmental Science School Program is an adventure-based, discovery program for students and teachers in Southwestern Pennsylvania. Voyager provides a forum for students to apply many of the scientific and mathematical concepts they are learning in the classroom in a real-world situation. The program includes five distinct, but integrated program components: Teacher Training Workshop, Classroom Program & Captain's Chest, Field Experience, Logbook and Evaluation

PA Academic Standards for Environment & Ecology Addressed

- | | |
|--|--|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input checked="" type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input checked="" type="checkbox"/> Environmental Health | <input checked="" type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Environmental Laws & Regulations | <input checked="" type="checkbox"/> Watersheds & Wetlands |
| <input checked="" type="checkbox"/> Humans & the Environment | |



The Pittsburgh Zoo and PPG Aquarium

The Pittsburgh Zoo and PPG Aquarium

For teacher workshops:

Mark Reardon
(412) 365-2521
reardon@zoo.pgh.pa.us

For Learning Adventures,
Zoomobile Outreach
or Group Sales:

Cindi Pfeiffer

(412) 365-2522
cindip@zoo.pgh.pa.us

One Wild Place
Pittsburgh, PA 15206

phone: (412)365-2520
or (412)365-2522
fax: (412)665-3661

Services Provided:

In-School Programs
At Our Facility
Teacher Training

The Pittsburgh Zoo and PPG Aquarium offers a myriad of programs that provide a rich learning experience for students and teachers. From coral reefs to tropical rainforests and endangered species to zoo careers Wild About Learning programs at the Zoo offer thematic classes that cover several of the new Pennsylvania Standards for Environment and Ecology. If you cannot get your students to the Zoo, education specialists can visit your school in one of our Zoomobiles for an investigation of wildlife designed to meet the needs of preschool through high school ages. Teacher workshops provide educators with knowledge and activities that put the life back into life sciences. And if school groups prefer to visit the zoo without utilizing any of these programs, they can prepay through the Education Department and still receive a Teacher Packet that will help you to plan and educational field trip to the Pittsburgh Zoo and Aquarium.

Fees Vary

**The Pittsburgh Zoo's programs include:
Zoofari, It's a Jungle, Coral Critters, Wild About Wetlands, African Adventures, Pennsylvania Pride, Animals in Jeopardy, Vertebrates, Exploring the Rainforest, and many more!**

To find out about the Zoo's conservation and research programs, animals, exhibits, upcoming events and more, visit www.pittsburghzoo.com.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|--|--|
| <input type="checkbox"/> Agriculture & Society | <input checked="" type="checkbox"/> Integrated Pest Management |
| <input checked="" type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input type="checkbox"/> Environmental Health | <input checked="" type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Environmental Laws & Regulations | <input checked="" type="checkbox"/> Watersheds & Wetlands |
| <input checked="" type="checkbox"/> Humans & the Environment | |



Rachel Carson Homestead

613 Marion Ave.
Springdale, PA 15144

phone: (724)274-5459
fax: (724)275-1259

email:
homestead@rachelcarson.org
website:
www.rachelcarson.org

Services Provided:

In-School Programs

At Our Facility

Tours

Equipment Needed:
(depending on program)

Movie Screen

Large Area

Rachel Carson Homestead

The Rachel Carson Homestead is the birthplace and childhood home of ecologist Rachel Carson (1907-1964), whose 1962 best-seller *Silent Spring* launched the modern environmental movement. Born in this four-room farmhouse, Rachel Carson's childhood in Southwestern Pennsylvania nurtured a love and respect for nature and natural things which would guide her the rest of her life. *Silent Spring* warned of the dangers of indiscriminate pesticide use and established Rachel Carson as one of the most important and influential environmentalists in history.

Carson's earlier books included *Under the Sea Wind* (1941), *The Sea Around Us* (1951), and *Edge of The Sea* (1955). *The Sense of Wonder*, which encouraged adults to share their love and appreciation for the natural world with children, was published posthumously.

Costs:

1. \$60 for first 15 students, \$3 for each additional student
2. 30 min/ \$40; 1hr/\$75; 2hrs./\$140
3. \$5 per scout
4. Free!
5. \$4 adult; \$2.50child

- | | |
|-----------------|--|
| Programs | <ol style="list-style-type: none">1. Historical Site Programs: K-122. Outreach Programs: K-123. Scout Programs: grades 3-84. "Science on Saturdays": child- adult5. Tours: child-adult |
|-----------------|--|

The Rachel Carson Homestead Association, a 501 9(c) (3) private nonprofit organization, was formed in 1975 to preserve and restore Rachel Carson's birthplace and to provide environmental education programs which advance her environmental ethic. Today, the Homestead offers guided tours of the house and grounds, environmental education classes, school and outreach programs, and also serves as an international resource for information about Rachel Carson's life and work.

PA Academic Standards for Environment & Ecology Addressed

Agriculture & Society

Integrated Pest Management

Ecosystem and Their Interactions

Renewable & Non-Renewable Resources

Environmental Health

Environmental Laws & Regulations

Threatened, Endangered & Extinct Species

Humans & the Environment

Watersheds & Wetlands



Rachel Carson Institute

Rachel Carson Institute

Dr. Ellen Dorsey
Director

Amanda Schiffman
Program Assistant

Chatham College
Woodland Road
Pittsburgh, PA 15232

phone: (412)365-1824
(412)365-1361

fax: (412)365-1868

email:
edorsey@chatham.edu
aschiffman@chatham.edu

Services Provided:

Rachel Carson
Environmental
Awareness Day

Rachel Carson
Essay Contest

Out-of-School Programs

The Rachel Carson Institute (RCI) was founded in 1988 to honor Chatham College's distinguished alumna, Rachel Carson' 29. To further the ideals of this pioneering scientist and the founder of the modern environmental movement, RCI focuses on environmental education in the college and greater communities.

Rachel Carson Environmental Awareness Day is a program for high school students and their teachers. Participants take part in a program focusing on a selected aspect of environmental awareness. Hands-on workshops and interactive sessions reinforce the lessons demonstrated in the keynote session. Past year's themes included biodiversity, environmental toxins and water quality issues. Chatham provides lunch for participants.

Grades:

9-12

Cost:

Free

Time:

1 Day
programs

"RCI also sponsors lectures, programs and seminars throughout the year on a variety of topics and issues, often working with other organizations as partners."

The Rachel Carson Essay Contest helps encourage multidimensional learning while honoring students demonstrating both science knowledge and excellence in English. Essays are reviewed by a team of faculty members from the science, English, and environmental studies departments for originality, research, and depth of presentation. Cash prizes are awarded. Teachers are encouraged to use the contest as part of a class project.

RCI also sponsors lectures, programs and seminars throughout the year on a variety of topics and issues, often working with other organizations as partners. Many of these programs would be appropriate for high school students.

PA Academic Standards for Environment & Ecology Addressed

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|--|--|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input checked="" type="checkbox"/> Ecosystem and Their Interactions | <input type="checkbox"/> Renewable & Non-Renewable Resources |
| <input type="checkbox"/> Environmental Health | <input checked="" type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input checked="" type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Watersheds & Wetlands |
| <input checked="" type="checkbox"/> Humans & the Environment | |



S.E.C.T.E.M

Student/Employee/Community Teamed for Energy Management

S.E.C.T.E.M

Jafus F. Boyd Jr.
Director of Plant
Operations

Ken Frazier
Energy Management
Monitor/ Coordinator
#8 South 12th Street
Pittsburgh, PA 15203

phone:(412)488-5129
fax:(412)488-4274

email:
kfrazier1@Pghboe.net

Services Provided:

In-School Programs

Support Materials

Equipment
Needed:
(Preparation)

Student/Teacher
Action Plan

Regular Meetings to
Check Progress

The purpose of S.E.C.T.E.M is to get students more involved in energy conservation. This program gives students firsthand knowledge and experience that will be of lifelong value in their schools, homes and future work places. S.E.C.T.E.M is committed to working with educators and the community in providing leadership which promotes wise and efficient use of energy to conserve funds for educational programs.

Resources available to schools include a system-wide budget of \$50,000 to be used toward incentive awards, plaques, grants for S.E.C.T.E.M., supplies and an energy-saving manual for schools. Printouts of your school's electric usage will be provided to you for in-school energy monitoring by your school Energy Conservation committee. Monetary awards ranging from \$200 to \$500 will be awarded to each school with an energy

Grade:
K-12

Cost:
free

Other:
Periodic reports of the school's activities are sent to the Energy Management Monitor Coordinator

"I believe in the dedication and ability of the employees of Plant Operations, to use energy wisely to convert utility dollars to education dollars."

Jafus F. Boyd Jr.

reduction of at least 10%. The time for measuring this savings will extend over a 10 month period from September 1 thru June 30 and will be compared with the same period in an established base year for your school.

Suggested format includes each school forming a committee consisting of a student, administrator, community person, teacher, custodian, etc. The committee should write an energy-action plan with a list of priorities for its school. They then review the electric energy consumption from the prior year and base year as a beginning point and brainstorm ideas to conserve during this new year of energy-saving measures. The energy manual will provide suggestions and other information which will be of assistance to the committee.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|---|---|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input type="checkbox"/> Ecosystem and Their Interactions | <input checked="" type="checkbox"/> Renewable & Non-Renewable Resources |
| <input type="checkbox"/> Environmental Health | |
| <input type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Humans & the Environment | <input type="checkbox"/> Watersheds & Wetlands |



Slippery Rock University

Department of Parks and Recreation/ Environmental Education

Slippery Rock University

Dr. Dan Dziubek
Associate Professor
Dept. of Parks & Recreation and
Environmental Education

Slippery Rock University
Slippery Rock, PA 16057

phone: (724)738-2958
fax: (724)738-2938

email:
daniel.dziubek@sru.edu

Services Provided:

Teacher Training

Slippery Rock University will offer its 8th annual Wild Resources Workshop for Elementary Teachers from June 17-22, 2002 on the Slippery Rock University campus in Butler County. This resident environmental education workshop is sponsored by the University, Safari Club International Pittsburgh Chapter, the Pennsylvania Department of Education, the Pennsylvania Game Commission, the Wild Resource Conservation Fund, and the Pennsylvania Fish and Boat Commission. The workshop is designed to provide teachers with content and curricula that will assist them in meeting state requirements for environmental education and is offered at no charge to the participants.

The week is structured around thematic days focusing on aquatic, forest, and wildlife resources and concludes with a session on integrating environment

The week workshop focuses on aquatic, forest, and wildlife resources.

"The [teacher training] workshop is designed to provide teachers with content and curricula that will assist them in meeting state requirements for environmental education and is offered at no charge to participants."

and ecology into the curriculum using the information and techniques gained through the workshop. Participants learn concepts from field professionals in each of these areas and then participate in activity sessions utilizing Project Learning Tree, PA Amphibians & Reptiles, Project Wild, Keystone Aquatic Resource Education, and Environmental Respect from the Safari Club. Evenings consist of recreational activities focusing on Pennsylvania's resources, conducted by agency personnel.

Meals, lodging and materials are provided. Graduate and intermediate unit credits are available; fees are the responsibility of the participant.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|--|--|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input checked="" type="checkbox"/> Ecosystem and Their Interactions | <input checked="" type="checkbox"/> Renewable & Non-Renewable Resources |
| <input checked="" type="checkbox"/> Environmental Health | <input checked="" type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input checked="" type="checkbox"/> Environmental Laws & Regulations | <input checked="" type="checkbox"/> Watersheds & Wetlands |
| <input checked="" type="checkbox"/> Humans & the Environment | |



Stash the Trash

Stash the Trash

Richard Bruce

City of Pittsburgh
Bureau of Building
Inspection
200 Ross St.
Pittsburgh, PA 15219

phone: (412)255-2177
fax: (412)255-2974

Services Provided:

In-School Programs

Support Materials

Stash the Trash is a program organized by the Bureau of Inspection to help combat litter in the City of Pittsburgh. Participation of Pittsburgh City Schools has dramatically increased over the years, involving more teachers and students in a community service oriented project that encourages thinking globally and acting locally.

Schools interested in joining the Stash the Trash team can be included by contacting Richard Bruce, coordinator of the program. Lead teachers identify areas in or around the school that could use a general clean up. After narrowing locations, students use gloves and trash bags supplied by the city to clean up the area. The City picks up the filled bags after the project is completed.

Participating students are often featured in the local media, giving them recognition for positive

Grades:

K-12

Cost:

Free

Time:

varying

"Participation of Pittsburgh City Schools has dramatically increased...involving more teachers and students in a community service oriented project that encourages thinking globally and acting locally."

action in their community. The Mayor of Pittsburgh invites representatives of participating schools to a post-event awards ceremony at the city-county building. Schools are also recognizing their students' hard work in cleaning up their community.

Stash the Trash is a first step to a comprehensive litter awareness, prevention and control program at a targeted school. With the aid of the Pennsylvania Resources Council, Stash the Trash can provide anti-litter posters, pins and other litter fighting tools to participating schools. Call the Pennsylvania Resources Council or Richard Bruce to receive more information about the Lens on Litter program available to interested amateur photographers.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Environmental Laws & Regulations



Threatened, Endangered & Extinct Species



Humans & the Environment



Watersheds & Wetlands



The Steel Recycling Institute

Steel Recycling Institute

Cycles for Science

Mary Norton
Foster Plaza 10
680 Andersen Dr.
Pittsburgh, PA 15220

phone: (412)922-2772
fax: (412)922-3213

Services Provided:

In School Programs

Out of School Programs

Teacher Training

The Steel Recycling Institute is an industry association dedicated to promoting and sustaining steel recycling. It is the primary information and technical resource for educators interested in steel recycling. This Pittsburgh based national organization has worked with teachers to develop a series of hands on activities known as Cycles for Science. This real life, user-friendly curriculum supplement is full of classroom tested activities designed to give students practical learning experience across all science subjects and skill areas.

Cycles for Science has curriculum supplements for Biology, Chemistry, General Science and Earth Science, Physics and Community Volunteer Projects. It was developed in cooperation with secondary teachers and solid waste management professionals and is part of the Steel Cycles program for K-12.

Grade:

9-12

Cost:

Varies

Other:

SRI can provide teacher training workshops for Cycles for Science

“SRI programs are being used throughout the country to support science objectives.”

Other SRI programs include the Yes I Can videotape and educators guide for early elementary school students, a Nature's for Me preschool program and Community Activity sheets (available free of charge for all ages). SRI can also provide Cycles for Science teacher training workshops.

SRI programs are being used throughout the country to support science objectives.

PA Academic Standards for Environment & Ecology Addressed

- | | |
|---|---|
| <input type="checkbox"/> Agriculture & Society | <input type="checkbox"/> Integrated Pest Management |
| <input type="checkbox"/> Ecosystem and Their Interactions | <input checked="" type="checkbox"/> Renewable & Non-Renewable Resources |
| <input type="checkbox"/> Environmental Health | <input type="checkbox"/> Threatened, Endangered & Extinct Species |
| <input type="checkbox"/> Environmental Laws & Regulations | <input type="checkbox"/> Watersheds & Wetlands |
| <input type="checkbox"/> Humans & the Environment | |



Student Conservation Association

Student Conservation Association

Nora Murphy
Regional Program
Manager

239 4th Ave. Suite 1007
Pittsburgh, PA 15222

(412) 325-1851
fax: (412) 325-1856

www.sca-inc.org

Services Provided:

Environmental
Education and
hands-on conservation
service for youth

The Student Conservation Association (SCA) is America's largest and oldest provider of national and community conservation service opportunities, outdoor education and career training for youth. SCA volunteers and interns annually perform more than one million hours of conservation service in national parks, forests, refuges, and urban areas in all 50 states.

The goal of SCA's urban program is to offer urban youth the opportunity to cultivate understanding, appreciation and stewardship of our natural world while developing life skills and career competencies through service to the land. To achieve this goal, we facilitate growth in young people by providing opportunities to experience the themes of

Grade:

9-12

Cost:

Free
Students can
earn money

Time:

2
weekends/m
onth
and/or
summer
opportunities

Changing lives through service to nature.

environmental education, career exploration, life skills, leadership, and outdoor skills. These themes will be implemented through the delivery of a sequential program model using the mediums of conservation service, environmental education and outdoor activities.

The program will offer after school and weekend programming. At the high school level, the program year will culminate with the opportunity for students to participate in a multi-week summer outdoor service experience in the region and nationally. SCA's Urban Youth Corps program is for students in grades 10-12 with a 2.0 GPA or higher. Student crews from across the city meet two weekends a month to volunteer in the outdoors, camp, canoe and learn about the environment. There is also an opportunity for students to earn money by participating.

PA Academic Standards for Environment & Ecology Addressed

- | | |
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| <input checked="" type="checkbox"/> Humans & the Environment | |



Three Rivers Storm Drain Stenciling Team

Three Rivers Storm Drain Stenciling

Freddie Fields
Mgr. of Industrial waste

phone: (412)734-8724
fax: (412)732-8032

email:
freddie.fieldsr@alcosan.
org

Equipment Needed:

Interested Teachers

One to Three
Hour Time Slot

The Three Rivers Storm Drain Stenciling Team evolved from a strong partnership of the Allegheny County Sanitary Authority, Pittsburgh Water and Sewer Authority, Allegheny County Health Department, and the Pennsylvania Resources Council. Students paint the message "Dump No Waste, Drains to River" on storm drains in their community. The program offers students the opportunity to participate in a fun and valuable community service activity while gaining a better understanding of watershed issues.

The project provides training to an adult who will act as a group leader. Materials are provided free of charge such as paint, stencils, gloves, safety vests and maps for students to develop their strategy. Students paint the message neighborhoods, students develop an awareness that actions in urban areas have effects on the natural environment. Garbage, litter and

Grades:
6-12

Cost:
Free

Time:
1 to 3 hours

"...The message 'Dump No Waste, Drains to River'...identifies possible pollution areas in local neighborhoods..."

other polluting substances that are deposited in storm drains do not simply disappear; these pollutants eventually end up in our lakes and rivers.

The project can occur during class time, after school or on weekends, lasting from one to three hours. Student groups of 10-15 are ideal for completing the project, although larger groups are workable.

The Three Rivers Storm Drain Stenciling Team sets the stage for classroom discussions involving Ecosystem and their Interpretation, Environmental Health, and Wetlands and Watersheds.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Threatened, Endangered & Extinct Species



Environmental Laws & Regulations



Humans & the Environment



Watersheds & Wetlands



Three Sisters Farm

Three Sister Farm

Darrell or Linda Frey
Managers

1134 Obitz Road
Sandy Lake, PA 16145

phone: (724) 376-2797
fax: (724) 376-4171

email:

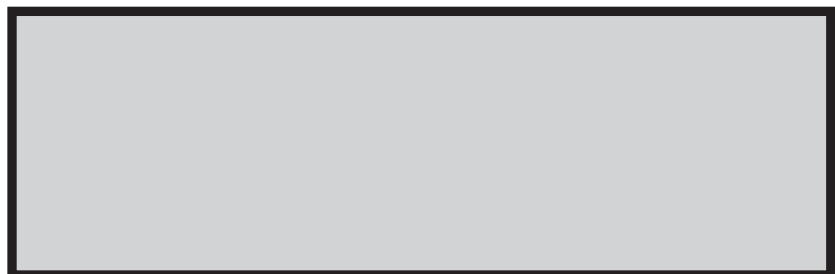
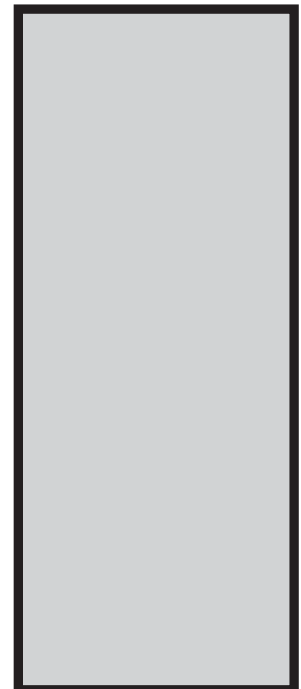
Services Provided:

Tour for Middle School
and High School
Students.

Workshops, lectures on
ecology on the farm
and sustainable design.

Three Sisters Farm is a certified organic market garden farm. We grow a full range of vegetables in season and a wide variety of herbs and speciality crops. Our crops are marketed to restaurants, grocers, caterers and individual subscribers in western Pennsylvania. We are open for farm sales Saturday 10-4 from June to October.

The tour of Three Sisters Farm addresses the new Standards for Environment and Ecology in a number of ways. Our farm tour begins with an overview of the farm history and operations. Three Sisters Farm received funding assistance in 1988 to build a solar heated greenhouse. The farm composts horse manure from a nearby stable to make fertilizer. The bioshelter and the farm as a whole are managed to encourage a healthy ecosystem. Habitat is provided for beneficial insects in the greenhouse.



In the gardens surrounding the bioshelter, habitat is provided for countless insects, frogs, snakes, birds, bats and other wildlife. This diversity of life helps maintain a balanced garden ecosystem. The overall impact of the farm on the environment is to enhance the quality of life in the area.

The tour also addresses solar energy, presenting basics of solar design, and an introduction to the various heating systems at the bioshelter, solar, wood and biothermal. Nutrient management is presented as well as botany during which students will propagate leaf or stem cuttings of scented geraniums.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Environmental Laws & Regulations



Threatened, Endangered & Extinct Species



Humans & the Environment



Watersheds & Wetlands



Western Pennsylvania Conservancy

Western Pennsylvania Conservancy

Farah Mosley
SGI Director
209 Fourth Ave.
Pittsburgh, PA 15222

phone: (412)586-2366
fax: (412)281-1792

email: fmosley@
paconserve.org

Services Provided:

School Ground
Plantings and Gardens

Through community conservation efforts, the Western Pennsylvania Conservancy (WPC) works to help make neighborhoods healthier and more attractive through its urban flower and vegetable garden programs and other greening projects. By helping to encourage reinvestment in communities, WPC helps reduce development pressures on undeveloped countrysides.

The WPC's School Garden Initiative (SGI) was created to address the fact that many students from urban areas may have a very limited knowledge of the natural world. A school garden often provides students with their first opportunity to learn about plants, soil and the environment, as well as making the school more attractive and welcoming. The Grable Foundation and Dominion Foundation currently fund portions of the program, in partnership with the Pittsburgh Public Schools and the WPC. The school gardens are

Grade:

K-12

Cost:

Free

Other:

Gardens can be viewed as outdoor laboratories!

"One of the goals of the grant initiative is to help develop a garden in every Pittsburgh Public School that wants one and is willing to commit the time and the resources" --WPC President Larry Schweiger

viewed as outdoor laboratories where students have an opportunity for hands-on learning by combining creativity and the arts, applied mathematics and research skills, as well as knowledge of horticulture, botany, and general sciences. The SGI also provides a foundation to help children learn about the importance of protecting our natural lands.

The School Garden Initiative Goals:

- To provide a unique, hands-on learning experience for children who may not otherwise be exposed to the natural world.
- To beautify school grounds and encourage community members to be more involved with our schools and the education of our children.
- To identify creative partnerships to generate interest in school gardens and help to ensure project sustainability.
- To provide a resource where students can be exposed to the importance of caring for the environment.

PA Academic Standards for Environment & Ecology Addressed



Agriculture & Society



Integrated Pest Management



Ecosystem and Their Interactions



Renewable & Non-Renewable Resources



Environmental Health



Environmental Laws & Regulations



Threatened, Endangered & Extinct Species



Humans & the Environment



Watersheds & Wetlands



Worm World

Pennsylvania's Finest Redworms For A Better Earth

Worm World

Kay Ihnat
26 Ihnat Lane
Avella, PA 15312

Phone: (724)356-2397
Fax: (724)356-9676

Email:
wormw@hky.com
Home page:
www.wormwrlld.com

Services Provided:

On Farm Programs

Support Materials

Equipment
Needed:

Curious Teachers
and Students!

At Worm World we have been growing redworms (red wigglers) for vermicomposting purposes since 1993. In addition, we offer all organic worm castings, worm bins for students, classrooms and families, worm books (How To and Classroom Workshops) and worm novelties (hats and tee shirts).

We now offer GROUP TOURS at our worm farm. With a group as small as 20, you can view a working worm farm, make your own vermicomposting unit, learn about recycling with red worms and get the knowledge needed to have your own bin either in your classroom or at home.

Along with the tour, we have included an educational session. We can answer any question your elementary students may have about worms and food wastes. The students are shown how they can recycle food wastes and have fun doing it.

Call
**"The Worm
Lady"** to
schedule a
vermi-
composting
tour
today!

**"We are trying to make
'Earth Day' everyday through
education of our youth."**

The Junior/Senior High Program focuses more on the ecology aspects, problems of waste management and an alternative solution to the problem of growing landfills.

Classroom units as well as a school size unit (commercial size) are incorporated to show what can be converted from a waste to a valuable by product. Each program can be tailor made to the educator's specific objectives.

Plan your field trip today. Other educational and fun stops to add to your trip which are close to Worm World are: Meadowcroft Village, Cross Creek County park, Weatherby Farm

PA Academic Standards for Environment & Ecology Addressed



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Humans & the Environment

Environmental Resource Guide



January '05
Southwestern PA, EE Resources Guide



Pennsylvania Resources Council, Inc.

"Working to protect the environment since 1939."