Guide to Environmental Education In Crawford County



Produced by the Crawford County Conservation District
With Growing Greener I Grant Funds provided by the
Pennsyvania Department of Environmental Protection (DEP)
Lynn Sandieson, Ryan Nageotte, Authors

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Introduction

Welcome to the "Guide to Environmental Education Resources in Crawford County." In putting together this guide we hope to provide the educator, scout leader, student, or interested private citizen with a quick and easy summary of environmental education resources available in Crawford County. We hope that you will take advantage of some of the opportunities listed here as you pursue your educational adventures.

The first version of this guide was produced by the Crawford Conservation District in 1976. We continually strive to keep it updated and interesting. This version was produced with Growing Greener I funding provided by the Pennsylvania Department of Environmental Resources. We hope that you find it useful.

If you know of any resources that would make good additions to this guide, we hope that you will let us know at lynn@crawfordconservation.com.

Lynn Sandieson District Manager

Crawford County Conservation District

Local Agencies and Individuals

Asbury Woods 4105 Asbury Road Erie, PA 16506

Phone: (814) 835-5356 Fax: (814) 835-5653

The mission of Asbury Woods is to provide all members of the community with opportunities to experience, study, and enjoy nature. To this end, Asbury Woods offers a wide variety of educational programs throughout the year for school and youth groups as well as the general public. Located in Millcreek Township in Erie County, PA, Asbury Woods is a 200-acre tract of wetlands, trails, forests, streams, fields and historic properties. With five distinct natural and recreational areas – Asbury Woods Nature Center, Asbury Community Park, Brown's Farm, Greenway Trail and James Wildlife Preserve – Asbury Woods is one of the premier environmental centers in northwestern Pennsylvania, providing educational and recreational opportunities to more than 130,000 visitors annually.

Crawford County Conservation District

Woodcock Creek Nature Center 21742 German Road Meadville, PA 16335

Phone: (814) 763-5269 Fax: (814) 763-1585

The mission of the Crawford County Conservation District is to protect, conserve, and restore the natural resources of the county for present and future generations by actively seeking resources and partnerships to achieve these goals through voluntary cooperation. The District staff is available to do in-school programs on a variety of conservation topics including nonpoint source pollution, watersheds, aquatics, soils, etc. Subject to availability of staff, please call well in advance. See also Woodcock Creek Nature Center. The District also offers scholarships for teachers and students, the "Birth of a Tree" program, etc.

Crawford County Cooperative Extension

13400 Dunham Road, Suite A Meadville, PA 16335-8344 Phone: (814) 333-7460

Fax: (814) 333-1590

The extension's mission is to extend nonformal outreach educational opportunities to individuals, families, businesses, and communities throughout

Pennsylvania. To enable the Commonwealth to maintain a competitive and environmentally sound food and fiber system and prepare youth, adults and families to enhance the quality of their lives and participate more fully in community decisions.

Crawford County Planning Commission

Crawford County Courthouse Meadville, PA 16335

Phone: (814) 336-1151 Fax: (814) 337-0457

The Commission is an advisory body for Crawford County, reviewing subdivisions and land development for municipalities with land use ordinances. The Commission was established in 1963 by the Crawford County Commissioners, and is made up of nine voluntary residents of Crawford County.

Crawford County Solid Waste Authority

Crawford County Solid Waste Authority 231 Chestnut Street, Suite 310 Meadville, PA 16335

Phone: (814) 333-7366 Fax: (814) 336-3521

The solid waste authority deals with recycling and solid waste issues specific to Crawford County. Talks are given to any age group and size. The presentation can be tailored to the needs of the group. Consultations at businesses are available on how to set up recycling programs for organizations.

The Crawford County Solid waste authority authors educational programs on a wide range of environmental issues. Programs are offered throughout all of Crawford County and can be tailored to all ages. Presentations are focused towards the goals of the PA Department of Education's Academic Standards for Environment and Ecology. The Authority is not limited to the amount of educational programs they can present and presentation length can be requested. Interested parties can contact Brenda Schmidt at the above number, Monday through Friday, 9:00a.m. to 4:00p.m. For more information about the Solid Waste Authority, go online and visit www.countyrecycling.com

Creek Connections Box 10, Allegheny College 520 N. Main Street Meadville, PA 16335 Phone: (814) 332-5351

Creek Connections has forged an effective partnership between Allegheny College and regional K-12 schools to turn waterways in Northwest Pennsylvania,

Southwest New York, and the Pittsburgh area into outdoor environmental laboratories. Emphasizing a hands-on, inquiry based investigation of local waterways; this project annually involves over 40 different secondary schools and the classes of 50 teachers.

Project Goals:

- Regional Schools and College Collaborative
- Hands-On Investigative Project
- Ongoing Water Quality Analysis
- Increase Awareness of Natural Resources

Creek Connections offers educational talks and activities on a wide range of subjects including: aquatic life, aquatic macroinvertebrates, basic water chemistry, fresh water fish, drinking water, ground water, riparian buffers, stream geology, stream critters, topographic maps, water pollution, wetlands, and watersheds. Creek Connections services all of Crawford County and aims their programs at middle to high school students. There are no limits to how often they can present and presentations are usually around one hour. Their programs are targeted towards the goals of the PA Department of Education's Academic Standards for Environment and Ecology. They also offer multiple printed materials on the aforementioned topics. Anyone with questions or requests should contact Wendy Kedzierski at the above number, Monday through Friday, 8:00a.m. to 4:00p.m. To find out more about Creek Connections educational resources, visit http://creekconnections.allegheny.edu/.

Environmental Alliance for Senior Involvement

The Senior Environmental Corps trains people 55 and older to monitor the waterways about which they are concerned. Crawford County volunteers monitor over 10 sites. Volunteers commit to monitor the waterway of their choice at least once per month and conduct a stream habitat assessment and biosurvey twice per year; both tests are a commitment of at least one year. The French Creek Project is the site for the French Creek Senior Environmental Corps.

Ernst's Conservation Seeds

9006 Mercer Pike Meadville, PA 16335 800-873-3321 814-336-2404

It is the mission of Ernst Conservation Seeds to identify, collect and propagate native and naturalized seeds needed for restoration, reclamation, conservation, wildlife habitat enhancement and the beautification needs of their clients.

French Creek Project

301 Chestnut Street Meadville, PA (office location)

Box 172, Allegheny College (mailing address)

Meadville, PA 16335 Contact: Mark Gorman Phone: (814) 332-2946 Fax: (814) 333-8149

The French Creek Project, located in Meadville, raises the public's awareness about the value of streams, act as a catalyst for the development of local people who are concerned with water quality, and preserve habitat, maintain biological diversity, and to protect endangered species. They achieve their goals through education, outreach, and research.

French Creek Outdoor Learning Center

Crawford County Industrial Park 18308 Broadway Meadville, PA 16335 Phone: (814) 337-7305

Fax: (814) 336-6413

The French Creek Outdoor Learning Center is a collaborative effort formed to enhance the community's environmental education by embracing hands-on experiential learning utilizing a diverse, multi-disciplinary approach. The purpose of the Center is to instill a greater respect and understanding of nature, along with an appreciation for the unique resources and ecosystems found locally and those found at other environmental facilities.

French Creek Valley Conservancy

297 ½ Chestnut Street, Meadville, PA (office location) P.O. Box 434 (mailing address) Meadville, PA 16335

Phone: (814) 337-4321

The conservancy's mission is to promote the environmental integrity of the French Creek watershed and its environs, and to advocate the protection of natural resources in the watershed to the aesthetic, ecological, recreational and economic benefit of the citizens of the area.

McKeever Environmental Learning Center

McKeever Environmental Learning Center 55 McKeever Lane Sandy Lake, PA 16145 Phone: (724) 376-1000

Fax: (724) 376-8235

The McKeever Environmental Learning Center offers day and overnight programs for school groups, youth leaders, teachers, college students, and the general public. Lodges, dining hall, auditorium, classroom building with environmental library, four and one half miles of trails on 200 acres, on and one-quarter mile trail to Goddard State Park. Facility rental available, reservations required. There is a newsletter available on request.

McKeever gives programs and presentations on ecology, the environment, general science, and natural history. They are targeted towards K – adult. Programs can last from one hour to one week. Their programs are targeted towards the goals of the PA Department of Education's Academic Standards for Environment and Ecology. To find out more, call the McKeever office Monday through Friday between the hours of 8:00a.m. and 4:30p.m. or email info@mckeever.org.

Meadville Community Energy Project

Box E Allegheny College 520 North Main St. Meadville, PA 16335

Phone: (814) 332-2986 Fax: (814) 332-2789

A nonprofit, community organization based at Allegheny College since 1997, the energy project consists of students, business people, local government officials, property owners, renters, faculty, and other community members working to promote energy efficiency and renewable energy in northwestern Pennsylvania. By keeping money in the community, rather than sending it to large energy companies beyond local and state borders, the project stimulates the local economy, improves social equity, and benefits the natural environment.

MCEP offers educational programs on renewable energy sources, particularly solar power, and energy conservation. Programs are available to all of Crawford County and focus on K – 12th graders. Presentations last about an hour and are limited based on student availability. Their programs are targeted towards the goals of the PA Department of Education's Academic Standards for Environment and Ecology. To request an energy program, call Jane Anderson or Kathy Greely between 8:30a.m. and 2:30p.m. at the above telephone number or get more information online at http://welcome.to/mcep.

Meadville Public Library

848 North Main Street Meadville, PA 16335 Phone: (814) 336-1773

Fax: (814) 333-8173

The library has a selection of environmental books for adults and children. Also available are videocassettes; magazines, pamphlets and clippings on ecology, pollution, and wildlife; and a picture file for bulletin board material.

The Nature Conservancy

15 East Ridge Pike, Suite 500 Conshohocken, PA 19428 Phone: (610) 834-1323

Fax: (610) 834-6533

The Nature Conservancy is a leading international, nonprofit organization dedicated to preserving the diversity of life on Earth. The mission of The Nature Conservancy is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

Northwest Pennsylvania Woodland Association

Craig Lawergren, President 5102 Cherry St. Erie, PA 16509 (814) 825-5606

Tom Sekula, Vice President 11274 Donation Road Waterford, PA 16441 (814) 796-3822

The Northwest Pennsylvania Woodland Association (NWPWA) is an organization of forestland owners and others interested in forestry issues in Crawford, Erie and Warren Counties. The mission of the NWPWA is to provide information, education and an exchange of ideas to its members and others about the methods and benefits of proper forest management. The association emphasizes the awareness and implementation of best forestry management practices to sustain the forest and meet each landowner's objectives including recreational, economic and forest conservation values. Membership is made up primarily of private woodland owners from the three-county area. Membership also consists of public and private organizations and individuals who sponsor and support the purposes of the NWPWA.

Northwest Rural Electric Cooperative Association, Inc.

P.O. Box 207

Cambridge Springs, PA 16403

Phone: 1-800-472-7910 Fax: (814) 398-8064 Northwestern REC was organized by local farmers and other rural folks in 1936 and incorporated on February 13, 1936 - the first electric distribution cooperative in Pennsylvania. First energized on May 19, 1937, Northwestern REC now serves 20,000 members in Crawford, Erie, Venango, Mercer and Warren Counties in Pennsylvania. Owned by those it serves, Northwestern REC operates under several basic cooperative principles, including continual education and community outreach.

Pennsylvania Department of Conservation and Natural Resources,

Bureau of Forestry

Woodcock Creek Nature Center 21742 German Road Meadville, PA 16335 Phone: (814) 763-

Fax: (814) 763-1585

The DCNR Bureau of Forestry offers technical assistance to county forestland owners and offers a wide range of educational activities. Programs are focused on forest resource management, tree identification, forest fire prevention, tree plantings, forest stewardship, wood walks, wildlife management, and anything related to trees. The audience age appropriateness ranges from K-adult. There is no limit as to the frequency of presentations and the lengths of programs are directed as requested. Their programs are targeted towards the goals of the PA Department of Education's Academic Standards for Environment and Ecology. The Bureau of Forestry also has several posters, activity sheets, and videos for public use. Anyone requesting materials or programs should contact Mark Lewis, Crawford County Service Forester, at the above number or email marklewis@state.pa.us.

Penn/Ohio Watershed Association

Amy Reeher 520 W. Main Street, Suite # 3 Cortland, Ohio 44410 Phone: (330) 637-2056

The mission of the Penn Ohio Watershed Association is to foster the protection and restoration of the Pymatuning/Shenango Watershed through grassroots conservation efforts and voluntary cooperation with the entire watershed community. The Penn/Ohio Watershed Association offers presentations on watersheds, wetlands, streams, soil, trees, animal adaptations, and similar topics. The association can only service communities that lie in the Pymatuning/Shenango River Watershed. Their programs can be adapted to service K – adults and usually last 30 minutes to 1 hour. There are limits to the

number and availability of programs. Their programs are targeted towards the goals of the PA Department of Education's Academic Standards for Environment and Ecology. There are also a number of printed materials available to teachers and the public. For more information, contact Amy Reeher Monday through Friday between 8:30a.m. and 4:30p.m. www.swcd.co.trumbull.oh.us

Pennsylvania Alliance for Environmental Education (PAEE)

Shaver's Creek Environmental Center Penn State University 3400 Discovery Road Petersburg, PA 16669

Phone: (814) 863-2000 Fax: (814) 865-2706

The Pennsylvania Alliance for Environmental Education is the professional membership organization for the Commonwealth's environmental community. PAEE is comprised of teachers in public and private schools, naturalists in education centers and museums, employees of government agencies as well as concerned citizens in a network that promotes environmental literacy through teacher training, conferences, workshops and publications. In this video, hear from past PAEE president Scott Palermo and others about the advantages of bringing environmental issues into mainstream school curriculums, where they provide real-life problem solving opportunities in multiple disciplines including English, math, science and social studies.

Pennsylvania Department of Environmental Protection Northwest Regional Office

230 Chestnut Street Meadville, PA 16335

Phone: (814) 332-6816 (business hours)

1-800-373-3398 (after hours)

www.dep.state.pa.us

The Pennsylvania Department of Environmental Protection (DEP) is the state agency charged with protecting environmental quality. There are separate offices for Air Quality, Environmental Cleanup, Recycling, Water Supply, Watershed Management, Oil & Gas, Water Quality, and Waste Management.

Pennsylvania Environmental Council

Toll-free contact numbers: 1-800-322-9214 or 1-888-590-7844

Western Regional Office

22 Terminal Way Pittsburgh, PA 15219 Phone: (412) 481-9400

Fax: (412) 481-9401

The Pennsylvania Environmental Council improves quality of life for all Pennsylvanians by enhancing the Commonwealth's natural and built environments by integrating advocacy, education and implementation of community and regional action projects. The Council values reasoned and long-term approaches that include the interests of all stakeholders to accomplish its goals

Pennsylvania Fish & Boat Commission

Northwest Region 11528 State Highway 98 Meadville, PA 16335

Phone: (814) 336-2426 (for educational services)

Fax: (814) 337-0579

The PA Fish and Boat Commission's mission is to provide fishing and boating opportunities through the protection and management of aquatic resources. Requests for materials must be made by filing out the necessary order forms and should be made at least four weeks in advance. To receive a complete list of videos, brochures, and fact sheets available to educators, contact the PA Fish and Boat Commission, Bureau of Boating and Education, PO Box 67000, 3532 Walnut Street, Harrisburg, PA 17106-7000.

Pennsylvania Game Commission

Northwest Region Post Office Box 31 Franklin, PA 16323 Phone: (814) 432-3187

For more than 100 years, the Game Commission has managed the Commonwealth's wildlife resources for all Pennsylvanians. With the help of more than 700 full-time employees and thousands of part-timers and volunteers, the agency provides a host of benefits to wildlife, state residents and visitors.

Presque Isle Audubon Society

Tom Ridge Environmental Center 301 Peninsula Drive, Suite 8 Erie, PA 16505

The mission of the PIAS is to promote the conservation and protection of wildlife, plants, soil, and water in relation to human activity; to initiate and carry out plans and activities which would contribute to the conservation and protection of these natural resources; and to provide opportunities to become more aware and appreciative of our physical and biological environment. The PIAS serves the Erie Area, has meetings, field trips, "Tern of Events" newsletter, lots of interesting field trips. Owns and maintains the 55 acre Laura Olsen Memorial Sanctuary in

Crawford County, the 33 acres Fern Wood Sanctuary near Fairview, and is coowner (with the Botanical Society of Western PA) of the 80 acre Titus Bog Sanctuary in Erie County.

Pymatuning Lake Association

PO Box 1737 Andover, OH 44003 Phone: (724) 927-6879

Pymatuning State Park

2660 Williamsfield Road Jamestown, PA 16134 Phone: (724) 932-3141

Pymatuning is one of the largest state parks in the Commonwealth. The large lake provides excellent fishing throughout the year. Pymatuning State Park offers a wide variety of environmental education and interpretive programs. Through hands-on activities, guided walks and evening programs, participants gain appreciation, understanding, and develop a sense of stewardship toward natural and cultural resources. Curriculum based environmental education programs are available to schools and youth groups. Teacher workshops are available. Group programs must be arranged in advance and may be scheduled by calling the park office. Programs are offered year-round. For more detailed information contact the park office.

Sierra Club – Lake Erie Chapter

PO Box 1556

Erie, PA 16507-0556

The local chapter of the Sierra Club mirrors the state organization by working to educate the public on environmental protection and promote solutions to environmental problems. Holds meetings and field trips locally in the Erie, Crawford, Warren, Venango, and Forest County areas.

Tamarack Wildlife Rehabilitation & Education Center

21601 Stull Road Saegertown, PA 16433 Phone: (814) 763-2574

Tamarack specializes in the rescue, treatment and release of injured, orphaned, or sick wildlife.

Tamarack's main goals are: (1) To provide treatment for wild animals that have been injured, orphaned, or sick. (2) To return wildlife to their natural habitat. (3) To promote the best interests of wildlife, and humans through public education.

The center offers programs on birds of prey, helping wildlife, tours of the education center, and slideshows. Presentations are available to all of Crawford County and can be tailored to many different ages. They usually last 30 minutes to an hour. There is a charge for booking presentations from the wildlife rehabilitation center. Contact Suzanne B. DeArment at the above number during the evenings to request a program or visit www.tamarackwildlife.org.

United States Army Corps of Engineers

Woodcock Creek Lake Ed Schwindt Reservoir Manager's Office Route 198 Saegertown, PA 814 763 4477 or (814) 763 4422

The Corps of Engineers runs the dam on Woodcock Creek Lake. The site features the lake, open to boating, swimming, and ice fishing, picnic areas, exercise trail over the dam, and a nature trail opposite the park office. Colonel Crawford Park, leased from the Army Corps and run by the County, features campsites, a swimming area, and a boat launch.

USDA Natural Resources Conservation Service

(Meadville Service Center) 14699 N Main Street Ext Meadville, PA 16335-9441 Phone: (814) 336-2127

Fax: (814) 337-7751

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment. NRCS gives presentations on soils, soil & water conservation, and agricultural best management practices. Programs are available to all of Crawford County and aimed at high school students. The programs usually last 1 to 2 hours and are limited based on the time of year and staff availability. Contact Carl Pelino, or Cheryl Panciera between 8:00a.m. and 4:30p.m. at the above number for more information. To learn more about NRCS visit www.nrcs.usda.gov or www.pa.nrcs.usda.gov.

Western Pennsylvania Conservancy

(NW Field Office) 11881 Valley Road Union City, PA 16438 Phone: (814) 739-9991 Fax: (814) 739-9891

The Western PA Conservancy is committed to a natural environment that maintains its native diversity, resilience, and beauty. Because the works of humankind must co-exist with nature, addressing the nexus between humans and nature is central to the purpose of WPC. There are five Strategic Drivers that guide Western Pennsylvania Conservancy in all its programs. Conserve the natural and cultural heritage of western Pennsylvania; Inspire a conservation ethic through outreach and volunteer action; Collaborate with communities; Advance public policy and public funding for conservation; and Maintain a healthy organization.

Environmental Organizations

Acid Rain Foundation

Alliance for Acid Rain Monitoring

Alliance to Save Energy

American Forestry Association

Appalachian Audubon Society

Black Ash Sportsman's Club

Clean Air Council

Clean Water Action

The Cousteau Society

Defenders of Wildlife

Department of Energy

Ducks Unlimited

Energy Efficiency and Renewable Energy Network

Environmental Action, Inc.

Environmental Defense Fund

Friends of the Earth

Garden Club Federation of PA

Group for Recycling in PA

League of Conservation Voters

League of Women Voters

Namchi United Enterprises

National Arbor Day Foundation

National Audubon Society

National Trapper's Association

National Wildlife Federation

The Nature Conservancy

Pennsylvania Environmental Council

Pennsylvanians for Acid Rain Control

Soil and Water Conservation Society

Rainforest Action Committee

Rainforest Action Network

The Nature Conservancy

The Sierra Club
Tri-County Recycling
Trout Unlimited
Whale Adoption Project
Wild Resource Conservation Fund
The Wilderness Society
World Resources Institute
Worldwatch Institute

LOCAL CONSERVATION FIELD TRIPS

Asbury Woods Nature Center 4105 Asbury Road Erie, PA 16506 (814) 835-5356 (Phone) (814) 835-5653 (Fax) www.asburywoods.org

The mission of Asbury Woods is to provide all members of the community with opportunities to experience, study and enjoy nature. To this end, Asbury Woods offers a variety of educational programs throughout the year for school and youth groups as well as the general public.

The curriculum for school groups is tailored for pre-school through the 8th grade. There is a small fee per child and a minimum of 10 in the group. For more information or to schedule a group, call at the above number or e-mail at education@asburywoods.org. (Academic Standards for Environment and Ecology – Many – refer to individual program.)

Cornplanter State Forest – Ingraham Tract Strawbridge Road, Townville, PA Contact: Mark Lewis, Service Forester DCNR Bureau of Forestry Woodcock Creek Nature Center 21742 German Road Meadville, PA 16335 (814) 763 2545

The Ingraham Tract is a 120 acre complex of state forest land off Strawbridge Road in Townville. The property was donated by Gerald Ingraham and is sustainably managed for environmental education. It features 1.5 miles of trail system, deer exclosures, hardwood plantations, managed timber sales, and timber stand improvement. Field trips are available for classes or public groups of all ages, including Tree I.D., Nature Walks, Timber Sales, Tree Plantings, Timber Stand Improvement, and Pruning and Grafting. (Academic Standards for Environment and Ecology, 4.2; 4.6; 4.7; 4.8)

Drake Well Museum Titusville, PA 16354 (814) 827 2797

The Drake Well museum interprets the founding of the oil industry in Pennsylvania for residents and visitors by education it audiences about the persons, places, and events important to the development of the petroleum

industry and its growth into a global enterprise. (Academic Standards for Environment and Ecology 4.2)

Erie National Wildlife Refuge 11296 Wood Duck Lane Guys Mills, PA 16327 (814) 789 3585 (phone) (814) 789 2909 (fax)

e-mail: fw5rw_ernwr@fws.gov

web: www.erie.fws.gov/northeast/erie

Directions:

Route 198E on Wood Duck Lane

3/4 mile east of Guys Mills and 10 miles east of Meadville

Hours: 8:00 to 4:30 Monday through Friday

The mission of the United States Fish and Wildlife Service is, "working with others, to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American People."

The Erie National Wildlife Refuge was established in 1959 and consists of two separate land divisions offering three distinct habitats: forests, fields, and water's edge. It is the only Refuge in the nation protecting endangered Northern riffleshell and clubshell mussels. French Creek, the most biologically diverse stream in Pennsylvania, flows through the Refuge where over 80 species of native fish are found. In addition, the refuge was designated an Important Bird Area by the National Audubon Society and attracts 237 species of birds. It also provides a home for 37 species of amphibians and reptiles and 47 species of mammals. The outdoor facilities are open daily, ½ hour before sunrise to sunset, unless otherwise posted. Visitors can view displays at the nature center and participate in events and programs. In addition, Environmental Education items are available for loan upon request. Three Discovery boxes have been developed for teachers to use in the classroom or on the refuge. The subject matters are Forests, Wetlands, and Birds. (Academic Standards for Environment and Ecology 4.1; 4.2; 4.6; 4.7; 4.8)

Visitor opportunities include excursions on several trails, a bird viewing area, and exhibits and programs at the Refuge Office. Contact for more information. (Calendar of events is posted on line.)

Erie Zoo 423 W. 38th Street PO Box 3268 Erie, PA 16508 (814) 864 4091 To schedule program call Education Department at (814) 864 4092 Extension 230

www.eriezoo.org

Learn about animals and animal conservation efforts! Class or group presentations lasting 45-60 minutes are available to groups of 30 or fewer. In addition to featured programs, listed on-line, programs can be tailored to a particular group's needs. The Pennsylvania Academic Standards addressed by each program are listed with the topic description. Presentations are also available in the classroom. Cost is \$40 for the first group and \$35 for each additional group from the same school on the same day.

French Creek Outdoor Learning Center Crawford County Industrial Park 18308 Broadway Meadville, PA 16335 Phone: (814) 337-7305

Fax: (814) 336-6413

The French Creek Outdoor Learning Center is a collaborative effort formed to enhance the community's environmental education by embracing hands-on experiential learning utilizing a diverse, multi-disciplinary approach. The purpose of the Center is to instill a greater respect and understanding of nature, along with an appreciation for the unique resources and ecosystems found locally and those found at other environmental facilities. (Academic Standards for Environment and Ecology 4.1; 4.3; 4.6; 4.7; 4.8)

Glinodo Center – 6270 East Lake Road, Erie, PA 16511-1583 (814) 899-4584

Glinodo Center is a conference and educational center owned and operated by the Benedictine Sister of Erie since 19930. Located on Route 5, six miles east of Erie in Erie County, the center offers environmental education that focuses on Lake Erie and its watersheds. Topics include habitats, recycling, water quality, and wetlands. (Academic Standards 4.1; 4.2; 4.6; 4.8)

Headwaters Park Erie County Conservation District 1927 Wager Road Erie, PA 16403

Phone: (814) 825 6403

Hours: 8:00 a.m. to 4:00 p.m. Mon-Thur 8:30 a.m. to 4:30 p.m. Friday Closed Saturday and Sunday

www.erieconservation.com

Headwaters Park is a 35-acre outdoor classroom operated by the Erie County Conservation District. There are many educational opportunities available for all

ages. Examples of programs include water quality sampling, nature walks, and Best Management Practice tours. In-school programs are also available. Contact the office for more information. (Academic Standards for Environment and Ecology 4.1; 4.2; 4.4; 4.6; 4.8)

Linesville State Fish Hatchery Pennsylvania Fish and Boat Commission 13300 Hartstown Road Linesville, PA 16424

One mile south of the Borough of Linesville on Pymatuning Reservoir in Crawford County, Pine Township.

(814) 683 4451

Visitor Hours – Daily 8:00 a.m. to 3:30 p.m.

www.fish.state.pa.us/images/fisheries/fcs/linesville

Originally constructed in 1939, the Linesville Fish Culture Station (hatchery) is situated on 97 developed acres (2,500 total acres) of land owned by the Commonwealth of Pennsylvania and managed by the PA Fish and Boat Commission. It features a visitor center that includes a hatchery building and large tank filled annually with native fish. An annual open house with exhibits, demonstrations, and lectures is held the first week in April. (Academic Standards for Environment and Ecology 4.1; 4.6; 4.8)

McKeever Environmental Learning Center 55 McKeever Lane Sandy Lake, PA 16145 Phone: (724) 376-1000

Fax: (724) 376-8235

The McKeever Environmental Learning Center offers day and overnight programs for school groups, youth leaders, teachers, college students, and the general public. Lodges, dining hall, auditorium, classroom building with environmental library, four and one half miles of trails on 200 acres, on and one-quarter mile trail to Goddard State Park. Facility rental available, reservations required. There is a newsletter available on request.

McKeever gives programs and presentations on ecology, the environment, general science, and natural history. They are targeted towards K – adult. Programs can last from one hour to one week. Their programs are targeted towards the goals of the PA Department of Education's Academic Standards for Environment and Ecology; see individual program listings. To find out more, call the McKeever office Monday through Friday between the hours of 8:00a.m. and 4:30p.m. or email info@mckeever.org.

Meadville Market House

910 Market Street Meadville, PA 16335 (814) 336 2056

The Meadville Market House hosts vendors of local farm products and crafts. It features an outdoor farmer's market with fresh produce, flowers, and plants, and an indoor restaurant, bakery, and vendors offering fare such as local farm-fresh milk in glass bottles, artisan cheeses, handmade pasta, jellies, mustards, salsas, maple syrup and maple products, locally grown and milled flours, spices, hand-spun yarns, and much more. (Academic Standard for Environment and Ecology 4.4)

Munnell Run Farm
Integrating Agriculture and Ecology Education
Mercer County Conservation District
747 Greenville Road
Mercer, PA 16137-5023
Phone: (724) 662 2242

e-mail: mercercd@verizon.net

Hours: 8 a.m. to 4 p.m. Monday - Friday

Munnell Run Farm is a 163-acre working farm and a non-profit agriculture and education center. Visitors have a unique opportunity to experience the connection between agriculture and the environment in a real-world setting that demonstrates ecologically sound land use.

Field learning experiences are available for pre-school through 6th grade. (Academic Standard for Environment and Ecology 4.4)

To register: Contact Education Coordinator Jill Shankel at (724) 662 2242 or e-mail at jshankelmccd@verizon.net

Pymatuning State Park (724) 932 3141

www.dcnr.state.pa.us/stateparks/parks/pymatuning

Pymatuning State Park is a 21,122 acre state park surrounding Pymatuning Lake on the Ohio border. In addition to offering camping, hiking, picnicking, and boating opportunities, the park has an Environmental Educator and hosts educational programs on a variety of topics throughout the year. (See Calendar on their website.) The Park also hosts an award winning Watershed Education Program, where students and teachers assess water quality of a local stream on a quarterly basis and develop strategies to solve local water quality problems. Teacher workshops are available. Group programs must be arranged in advance and may be scheduled by calling the park office. Programs are offered year-round. For more detailed information contact the park office. (Academic Standard for Environment and Ecology 4.1 B; 4.1 E)

Pymatuning Wildlife Learning Center

PA Game Commission 12590 Hartstown Road Linesville, PA 16424

Opened to the public in 1938 as the "Pymatuning Museum", the Wildlife Museum includes exhibits and displays on native animals and birds. The site features a nature trail, bird watching (bald eagles nest nearby), guided nature walks, deer exclosures, and backyard conservation education. The museum also hosts a variety of special programs throughout the year. Call to make sure it is open. (Academic Standard for Environment and Ecology 4.7)

Tamarack Wildlife Rehabilitation & Education Center

www.tamarackwildlife.org

Sue DeArment PA Licensed Wildlife Rehabilitator (814) 763 2574

Hours: 9 a.m. to 7 p.m.

The Tamarack Wildlife Rehabilitation & Education Center offers presentations at the center or in the classroom for all age groups. Center visits offer students the opportunity to learn about wildlife rehabilitation. Presentations with live raptors can be arranged. (Academic Standard for Environment and Ecology, 4.7)

Tom Ridge Environmental Center (TREC)
Presque Isle State Park
301 Peninsula Drive Suite 1
Erie, PA 16505-2042
General Information: (814) 833 7424

To Arrange Group Tour: (814) 833 6050

www.trecpi.org

The Tom Ridge Environmental Center is located and the entrance to Presque Isle in Erie County. It features interactive exhibits and educational and recreational programs for all ages.

Two-Mile Run Park
Nature Lodge
Venango Conservation District
471 Beach Road
Franklin, PA 16323
Phone: (814) 676 2832
FAX: (814) (814) 678 1190

www.venangocd.org

The Venango County Conservation District hosts watershed education programs for area schools. Presentations include demonstrations of macroinvertebrate life in streams, stream table demonstrations, and crafts. (Academic Standards for Environment and Ecology 4.1; 4.2; 4.6)

Woodcock Creek Nature Center 21742 German Road Meadville, PA 16335 (814) 763 5269 www.crawfordconservation.com

The Woodcock Creek Nature Center houses the Crawford County Conservation District and the Pennsylvania DCNR Bureau of Forestry (Crawford County) offices. Ever-changing kid-friendly exhibits can be viewed in the main lobby. The Center also sits at the entrance to 27-acre Stainbrook Park, leased from the Army Corps of Engineers and maintained by the Conservation District. The park features wooded picnic facilities bordered by Woodcock Creek. The Conservation District and Bureau of Forestry can do nature programs for students by prearrangement. Programs include tree identification (summer and winter), pruning and grafting, macroinvertebrate sampling, non-point source pollution prevention, identification and values of wetlands, conservation art, butterfly walks, wildlife talks, Native American use of plants, orienteering, watershed education, and water quality sampling. (Academic Standards for Environment and Ecology 4.1; 4.2; 4.4; 4.6; 4.8; 4.9)

Environmental Video List (VHS)

The following videos are available from the Crawford Conservation District's office. They are available for loan to teachers and community and youth group leaders.

Water Quality & Watersheds

LIFE IN A WATERSHED

Produced by: Adams County Conservation District -16 min

POINTLESS POLLUTION: AMERICA'S WATER CRISIS

Produced by: LCRA, Narrated by: Walter Cronkite - 27:40 min

JUST A DROP IN THE OCEAN

Featuring "Willie Waterdrop," Produced by: Earth Vision San Diego

RIPARIAN FOREST BUFFERS

The Link Between Land and Water
Produced by the Maryland Cooperative Extension – 21 min

DENNIS CREEK: "A Working Partnership"

Distributed by: DEP Bureau of Water Quality Protection -16:40 min

WE ALL LIVE IN A WATERSHED

5 min

*Check the Green Works series below for more titles related to this topic

Flora & Fauna

LANDSCAPING FOR WILDLIFE

Produced by: Missouri Department of Conservation -13 min

PROJECT WILD: EXPLORING SCHOOL NATURE AREAS

Produced by: Western Regional Environmental Education Council, 1994 –13 min

SEASON OF THE BAT

Produced by: Wild Resource Conservation Fund 93, 1993 -26:45 min

OUR TREASURED TREE

Produced by: NACD Soil & Water Stewardship Week -8 min

RESTORING THE BALANCE - BIOLOGICAL CONTROL OF PURPLE LOOSTRIFE

Produced by: Cornell University Media Services -28 min

BACKYARD CONSERVATION: One Yard at a Time (2 copies)

Produced by: NACD, 1998 -9 min

Agriculture

CONSERVATION ON YOUR OWN: A "How to Videotape Series for Farmers and Ranchers"

Produced by: the Soil Conservation Service -55:36 min

LINES ON THE LAND: Contours in farming

Distributed by: NACD -10 min

WHY IPM? Integrated Pest Management

Presented by: PA IPM Program

AGRICULTURAL CHEMICAL CONTAINMENT AND MANAGEMENT ALTERNATIVES

Produced by: Commonwealth Media Services and PA DEP -23 min

BIOSOLIDS: RECYCLING A VALUABLE RESOURCE

Produced by: Commonwealth Media Services -10:22 min

SUSTAINING AMERICA'S AGRICULTURE

FARMING FOR THE FUTURE: Sound Management and a healthy environment

PACD, 5/04/00, 11:30 min

ONE PLAN APPROACH FOR FARMERS

Describes what is involved in doing a simple farm conservation plan 11:30 min

THE RIPARIAN ZONE

Mercer County Conservation District

BETTER BARNYARD MANAGEMENT

Penn State College of Agricultural Sciences, The PA State Conservation Commission -16 min

SUSTANIABLE AGRICULTURE PERSPECTIVES FROM ACROSS AMERICA: Guides to Concepts and Principals

24:14 min

RUNOFF & FIELD LOSS

Produced by: PACD and Penn State -22 min

PA CONSERVATION RESERVE ENHANCEMENT PROGRAM (C.R.E.P.)

15 min

*Check the Green Works series below for more titles related to this topic

Video Series

GREEN WORKS SERIES

Produced by the Environmental Fund for Pennsylvania in Partnership with the PA DEP

GREEN WORKS Air Quality

GREEN WORKS Building Green

GREEN WORKS Energy Efficiency

GREEN WORKS Environmental Education

GREEN WORKS Environment in the Home

GREEN WORKS Highlights the First Season

GREEN WORKS Know Your Watersheds

GREEN WORKS Land Use

GREEN WORKS Pollution Prevention (3 copies)

GREEN WORKS Reduce, Reuse & Recycle

GREEN WORKS Variety Show

GREEN WORKS Watersheds

GREEN WORKS Clearing the Air

GREEN WORKS Pollution: Solution & Results

GREEN WORKS Erie and its Environment

GREEN WORKS Gabrielle's Environmental Excellence Adventure

GREEN WORKS Eco-Logical Home

GREEN WORKS Think Globally, Eat Locally

GREEN WORKS The Recycling Loop: Buy Recycled

GREEN WORKS Faces of the Farm

GREEN WORKS Third Season Highlights

GREEN WORKS Dealing with Waste

GREEN WORKS Echoes Through Penn's Woods

GREEN WORKS Stream Restoration: Communities Coming Together

GREEN WORKS Home Green Home

GREEN WORKS Green Works Channel

GREEN WORKS Buy Recycled

GREEN WORKS Governor's Awards for Environmental Excellence

GREEN WORKS Environment in the 21st Century

GREEN WORKS Shaping our Communities

GREEN WORKS Southwestern PA Special

GREEN WORKS Transportation and the Environment

GREEN WORKS Environmental Careers

GREEN WORKS Green Works in the City

GREEN WORKS Highlights

GREEN WORKS Touch the Water

GREEN WORKS Our Watersheds

GREEN WORKS From the Bay to PA

GREEN WORKS Choose to Reuse

GREEN WORKS The Environmental University

GREEN WORKS Protecting Our Children's Health

GREEN WORKS Go Out! Environmental Education Centers

GREEN WORKS Youth Action

GREEN WORKS Pennsylvania A River Sojourn

GREEN WORKS Livable Communities

GREEN WORKS Environmental Innovations

GREEN WORKS Our Natural Environment

GREEN WORKS The Environmental Classroom

GREEN WORKS "Less is More"

GREEN WORKS Enviro-Pioneers

GREEN WORKS Highlights of the Fourth Season

GREEN WORKS Governor's Awards

GREEN WORKS Raycing the Sun

GREEN WORKS Communicating your Message with Media and Elected Officials

GREEN WORKS "And the Award Goes to..."

GREEN WORKS Return of the Raptor

GREEN WORKS Well-built, Green Built

GREEN WORKS Watershed Weekly

Great American Woodlots Program

A co-production of Maine Public Broadcasting Network and University of Maine Cooperative Extension Service

- #11 Blue Heron, tools, house building, Nat'l Forest
- #12 Tree farm, fast grow firewood, woodcock, smoke jumpers, maple syrup
- #101 Woodlots
- #102 Tree farm, chainsaws, forest succession, wildlife
- #103 Alaska, chainsaw, logging, land stewardship
- #105 Safety, wild turkey, modifying tractors, water
- #106 Safety, tree farm, sawmill, Environmental center
- #107 Safety, ruffed grouse, cutting logs, soil & trees
- #108 Tree farm, buzz saw, ruffed grouse, nursery, insects, wildlife
- #109 Water, ruffed grouse, nursery, tree genetics, forestry regulations
- #110 Tree genetics, wildlife, prescribed burning, shelter belts, Project Learning Tree

General Environmental Education

ALL THINGS ARE CONNECTED

Produced by: North Carolina Wildlife Resources Commission Division of Conservation Education, 1991 -12:36 min

FACES OF THE FUTURE: Kids talk about the Environment

Produced by: NACD -5 min

CITIZENS PROTECTING AMERICAS PARKS

Produced by: National Parks and Conservation Association -12 min

AMERICAN ENVIRONMENTAL REVIEW: Bon Terra America

With Charlton Heston

PEOPLE: A SOLUTION TO POLLUTION

Produced by: Pa CleanWays -12 min

Erosion, Sedimentation, & Stormwater

SILT FENCE & STRAW BALE BARRIERS

Produced by: Southeast PA Association of Conservation Districts Installing Erosion & Sedimentation Control Facilities

SEDIMENT BASINS

Produced by: Southeast PA Association of Conservation Districts Installing Erosion & Sedimentation Control Facilities

SEDIMENT TRAPS

Produced by: Southeast PA Association of Conservation Districts Installing Erosion & Sedimentation Control Facilities

VEGETATIVE COVERS & LINING

Produced by: Southeast PA Association of Conservation Districts Installing Erosion & Sedimentation Control Facilities

EROSION & SEDIMENT CONTROL PROGRAM

Produced by: Southeast PA Association of Conservation Districts FOR PA, 1995 UPDATE

SEQUENCE OF CONSTRUCTION

TAPE # 6 Chapter 102 EROSION & SEDIMENTATION CONTROL –22 min

STORMWATER MANAGEMENT ... PUBLIC VERSION

16:19 min

STORMWATER MANAGEMENT MUNICIPAL VERSION

19:45 min

EFFECTIVE WASTEWATER MANAGEMENT: THE CHALLENGE FOR RURAL AND SUBURBAN PA (2 copies)

Produced by: Penn State University –2 hrs 20 min "THE ROCK STICK" Ralph Porterfield PA DOT

PBS SOIL CONSERVATION FILM

55 min

SOIL EROSION AND SEDIMENT CONTROL PROGRAM

County Conservation Districts

DIRT & GRAVEL ROADS TELECONFERENCE

6/23/98 Penn State University

STORM SEWERS DON'T GO TO THE SEWER PLANT

Conservation Districts

BUILDING FOR TOMORROW:

PENNSYLVANIA'S CONSERVATION DISTRICT DIRECTORS

Produced by: Pennsylvania Conservation Partnership -10 min

DISCOVER YOUR CONSERVATION DISTRICT

13 min

<u>Planning</u>

ONE PLAN APPROACH FOR AGENCIES AND INDUSTRY

12 min

CONNEAUT LAKE - SPECIAL TOWN MEETING

Conneaut Lake Area Business Association

Web Sites

By Subject

AGRICULTURE

<u>www.ageducate.org</u> – American Farm Bureau Foundation for Agriculture – Educating about agriculture. Features "Agriculture in the Classroom", a grassroots program coordinated by the USDA and conducted in all 50 states. Book list, educational activities. (Academic Standards for Environment and Ecology, 4.4)

AIR QUALITY

<u>www.atdd.noaa.gov</u> – National Oceanic and Atmospheric Administration. Frequently asked questions on a wide variety of air pollution issues. Includes links. (Academic Standards for Environment and Ecology, 4.3; 4.8)

<u>www.cleanairprogress.org</u> – Classroom resources for kids and teachers, including air quality progress by state, have kids take the "Clean Air Challenge" and see how their actions affect air quality. (Academic Standards for Environment and Ecology 4.3; 4.8)

<u>www.epa.gov/kids</u> - Environmental Kids Club – A site for younger kids with areas of explore on air, water quality, plants, art, science.

www.epa.gov/students

- EPA Student Center – For slightly older students. Includes teacher site with resources such as lesson plans, earth day activities, etc. Includes links to local air pollution data for the entire us – www.epa.gov/air/data (Academic Standards for Environment and Ecology 4.3; 4.8)

ALTERNATIVE ENERGY

http://www.energy.gov/foreducators.htm - The Department of Energy's Resources for educators. Includes curriculum guides and activities, including "Dr. E's Energy Lab" for kids, which includes tips on smart energy use, alternative energy, and a link to http://froggy.lbl.gov/virtual/, an award-winning interactive program where the user can interactively dissect a (digitized) frog named fluffy, and play the "Virtual Frog Builder" game. (Academic Standards for Environment and Ecology, 4.2; 4.8)

BATS

endangered.fws.gov/bats/bats.htm – US Fish and Wildlife Service – Introduction to U.S. bats, myths, biology, reasons for decline. (Academic Stndards for Environment and Ecology 4.7; 4.8)

Members.aol.com/bats4kids – Bats 4 Kids – A happy, kid-friendly bat site. Features the "Big 9" Bat facts and Frequently Asked Questions. Includes games, Bat Quiz, classroom ideas and study projects.

BIG TREES OF CRAWFORD COUNTY

<u>www.crawfordconservation.com</u> – Crawford County Conservation District's website has a "Big Trees of Crawford County" section. Nominate your favorite big tree for the list.

BIRDS

http://aswp.org – Audubon Society of Western Pennsylvania – Information on Birding, Conservation, Native Plants, and Beechwood Farms Nature Preserve. (Academic Standards for Environment and Ecology, - 4.6; 4.7; 4.8)

www.depweb.state.pa.us

- Includes the "Falcon Cam", Falcon wallpaper, & Screensavers.

BUTTERFLIES

http://bsi.montana.edu/web/kidsbutterfly Children's Butterfly Site. Includes coloring pages, life cycle of butterflies, frequently asked questions, and good links.

http://www.naba.org – North American Butterfly Association – A nonprofit organization formed in 1992 to educate the public about the joys of butterflying.

http://www.monarchwatch.org – Monarch Watch is a network where children help raise, tag, and follow the migrations of the Monarch butterfly from North America to Mexico or California every fall. Associated with the University of Kansas Department of Entomology.

http://sciencespot.net/pages/adtinspg.html – The Science Spot. "Has an Adopt An Inspect Project" that was developed for Havana Junior High School to explore the world of insects. Project pages include procedures, objectives, lesson plans and links.

CLIMATE CHANGE/GLOBAL WARMING/WEATHER

<u>www.epa.gov/climatechange/index</u> - The Environmental Protection Agency's "Climate Change" or global warming site. (Academic Standards for Environment and Ecology 4.3; 4.8)

<u>www.climatechoices.org/assets/documents/climatechoices/NECIA-climate-report</u> - Comprehensive report on the projected effect of global warming on the Northeastern United States. (Academic Standards for Environment and Ecology 4.3, 4.7, 4.8)

ENVIRONMENTAL EDUCATION

<u>www.paee.net</u> – Pennsylvania Alliance for Environmental Education – The PAEE is a nonprofit organization which promotes and supports environmental education activities. Offers workshops, conferences, and great environmental education web links.

www.pcee.org

 Pennsylvania Center for Environmental Education – EE Connections Newsletter, Environmental Education Tools for Teachers. Features "PEER", Pennsylvania Environmental Education Resource Directory, a searchable database of EE Resources.

<u>www.pde.state.pa.us/env.eco/site/default.asp</u> - Pennsylvania Department of Education Division of Environment and Ecology. Includes curriculum and instructions, correlations to the Academic Standards for Environment and Ecology.

FISH -

www.fish.state.pa.us

Pennsylvania Fish and Boat Commission - Has fish ID charts, local maps, stocking and stream information.

FORESTRY

www.ohiodnr.com/forestry - The official site of the Ohio Department of Natural Resources, Division of Forestry. The website shows forest news, the History of Ohio Forests, Maps and brochures of state forests, camping, and hiking sites, and a very useful "Index of Ohio Trees" which begins with a list of common Ohio trees. You click on the tree name and get information on the tree, including photos and identification tips, the tree's common uses, and its best growing conditions. (Academic Standards for Environment and Ecology, 4.2)

<u>www.crawfordconservation.com</u> – Crawford County Conservation District – Information of forestry and also "Big Trees of Crawford County" list, locations, photos.

GEOLOGY

<u>www.dcnr.state.pa.us/topogeo</u> - Pennsylvania Geological Survey – Geology information for classroom use, rock collecting, information on Drake Well, Oil and Gas Drilling, Glaciers.

GLOBAL WARMING

<u>www.sierraclub.org/globalwarming</u> - Sierra Club site, offers description of what global warming is, factsheets, reports, promotes solutions using current and

cutting-edge technology. (Academic Standards for Environment and Ecology 4.3; 4.8)

LAKES

<u>http://www.mbgnet.net/fresh/lakes/index.htm</u> - The Missouri Botanical Gardens – Lots of information on lakes, pond succession, aquatic critter slide show, lake-effect snow, how the great lakes look from space, etc.

http://www.nalms.org/ - North American Lake Management Society – The purpose of the Society is to forge partnerships among citizens, scientists, and professionals to foster the management and protection of lakes and reservoirs for today and tomorrow. The function of the group is primarily educational. Includes great links for students of all ages.

http://www.aquatic.uoguelph.ca/ - Canada's Aquatic Environments – Educational information on aquatic plants, animals, and habitats.

NONPOINT SOURCE POLLUTION

<u>www.pacd.org/resources/nps</u> - Pennsylvania Association of Conservation Districts – What is nonpoint source pollution and what can we do to prevent it?

OCEAN SCIENCE

<u>www.oceancommission</u> – Report on the status of ocean degradation. (Academic Standards for Environment and Ecology 4.3; 4.6; 4.7; 4.8)

<u>www.ncdc.noaa.gov</u> – National Oceanic and Atmospheric Administration – National Climatic Data Center. Includes sections on weather, ocean, satellites, fisheries, climate research, coasts, maps and charts. Examples of use: Click on Ocean, the Ocean Explorer to get to a section that provides access to over 240 lesson plans. (Academic Standards for Environment and Ecology 4.6; 4.7; 4.8)

<u>www.seaworld.org/animal-info</u> - Seaworld - Quick information on animals; an animal sounds library, a section "Just for Teachers" including classroom activities and lesson plans; clips of marine mammals in action, science tips, an on-line education store; and, just for fun, a live "Shamu-Cam". (Academic Standards for Environment and Ecology 4.7)

www.ccturtle.org

Caribbean Conservation & Sea Turtle Survival League – Supporting Sea Turtle
 Conservation – Includes "Turtle Tides", just for kids – Games, Coloring Pages,
 Puzzles. (Academic Standards for Environment and Ecology 4.7)

SOIL CONSERVATION

http://www.nrcs.usda.gov/feature/education - USDA Natural Resources Conservation Service - Soil tidbits, conservation history. Especially useful is the Backyard Conservation section, which includes printable tip sheets such as how to construct a backyard pond for wildlife. (Academic Standards for Environment and Ecology 4.4; 4.5; 4.8)

WATERSHEDS

<u>www.crawfordconservation.com</u> – Crawford County Conservation District – Features information and links on Crawford County's major watersheds. (Academic Standards for Environment and Ecology 4.1)

WATER QUALITY

http://www.epa.gov/kids/ - Environmental Protection Agency – Environmental Kids' Club – fun activities for kids as they learn about the environment. (Academic Standards for Environment and Ecology 4.1; 4.6; 4.7; 4.8)

WETLANDS

http://el.erdc.usace.army.mil/wetlands - US Army Corps of Engineers, Wetlands Research and Technology Center. . Includes a 15 page wetlands coloring book for kids. (Academic Standards for Environment and Ecology 4.1)

<u>www.kathimitchel.com/wetlands</u> - Wetlands for Kids – A web page with lots of wetland education links. (Academic Standards for Environment and Ecology 4.1)

WILDLIFE

<u>www.nwf.org</u> - National Wildlife Federation – Native plant information, backyard conservation, attracting birds and butterflies, information on wildlife for kids and adults. (Academic Standards for Environment and Ecology 4.7)

<u>www.pgc.state.pa.us</u> – Pennsylvania Game Commission - Features education resources such as <u>50 Birds and Mammals of PA</u> on line; downloadable woodcrafting for wildlife plans.

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