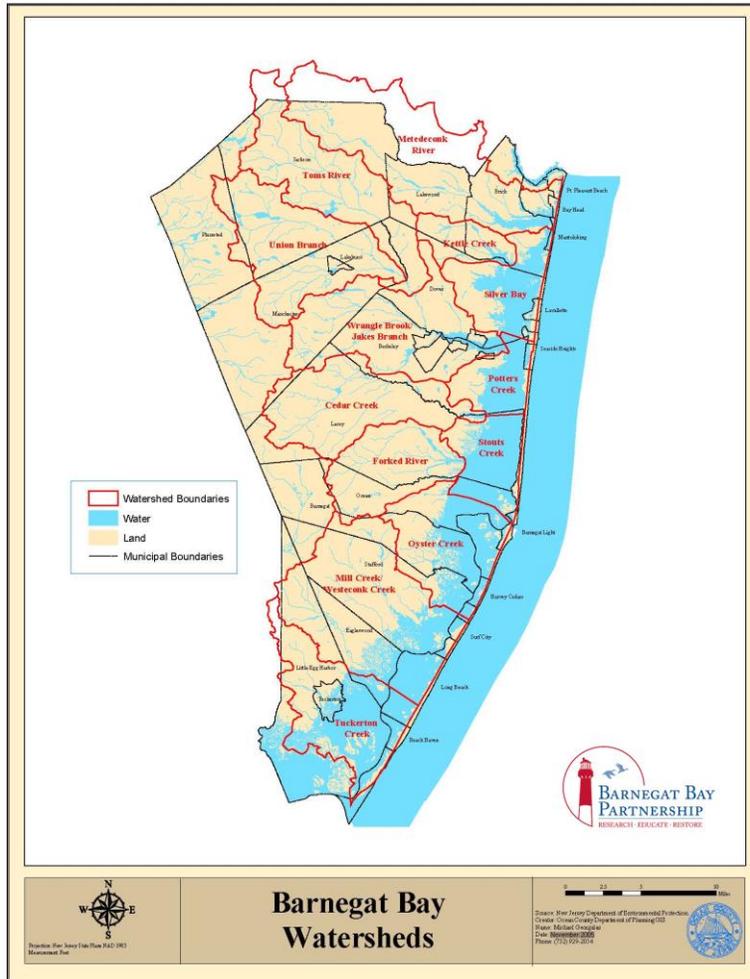


Barnegat Bay Watershed Educational Resource Guide



*Prepared by Christine R. Raabe
For the Ocean County Soil Conservation District and the
Barnegat Bay Watershed Environmental Educators Roundtable*

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Introduction

The Ocean County Soil Conservation District and the Barnegat Bay Watershed Environmental Educators Roundtable discovered that educators within the watershed need assistance in finding pertinent information and resources if they are to effectively teach about the Barnegat Bay watershed and the issues that impact it. This guide has been compiled to answer that need.

What began as a simple directory has grown into an annotated compendium of resources and organizations offering numerous programs, publications, field trips, and watershed information which educators can incorporate into their lessons and activities. It is a guide that will prove useful to anyone searching for information about the features and functions of the Barnegat Bay watershed.

This Educator's Resource Guide will be updated periodically. Please help us keep the document current by e-mailing Mary Judge at mjudge@ocean.edu with any additions, deletions, or corrections to the entries in this directory. Thank you for your help with this ongoing project.

Original funding for this guide was provided by the USEPA and the NJDEP through the Barnegat Bay Partnership (BBP, formerly Barnegat Bay National Estuary Program) and the Partnership for Nonpoint Source Pollution Control in the Barnegat Bay Watershed.

How to Use this Guide

Section One: Organizations and Agencies Involved with Barnegat Bay Watershed Education

Addresses, telephone numbers, fax numbers, and web sites (when available) are listed for each entry. The names of any particular contact person were intentionally left out to avoid the inevitable inaccuracy that would occur. Please take the time to find out the names of the many wonderful people at work within the watershed, and make the personal contacts that will help bring your environmental education efforts to life.

Section Two: National Organizations for Additional Resources

This section lists the names, addresses, telephone numbers, fax numbers, and web site addresses for the national organizations that provide environmental education materials to teachers and youth group leaders. This is not meant to be a complete list, but rather a focused list for preliminary inquiries.

Section Three: A Synopsis of Teacher Resources

This is not a listing of all resources available, but does list those that have been reviewed and identified as significant. A brief synopsis for each is included, and the information needed to obtain each item. Those marked with a “#” are New Jersey-based and/or specific, and those marked with an “*” are climate change-specific. Many of the resources are part of a library housed at the Ocean County Soil Conservation District or the Barnegat Bay Partnership.

Section Four: Other Resource Guides and Directories

Some of these resources are very specific to the Barnegat Bay region, such as the Pinelands Guide or the Ocean County Government Directory. Others are resource-specific, such as the Marine Education Resource Guide. These resources provide good sources for additional contacts and information that were too comprehensive to include here.

Section Five: Map Resources

No discussion or investigation into watersheds would be complete without the appropriate maps. We have provided a short listing and description of the map resources that are readily available. A full color, digitized map of the entire Barnegat Bay watershed is included in this guide. The map can be printed out and laminated or copied onto a transparency to use with an overhead projector. If you would like a copy mailed to you, please e-mail Mary Judge at mjudge@ocean.edu.

Section Six: Barnegat Bay Watershed Environmental Educators Roundtable Steering Committee Members

Organizations and Agencies Involved with Barnegat Bay Watershed Education

Alliance for a Living Ocean

Office Location:
1101 Central Avenue, Suite A
Ship Bottom, NJ 08008
Phone: (609) 494-7800
E-mail: aloLBI@verizon.net
www.livingocean.org

Mailing Address:
P.O. Box 2250
Long Beach Township, NJ 08008

Alliance for a Living Ocean (ALO) educates the public about the importance of maintaining good water quality in the Atlantic Ocean, the Barnegat Bay, and its watershed. They have an extensive array of programs that can be offered to school groups including various presentations and puppet shows. During the summer, ALO hosts various summer programs near their Ship Bottom office such as the Sea Critter Roundup seining program, Puppet Theater at the Ocean County Library, and the Eco-Kayak Tour. In addition, Alliance for a Living Ocean organizes beach cleanups. Please contact ALO if you are interested in attending programs or becoming a volunteer.

Alliance for New Jersey Environmental Education

11 Hardscrabble Road
Bernardsville, NJ 07924
E-mail: president@anjee.net
www.anjee.net

The Alliance for New Jersey Environmental Education (ANJEE) is a statewide nonprofit organization that provides a structure for its members to collaborate and cooperate in projects and programs to facilitate the overall improvement of environmental education. They hold workshops and an annual conference, which includes an evening of music. Membership is reasonable and provides access to a growing network of educators involved with all aspects of environmental education throughout the state.

American Littoral Society - Headquarters and Mid-Atlantic Chapter

18 Hartshorne Drive, Suite 1
Highlands, NJ 07732
Phone: (732) 291-0055 / Fax: (732) 291-3551
www.littoralsociety.org

The American Littoral Society is a national, membership-based organization that focuses on the littoral zone – that area between the ocean and the upland that includes the entire watershed in its scope. Their headquarters is located on Sandy Hook in Highlands, New Jersey. They offer a

number of field trip opportunities to explore the coastal environment, including kayak tours and hikes. They also are available for presentations and school programs that cover such topics as smart growth, natural history of the littoral zone, etc. The Society also offers special trips around the world and has an extensive list of resources available, including their newsletter and many other informational publications and fact sheets.

Associated Humane Societies - Popcorn Park Zoo

P.O. Box 43

Forked River, NJ 08731

Phone: (609) 693-1900 / Fax: (609) 693-8404

www.ahscares.org

The Popcorn Park Zoo is a facility of the Associated Humane Societies. The zoo, located in Forked River, is a special rescue zoo where over 200 animals are kept. They take in wildlife, birds, exotic, and farm animals. All of the animals have been rescued due to injury, handicap, cruelty, exploitation, or illegal ownership. School groups can make appointments for special tours of the zoo to learn about the animals. There are sponsorship programs available for animals at the zoo, as well as informational publications about the humane treatment of animals. Visitors to the website can view the zoo animals available for sponsorship as well as read many of their stories.

Barnegat Bay Partnership

Ocean County College

College Drive

P.O. Box 2001

Toms River, NJ 08754-2001

Phone: (732) 255-0472 / Fax: (732) 864-3851

E-mail: mjudge@ocean.edu

bbp.ocean.edu

The Barnegat Bay Partnership (BBP) is a federal program that, together with the state of New Jersey, Ocean County, and local communities, will help restore, maintain, protect, and enhance the natural resources of the Barnegat Bay estuary and its contributing watershed. Over 450,000 people live within the Barnegat Bay watershed, which includes nearly all of Ocean County and parts of Monmouth County. That population doubles in the summer as people flock to the shore. The continued economic health of the Barnegat Bay watershed is dependent on the continued health of its natural resources. Four areas have been identified as priority issues. They are:

1. Water quality and supply;
2. Habitat restoration and protection;
3. Reducing human use conflicts; and
4. Public education and outreach.

The BBP has developed a Comprehensive Conservation and Management Plan that includes a characterization of the region, a statement of priority problems, environmental quality, goals and objectives, action plans, implementation strategy and financial plan, and a summary of public involvement. The BBP also organizes the annual Barnegat Bay Festival. The “In the Classroom” section of their quarterly newsletter *The Barnegat Bay Beat*, reports on upcoming events or resources available to educators.

Clean Ocean Action

18 Hartshorne Drive, Suite 2

Highlands, NJ 07732

Phone: (732) 872-0111 / Fax: (732) 872-8041

E-mail: Info@CleanOceanAction.org

www.cleanoceanaction.org

Clean Ocean Action’s goal is to improve the degraded marine water quality off the New Jersey and New York coasts and within New Jersey coastal watersheds. The organization identifies pollution sources and uses research, public education, and citizen action to correct the problem. Clean Ocean Action is a broad-based coalition of over 170 conservation, environmental, fishing, boating, diving, student, surfing, women’s, business, service, and community groups with a wide range of experience and concern regarding ocean pollution issues. They also host a variety of programs, including the Student Summit, Beach Sweeps, and other educational programs. Clean Ocean Action will also make presentations to groups on water quality, watershed and coastal issues.

Conserve Wildlife Foundation of New Jersey

Office Location:

501 E. State Street, Building 5, 3rd Floor

Trenton, NJ 08609

Phone: (609) 984-0621

www.conservewildlifenj.org

Mailing Address:

P.O. Box 420, Mailcode 501-03E

Trenton, NJ 08625-0420

Created in 1998, the Conserve Wildlife Foundation of New Jersey (CWF) is a private, not-for-profit organization dedicated to protecting New Jersey’s endangered and threatened wildlife. We accomplish this through research, management, conservation, and education projects.

Conserve Wildlife Foundation of New Jersey provides programs focused on New Jersey’s rare and endangered wildlife for schools and community groups.

CWF collaborates with Duke Farms to bring the EagleCam to classrooms throughout New Jersey and beyond; also offered on the CWF website, is the PeregrineCam. These live webcams excite students into learning about endangered species and their unique habits and habitats.

To learn more the EagleCam and PeregrineCam and CWF's many other educational programs, please visit www.conservewildlifenj.org.

Environmental Commissions

The following are municipalities with active Environmental Commissions. Often, the most direct avenue for locally-specific environmental issues and concerns, the commissions listed below may provide some assistance and insight. To contact the Commission in your borough or township, use the municipal government offices listed below:

Barnegat
900 West Bay Avenue
Barnegat, NJ 08005
Phone: (609) 698-0080

Barnegat Light (Borough of) –
(*See below)

Bay Head
81 Bridge Avenue
Bay Head, NJ 08742
Phone: (732) 892-0636

Beach Haven (Borough of) – (*See
below)

Berkeley Township
627 Pinewald-Keswick Road
P.O. Box B
Bayville, NJ 08721
Phone: (732) 244-7400

Brick Township
401 Chambers Bridge Road
Brick, NJ 08723
Phone: (732) 262-1000

Toms River (formerly Dover Twp.)
33 Washington Street
P.O. Box 728
Toms River, NJ 08754
Phone: (732) 341-1000

Eagleswood
146 Division Street
P.O. Box 409
West Creek, NJ 08092
Phone: (609) 296-3040

Harvey Cedars (*See below)
7606 Long Beach Boulevard
P.O. Box 3185
Harvey Cedars, NJ 08008
Phone: (609) 361-6000

Island Heights
PO Box 797
Island Heights, NJ 08732
Phone: (732) 270-6415

Jackson Township
95 West Veterans Highway
Jackson, NJ 08527
Phone: (732) 928-1200

Lacey Township
818 West Lacey Road
Forked River, NJ 08731
Phone: (609) 693-1100

Lakewood Township
231 Third Street
Lakewood, NJ 08701
Phone: (732) 364-2500

Little Egg Harbor Township
665 Radio Road
Little Egg Harbor, NJ 08087
Phone: (609) 296-7241

Long Beach Township (*See below)

Manchester Township
1 Colonial Drive
Manchester, NJ 08759
Phone: (732) 657-8121

Millstone
215 Millstone Road
Millstone, NJ 08535
Phone: (732) 446-6219

Ocean Township
(Waretown)
50 Railroad Avenue
Waretown, NJ 08758
Phone: (609) 693-3302

Pine Beach (Borough of)
599 Pennsylvania Ave.
P.O. Box 425
Pine Beach, NJ 08741
Phone: (732) 349-6425

Plumsted Township
121 Evergreen Road
New Egypt, NJ 08533
Phone: (609) 758-2241

Pt. Pleasant (Borough of)
2233 Bridge Avenue
P.O. Box 25
Pt. Pleasant, NJ 08742
Phone: (732) 892-3434

Pt. Pleasant Beach
416 New Jersey Avenue
Pt. Pleasant Beach, NJ 08742
Phone: (732) 892-1118

Seaside Heights
901 Boulevard
P.O. Box 38
Seaside Hgts., NJ 08751
Phone: (732) 793-9100

Ship Bottom (*See below)
1621 Long Beach Boulevard
Ship Bottom, NJ 08008
Phone: (609) 494-2171

Stafford Township (Manahawkin)
260 East Bay Avenue
Manahawkin, NJ 08050
Phone: (609) 597-1000

Surf City (*See below)

Tuckerton
140 East Main Street
Tuckerton, NJ 08742
Phone: (609) 296-2701

*A joint environmental commission has been formed with Barnegat Light, Harvey Cedars, Surf City, Beach Haven, Long Beach Township, and Ship Bottom, with Ship Bottom as the lead agency.

*Association of New Jersey
Environmental Commissions (ANJEC)*
P.O. Box 157
Mendham, NJ 07945
Phone: (973) 539-7547 / Fax: (973) 539-7713
E-mail: info@anjec.org
www.anjec.org

Ocean County Environmental Agency
P.O. Box 2191
Toms River, NJ 08754-2191
Phone: (732) 505-3671 / Fax: (732) 505-8941

Forked River Mountain Coalition

P.O. Box 219
Forked River, NJ 08731
Phone: (609) 971-1635
E-mail: frmc@frmc.org
www.frmc.org

The Forked River Mountains are the centerpiece of a vast wilderness located in the Pine Barrens of Ocean County that contain over 20,000 acres of pristine forests and streams. The area is rich in culture and history and is home to a variety of wildlife, including many rare, threatened and endangered plants and animals. The Forked River Mountain Coalition is a nonprofit organization working to conserve, maintain, protect and restore the natural, cultural, historical, recreational and other resources of the Forked River Mountains. In order to help increase public awareness about this unique area, the Coalition offers a speakers program and a slide show. Numerous educational outings such as field trips, hikes, and canoe trips are conducted throughout the year. A newsletter is also available. The group holds an annual cleanup each spring. A hiking and bluebird trail are currently being planned.

Friends of Island Beach State Park

P.O. Box 406
Seaside Park, NJ 08752
Phone: (732) 793-5525
E-mail: mail@friendsofislandbeach.org
www.friendsofislandbeach.com

The Friends of Island Beach State Park recognize that Island Beach State Park is a unique, natural, educational, and recreational resource. The Friends group is an advisory and volunteer worker organization to assist Island Beach State Park in promoting its resources and maintaining the Park to its natural high standard. The group encourages support for the programs of the park through volunteering to assist in their interpretive activities, fundraising, and providing information and assistance in all operations of the Park.

Gateway National Recreation Area - Sandy Hook

P.O. Box 530
Fort Hancock, NJ 07732
Phone: (732) 872-5970 / Fax: (732) 872-5915
www.nps.gov/gate

Opportunities for visiting a barrier island environment and participating in any number of coastal ecology programs exist at Sandy Hook. Particularly significant is the accessibility of the Bayside and salt marsh area at this facility and, in fact, a program geared specifically to salt marsh ecology is offered. Although out of the Barnegat Bay watershed, this may be appropriate for the northern residents and school groups. It is the site of Fort Hancock and offers unique views of the Twin Lights in Highlands, New Jersey, and the New York City skyline. Due to the diverse historical uses of Sandy Hook, they also offer programs and displays on topics such as the US Army, Lighthouses, and the US Life Saving Service.

Georgian Court University

900 Lakewood Avenue
Lakewood, NJ 08701
Phone: (800) 458-8422
www.georgian.edu

The university is located in the northern part of the Barnegat Bay watershed on the shores of the Metedeconk River. Its science departments offer a regionally specific look at the watershed through science courses in a variety of specialty areas at both the graduate (biology) and undergraduate (biology, chemistry, biochemistry, and physics) levels. Some of the university's faculty members do research in the watershed and are available to give guest lectures. The university has a weather station, a science discovery garden, an arboretum with dozens of native woody plant species labeled for the public, and an extensive library with many watershed-related resources.

Girl Scouts of the Jersey Shore

1405 Old Freehold Road

Toms River, NJ 08753

Phone: (732) 349-4499 or (800) 785-2090/ Fax: (732) 349-4690

www.girlscoutsjs.org

The Girl Scouts of Ocean County serve all of the scout troops from Toms River south (Brick is part of the Monmouth County Girl Scouts). The Girl Scouts offers quite extensive opportunities to girls ranging in age from 5 through adulthood. Troops are operating throughout the county in schools and other facilities. Although not exclusively an environmental organization, the Girl Scouts have participated in a number of environmental and watershed-related projects and programs.

Institute of Marine and Coastal Sciences at Rutgers University

71 Dudley Road

New Brunswick, NJ 08901

Phone: (848) 932-6555/ Fax: (732) 932-8578

marine.rutgers.edu

A nationally-recognized staff, well-equipped modern laboratories and field stations at key locations combine to make the Institute of Marine and Coastal Sciences (IMCS) a focal point for those studying marine and coastal habitats in New Jersey and the Mid-Atlantic region.

The Jacques Cousteau National Estuarine Research Reserve (JCNERR)

130 Great Bay Blvd.

Tuckerton, NJ 08087

Phone: (609) 812-0649 / Fax: (609) 294-8597

www.jcnerr.org

The JCNERR provides science-based educational opportunities and professional development based on scientific research for a variety of audiences, including K-12 educators and students, coastal managers, and the public. Professional development workshops offered by the JCNERR focus on estuary, ocean, and climate literacy. Trainings are designed to increase science content knowledge, provide inquiry-based activities for both field and classroom activities and to provide educators with high quality resource materials to facilitate their teaching. The K-12 Estuary Education Program (KEEP) is a collection of resources for learning about estuaries for teachers and students in grades K-12 nation-wide through the reserve system. Lessons and activities can be found online at www.estuaries.gov Year-round public programs offer opportunities to explore the Reserve's ~115,000 acres while raising awareness of the ecological, economic, historical and cultural importance of estuarine and marine resources. The Coastal Training Program (CTP) provides up-to-date scientific information and skills-building opportunities for coastal decision makers to ensure science-based information is being used to manage New

Jersey's natural resources. The "Life on the Edge" interpretive exhibit serves as a gateway to the Reserve and can be found at the Tuckerton Seaport in the upstairs of the Yacht Club (admittance is free).

Jenkinson's Aquarium

Mailing Address:

300 Ocean Avenue

Point Pleasant Beach, NJ 08742

Phone: (732) 892-0600, ext. 130 or (732) 899-1659 / Fax: (732) 899-1717

E-mail: jenkinsonsaquarium@comcast.net

www.jenkinsons.com

Aquarium Location:

Boardwalk and Parkway, Point Pleasant Beach

Jenkinson's Aquarium is owned by a privately-held corporation and is dedicated to educating the general public on all aspects of marine life and conservation. In order to promote ecological understanding, they have developed innovative educational programs both within the Aquarium and through Outreach Programs. The aquatic exhibits within the aquarium weave the thread of aquatic food chains as a patron wanders through the facility. A wonderful field trip opportunity for teachers wishing to excite their students about the wonders of the marine world. A classroom is available for focus programs, which highlight a particular subject matter for school groups. Outreach programs are continually being developed and are available on a wide assortment of topics. Call for the updated list of scheduled programs. All programs must be pre-scheduled. Group discount rates are available. Public education programs are also available.

Jersey Shore Council - Boy Scouts of America

1518 Ridgeway Road

Toms River, NJ 08755

Phone: (732) 349-1037 / Fax: (732) 349-8093

www.jerseyshore-bsa.org

The Boy Scouts of America actively supports environmental programs that protect the area's unique ecosystem. Environmental awareness and advocacy is a staple of the Scouting program at all levels from Cub Scouts and Boy Scouts to Venturing. Hands-on activities teach Scouts to appreciate and respect the world around them, and help them develop into environmentally conscious adults. Park clean-ups, wildlife observation and education, and camp-based environmental activities emphasize the Scouts' role in their natural world. Many Eagle Scout projects have an environment-related goal, and special camp programs enable Scouts to experience the Barnegat Bay in a variety of up-close ways.

Long Beach Island Foundation of the Arts and Sciences

120 Long Beach Boulevard

Loveladies, NJ 08008

Phone: (609) 494-1241 / Fax: (609) 494-0662

E-mail: office@lbifoundation.org
www.lbifoundation.org

Located on the Long Beach barrier island, the Foundation is dedicated to providing courses and programs that focus on the arts and sciences. This exemplary facility provides a unique opportunity for involvement in the local environment as the property contains approximately 22 acres of wetlands adjacent to Barnegat Bay and is located across the street from the Atlantic Ocean. Children's Marine Biology and Nature Studies Programs run from Monday through Friday in July and August. These provide focused nature exploration and hands-on field trip experiences for young watershed residents.

Marine Mammal Stranding Center

3625 Brigantine Boulevard
Brigantine, NJ 08203
Phone: (609) 266-0538 / Fax: (609) 266-6300
E-mail: mmsc@verizon.net
www.mmsc.org

The Marine Mammal Stranding Center is a private, non-profit organization that was founded in 1978. Funded by donations and grants, it is the only organization in the state of New Jersey authorized to rescue and rehabilitate stranded or otherwise distressed marine mammals and sea turtles. Based in Brigantine, New Jersey, the Center has responded to over 2,755 calls for stranded whales, dolphins, seals and sea turtles that washed ashore on New Jersey's beaches. Whenever possible, the animals are brought back to the Center for rehabilitation and eventual release. Rehabilitation can last up to several months and cost thousands of dollars for a single animal. Outreach programs are available to schools and other interested groups. The Center's Museum is open to the public year-round. Hours vary, so it is advised that you call ahead for available times. Groups must call ahead to make advanced arrangements for tours and programs.

Museum of New Jersey Maritime History

528 Dock Road
Beach Haven, NJ 08008
Phone: (609) 492-0202
Fax: (609) 492-7575
E-mail: Curator@NJMaritimeMuseum.org
museumofnjmh.com

June through August, Open Daily: 10 am to 5 pm
September through May, Open Friday through Sunday: 10 am to 4 pm

Natural Resource Education Foundation of New Jersey

Lighthouse Center for Natural Resource Education

P.O. Box 747

Waretown, NJ 08758

Phone: (609) 698-8003 / Fax: (609) 782-0311

E-mail: info@nrefnj.org

www.lighthousecenternj.org

The Natural Resource Education Foundation of New Jersey will offer experiential education opportunities through their program “Experience Barnegat Bay” at the Lighthouse Center. This 95-acre site boasts diverse coastal habitats, including salt marsh, fresh water pond, maritime forest, and bayfront access. The extensive facilities include dormitories, a lodge and dining hall that each sits 90+ people, conference center, outdoor education classrooms (which include sites on shore birds, bay life, maritime forest, salt marsh, and watershed exploration), numerous cabins, and a boat house. The Lighthouse Center will provide information, education and citizen training to foster a deeper appreciation for New Jersey's, and in particular Barnegat Bay's, natural resources. Programs will encourage active participation of visitors in protection and management of those resources. The mission of the Foundation is to foster environmental leadership and stewardship, to develop resources that fulfill environmental needs on the community level, and to build a healthy, just and sustainable society through educational leadership and community action programs.

The Nature Conservancy – New Jersey Chapter

Kay Environmental Center

200 Pottersville Road

Chester, NJ 07930

Phone: (908) 879-7262, ext. 32 / Fax: (908) 879-2172

E-mail: newjersey@tnc.org

www.nature.org/newjersey

The Nature Conservancy, established in 1951, is an international, nonprofit conservation organization dedicated to preserving the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Active in New Jersey since 1955, the Conservancy established the New Jersey Chapter office in 1988. The organization hosts a number of field trip experiences and has a variety of informational publications.

New Jersey Academy for Aquatic Sciences (NJAAS)

1 Riverside Drive

Camden, NJ 08103-1060

Phone: (856) 365-0352 / Fax: (856) 365-3318

E-mail: info@njaas.org

www.njaas.org

The New Jersey Coastal Management Program has partnered with Adventure Aquarium and the New Jersey Academy for Aquatic Sciences (NJAAS) in Camden, New Jersey, to create a fun, innovative, and educational program for aquarium visitors on coastal nonpoint source pollution. The three-part educational program is designed to teach visitors about polluted runoff and the steps they can take to reduce nonpoint source pollution. As part of the educational program, the NJAAS purchased a Coastal EnviroScope model to demonstrate how nonpoint source pollution flows throughout the watershed and eventually into the estuary and ocean waters to aquarium visitors. New Jersey's demonstration emphasizes polluted runoff from urban activities, marina and boating activities, and agriculture – three main sources of coastal nonpoint source pollution in the state – as well as primary focuses of New Jersey's Coastal Nonpoint Program. In addition, the NJAAS developed a theatre production for the Aquarium on nonpoint source pollution. In the production a "talking fish" leads an aquarium owner on an upward journey through the New Jersey watershed, discovering that pollution begins a lot closer to home than most people think. The audience gains an understanding of the causes of polluted runoff, its impacts, the strategies already in place to reduce it, and what more they can do every day to limit their contributions to nonpoint source pollution. For additional information, contact Tali Engoltz at tali.engoltz@dep.state.nj.us

New Jersey Audubon Society

New Jersey Audubon Society (NJAS) is a statewide, nonprofit membership organization with a threefold mission of conservation, environmental education and research.

Headquarters

9 Hardscrabble Road

Bernardsville, NJ 07924

Phone: (908) 204-8998

E-mail: hq@njudubon.org

www.njudubon.org

NJAS provides programs about nature, habitat diversity, and environmental issues for members, educators, government officials and the general public. The Society maintains ten staffed sanctuaries throughout the state that offer a variety of programs. NJAS coordinates the New Jersey WATERS: A Watershed Approach to Teaching the Ecology of Regional Systems, A Guide for Middle School and High School Educators, which is a comprehensive book describing the features of each of the state's watershed regions. They also have produced the award-winning Bridges to the Natural World -- A Natural History Guide for teacher of grades pre-K through six that includes a series of activities that investigate the habitats of New Jersey.

Rancocas Nature Center

794 Rancocas Road

Mount Holly, NJ 08060

Phone: (609) 261-2495 / Fax: (609) 261-9916

E-mail: rancocas@njudubon.org

www.njudubon.org/centers/rancocas

The Rancocas Nature Center is located in Mount Holly on an old farmstead that is partially bounded by the creek. Self-guided nature trails familiarize the visitor with Inner Coastal Plain vegetation. Examples of willow oak, black locust, American holly, sweet gum, red maple, spicebush, and the like may be found. Wildlife abounds in this natural setting and opportunities for field study are readily available from the experienced staff. Arrangements can be made for indoor and outdoor educational programs at the center or in schools. Adult natural history field trips are scheduled regularly; these usually visit the Pinelands and other south Jersey localities for bird, plant, and animal study.

Information about the Rancocas Nature Center, including directions, hours, and a calendar of events, can be found at: www.njudubon.org/centers/rancocas

New Jersey Conservation Foundation

170 Longview Road

Far Hills, NJ 07931

Phone: (908) 234-1225 / Fax: (908) 234-1189

E-mail: info@njconservation.org

www.njconservation.org

The New Jersey Conservation Foundation preserves land and natural resources for the benefit of all. Through acquisition and stewardship, NJCF protects strategic lands; promotes strong land use policies; and forges partnerships to achieve conservation goals. Since 1960, NJCF has protected over 100,000 acres of open space – from the Highlands to the Pine Barrens to the Delaware Bayshore, from farms to forests to urban and suburban parks.

Phone: (888) LAND-SAVE

***New Jersey Department of Environmental Protection
Division of Fish and Wildlife***

Office of Information and Education

P.O. Box 402

Trenton, NJ 08625

Phone: (609) 292-2965 / Fax: (609) 292-8207

www.njfishandwildlife.com

The source for wildlife related information and education for the entire state. Numerous publications are available, including a new fold-out map entitled *Wild Places and Open Spaces*, which identifies the Division's properties and the facilities available at each. Most publications are available for a nominal fee.

Pequest Trout Hatchery & Natural Resource Education Center (Wildlife Education)

605 Pequest Road

Oxford, NJ 07863

Phone: (908) 637-4125

www.nj.gov/dep/fgw/pequest.htm

Programs and opportunities offered include teacher training workshops in the nationally acclaimed *Project WILD* activity guide, as well as *Homes for Wildlife* and *WILD School Sites* where teachers learn how to improve their school yards for wildlife. The *Becoming an Outdoors Woman* program trains women in a variety of wildlife-related sporting activities. In addition, numerous resources are available related to wildlife in New Jersey.

Nacote Creek Research Station (Marine and Coastal Education)

P.O. Box 418

Port Republic, NJ 08241

Phone: (609) 748-4347 / Fax: (609) 748-2032

Numerous opportunities for teacher training are provided, such as the annual Coastal Weekend for Teachers, which is held the third weekend of May and, for the more adventurous, overnight training sessions at the Sedge Island facility, located in the Barnegat Bay off the southern end of Island Beach State Park. Additional workshops and in-service training are provided through Project Aquatic WILD. Excellent resources are available related to marine wildlife; especially worthwhile is the Marine Education Resource Guide. Call and ask for "The List" of resources.

***New Jersey Department of Environmental Protection
Division of Parks and Forestry***

P.O. Box 404

Trenton, NJ 08065

Phone: (800) 843-6420 / Fax: (609) 984-0378

www.state.nj.us/dep/forestry/parknj

Barnegat Lighthouse State Park

P.O. Box 167
Barnegat Light, NJ 08006
Phone: (609) 494-2016

Barnegat Lighthouse State Park is situated on the northern tip of Long Beach Island along the Atlantic coastline. The lighthouse is one of New Jersey's best-known landmarks and a veteran of nearly 100 years of service to seafarers. You can visit the lighthouse and climb to the top; informational displays are found throughout the 217 step (165 foot) climb. The Park also has a self-guided maritime forest trail and a picnic area. The lighthouse is open from 9:00 am to 4:30 pm, from May through October and from 8:00 am to 4:00 pm, from November through March. There is also an evening program in the summer months for full moon rises on the Atlantic Ocean or sunsets on the Barnegat Bay.

Bass River State Forest

762 Stage Road
Tuckerton, NJ 08087
Phone: (609) 296-1114

Bass River State Forest, in the heart of New Jersey's Pinelands, consists of 18,208 wooded acres. In the 1930's two streams flowing through the park were impounded creating 67-acre Lake Absegami which has become the center of public recreation, water conservation, wildlife, and timber management. Within the park, there are facilities for boating and canoeing, swimming, camping, picnicking, hiking, horseback riding, hunting and fishing. A half-mile self-guided trail beginning at the eastern arm of Lake Absegami provides a cross-section of typical pine-oak woods and a small Atlantic white cedar bog. Visitors may be able to observe a variety of birds and animals common to the area.

Brendan T. Byrne State Forest

Mailing Address:
P.O. Box 215
New Lisbon, NJ 08064
Phone: (609) 726-1191

Location:
Mile Marker 1, Highway Route 72 East
Woodland Township, NJ 08088

This 34,600-acre forest is located in the heart of New Jersey's Pinelands. The park was originally named "Lebanon State Forest" after the Lebanon Glass Works that was a thriving industry between 1851 and 1867. (Abundant sand and locally-produced charcoal made the manufacture of high quality window glass possible. However, once the timber supply for charcoal making was exhausted, the factory was abandoned and the site of the glassworks was reclaimed by the forest.) The park was renamed in 2002 for ex-governor of New Jersey, Brendan T. Byrne, in recognition of his achievements in preserving the Pinelands for future generations. Over a century ago, cranberry cultivation was also introduced to the area. It continues today on this state-owned land; however, the area

under production has decreased due to increased yields per acre. Examples of upland and wetland vegetation abound within the forest. Dense stands of Atlantic white cedar, one of the region's most characteristic trees, are found along the forest's streams. This species reaches its northern limit of commercial importance in the Pinelands. These woods are a favorite nesting place for redheaded woodpeckers. They are also home to pine, corn, and scarlet snakes as well as a variety of plants including orchids, sundews, pitcher plants, pyxie moss, and sand myrtle. Within the park there are facilities for picnicking, camping, hiking, and horseback riding. A visitors' center is on site. The park is the co-sponsor of the Pinelands Institute for Natural and Environmental Studies (P.I.N.E.S.) at Burlington County College (see separate entry in this document), which is a program to provide teachers with science and social studies field trips, in which students study the environment and culture of the New Jersey Pine Barrens.

Double Trouble State Park

581 Pinewald Keswick Road

Bayville, NJ 08721

Phone: (732) 341-4098

www.njparksandforests.org

Located conveniently off exit 77 of the Garden State Parkway, Double Trouble State Park offers an outstanding example of the Pine Barrens ecosystem and a window into two Pinelands industries. The park provides for the protection and interpretation of 8,500 acres of significant natural, cultural, and recreational resources in the Cedar Creek and Jakes Branch sub-watersheds. The Double Trouble Historic District occupies over 200 acres and includes the preserved Double Trouble Village and surrounding cranberry bogs. The natural environment of cedar forest and rapidly-flowing stream provided both raw materials and water power for an extensive lumber industry from the 1700s to the 1900s. As timber was cut, the cleared swampland created bog habitat ideal for growing cranberries. By the 20th century, the Double Trouble Company was one of the largest cranberry operations in the state. With technological advancements and the change from the back-breaking "dry" harvest of cranberries by hand to the mechanized "wet" harvest still used today, the large seasonal labor force of migrant workers who lived in the village was no longer needed. Cranberry cultivation continues today in several bogs intermittently maintained by leaseholders. Double Trouble State Park is open daily 8:00 am to dusk. The interpretive center is open most weeks 10:00 am – 3:45 pm Wednesday through Sunday; closed Monday and Tuesday. Individual or group-guided village tours, including viewing static exhibits inside the restored sawmill and cranberry packing house, hikes, school class trips, teacher professional development workshops, and Scout advancement requirement programs may be arranged with the interpretive staff at [\(732\) 341-4098](tel:7323414098). Wayside signs and a marked 1.5 mile nature trail recount the ecological and cultural story of the area.

Forest Resource Education Center

370 East Veterans Highway

Jackson, NJ 08527

Phone: Interpretive Programs: (732) 928-0987

Project Learning Tree: (732) 833-9816

Fax: (732) 928-8472

E-mail: forestrycenter@gmail.com

www.njforestrycenter.org

Located on 660 acres in the headwaters of the Toms River, the Forest Resource Education Center (FREC) is operated by the New Jersey Forest Service. The New Jersey Tree Nursery grows and ships 300,000 seedlings annually for reforestation and conservation projects throughout the state. The Interpretive Center features exhibits and displays relating to the benefits of trees and forestry issues. There are more than 7 miles of trails with 21 informational kiosks, wayside exhibits and “Talking Trees.” Four of these trails are self-guided ADA-accessible trails. There are seven Forestry Demonstration Plots that may be accessed from the trail. Interpretive programs are offered free of charge by reservation for school, scout, and civic groups. Two special events, Fall Forestry Festival and Spring Conservation Day are hosted annually at the FREC. The area is open from dawn to dusk for hiking, horseback riding, mountain biking, trout fishing, and nature observation. For educators, the FREC is the primary contact for Project Learning Tree workshops and they are encouraged to borrow a Project Learning Tree trunk filled with hands-on educational materials.

Island Beach State Park

P.O. Box 37

Seaside Park, NJ 08752

Phone: (732) 793-0506

Ten miles of undeveloped barrier island provide opportunities for Park-led educational programs and self-guided natural resource interpretation. Many groups utilize Island Beach State Park as the ideal location to bring their classes to explore coastal environments and ecology. Guided tours and specific programs are available that focus on the natural and cultural history of the island. Coastal trails allow access to the bay side of the island for birding, kayaking, and seining, as well as to the ocean for fishing. There are a number of facilities in the park to accommodate groups: two bathhouses which afford ample parking, seasonal restroom facilities, and beach access and an interpretive and nature center at the southern end of the island where visitors can explore the unique natural and culture history of the island. The Emily deCamp Herbarium is located here, which provides pressed and labeled plant specimens indicative of the barrier beach environment. Groups must register in advance to participate in an interpretive educational program.

***New Jersey Department of Environmental Protection
Division of Watershed Management***

401 East State Street
P.O. Box 420
Trenton, NJ 08625-0420
Phone: (866) 337-5779
www.nj.gov/dep/watershedmgt
www.cleanwaternj.org

The Department offers many services and tools to assist your water education and outreach efforts. These include free classroom presentations on water pollution through the Watershed Ambassadors Program, Project WET workshops for educators, WaterSavers programs for water conservation, stormwater lessons, and publications. Please refer to the Teacher Resources Section for detailed descriptions of the Department's offerings.

New Jersey Marine Educators Association

P.O. Box 1149
Manahawkin, NJ 08050
www.njmarineed.org

The New Jersey Marine Education Association is a group of teachers, students, marine scientists, and lay persons united in a common interest: to promote marine and aquatic sciences throughout all disciplines and all levels of the education process. The NJMEA was formed in 1973, making it one of the oldest environmental organizations in New Jersey. Their focus is on the study of the marine biome, particularly as it affects and is affected by citizens in both New Jersey and Pennsylvania. Because New Jersey is bordered on three sides by water and eastern Pennsylvania shares the Delaware watershed with New Jersey, the importance of this extensive shoreline in our lives should be explored and emphasized in school curricula. The NJMEA offers "Teach at the Beach," an annual K-12 professional teachers conference in May, as well as offering educational materials, workshops, seminars, guest speakers, and their official publication, the *Sea Horse*.

New Jersey Pinelands Commission

15 Springfield Road
P.O. Box 359
New Lisbon, NJ 08064
Phone: (609) 894-7300 / Fax: (609) 894-7330
E-mail: info@njpines.state.nj.us
www.nj.gov/pinelands

The Pinelands Commission has a number of resources available to educators. Online resources include: Pinelands Curriculum guides for grades 4-6 and grades 7-8; a Pinelands guide which lists recreational opportunities, historic sites, nature centers, and field trips; Pinelands Speakers Directory; Take Ten; Pinelands fact sheets. The web site also offers younger students the "Kids Korner" where the Jersey Devil can be found with the click of a mouse along with science

experiments, coloring, and Pinelands quizzes. The Commission co-sponsors the annual Pinelands Short Course and takes part in other outreach events and educational programs. A Pinelands Information packet is offered through the mail.

New Jersey Sea Grant Consortium (formerly New Jersey Sea Grant & the New Jersey Marine Sciences Consortium)

22 Magruder Road

Fort Hancock, NJ 07732

Phone: (732) 872-1300 ext. 10

www.njseagrant.org

The New Jersey Sea Grant Consortium (NJS GC) is an affiliation of colleges, universities and other groups dedicated to advancing knowledge and stewardship of New Jersey's marine and coastal environment. The NJS GC meets its mission through its research, education and extension programs.

Education at the NJS GC is committed to ensuring that New Jersey's citizens and visitors understand, value, and appreciate the state's marine and coastal environment and are able to apply sound evidence and science-based information to make well-informed decisions regarding its use, management, and care. This is accomplished in part through the wide range of place-based educational services and products that the Education Program at the NJS GC develops and provides. Teaching and learning activities range from direct instruction (K-12 field trips, camps, scout programs, in-school presentations, teacher workshops, college coursework, public outreach events) to information preparation and dissemination (fact sheets, posters, lesson plans, activity guides, web-based publications and other teaching materials). In addition, the Program continually seeks to partner with groups with similar missions and to assist those who have the need or desire to promote marine studies. All programs and services provided are based on the precept that learning by doing is best.

To receive detailed information about the NJS GC's research, education and extension programs visit the organization's website at www.njseagrant.org or call (732) 872-1300, ext. 10.

New Jersey State Museum

205 West State Street

P.O. Box 530

Trenton, NJ 08625

Phone: (609) 292-6464

E-mail: Feedback@sos.state.nj.us

www.newjerseystatemuseum.org

The State Museum in Trenton will be closed for renovations until early 2007. Please refer to their website, which will be updated every month and will contain the latest information on

educational outreach activities. The museum visit is free and hours are 9:00 am to 4:45 pm from Tuesday through Saturday and 12:00 pm to 5:00 pm on Sunday.

Ocean County Audio-Visual Aids Commission

c/o SRI & ETTC

The Richard Stockton College of New Jersey

101 Vera King Farris Drive

Galloway, NJ 08205-9441

Phone: (609) 626-3850 / Fax: (609) 748-6212

The Ocean County Audio-Visual Aids Commission houses an extensive online collection of science and environmentally-based DVD programs. Educators in Audio-Visual Aid member districts have access to the Learn 360 and Discovery Education databases. If you are a school district wishing to become a member, please contact Courtney Regan at the number listed above.

Ocean County College - Biology Department

College Drive, P.O. Box 2001

Toms River, NJ 08754-2001

Phone: (732) 255-0400, ext. 2178

www.ocean.edu

The staff and students involved with the Ocean County College Biology courses regularly utilize natural areas within the watershed for their course work and field studies. This familiarity makes them a wonderful resource for regionally specific information regarding the flora and fauna of the Barnegat Bay region. Also of particular appeal are their internship programs which provide the opportunity for undergraduate students to work and experience natural history and environmental research projects in a meaningful way.

Ocean County Government

Mailing Address:

P.O. Box 2191

Toms River, NJ 08754-2191

Phone: (732) 244-2121 or (877) 929-2082 / Fax: (732) 506-5000

www.co.ocean.nj.us/

Ask for the Government Directory for Ocean County which lists numerous resources on both the County and municipal level. This handy little booklet is a “must have” for anyone wishing to investigate and learn about the programs and facilities within Ocean County and the Barnegat Bay Watershed. The Directory also contains sections listing local Chambers of Commerce, business associations, and media covering the area. Phone numbers, contacts, and addresses are listed for all entries.

Department of Corrections

120 Hooper Avenue
P.O. Box 2191
Toms River, NJ 08754-2191
Phone: (732) 929-2043/ Fax: (732) 506-5098
www.co.ocean.nj.us/corrections/index/htm

Ask for Sergeant Spina -- *Sam the Tuna* environmental programs for children, teaches about nonpoint source pollution and how to prevent it.

Department of Planning

129 Hooper Avenue
P.O. Box 2191
Toms River, NJ 08754
Phone: (732) 929-2054 / Fax: (732) 244-8396
www.planning.co.ocean.nj.us

This is the County agency whose responsibilities include regional land-use planning. The department is involved in a diverse range of activities from environmental protection to economic development. Specifically, the department can assist municipalities and the public on issues related to transportation, water supply, wastewater management, housing assistance programs, natural land protection, aerial photographs, and demographic information for Ocean County.

Department of Public Affairs

Room 109, Administration Building
101 Hooper Avenue
Toms River, NJ 08754
Phone: (732) 929-2000 / Fax: (732) 506-5370
E-mail: bstele@co.ocean.nj.us

For an Ocean County Tourism Guide call: (800) ENJOY-33

Division of Public Information

Phone: (732) 929-2000 / Fax: (732) 288-7683
E-mail: dflynn@co.ocean.nj.us

Division of the County Connection/County Connection Express

Ocean County Mall, 1201 Hooper Avenue
P.O. Box 2191
Toms River, NJ 08754
Phone: (732) 288-7777 / Fax: (732) 736-0239
E-mail: CountyConnection@co.ocean.nj.us
www.co.ocean.nj.us/CountyConnectionPage.aspx

This county agency provides public information services for the Board of Chosen Freeholders and those county government offices which do not have their own public information officers. The agency hosts a public information center in the County Administration Building which distributes information primarily of interest to tourists, but also will include public outreach environmental educational literature. In addition, it coordinates 25 mini-information centers around the county which distribute public education materials of interest to tourists.

The County Connection is an outreach of Ocean County government, located in the Ocean County Mall, which operates during mall hours, including evenings, holidays and weekends. The County Connection Express is a mobile van making scheduled stops at various locations around the county offering most of the services of the County Connection. Both will offer environmental public education materials as space permits.

Department of Solid Waste Management

129 Hooper Avenue
P.O. Box 2191
Toms River, NJ 08754
Toll free: (800) 55-RECYCLE
Phone: (732) 506-5047 / Fax: (732) 244-8396
E-mail: ocreycles@co.ocean.nj.us
www.co.ocean.nj.us/recycle

Contact them for information and materials related to composting and recycling.

Ocean County Prosecutor's Office

119 Hooper Avenue
P.O. Box 2191
Toms River, NJ 08754
Phone: (732) 929-2027 / Fax: (732) 929-2145

Contact the Prosecutor's Office to report possible crimes against the environment involving illegal solid waste dumping, water or land pollution.

Contact the Prosecutor's Website for additional information:

E-mail: DutyDetective@co.ocean.nj.us
www.prosecutor.co.ocean.nj.us

Ocean County Health Department

175 Sunset Avenue
P.O. Box 2191
Toms River, NJ 08754
Phone: (732) 341-9700 or (800) 342-9738 / Fax: (732) 341-4467
E-mail: info@ochd.org
www.ochd.org

The Ocean County Health Department is committed to promoting healthy lifestyles and a clean and safe environment. There are a variety of environmental and educational programs and information available. An opportunity to monitor water quality is also available.

Ocean County Historical Society

26 Hadley Avenue
Toms River, NJ 08753
Phone: (732) 341-1880 / Fax: (732) 341-4372
E-mail: oceancounty.history@verizon.net
www.oceancountyhistory.org

Numerous publications are available regarding specific historical descriptions and details from many people and of places throughout Ocean County and the Barnegat Bay watershed region. Call them for a listing of their publications. They operate a small museum which has limited visiting hours on Tuesdays and Thursdays from 1 pm – 3 pm, and the first Saturday of each month from 1 pm to 4 pm. You can visit their current exhibit Monday through Friday between 9:30 am and 4 pm. They also house a library and research center. Any group tours and programs must be arranged in advance.

Other Museums

Barnegat Heritage Village

575 East Bay Avenue
Barnegat, NJ 08005
www.ocean.nj.us/museums/Barnegat/about.htm

(609) 698-5284
Memorial Day – Labor Day
Sat.: 1 pm – 4 pm

Barnegat Light Museum

501 Cental Avenue
P.O. Box 386
Barnegat Light, NJ 08006
E-mail: klarson767@aol.com
www.bl-hs.org

(609) 494-8578
June – October
Sat. & Sun.: 10 am – 4 pm
July & August
Daily: 10 am – 4 pm

Bay Head Historical Society Museum

Bridge and Bay Avenues
Bay Head, NJ 08742
www.co.ocean.nj.us/museums/BayHead/about.htm

(732) 892-0223
June 15th – September 15th
Sun.: 12– 4 pm &
by appointment

Berkeley Township Historical Museum
630 Route 9
P.O. Box 303
Bayville, NJ 08721

www.ocean.nj.us/museums/Berkeley/about.htm

(732) 269-9527
June 18th – Mid-September
Wed.: 6 pm – 8 pm; Sun.: 2 pm – 4 pm
or by appointment

The Colonel Charles Waterhouse Historical Museum
(Note: the museum facility is closed, but website is open for online sales)

17 Washington Street
Toms River, NJ 08753
E-mail: waterhousemuseum@aol.com
www.waterhousemuseum.com

(732) 818-9040

Giffordtown Schoolhouse Museum
35 Leitz Boulevard & Wisteria Lane
P.O. Box 43
Little Egg Harbor, NJ 08087

www.co.ocean.nj.us/museums/Tuckerton/about.htm

(609) 294-1547
June - September
Wed.: 10 am – 4 pm
Sat.: 2 pm – 4 pm

Havens Homestead Museum
521 Herbertsville Road
P.O. Box 160
Brick, NJ 08724

www.co.ocean.nj.us/museums/Brick/about.htm
www.bricktwphistoricalociety.com

(732) 785-2500
April - October
Sat.: 10 am – Noon, Sun.: Noon – 2 pm

Island Heights Cottage Museum
105 Simpson Avenue
P.O. Box 670
Island Heights, NJ 08732

www.ocean.nj.us/museums/IslandHts/about.htm

(732) 929-2815
Open year-round
Wed.: 1 pm – 4 pm
every third Sat.: 9 am – 3 pm

Jackson Township Cultural & Heritage Commission:
Old Town Hall Replica
69 West Veterans Highway, Route 528
Jackson, NJ 08757

John F. Peto Studio Museum

102 Cedar Avenue
P.O. Box 1022
Island Heights, NJ 08732
www.petomuseum.org

(732) 929-4949
Summer hours: Wed. & Sat.: 1 pm – 4 pm
After Labor Day: Sat.: 1 pm – 4 pm

Lacey Historical Society Old Schoolhouse Museum

126 South Main Street (Route 9)
P.O. Box 412
Forked River, NJ 08731
www.ocean.nj.us/museums/Lacey/about.htm

(609) 971-0467
Mid-June - Labor Day (or by appointment)
Mon., Wed., Fri.: 1 pm – 3 pm,
Sat.: 10 am – Noon

Lakehurst Historical Museum

300 Center Street
Lakehurst, NJ 08733
www.co.ocean.nj.us/museums/Lakehurst/about.htm

(732) 657-8864
Wed. & Sun.: Noon – 3 pm

Lakewood Heritage Museum

655 Princeton Avenue
Lakewood, NJ 08701
www.ocean.nj.us/museums/Lakewood/about.htm

(732) 364-2500, ext. 5283
Tues. – Thurs.: 2 pm – 5 pm
Sun.: 2 pm – 4 pm
Closed Sundays in July & August

The Little Red Schoolhouse Museum of the Historical Society of Waretown

182 Wells Mills Road
P.O. Box 138
Waretown, NJ 08758
www.co.ocean.nj.us/museums/Waretown/about.htm

(609) 693-5666
May - September
Fri. & Sat.: 1 pm – 3 pm
or by appointment

Long Beach Island Historical Museum

Engleside & Beach Avenues
P.O. Box 1222
Beach Haven, NJ 08008
E-mail: info@lbimuseum.org
www.lbimuseum.org

(609) 492-0700
May 28 – June 26, September 10 – October 2: Sat. & Sun.:
2 pm – 4 pm
June 27 – September 4:
Daily: 10 am – 4 pm

Navy Lakehurst Historical Society Information Center

P.O. Box 328
Lakehurst, NJ 08733-0328
www.nlhs.com

For Tour: (732) 818-7520
Pre-register for tour of center
and Historic Hangar One (two weeks notice)

New Egypt Historical Museum

125 Evergreen Road

P.O. Box 295

New Egypt, NJ 08533

www.co.ocean.nj.us/museums/NewEgypt/about.htm

(609) 758-8111

Sun.: 1 pm – 4 pm

Wed.: 11 am – 1 pm

New Jersey Museum of Boating

1800 Bay Avenue, Building #12

Point Pleasant, NJ 08742

E-mail: info@woodenboatsnj.com

www.njmb.org

(732) 859-4767

Daily: 10 am – 4 pm

Ocean County Historical Society Museum

26 Hadley Avenue

Toms River, NJ 08753

E-mail: oceancounty.history@verizon.net

www.oceancountyhistory.org

(732) 341-1880

Fax: (732) 341-4372

Tue. & Thurs.: 1 pm – 3 pm

1st Sat.: 1 pm – 4 pm

Ocean Gate Historical Museum

Cape May & Asbury Avenues

Ocean Gate, NJ 08740

www.co.ocean.nj.us/museums/OceanGate/about.htm

(732) 269-8040

June - September

Sat.: 10 am – Noon

Wed.: 6:30 pm to 8 pm or by appointment

Point Pleasant Historical Society Museum

416 New Jersey Avenue

P.O. Box 1273

Point Pleasant Beach, NJ 08742

www.co.ocean.nj.us/museums/PointPleasant/about.htm

(732) 892-3091

2nd Thurs.: 1 pm – 4 pm

or by appointment

Prospectown Schoolhouse Museum/Jackson

95 West Veterans Highway

Route 528

Jackson, NJ 08757

www.co.ocean.nj.us/museums/Prospectown/about.htm

(732) 928-1200, ext. 200

Mon. – Fri.: 9 am – 5 pm

by appointment only

Stafford Township Historical Society

50 West Bay Avenue

Manahawkin, NJ 08050

www.staffordhistory.com

(609) 597-5947

May – September, Wed. – Sun.: 10 am – 4 pm

or by appointment

Open all year on Sun. 1 pm – 4 pm

Toms River Seaport Society & Maritime Museum

78 East Water Street

P.O. Box 1111

Toms River, NJ 08754-1111

E-mail: tomsriverssmm@yahoo.com

www.tomsriverseaport.org

(732) 349-9209

Tue., Thurs., & Sat.: 10 am – 2 pm

Tuckerton Seaport

120 West Main Street

P.O. Box 52

Tuckerton, NJ 08087

www.tuckertonseaport.org

(609) 296-8868

Daily: 10 am – 5 pm

Ocean County Cultural & Heritage Commission

101 Hooper Avenue

P.O. Box 2191

Toms River, NJ 08754

Phone: (732) 929-4779 / Fax: (732) 288-7871

E-mail: culturalheritage@co.ocean.nj.us

www.co.ocean.nj.us/cultural/index.htm

* Call the Ocean County Department of Public Affairs at (732) 929-2000 and ask them for a copy of the "Ocean County Museums Historical Trail – Time Traveler Passport," which lists mailing addresses, hours of operation, special features and descriptions, as well as fees for all of the above museums.

Ocean County Library

The Ocean County Library has 22 library facilities to meet the informational needs of the entire community.

101 Washington Street

Toms River, NJ 08753

Phone: (732) 349-6200 or (609) 971-0514 / Fax: (732) 473-1356

www.theoceancountylibrary.org

Library Headquarters -- Bishop Building

New Jersey Reference Collection

Phone: (732) 349-6200, ext. 859

The Ocean County Library owns many books and documents on the ecology of Barnegat Bay, the history of New Jersey and Ocean County, as well as atlases and aerial maps of Ocean County.

The Toms River Branch maintains an extensive newspaper clipping file on many topics of local interest, and receives documents which various community agencies make available for public review.

The library also subscribes to several online databases where you can find full-text magazine and newspaper articles on virtually any topic. Reference service is available at the library, by phone,

by an on-line form (<http://theoceancountylibrary.org/contactus/emailus.aspx>), and by e-mail at question@theoceancountylibrary.org.

Branches of the Ocean County Library

See <http://theoceancountylibrary.org/Branches/branches.htm>

Ocean County Parks and Recreation

The Ocean County Parks Department has 23 different parks and facilities throughout the county and hosts a huge variety of programs and presentations throughout the year in different locations. Although the parks listed below have educational facilities and naturalist staff, other programs are offered throughout the park system and the County. Special arrangements can be made to use other parks within the system for programs.

Administrative Offices

1198 Bandon Road

Toms River, NJ 08753

For Newsletter and General Information:

Phone: (732) 270-0387 / Fax: (732) 270-9464

Or call toll-free (877) OCPARKS

www.co.ocean.nj.us/OC Parks/

Situated along the sparkling Silver Bay, this 35-acre site is the home of the Ocean County Parks and Recreation Administrative Offices. Here, the administrative staff plans and supervises the numerous activities annually sponsored by the Ocean County Parks and Recreation Department. These activities include recreational and educational programs, a summer concert series, environmental studies, and trips to assorted events and locations. Call or stop in for more information on your Ocean County Parks System.

Cattus Island County Park

1170 Cattus Island Boulevard

Toms River, NJ 08753

Phone: (732) 270-6960 / Fax: (732) 831-0406

Cattus Island Park is a peninsula that juts out into the Barnegat Bay and divides Silver Bay. The 500-acre park is composed primarily of salt marsh where numerous hummocks (higher ground with trees) dot the wetland landscape. Freshwater bogs and cedar swamps may also be found. Open from 8 am to 4:30 pm daily, the Cooper Environmental Center boasts an exhibit room that continually changes on a seasonal level. Live reptiles and fish, a library of natural history and related literature, and an observation deck are available. A variety of trails are available, including a 500-foot boardwalk, a tree identification loop, and six miles of marked trails. Wheelchair-accessible interpretive signs offer habitat and wildlife information to the park visitor. There are also picnic and playground areas. The staff conducts many hikes, kayak tours, boat tours, and van trips throughout the county. Groups planning on using the facility are requested to register in

advance. Guided tours are available free of charge to groups of all ages originating in Ocean County. Call for more details.

Eno's Pond County Park

330 East Lacey Road

Forked River, NJ 08731

Phone: (732) 281-2750 (Jakes Branch County Park) or (609) 971-3085 (Wells Mills County Park)

Eno's Pond County Park is comprised of 28 acres of uplands, marsh and hardwood swamps and abuts the Edwin B. Forsythe National Wildlife Refuge, Lacey Township Extension. Eno's Pond and the surrounding area have a long and colorful history dating to the Colonial period. The observation decks overlook Eno's Pond, which was used as a source of ice for a hotel that once housed notable guests such as Babe Ruth! Now the deck is a perfect vantage point for viewing some of the pond's avian residents and visitors such as wood ducks, mallards, egrets, great blue herons, and osprey. A self-guided 1.1 mile nature trail traverses both properties. A section of the trail is specially designed to be wheelchair accessible. There are rest-room facilities, open play field and several picnic areas. Special arrangements for use of the park should be made through Ocean County Parks and Recreation Administrative Headquarters. To schedule a naturalist-led program, please call either Wells Mills County Park or Jakes Branch County Park.

Jakes Branch County Park

1100 Double Trouble Road

Beachwood, NJ 08722

Phone: (732) 281-2750 / Fax: (732) 281-2757

“The Gateway to the Pines,” Jakes Branch County Park is situated on 400 acres of pristine Pinelands habitat. The park’s Nature Center highlights the beauty, history and natural surroundings of the Pinelands through informational exhibits, live animals and environmental education/outdoor recreation programs. Breathtaking views of the surrounding Pinelands forest can be taken in from the observation deck perched 5-stories atop the nature center. Over 4 miles of hiking trails, including a ½-mile handicapped-accessible self-guided nature trail and 2-mile bike trail provide both educational and recreational opportunities. Jakes Branch also offers opportunities for soccer, baseball/softball, tennis and basketball. The park hosts a tot lot, picnic grove and open play field.

Wells Mills County Park

905 Wells Mills Road (Route 532)

Waretown, NJ 08758

Phone: (609) 971-3085 / Fax: (609) 971-9540

This 900-acre park is open daily from 8 am to sunset; the nature center features an observation deck and an exhibit area and is open from 10 am to 4 pm daily. Sixteen

miles of marked nature trails lead the visitor through a variety of Pine Barren habitats, including pine-oak forests, Atlantic white cedar swamps, freshwater bogs, and maple gum swamps. Canoes can be rented and boating and fishing are permitted on the 34-acre Wells Mills Lake. There is also a nature trail for the visually impaired.

These educational centers house a variety of exhibits which highlight our watershed's environments and its indigenous species. Guides operating from these two interpretive centers provide a variety of educational programming that meets the needs of both the novice and expert naturalist or outdoor recreation buff. Many groups visiting these facilities tour the fascinating exhibits, see topical slide shows, and enjoy guided nature walks. Subject to available staff and time, any nature program or activity can be scheduled for a school group. All groups planning to visit the County's parks must make advance arrangements. Registering nine months in advance will usually prevent disappointment.

Other County Park Properties

Gull Island County Conservation Area - Broadway, Point Pleasant Beach

This small park is adjacent to a 48-acre island-like conservation area on the Manasquan River.

Beaver Dam Creek County Park - Bridge Avenue, Point Pleasant

A boardwalk through tidal wetlands, picnic areas, six acres of playing fields, and two tennis courts are available for everyone's enjoyment.

Ocean County Golf Course at Forge Pond - Chambers Bridge Road, Brick Township

Currently planning a nature trail to transverse the wooded area surrounding the green and leading to the edge of Forge Pond.

Metedeconk River County Conservation Area - Lakewood and Brick Townships

Although primarily a conservation site, this 318-acre area is also excellent for canoeing during peak tides.

Shenandoah County Sports Field Complex - Route 88 (Ocean Avenue), Lakewood

Eighty-four acres of open playing fields await the visitor to this popular complex, which features six soccer fields, two softball fields, bike paths, picnic areas, and a playground. Adjoins Lake Shenandoah County Park.

Lake Shenandoah County Park - Route 88 (Ocean Avenue), Lakewood

The 100-acre lake at the park features trout-stocked waters, large piers, and an on-site boat house and bait shop.

Ocean County Park - Route 88 (Ocean Avenue), Lakewood

Ocean County Park, the flagship of the County Park System and one of its most popular parks, was originally part of financier John D. Rockefeller's vacation estate. This spacious park, which was acquired by the county in 1941, offers playing fields, tennis courts, a sandy bathing beach, and much more.

Patriots' County Park - Bowman Road, Jackson Township

This 219-acre sports field complex features soccer and softball fields, shuffleboard, horseshoe pits, boccie, basketball courts, fitness trails, playgrounds, and picnic areas.

Robert J. Miller County Airpark - Route 530 (Airport Road), Berkeley Township

The Airpark is home to the famous Ocean County fair held each July. In addition to the fairgrounds, the Park includes playgrounds, picnic areas, and a small, privately managed airport.

E. B. Leone County Conservation Area - Silver Bay, Dover Township

This county property covers 45 acres of pristine wetlands, which can be viewed from one of the pontoon boat tours launched from Cattus Island County Park.

Riverfront Landing County Park - Water Street, Toms River

This walk-through park features a scenic view of the Toms River.

Mill Creek County Park - Mill Creek Road & Chelsea Drive, Berkeley Township

Tree-lined trails and three playgrounds geared toward children of different ages are among the offerings at this park.

Florence T. Allen County Conservation Area – Chelsea Avenue, Berkeley Township

This conservation area consists of 45 acres of cedar swamp and uplands bordering Mill Creek. These wetlands protect Mill Creek as it flows into the Toms River.

Jake's Branch County Park (Future Site)

The Pinelands habitat will be featured at the soon to be developed Jake's Branch County Park. A nature center, hiking and nature trails will complement other active recreation possibilities.

Berkeley Island County Park - Brennan Concourse, Berkeley Township

This park boasts a sandy bathing beach protected by lifeguards on the Barnegat Bay, as well as fishing, crabbing and a panoramic view.

A. Paul King County Park - Routes 72 & 9, Stafford Township

Situated on lovely Manahawkin Lake, this County park features many recreational possibilities, including beach volleyball, horseshoes, a large picnic area, playground, and a sandy swimming beach.

Freedom Fields County Park – Route 539, Little Egg Harbor Township

Active recreation will be the theme at this new park site. The Sports Field Complex is conveniently located on Route 539. Soccer, softball, and baseball fields have been developed to meet the needs of the expanding population of southern Ocean County.

Stanley H. “Tip” Seaman County Park – 120 Lakeside Drive, Tuckerton

Home of the nationally-acclaimed Ocean County Decoy and Gunning Show, this 22-acre park also features a lighted softball field and tennis courts, basketball courts, bocce, horseshoes, and much more. Located on the banks of Lake Pohatcong and across the street from the Tuckerton Seaport.

Ocean County Soil Conservation District

714 Lacey Road

Forked River, NJ 08731

Phone: (609) 971-7002 / Fax: (609) 971-3391

E-mail: info@ocscd.org

www.ocscd.org

The Ocean County Soil Conservation District (OCSCD) provides conservation assistance through a variety of programs for builders, homeowners, farmers, resource professionals, public officials, and educators. With an extensive education program accommodating all ages and interests, OCSCD strives to promote awareness of natural resources and the importance of environmental stewardship within the Barnegat Bay watershed. The agency publishes *The Tutor* (a newsletter for educators), sponsors annual poster, bumper-sticker and photo contests, and hosts teacher workshops such as Project Learning Tree, WET, WILD and WILD School Sites. OCSCD’s “Outdoor Classrooms” program is one of the best in New Jersey, providing area schools with technical and financial assistance. OCSCD published a regionally specific activity guide entitled “Discovering Barnegat Bay” which includes 40 lesson plans unique to the region. For more information on the guidebook, see the section on Curricular Materials. Updated workshop schedules can be found at the website. Each year in the spring, OCSCD sponsors the Environmental Educators Roundtable in partnership with numerous area organizations and agencies. An inventory of educational brochures and publications is maintained by OCSCD and is available to the public.

Ocean County Utilities Authority

501 Hickory Lane
P.O. Box P
Bayville, NJ 08721
Phone: (732) 269-4500 / Fax: (732) 269-4173
E-mail: mailbox@ocua.com
www.ocua.com

The Ocean County Utilities Authority (OCUA) has an active public education program. OCUA is an important cog in the environmental protection wheel. OCUA treats and recycles the wastewater generated by the citizens and industries of Ocean and Southwestern Monmouth County. The wastewater residuals are stabilized and converted to an organic fertilizer marketed under the trade name "Oceangro." OCUA encourages tours of their facilities which are located in Brick, Bayville, and Manahawkin. They also have speakers who will come to schools with slides and/or videos about wastewater reclamation and the hydrologic cycle.

Other Water Treatment facilities which may provide local assistance to teachers include:

Barnegat Township Utility	900 West Bay Avenue, Barnegat, 08005 (609) 698-6185
Beachwood Sewerage Authority	1133 Beach Avenue, Beachwood, 08722 (732) 240-2608
Berkeley Township Sewerage Authority	255 Atlantic City Boulevard, Bayville, 08721 (732) 269-3500
Borough of Island Heights	1 Wanamaker Municipal Complex, PO Box 797, Island Heights, 08732 (732) 270-6415
Borough of Lakehurst	5 Union Avenue, Lakehurst, 08733 (732) 657-4151
Borough of Lavallette	1306 Grand Central Avenue, Lavallette, 08735 (732) 793-7766
Borough of Ocean Gate Sewerage Dept.	151 East Longport Avenue, Ocean Gate, 08740 (732) 269-3790
Borough of Pine Beach	599 Pennsylvania Avenue, Pine Beach, 08741 (732) 349-6425
Borough of Seaside Heights	901 Boulevard, Seaside Heights, 08751 (732) 793-9100

Borough of Seaside Park	1701 North Ocean Avenue, Seaside Park, 08752 (732) 793-3700
Dover MUA	340 West Water Street, Toms River, 08753 (732) 240-3500
Lacey MUA	124 South Main Street, P.O. Box 205, Forked River, 08731 (609) 693-8188
Manchester Township Utility Dept.	One Colonial Drive, Manchester, 08759 (732) 657-8121
Ocean Township MUA	200 Wells Mill Road, Waretown, 08758 (609) 693-3426
South Toms River Sewerage Authority	148 Mill Street, South Toms River, 08757 (732) 244-9722
Borough of Bay Head	81 Bridge Avenue, Bay Head, 08742 (732) 892-0574
Borough of Point Pleasant	2233 Bridge Avenue, P.O. Box 25, Pt. Pleasant, 08742 (732) 892-3434
Borough of Pt. Pleasant Beach	416 New Jersey Avenue, Pt. Pleasant Beach, 08742 (732) 892-1118
Brick MUA	1551 Highway 88 West, Brick, 08724 (732) 458-7000
Jackson Township MUA	135 Manhattan Street, Jackson, 08527 (732) 928-2222
Lakewood Township MUA	390 New Hampshire Avenue, Lakewood, 08701 (732) 363-4422
New Jersey American Water Co.	100 James Street, Lakewood, 08701 (732) 352-4772
Beach Haven Sewerage Authority	349 Nelson Avenue, Beach Haven, 08008 (609) 492-2299

Borough of Barnegat Light	10 East 7 th Street, PO Box 576, Barnegat Light, 08006 (609) 494-9196
Borough of Harvey Cedars	7606 Long Beach Boulevard, Harvey Cedars, 08008 (609) 361-6000
Borough of Ship Bottom	1621 Long Beach Boulevard, Ship Bottom, 08008 (609) 494-2171
Borough of Surf City	9 th Street & Long Beach Boulevard, Surf City, 08008 (609) 494-3064
Eagleswood Township	146 Division Street, P.O. Box 409, West Creek, 08092 (609) 296-3040
Little Egg Harbor MUA	823 Radio Road, Little Egg Harbor, 08087 (609) 296-1168
Long Beach Township	6805 Long Beach Boulevard, Brant Beach, 08008 (609) 361-1000
Stafford MUA	260 East Bay Avenue, Manahawkin, 08050 (609) 597-1000
Tuckerton Water and Sewer	445 South Green Street, Tuckerton, 08087 (609) 296-9222

Ocean County Vocational Technical School

Admissions Office:

131 Bey Lea Road
Toms River, NJ 38753
Phone: (732) 473-3100

www.ocvts.org

MATES (Marine Academy of

Technology and Environmental Science

Phone: (609) 978-8439 / Fax: (609) 978-8540

The mission of the Ocean County Vocational Technical School system is to prepare students for job placement or further education leading to successful employment. We develop partnerships with affiliated schools, parents, businesses, industry, and community agencies to create and deliver opportunities for students to participate in quality academic and occupational programs with support services. These programs and services are designed to meet the needs of high school students and adult learners as well as the requirements of employers, colleges, technical schools, and the community. Our most important products are quality graduates and our most important service is to provide them with critical thinking skills for a lifetime. The MATES program is a unique opportunity to the serious student with interest in any marine or environmentally related field. It is an intensive program which challenges and engages the

students. Much of their field study takes place throughout the entire Barnegat Bay watershed. The staff and students are wonderful resources and are always looking to become involved in outreach and educational efforts.

Ocean Institute at Brookdale Community College

53 Hudson Road-Sandy Hook

Highlands, NJ 07732

Phone: (732) 224-2435 / Fax: (732) 872-1100

E-mail: sandyhook@brookdalecc.edu

<http://ux.brookdalecc.edu/staff/Web%2012-2-04/index2-2.html>

The goal of the Ocean Institute is to provide education in the areas of oceanography, marine science, barrier beach ecology and dynamics, wetlands, estuaries, weather and global change to schools throughout New Jersey. Teacher training sessions on a variety of coastal topics are also offered throughout the year. The Institute is involved in community outreach and education, including beach cleanups and water quality monitoring. The Institute also offers oceanographic boat trips on the Raritan Bay, and provides training through the National Audubon Society's Saving Wetlands - New Jersey Guide, Brookdale's ESTUARIES and SANDY HOOK Guides. The Institute offers presentations on topics such as water testing, aquatic life and adaptations, wetlands and weather. Their Ocean Adventures is a 1-2 week long summer camp for 4th-8th grade students. There are several sessions throughout the summer which focus on a variety of topics. Call for registration information.

Oyster Creek Generating Station

P.O. Box 388

Route 9 South

Forked River, NJ 08731

Phone: (609) 971-4000 /Fax: (609) 693-4930

www.exeloncorp.com

Oyster Creek's Speaker's Bureau is available for presentations on a variety of topics, including energy use and power supply. Appointments can be made by calling the number above.

Pinelands Institute for Natural and Environmental Studies (P.I.N.E.S.)

Burlington County College
120-13 Whitesbog Road
Browns Mills, NJ 08015
Phone: (609) 893-1765
E-mail: pin.es@bcc.edu
<http://staff.bcc.edu/pines>

Our program operates in cooperation with Brendan T. Byrne State Forest to provide teachers with science and social studies field trips in which students study the environment and culture of the New Jersey Pine Barrens. On-site field trips include: The New Jersey Cranberry Industry, Life in a Company Town, Water Quality, Trees of the Pines, Pine Barrens Ecology, Lenape Living in the Pines, Exploring Freshwater Wetlands, Autumn in the Pines, Spring Adventure, and Pond Ecology. In-school presentations include: Pine Barrens Ecology Lab, Fire Ecology Lab, and Lenape Living in the Pine Barrens.

Pinelands Preservation Alliance

17 Pemberton Road
Southampton, NJ 08088
Phone: (609) 859-8860 / Fax: (609) 859-8804
E-mail: ppa@pinelandsalliance.org
www.pinelandsalliance.org

The Pinelands Preservation Alliance (PPA) is a nonprofit organization dedicated to protecting the 1.1 million acres of New Jersey's Pinelands National Reserve. The Alliance accomplishes this through education, grassroots organizing within the 56 municipalities of the Pinelands and monitoring activities of the Pinelands Commission. PPA supports implementation of the Pinelands Comprehensive Management Plan and advocates its region-wide protection strategy. PPA offers a week-long summer institute for middle and high school teachers and develops curriculum for integrating Pinelands themes into science and social studies teaching. PPA also offers field trips and slide presentations through its Speakers Bureau. PPA's newsletter *Inside the Pinelands* is published six times each year and includes articles and updates pertinent to the region. Call to find out more or to schedule a presentation.

ReClam the Bay

1623 Whitesville Road
Toms River, NJ 08755-1199
Phone: (732) 349-1152 / Fax: (732) 505-8941
www.reclamthebay.org

ReClam the Bay, Inc., founded by Rutgers Cooperative Extension of Ocean County and the Barnegat Bay Shellfish Restoration Program is a non-profit organization whose mission is to involve and educate the public about the estuary's water quality and the importance of shellfish.

The organization believes that by involving the public in the care, feeding, and life cycles of the shellfish they will better understand what an integral role shellfish have in our lives. ReClam the Bay offers the following educational opportunities about Barnegat Bay, shellfish and water quality: the Speakers Bureau (available year-round) offers group presentations about Barnegat Bay and the shellfish that inhabit it; in-the-field talks (a summer program) at or near the Bay using shellfish to raise awareness about the conditions of the Bay and what the public can do to help; a “Shellfish in the Classroom” in-school program which introduces elementary through high school students to shellfish and their role in keeping the Bay healthy; and the Clam Trail, a kind of treasure hunt. Visit the website above to find out about the Clam Trail and where to visit the shellfish nurseries where millions of baby shellfish are grown each summer.

Rutgers Cooperative Extension of Ocean County

1623 Whitesville Road
Toms River, NJ 08755-1199
Phone: (732) 349-1152
<http://ocean.njaes.rutgers.edu/>

Rutgers Cooperative Extension (RCE) of Ocean County operates through the New Jersey Agricultural Experiment Station and Rutgers, the State University of New Jersey. RCE develops and delivers educational programs in Agriculture and Natural Resources, 4-H, Family and Community Health Sciences (FCHS), SNAP-Ed, Commercial Fisheries and Aquaculture, and Coastal Water Quality and Recreation.

County Agents and staff provide non-biased, research-based information to farmers, landscapers, commercial horticulturalists, homeowners, fishermen and clambers, educators, youth, and the general public. Agricultural and environmental information is available on topics including sustainable landscaping practices, water conservation, water quality, and fisheries and aquaculture. FCHS and SNAP-Ed share evidence-based information about nutrition, wellness, and healthy lifestyles to both youth and adult audiences. The RCE also provides a variety of community-service focused volunteer opportunities, including the Barnegat Bay Shellfish Restoration Program and the Master Gardener Program, as well as 4-H clubs for Ocean County youth between Kindergarten and the 12th grade.

Toms River Avian Care

1916 Kenilworth Court
Toms River, NJ 08753
Phone: (732) 255-9270

Toms River Avian Care is a wildlife rehabilitation center licensed by both the state and federal government to treat all species of wild birds. Each year over 2000 birds are admitted to the center. Educational programs are available on most aspects of wildlife and conservation. Programs are primarily scheduled for evenings and weekends. Toms River Avian Care is a nonprofit organization owned and operated by Karen and Don Bonica.

Toms River Seaport Society and Maritime Museum

78 Water Street

Box 1111

Toms River, NJ 08754

Phone: (732) 349-9209 / Fax: (732) 349-2498

E-mail: tomsriverssimm@yahoo.com

www.tomsriverseaport.org

The Toms River Seaport Society and Maritime Museum is a nonprofit organization that focuses on preserving and educating the public about our maritime history. The Society's headquarters and Maritime Museum occupies the 1868 Carriage House which served the estate of Joseph Francis, developer of the "Lifecar" which was used in the Lifesaving Service. The Society operates a small museum located on Water Street in Toms River which provides displays of many artifacts associated with the marine history and development of the area, historic boats, models, a maritime library, and a ship's store. There is also a Boat Workshop for boat restorations, building, educational programs and seminars on topics such as navigation, marine carpentry, wood finishing, wood carving, etc. Please call for their hours of operation.

The Trust for Public Land

New Jersey Field Office

20 Community Place, Suite 7

Morristown, NJ 07960

Phone: (973) 292-1100

E-mail: newjersey@tpl.org

www.tpl.org

The Trust for Public Land (TPL) is a national nonprofit land conservation organization conserving land for people. TPL has been actively involved in the Barnegat Bay watershed since the mid-1990s and has added land to the Edwin B. Forsythe National Wildlife Refuge, the Sedge Island Wildlife Management Area, and Ocean County Natural Lands Trust, among other public entities. TPL's preservation efforts are guided, in part, by their 1995 study *The Century Plan*, which identified 100 open space parcels vital to protecting water quality, wildlife habitat, and public recreational opportunities in the bay watershed. TPL also completed an EPA-funded study in the Metedeconk watershed, to help develop innovative strategies for source water protection. In addition, TPL administers the Barnegat Bay Environmental Grant Fund, an annual mini-grant program for environmental projects that directly benefit the bay watershed.

Tuckerton Seaport, A Project of the Barnegat Bay Decoy and Baymen's Museum

Mailing Address:

P.O. Box 52

Museum Location:

Route 9 across from Lake Pohatcong

120 W. Main Street
Tuckerton, NJ 08087
Phone: (609) 296-8868
www.tuckertonseaport.org

Tuckerton Seaport is a nonprofit organization dedicated to preserving, presenting and interpreting the rich maritime history, artistry, heritage and environment of the Jersey Shore, and the unique contributions of its baymen. Opened in 2000, this open-air maritime museum honors Jersey Shore traditions with recreated and historic buildings, exhibits, demonstrations of traditional folk arts, guided tours and public programs, special events, professional development workshops, folk art classes, and more. The site also includes restored salt marshes and a coastal forest trail. Tuckerton Seaport is a significant resource in the state of New Jersey for regionally specific information and resources related to the natural and cultural history of Barnegat Bay. Teacher resource packets are available on-line. Partners include the Jacques Cousteau National Estuarine Research Reserve administered by Rutgers University, Richard Stockton State College, and the New Jersey Division of Fish and Wildlife.

United States Environmental Protection Agency

Regional Office
290 Broadway
New York, NY 10007
Phone: (212) 637-3000 or (877) 251-4575
www.epa.gov/docs/Region2

The Environmental Protection Agency (EPA) has an *Adopt Your Watershed* campaign and has created a nationwide catalog of organizations active in local watershed issues. It is available on the World Wide Web at <http://water.epa.gov/action/adopt/index.cfm>. There are links to numerous other EPA sponsored websites offered through the Office of Wetlands, Oceans and Watersheds www.epa.gov/OWOW. The EPA has numerous publications available on specific environmental topics. It is probably best to visit their website address and search for specific information and resources. This could also be an assignment for students and the search can be a learning experience as well. Annual educational grants available – application deadline is usually in November.

United States Fish and Wildlife Service

Ecological Services, New Jersey Field Office

927 North Main Street, Building D

Pleasantville, NJ 08232

Phone: (609) 646-9310 / Fax: (609) 646-0352

<http://njfieldoffice.fws.gov>

The New Jersey Field Office (NJFO), located in Pleasantville, Atlantic County, New Jersey implements the U.S. Fish and Wildlife Service's Ecological Services program throughout New Jersey and its territorial waters. The Service's mission 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 NJFO's responsibilities chiefly focus on the stewardship of federal trust resources, which include federally listed species, migratory birds and fish, certain marine mammals, and federal lands including National Wildlife Refuges.

Our goal is to sustain and safeguard federal trust fish and wildlife resources for present and future generations. We implement several program activities to accomplish this goal. The NJFO's *Threatened and Endangered Species Program* provides information consultations and technical assistance for the protection of federally listed species in New Jersey as well as formal consultation on the effects of beach nourishments and shoreline stabilization. The goal of this program is the recovery of federally listed species. The *Federal Activities Program* works in an advisory capacity to the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency (USEPA), U.S. Department of Transportation, Federal Energy Regulatory Commission, and the state of New Jersey, reviewing federal and state permits for regulated activities in wetlands and coordinating federal projects to avoid or minimize adverse impacts to fish and wildlife populations. Through the *Partners for Fish and Wildlife Program*, the NJFO works with private land owners and has restored 5,513 acres of freshwater wetlands, 38 miles of riparian buffer, and 1,278 acres of uplands in New Jersey since the program's inception in 1991. Also in partnership with landowners, the *Coastal Program* has restored 2,114 acres of coastal wetlands and 174 acres of uplands, has provided over 76 miles of fish passage, and has protected 4,134 acres of wetlands through fee acquisition since 1999. The *Environmental Contaminants Program* works collaboratively with the USEPA and the state of New Jersey to implement wildlife-protective surface water quality criteria for mercury, PCBs, and DDT; conducts environmental contaminant studies; provides pre-acquisition refuge land surveys and Natural Resource Damage Assessments; and responds to oil spills and chemical discharges. *Outreach/Education* supports NJFO activities with reports, briefings, and public information/outreach publications such as *Field Notes*, an activity report of field operations.

The NJFO's outreach activities also include *The Nature of Learning Program*, which promotes conservation education at local schools blending the Service's mission with school *curricula* and helping students understand and appreciate New Jersey's living resources.

Edwin B. Forsythe National Wildlife Refuge

Brigantine Division

P.O. Box 72, 800 Great Creek Road

Oceanville, NJ 08231

Phone: (609) 652-1665 / Fax: (609) 652-1474

E-mail: forsythe@fws.gov

<http://forsythe.fws.gov>

Barnegat Division

70 Collinstown Road, P.O. Box 544

Barnegat, NJ 08005

Phone: (609) 698-1387 / Fax: (609) 698-0109

This incredible National Wildlife Refuge protects more than 46,000 acres of southern New Jersey coastal habitats and wetlands. The refuge extends for 50 miles along the coast from Brick to its southern extent, 5 miles north of Atlantic City. At least 293 species of birds have been observed on the refuge. Over 6,000 acres of the refuge are designated as the Brigantine Wilderness Area. It contains two of the remaining undeveloped barrier beaches in the state. These fragile areas provide essential nesting and feeding habitats for the endangered piping plover, black skimmer, and least tern. Refuge staff and local teachers are in the process of developing environmental education programs. We also offer a variety of activities for scout groups. Check with us to see what we have to offer.

There are at least ten locations where visitors can access the refuge. Three of these are in the Barnegat Bay Watershed -- the deCamp Wildlife Trail in Brick Township, a one-mile trail adjacent to Eno's Pond County Park, and the Barnegat Observation Platform.

The most popular place to view birds is the Wildlife Drive in the Brigantine Division. This eight-mile, one-way, unpaved road leads you through wetlands and woodlands. There are two observation towers and one observation deck equipped with spotting scopes to help visitors view birds. Look for spectacular concentrations of migratory water birds in spring and fall, as they stop and linger in the refuge habitats managed to meet their needs. Hiking trails through the forest and along a boardwalk through the salt marsh provide opportunities to get away from the car to see and hear a variety of wildlife. An entrance fee is required to access the Wildlife Drive and its associated foot trails. School groups can request an educational fee waiver. Bird checklists, refuge brochures, and a self-guided auto tour guide can be picked up at the entrance to the Wildlife Drive. The refuge headquarters and Wildlife Drive are located between Absecon and Smithville off Route 9 where Great Creek Road meets the bay.

USDA - Natural Resources Conservation Service

220 Davidson Avenue, 4th Floor

Somerset, NJ 08873

Phone: (732) 537-6040 / Fax: (732) 537-6095

www.nj.nrcs.usda.gov

A major responsibility of the NRCS is to conduct soil surveys on private lands in the United States. Soil surveys contain information in the form of detailed soil maps, data tables, and text

narratives that can be used in land-use planning programs. A soil survey contains predictions of soil behavior for selected land uses and highlights limitations and hazards inherent in the soil, and the impact of selected land uses on the environment. They may also provide technical support for problems related to soil erosion and control.

United States Geological Survey

New Jersey Water Science Center
810 Bear Tavern Road, Suite 206
West Trenton, NJ 08628
Phone: (609) 771-3900 / Fax: (609) 771-3915
<http://nj.usgs.gov>

The United States Geological Survey (USGS) is a division of the U.S. Department of the Interior that has been assessing and monitoring New Jersey's natural resources for over a century. Through cooperative programs with more than 25 federal, state and local agencies, the USGS studies water supply, water quality, floods, droughts, and a variety of other natural resource issues. The research information obtained by the USGS is often the first step in scientific investigations, construction projects, and recreational activity planning. The USGS is instrumental in the study of watershed issues statewide through collection, storage and dissemination of data relating to stream flow, groundwater level, and water quality. Information on their programs is available on their website listed above. The New Jersey office has been involved in the Barnegat Bay Partnership and has some important historical data on the groundwater status within the Barnegat Bay watershed.

Watershed Partnership for New Jersey - c/o New Jersey Audubon Society Center for Research and Education

600 Route 47 North
Cape May Court House, NJ 08210
Phone: (609) 861-0700
www.anjee.net/affiliates/wpnj.html
www.birdcapemay.org

The Watershed Partnership for New Jersey (WPNJ) is an affiliate of the New Jersey Association for Environmental Education (ANJEE) and is a group of individuals that are representative of various groups, organizations and agencies that conduct watershed education throughout the state. They produced a resource directory for the state that lists contact information for watershed education people within each of the five watershed regions of the state. There are regional contacts throughout the state. WPNJ also hosts an annual watershed education conference.

Wetlands Institute

1075 Stone Harbor Boulevard
Stone Harbor, NJ 08247
Phone: (609) 368-1211 / Fax: (609) 368-3871
E-mail: education@wetlandsinstitute.org
www.wetlandsinstitute.org

The Wetlands Institute is a nonprofit organization dedicated to public education and research concerning tidal wetlands and coastal ecosystems. The Institute is situated on 34 acres of salt marsh and is surrounded by 6,000 acres of publicly-owned coastal wetlands which serve as a living laboratory for both students and visitors. Exhibits, live displays, and a self-guided salt marsh trail introduce visitors to salt marsh vegetation, backbay fish, invertebrates, and turtles. Educational programs for schools, colleges, or youth groups can be arranged. Programs for the public, including classes, lectures, and workshops, are held throughout the year.

Whitesbog Preservation Trust

120-34 Whitesbog Road
Browns Mills, NJ 08015
Phone: (609) 893-4646 / Fax: (609) 893-8297
E-mail: programmanagerwpt@comcast.net, whitesbogpreservationtrust@comcast.net
www.whitesbog.org

The Whitesbog Preservation Trust is a nonprofit organization directly involved in the restoration, preservation, and use of Whitesbog as a site for interpretive education. The Trust, in cooperation with Brendan T. Byrne State Forest, sponsors a variety of interpretive and recreational programs at Whitesbog for public education and enjoyment. Historic Whitesbog Village is a turn of the century company town located in the internationally recognized Pinelands National Reserve in Brendan T. Byrne State Forest, Pemberton Township. The village served as the main settlement and service center for the cranberry farming operation of Joseph J. White. In 1916, the first cultivated blueberry was developed by Elizabeth C. White and Dr. Frederick Coville. Whitesbog is listed on both the National and State Registers of Historic Sites. With few exceptions, the buildings of Whitesbog still stand. Historic Whitesbog Village is also an important natural site. Nestled in the New Jersey Pinelands, Whitesbog serves as a unique example of the relationship between history, culture, and the natural environment. The visitor to Whitesbog is treated to a dazzling array of all the unique features the Pinelands has to offer plus the opportunity to learn about the history and the culture of the region. Tours and presentations may be arranged. Annual events include the Blueberry Festival, Sunset Hayride, and Tundra Swan Tours. The Trust is supported by its membership fees and supported by its volunteers.

* * *

National Organizations for Additional Resources

American Water Resources Association
P.O. Box 1626

Middleburg, VA 20118-1626
Phone: (540) 687-8390 / Fax: (540) 687-8395
E-mail: info@awra.org
www.awra.org

Earth Force
(Previously Global Rivers Environmental Education Network or GREEN)
2555 West 34th Avenue
Denver, CO 80211
Phone: (303) 433-0016
www.earthforce.org

Izaak Walton League of America
707 Conservation Lane
Gaithersburg, MD 20878
Toll-free: (800) 453-5463
Phone: (301) 548-0150 / Fax: (301) 548-0146
E-mail: info@iwla.org
www.iwla.org

National Arbor Day Foundation
100 Arbor Avenue
Nebraska City, NE 68410
Toll free: (888) 448-7337
www.arboday.org

National Association of Conservation Districts
509 Capitol Court NE
Washington, DC 20002
Phone: (202) 547-6223 / Fax: (202) 547-6450
www.nacdnet.org

National Audubon Society
225 Varick Street
New York, NY 10014
Phone: (212) 979-3000
www.audubon.org

National Wildlife Federation
11100 Wildlife Center Drive
Reston, VA 20190
Phone: (703) 438-6000
Toll free: (800) 822-9919
www.nwf.org

Ocean Conservancy (Previously, Center for Marine Conservation)

1300 19th Street, NW, 8th Floor
Washington, DC 20036
Toll-free: (800) 519-1541
Phone: (202) 429-5609
E-mail: membership@oceanconservancy.org
www.oceanconservancy.org

Soil and Water Conservation Society

945 SW Ankeny Road
Ankeny, IA 50021
Phone: (515) 289-2331 / Fax: (515) 289-1227
E-mail: swcs@swcs.org
www.swcs.org

World Wildlife Fund

1250 24th Street, NW
P.O. Box 97180
Washington, DC 20037-1193
Phone: (202) 293-4800
www.worldwildlife.org

* * *

**A Synopsis of Curricula and Teacher Resources
to Enhance Barnegat Bay Watershed Education**

NOTE: Those marked with an “#” are New Jersey-based and/or specific. Those marked with an “” are climate change-specific. Utilizing your computer’s word-search function is recommended for finding the specific resources you are interested in.*

Active Watershed Education - It’s AWESome

The Active Watershed Education Curriculum has been recognized nationally as “one of the best water-based education curricula available in the country.” The curriculum is interactive between students, teachers, and the environment. It is comprehensive, including scientific, cultural, and social information about watersheds, includes units that build on each other -- helping students see the big picture. This curriculum can be used in any watershed as an effective medium for public outreach, and to build support for local watershed management activities.

Southern Rhode Island Conservation District Phone: (401) 934-0841
PO Box 1636
Kingston, RI 02881 www.sricd.org

*** An Inconvenient Truth in the Classroom**

This curriculum focuses on global warming and what teens can do about it. It uses current environmental education materials to get compelling science instruction into classrooms, offers tailored and age-appropriate contents for all ages and levels of development, and offers educators a way to connect with students using activity-oriented lessons and projects.

National Wildlife Federation
Climate Classroom
11100 Wildlife Center Drive
Reston, VA 20190

Phone: (703) 438-6000
Toll free: (800) 822-9919
www.climateclassroom.org/teens

Barnegat Bay Decoy and Baymen’s Museum, Inc.

In addition to the Tuckerton Seaport, the museum offers comprehensive curriculum guides: "From the Beach to the Bay" (habitats, wildlife and culture of South Jersey), "Horseshoe Crabs," and "Take a Walk on the Wild Side" (habitats and wildlife of southern/coastal New Jersey). Individual lesson plans are available on the Seaport website on such topics as: Working the Cycle, Barnegat Bay Boats, Barnegat Bay Decoys, Clamming and Oystering, Tucker's Island Lighthouse and more. Two traveling trunks are available as well on "Horseshoe Crabs" and "Take a Walk on the Wild Side."

Tuckerton Seaport
120 W. Main Street
Tuckerton, NJ 08087

Phone: (609) 296-8868
www.tuckertonseaport.org

Beneath the Shell: A Teacher’s Guide to Nonpoint Source Pollution and Its Potential Impact on New Jersey Shellfish

Designed for grades 1-8, this interdisciplinary, skill-oriented supplemental guide focuses on general water concepts, nonpoint source pollution, and shellfish.

NJDEP, Division of Watershed Management
P.O. Box 418
Trenton, New Jersey 08625-0418

Phone: (609) 292-2113
Fax: (609) 292-0687
www.state.nj.us/dep/seeds/shell.htm

Bridges to the Natural World

New Jersey Audubon Society's publication. A Natural History Guide for teachers of grades pre-K through 6th grade. *Bridges to the Natural World* was developed to help New Jersey teachers lead students to a better understanding of their local natural environment. The three major sections of the guide are designed to facilitate the transition from classroom or indoor teaching to an outdoor learning experience. Includes easy-to-use descriptions of common New Jersey habitats complete with animal and plant lists. Age-appropriate lessons focus on habitats, natural communities, ecosystems, human ecological impacts and human land stewardship practices. Also includes many shorter activities to help focus students' attention and rubrics to assess learning. In addition to *Bridges*, NJAS offers other professional development opportunities for educators and New Jersey-specific resources, including *NJ WATERS: Watershed Approach to Teaching the Ecology of Regional Systems*, and *Songbirds at the Crossroads of Migration*.

NJAS Department of Education
600 Route 47 North
Cape May Court House, NJ 08210

Phone: (609) 861-0700

www.njaudubon.org/SectionEducation/BridgestotheNaturalWorld.aspx

*** Carbon Footprint Calculators**

Inevitably, in going about our daily lives — commuting, sheltering our families, eating — each of us contributes to the greenhouse gas emissions that are causing climate change. Yet, there are many things each of us, as individuals, can do to reduce our carbon emissions. The choices we make in our homes, our travel, the food we eat, and what we buy and throw away all influence our carbon footprint and can help ensure a stable climate for future generations. The following organizations offer online calculators for determining your carbon footprint.

The Nature Conservancy: www.nature.org/greenliving/carboncalculator/

The GREENS: www.meetthegreens.org/features/carbon-calculator.html

US EPA: www.epa.gov/climatechange/kids/calc/

*** Climate Change Links for Educators**

The US Environmental Protection Agency's Climate Change Division (CCD) offers a comprehensive list of climate change-related web links for educators to browse. Topics include atmospheric science, oceanography, acid rain and aeronautics, just to name a few.

US Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Phone: (202) 343-9990 (CCD)

Phone: (202) 272-0167 (EPA)

www.epa.gov/climatechange/links.html

*** Climate Change Wildlife and Wildlands**

The new *Climate Change, Wildlife and Wildlands Toolkit for Formal and Informal Educators* is designed for classroom teachers and informal educators in parks, refuges, forest lands, nature centers, zoos, aquariums, science centers, etc., and is aimed at the middle school grade level. The U.S. Environmental Protection Agency, in partnership with six other federal agencies (National Park Service, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, USDA/Forest Service, Bureau of Land Management), developed the kit to aid educators in teaching how climate change is affecting our nation's wildlife and public lands, and how everyone can become "climate stewards." Toolkit materials are available for download free of charge on the United States Global Change Research Program website.

US Global Change Research Program
1717 Pennsylvania Avenue, NW
Suite 250
Washington, DC 20006

Phone: (202) 223-6262
Fax: (202) 223-3065
www.globalchange.gov

The Comprehensive Water Education Book – Grades K-6

The Comprehensive Water Education Book is based on the assumption that children learn best by doing. In education, and especially science, talking is not necessarily teaching. The activities in this manual will help students develop a scientific attitude. By their participation, students can begin to learn cause-and-effect relationships, increase their natural curiosity, suspend judgment, develop a desire to search for answers, and approach problems with open minds.

International Office for Water & Science Education Phone: (435) 797-3157
Utah Water Research Laboratory
Utah State University
1600 Canyon Road
Logan, Utah 84321
<http://uwrl.usu.edu/partnerships/niwr/iowse.html>

Conserving Soil

This activity and resource folder is designed for use as enrichment materials for grades 6 through 9 and is an interdisciplinary study of soils. Conserving Soil is ready for use in the classroom – it has 24 photocopy activity masters, 4 full-color transparencies, and a 16-page teacher's guide. The program contains a balance of in-class and outdoor learning experiences that will teach your students about an often overlooked but essential part of the environment – our soils.

Available locally from:
Ocean County Soil Conservation District
714 Lacey Road
Forked River, NJ 08731

Phone: (609) 971-7002
Fax: (609) 971-3391
E-mail: info@ocscd.org
www.ocscd.org

Curriculum Earth (formerly, Regional Environmental Education Program [REEP])

Curriculum Earth is packaged in two ways: a three-ringed binder set, with each binder containing five units, and as fifteen individual binders, one per unit. Each elementary grade, kindergarten through grade 6, has a corresponding unit: The Five Senses, Communities, Adaptations, Energy, and Cycles. At the middle school/junior high school level, there is one unit each for earth science, life science and physical science. Each unit contains the following components of environmental education: Awareness, Concept and Action.

The Schuylkill Center for Environmental Education Phone: (215) 482-7300
8480 Hagy's Mill Road
Philadelphia, PA 19128

Fax: (215) 482-8158
Email: scee@schuylkillcenter.org
www.schuylkillcenter.org

Discovering Barnegat Bay

Created through a collaborative effort by the Barnegat Bay Environmental Educators Roundtable Steering Committee, *Discovering Barnegat Bay* is an interdisciplinary guide for the historical, cultural and natural resources of the Barnegat Bay watershed. It includes:

- Forty lesson plans and activities designed specifically about the Barnegat Bay watershed.
- Activities that incorporate locally significant topics and issues into existing curricula.
- Lessons that are interdisciplinary and offer opportunities in Language Arts, Science, Social Studies & Mathematics.
- Chapters that focus on themes: Soil, Water's Path, Natural Wonders, People and Places, and Boundaries of our Watershed. All are created to help make learning more meaningful for students by bringing it "closer to home."
- A supplemental resource for teachers that meets New Jersey State Standards.
- Workshop attendees also receive a Treasure Chest of more than 65 supplemental resources to enhance the activities.

Available locally from:

Ocean County Soil Conservation District
714 Lacey Road
Forked River, New Jersey 08731

Phone: (609) 971-7002
Fax: (609) 971-3391
E-mail: info@ocscd.org
www.ocscd.org

Eco-Friendly Stormdrain Stencils

Storm drain stencils are excellent education tools to help combat water pollution. Use them as part of your school's ongoing commitment to a green environment, or as a project to promote environmental awareness.

Adopt-A-Watershed Program
P.O. Box 788
Hayfork, CA 96041

Phone: (530) 410-1456
E-mail: info@crstencils.com
www.crstencils.com

Educating Young People about Water

Educating Young People about Water (EYPAW) provides resources for developing a community-based, youth water education program that targets youth and links key community members in partnerships -- all working toward common water education goals. Search through over 140 water-related curricula in the EYPAW database to find resources to meet programming needs.

Environmental Resources Center
University of Wisconsin-Madison
445 Henry Mall, Room 202
Madison, WI 53706

Phone: (800) WATER20
Phone: (608) 265-5496
Fax: (608) 262-2031
E-mail: klreilly@wisc.edu
www.uwex.edu/erc/ey paw

*** Energy Hog Challenge**

Learning about energy is fun when you include energy hogs! The Energy Hog Challenge is a set of classroom activities that guide students through lessons about different sources of energy, how we use energy at home, and how to bust energy hogs to save energy. The lessons (grades 2-6) cover science, math, technology, language arts and social studies, and meet national learning standards. Scavenger hunts and other activities are also available.

Alliance to Save Energy
Energy Hog Campaign
1850 M Street, NW
Washington, DC 20036

Phone: (202) 530-2249
E-mail: astainthorp@ase.org
www.energyhog.org

Environmental Resource Guide – Nonpoint Source Pollution Prevention

The *Environmental Resource Guide -- Nonpoint Source Pollution Prevention* addresses the impact of land use on the quality of our water. The guide explains what nonpoint source pollution is, where it comes from, and what can be done about it. Activities focus on agricultural, mining, forestry, and urban sources of pollution and the four main types of pollutants: sediment, nutrients, bacteria, and toxins. The guide for grades 9 through 12 includes extensive, student-directed activities that help develop cognitive and reasoning skills, as well as providing sound information on nonpoint source pollution prevention. Available for grades K-2, 3-5, 6-8, and 9-12. Both English and Spanish versions are available.

Education Program Coordinator
Air and Water Waste Management Association
One Gateway Center, 3rd Floor
420 Fort Duquesne Boulevard
Pittsburgh, Pennsylvania 15222-1435

Phone: (412) 232-3444
Toll free: (800) 270-3444
[Fax: \(412\) 232-3450](tel:(412)232-3450)
www.awma.org
E-mail: info@awma.org

Estuaries 101

Estuaries 101, the online science curriculum from NOAA's National Estuarine Reserve System (NERRS), provides powerful ways for students to learn fundamental concepts in science and develop scientific thinking skills, as well as explore the nation's biologically and economically important estuaries. From flying over an estuary with Google Maps to tracking the path and impact of a hurricane, Estuaries 101 modules feature hands-on learning, experiments, field-based activities and data explorations. The curriculum comprises four two- to three-week modules designed for 9th-12th grade classrooms, with the flexibility to adapt to higher or lower grades, and meets key National Science Education Standards. All are available on the NERRS website.

Estuarine Reserves Division, N/ORM5
Office of Ocean and Coastal Resource Management
1305 East West Highway
Silver Spring, MD 20910
<http://apps.dataintheclassroom.org/water-quality/>

Phone: (301) 713-3155
Fax: (301) 713-4012
www.estuaries.gov

Estuaries -- A Day at the Bay

The program is designed for K-12 educators and covers a variety of topics related to estuarine study. The major goal of the Ocean Institute is to provide education in the areas of oceanography, marine science, barrier beach ecology and dynamics, wetlands, estuaries, weather and global change to schools throughout New Jersey.

Dave Grant, Director
Ocean Institute - Brookdale Community College
Box 533
Sandy Hook, NJ 07732

Phone: (732) 872-2284
Fax: (732) 872-1110
E-mail: dgrant@brookdalecc.edu
www.brookdale.cc.nj.us

Exploring the Estuary!

First produced in 2003, this updated guide highlights regional education organizations providing K-12 estuary-related field trips, lesson plans and classroom activities. The introduction to this 112-page document includes background information on the NY-NJ Harbor Estuary as well as estuary-related facts, vocabulary and internet resources. For download or hardcopy order.

New York/New Jersey Harbor Estuary Program
290 Broadway, 24th Floor
New York, NY 10007

Phone: (212) 637-3816
Fax: (212) 637-3889
E-mail: info@harborestuary.org

GEMS (Great Explorations in Math and Science)

GEMS is a series of teacher's guides and handbooks on a number of science and mathematics topics. It represents a wonderfully creative partnership between the Lawrence Hall of Science and thousands of teachers nationwide. GEMS units can serve as a strong support to the National Science Education Standards, Benchmarks for Science Literacy, and New Jersey Core Curriculum Content Standards. Overwhelming educational evidence that students learn best by doing is the basis for the GEMS guided-discovery approach. Activities engage students in the experience and experimentation before introducing explanations of principles and concepts. For more information on the GEMS series and opportunities to become a GEMS Leader or a GEMS Associate please write to:

University of California, Berkeley
GEMS/Lawrence Hall of Science
One Centennial Drive, #5200
Berkeley, CA 94720-5200

Phone: (510) 642-5132

www.lhs.berkeley.edu

Get the Dirt on Soil Biology

Soil filters our water and contributes to plant growth, but it's not the soil that is doing these important jobs – it's the microorganisms living within the soil. In just a spoonful, there are more microorganisms than the number of people on earth. How does this work? The *Soil Biology Primer*, a 4-color, 48-page publication, introduces the reader to the living component of soil and how that component contributes to agricultural productivity and to air and water quality. It's an excellent resource for gardeners, farmers, ranchers, agriculture professionals, resource specialists, conservationists, soil scientists, students, and educators. The *Primer* includes information on the soil food web – the community of organisms living in soil – and how the web relates to soil health. Chapter topics include bacteria, fungi, protozoa, nematodes, arthropods, and earthworms. The *Primer* is published by the Soil and Water Conservation Society (December 2000). A single copy is \$18.00 (plus shipping/handling fee) with discounts for multiple copies.

Soil and Water Conservation Society
945 SW Ankeny Rd.
Ankeny, IA 50023-9723

Phone: (800) THE-SOIL, ext. 10

Fax: (515) 289-1227

E-mail: Linda.larson@swcs.sorg

www.swcs.org

Give Water a Hand

Give Water a Hand is a national watershed education program designed to involve young people in local environmental service projects. Following steps in the *Give Water A Hand Action Guide*, your youth group or class plans and completes a community service project to protect and improve water resources.

Environmental Resources Center
Give Water a Hand

Phone: (800) WATER20

Fax: (608) 262-2031

445 Henry Mall, Room 202
Madison, WI 53706

E-mail: erc@uwex.edu
www.uwex.edu/erc/gwah/

*** # Global Warming Curriculum Materials and Resources**

The State of New Jersey introduces educators, parents and students in grades pre-K through 12 to a sample of information sources, curriculum resources and school- or community-based service and action projects that engage students of all ages in learning about global climate change in New Jersey and beyond. These resources focus primarily on global climate change.

State of New Jersey
NJ Global Warming
P.O. Box 082
Trenton, NJ 08625

Phone: (866) 337-5669
<http://nj.gov/globalwarming/teachers/>

*** Global Warming School Solutions**

Set a powerful example by helping your local school “go green.” Implementing practical and sustainable solutions throughout your school and incorporating environmental education in the students' curriculum has enormous benefits for the children, the school, the community, and the environment. The National Wildlife Federation's Eco-Schools USA Program provides a framework to help educators integrate sustainable principles throughout their schools and curriculum, and their Climate Classroom curriculum is designed to teach children about the science behind climate change. Sign up on the NWF website.

National Wildlife Federation
11100 Wildlife Center Drive
Reston, VA 20190

Phone: (703) 438-6000
Toll free: (800) 822-9919
www.nwf.org/global-warming.aspx

Green Hour – Be Out There

The National Wildlife Federation offers over 1,000 lesson plans on various topics, aligned to the National Science Education Standards. *Danger from Afar: Non-point Source Pollution and the Lake Superior Basin* (grades 3-8), *Go with the Flow* (grades 6-8), *How Do You Feel about Water?* (grades 3-4, 5-8), *The Water Cycle* (grades 2-8), *Water, Water, Everywhere?* (grades K-2, 3-4, 5-8), and *Watershed Web: A Field Trip* (grades K-2, 3-5, 6-8) lesson plans are just some of the lesson plans available for download from the NWF. Check back regularly, as they are continually adding to their online library of resources for educators.

National Wildlife Federation
11100 Wildlife Center Drive
Reston, VA 20190

Phone: (703) 438-6000
Toll free: (800) 822-9919
www.greenhour.org

GrowLab

GrowLab: Activities for Growing Minds reflects a new thrust in hands-on science curricula, intended to help teachers make science inviting and relevant to students' lives, and to make connections between science and other disciplines. Activities in the guide draw upon students' own experiences, encourage open-ended questioning, and help students then turn their own questions into active investigations. The teacher is seen as the co-explorer, collaborating with students and gently guiding their explorations.

National Gardening Association
1100 Dorset Street
South Burlington, Vermont 05403

Phone: (802) 863-5251
Toll free: (800) 538-7476
Fax: [\(802\) 864-6889](tel:(802)864-6889)
E-mail: customerservice@garden.org
www.garden.org
www.kidsgardening.com

Habitats for Learning

This project takes a new look at using and developing school grounds as a habitat for learning. These areas are also called outdoor classrooms, outdoor learning sites, and school land laboratories or "land labs," but the new term reflects a broader notion of the potential of these areas. All outdoor school grounds, whether in their existing form or designed especially as an outdoor classroom, can be rich habitats for learning. The Planning Guide presents the "nuts and bolts" of how to use, enhance and develop habitats for learning. It includes sections on educational value, building a support system, developing and implementing a plan, and site development. There is also an accompanying video which is designed as a motivational tool.

Ohio Environmental Protection Agency
Office of Environmental Education
P.O. Box 1049
Columbus, OH 43216-1049

Phone: (614) 644-2873
Fax: (614) 728-1275
E-mail: oeef@epa.state.oh.us
www.epa.state.oh.us/oeef/

Invasive Species Integrated Curriculum: Phragmites

Georgian Court University (GCU) provides free lesson plans and associated activities to support middle school teachers in providing a 2-week learning unit for their students, centered on invasive species. Lesson plans are designed to meet federal and state core content standards for middle school educators and include a series of interconnected, inquiry-based activities. They are designed to teach students about invasive species, while building basic math, geography, reading and writing skills. Contact curriculum developer Louise Wootton, Ph.D., of GCU for more information.

Georgian Court University
School of Science and Mathematics
900 Lakewood Avenue
Lakewood, NJ 08701

Phone: (732) 987-2349
Fax: (732) 987-2010
E-mail: woottonL@georgian.edu

www.gcuonline.georgian.edu/wootton_l/phragmites.htm

Learning About the Barnegat Bay Watershed

This curriculum guide provides a framework for elementary school teaches. All lesson plans are easily adaptable for grade K-3 by modifying activities and vocabulary to age and grade appropriateness. Topics covered include trees, cranberry farming, pollution, fishing, and human ecology. Available for download from the BBP.

Barnegat Bay Partnership
College Drive
P.O. Box 2001
Toms River, NJ 08754

Phone: (732) 255-0472
Fax: (732) 864-3851
bbp.ocean.edu

Liberty Science Center

Schools may qualify for a free field trip under their “Adopt-A-Class” program. See their website at www.lsc.org and search for “Adopt.”

Liberty Science Center
Liberty State Park
222 Jersey City Boulevard
Jersey City, NJ 07305

Phone: (201) 200-1000
Phone: (201) 253-1310 (Field Trips)
E-mail: guestcomments@lsc.org
www.lsc.org

Light Pollution Lesson Plans

The International Dark-Sky Association offers lesson plans to aid in teaching about light pollution issues. Currently three lesson plans are available for download. Astronomy and wildlife lessons are available for students ages 5-8, and lighting lessons are available for students ages 16 and up.

International Dark-Sky Association
3223 N. First Avenue
Tucson, AZ 85719

Phone: (520) 293-3198
Fax: (520) 293-3192
E-mail: ida@darksky.org
www.darksky.org

Low Maintenance Landscaping for the Barnegat Bay Watershed.

This guidebook was developed specifically for residents of the Barnegat Bay watershed and Ocean County's environment and conditions. Sandy and porous soils, salty air, and variable weather conditions all play an important role in determining the make-up and maintenance needs of the home yard and landscape. This comprehensive guidebook follows eight simple and effective horticultural techniques and methods which will help our county residents establish low maintenance landscapes. This, in turn, will help minimize the impacts of stormwater runoff and nonpoint source pollutants entering our waterways.

This guidebook represents a truly cooperative effort by the Ocean County Soil Conservation

District, Rutgers Cooperative Extension of Ocean County and the Barnegat Bay Partnership with support from the Ocean County Planning Department and the Board of Chosen Freeholders. This newly released second edition is available on-line at www.ocsed.org/ocsedbook.pdf, or as a hard copy, at any of the partner agencies.

MARE – (Marine Activities, Resources and Education)

MARE is an interdisciplinary, school-wide program that engages teachers, students, parents, administrators and the community to transform elementary and middle schools into dynamic laboratories for the study of the ocean. The program, created by Lawrence Hall of Science at the University of California at Berkeley, has been successfully implemented in hundreds of inland and coastal schools nationwide. MARE is specifically designed to enrich science instruction for all students while promoting equity, language acquisition, and academic excellence. MARE was selected in 1995 as one of the 50 most promising science and mathematics programs in the United States and more recently as a “program that works” by the Eisenhower Regional Consortia.

MARE has been adopted as the principal marine science program offered through Rutgers University’s Institute of Marine and Coastal Sciences (IMCS) and the Jacques Cousteau National Estuarine Research Reserve (JCNERR).

Institute of Marine & Coastal Sciences
Rutgers, the State University of New Jersey
71 Dudley Road
New Brunswick, New Jersey 08901-8521

<http://marine.rutgers.edu>

JCNERR Coastal Education Center
130 Great Bay Blvd.
Tuckerton NJ 08087

Phone: (609) 812-0649
Fax: (609) 294-8597
www.jcnerr.org

Monitoring Estuarine Water Quality Curriculum Module

This curriculum guide contains five activities that incorporate real data from NOAA’s National Estuarine Research Reserve System. The activities are organized as a pathway with five levels of increasing sophistication. Ultimately, students examine the impacts of physical water quality factors on species that live in a given environment, using the Atlantic sturgeon as an example. The goal is for students to experience different kinds of data and data accessing tools, so that, by the end of the module, they can continue to explore data sets driven by their own inquiry.

Estuarine Reserves Division, N/ORM5
Office of Ocean and Coastal Resource Management
1305 East West Highway
Silver Spring, MD 20910

Phone: (301) 713-3155
Fax: (301) 713-4012
www.estuaries.gov/Resources/Home.aspx

My World, My Water and Me

The activities in this guide are focused on water pollution and what individuals can do to help. The guide was written and reviewed by teachers and water resource professionals from throughout New Jersey. There is an extensive background section for teachers. It uses the arts extensively to convey human uses and impacts. Materials use a unique strategy to tie all the activity concepts together; students write a story, in sections, as the unit proceeds.

Association of Environmental Authorities of NJ
2333 Whitehorse-Mercerville Road, Suite 3
Mercerville, NJ 08619

Phone: (609) 584-1877
Fax: (609) 584-8271
E-mail: info@aeanj.org
www.aeanj.org

*** NASA's Climate Kids**

The California Institute of Technology and NASA's Jet Propulsion Lab has created the Eyes on the Earth program which targets grades 4-6. The website includes games, big questions, climate tales, and a wealth of teacher resources and classroom activities.

NASA Jet Propulsion Laboratory
California Institute of Technology
4800 Oak Grove Drive
Pasadena, CA 91109

Phone: (818) 354-4321
climate.nasa.gov/kids/

Natural Resource Educational Materials

The National Association of Conservation Districts currently offers four learning packages for educators and the public. The *Conservation Habits-Healthy Habitats*, *DIG IT! The Secrets of Soil*, *Water is Life*, and *Forestry Education* booklet series are available separately for grades K-1, 2-3, 4-5, and 6 and up. Prices range from \$8 to \$11.50 (plus shipping and handling) for sets of 25.

National Association of Conservation Districts
509 Capitol Court, NE
Washington, DC 20002

Phone: (202) 547-6223
Fax: (202) 547-6450
E-mail: nacdstore@email.nacdnet.org
www.nacdnet.org

Nature Explore Educator Resource DVDs

The *Add New Dimensions to Learning* DVD teaches how adding more experiences with building, nature and movement to children's lives will bring benefits for years to come. The *Learning With Nature* DVD offers techniques for using outdoor classrooms as an integral part of preschool elementary children's daily learning, as well as insight into ways to help children make deeper connections with the natural world. Each disc is approximately 20 minutes long. Cost is \$19.99 each plus shipping and handling.

The National Arbor Day Foundation
100 Arbor Avenue
Nebraska City, Nebraska 68410

Toll free: (888) 448-7337

www.arborday.org

NJ DEP Water Education & Outreach Resources

P.O. Box 420
201 East State Street
Trenton, NJ 08625-0420

Phone: (866) 337-5779
E-mail: watershed@dep.state.nj.us
www.cleanwaternj.org

The Department offers many services and tools to assist your water education and outreach efforts. These include free classroom presentations on water pollution through the Watershed Ambassadors Program, Project WET workshops for educators, WaterSavers programs for water conservation, stormwater lessons, and publications.

The AmeriCorps NJ Watershed Ambassadors Program *is a community-oriented stewardship program designed to raise awareness about water issues in New Jersey. Through this service program, Watershed Ambassadors are available to make interactive presentations on water topics. Watershed Ambassadors also work with community organizations on partnership projects such as rain gardens, stream clean-ups, restoration projects and educational events. Watershed Ambassadors also monitor the local rivers using volunteer monitoring protocols. They also provide training on biological and visual assessments in coordination with the **NJ Watershed Watch Network**, the umbrella organization for the state's volunteer water monitors. For more information: <http://www.nj.gov/dep/wms/bear/ameriCorps.htm>*

Project WET (Water Education for Teachers) *is an internationally renowned program that offers teachers a better understanding about the world's water resources through hands-on, multi-disciplinary lessons. Project WET is a well-rounded series of curriculum and activity guides and associated programs that focus on water supply, water quality, water conservation, watersheds, land use planning and wetlands. Available only through workshops by qualified facilitators, the Project WET Curriculum and Activity guide provides educators with accurate insight into critical water issues while offering a large selection of creative teaching strategies for the classroom and beyond.*

In addition to teacher training workshops, **NJ Project WET Water Festival Program** provides funding to schools for one-day celebrations of water. Students participate in a series of learning stations that examine different water issues and involve the local community. More information at <http://www.state.nj.us/dep/seeds/projwet.htm>

Urban Watershed Education Program is designed to educate young students living in the Newark Bay Complex and other urban areas with fish advisories about the hazards of eating contaminated fish and help them to discover the beauty of their local waterways. Students who participate in the program sample local recreational fishing opportunities while learning how to be responsible citizens within the watershed. The students

experience 3 to 4 days of intense yet enjoyable instruction related to the water pollution, fish advisories and the human connection to their local natural resources. For more information: <http://www.state.nj.us/dep/dsr/urbanfishing/>

Clean Water Raingers publications are available for educators and can be used in conjunction with other water education lessons. Educators are provided with free coloring books and stickers for their elementary school age students. To order, call 866-DEP-KNOW (337-5779) or email watershed@dep.state.nj.us.

Stormwater lessons and other resources can be found on the NJ Department of Environmental Protection website at www.cleanwaternj.org. This **CleanWaterNJ.org website** also offers a host of other information and resources on stormwater and nonpoint source pollution. The **NJDEP Seeds website** offers these publications and many other educational resources on the Department's central environmental education web page <http://www.state.nj.us/dep/seeds>.

New Jersey Water Savers is a partnership between the Rutgers Cooperative Extension Water Resources Program, the US Environmental Protection Agency and the NJDEP. The NJ Water Savers have developed and implemented conservation programs that encourage local stakeholders to change their behavior, ultimately saving water. The programs include incentive programs, model ordinance development, consumer targeted water conservation videos, retrofit programs, outdoor demonstration projects encouraging native plants, rain gardens, rain barrels/ cisterns, and various marketing campaigns. More information can be found at <http://www.njwatersavers.rutgers.edu/>

New Jersey Pinelands On-Line Curriculum Guide

The Curriculum guides have been developed for grades 4-6 and grades 7-8. The grades 4-6 Guide contains a General Information Unit, and units on Pinelands Soil, Pinelands Water, Pinelands Fire, Pinelands People, Pinelands Plants, and Pinelands Animals. The grades 7-8 guide covers the same topics, but omits the General Information Unit.

New Jersey Pinelands Commission
Public Programs Office
15 Springfield Road
New Lisbon, New Jersey 08064

Phone: (609) 894-7300, ext. 125

Email: info@njpines.state.nj.us
www.nj.gov/pinelands

NOAA Lesson Plans

The NOAA National Ocean Service has launched an online tutorial, roadmap to data resources, and lesson plans on topics such as ocean currents, coral reefs, marine sanctuaries, climate change, sea nettles, estuaries, dead zones and other marine issues.

Communications and Education Division
NOAA's National Ocean Service
SSMC4, Room 13317
1305 East-West Highway
Silver Spring, MD 20910

Phone: (301) 713-310
E-mail: nos.info@noaa.gov
www.oceanservice.noaa.gov/education/

Ocean Pollution Classroom Presentations

Clean Ocean Action offers informative marine environmental presentations to teach students about the issues surrounding ocean pollution. Topics include: Clean Ocean Zones (for grades 5-12 and adults), Pointless People Pollution (for all grades and adults), and Liquefied Natural Gas (LNG) (for grades 9-12 and adults). The presentations are each an hour long and a donation of \$75 is suggested. Please contact Meg Gardner (citizens@cleanoceanaction.org) for the LNG presentation, and Tavia Danch (education@cleanoceanaction.org) for all others.

Clean Ocean Action
18 Hartshorne Avenue, Suite 2
Highlands, NJ 07732

Phone: (732) 872-0111
Fax: (732) 872-8041
E-mail: education@cleanoceanaction.org
www.cleanoceanaction.org

The Peregrine Project

The Peregrine Project is a FREE & comprehensive curriculum guide that focuses on one of the fastest animals in the world and one of New Jersey's endangered species, the peregrine falcon. Aimed at elementary school teachers, *The Peregrine Project* features 23 multi-disciplinary lesson plans and activities that are sequential, first covering birds in general, urban wildlife, birds of prey, then peregrine falcons. It is a perfect accompaniment to the PeregrineCam, a live action webcam on a pair of peregrine falcons in Jersey City. Download it today at www.conservewildlifenj.org.

Conserve Wildlife Foundation of NJ
P.O. Box 420, Mailcode 501-03E
Trenton, NJ 08625-0420

Phone: (609) 984-6012
Fax: (609) 984-1414
E-mail: maria.grace@conservewildlifenj.org
www.conservewildlifenj.org

*** Polar Bear Classroom Activities**

These activities introduce students to polar bears, the Arctic, and climate change. *How do Polar Bears Stay Warm?* (grades 2-6), *What Color is a Polar Bear?* (2-5), *How Much Do You Know?* (grades 4-6), *Where in the World is the Polar Bear?* (grades 4-6), *Energy Conservation: Did I Remember To...?* (grades 4-6), and *Where Do Polar Bears Live?* (grades 1-3) activities are all available for download from Climate Classroom Kids.

Climate Classroom Kids
National Wildlife Federation

Phone: (703) 438-6000
Toll free: (800) 822-9919

11100 Wildlife Center Drive
Reston, VA 20190

www.climateclassroomkids.org

Project Estuary - A Curriculum Guide for Teachers

The guide includes a variety of activities and levels of information designed to fit into the existing secondary school curricula. The underlying philosophy for the curriculum is that estuarine education is so very important that estuarine-related concepts should be taught whenever and wherever possible. The activities are designed to be taught anywhere – access to an estuary is not necessary. The teacher information sections include the unit objectives, vocabulary, answers to unit questions and suggestions for further activities. Available for loan only. NCNERR also offers a free activity book entitled *Our Living Estuaries* on their website.

North Carolina Nat'l Estuarine Research Reserve Phone: (252) 838-0883
101 Pivers Island Road Fax: (252) 838-0890
Beaufort, NC 28516 www.nccoastalreserve.net

Project Learning Tree

A pre-K-12 supplemental, multidisciplinary curriculum that uses the forest as a “window on the world” to teach environmental topics. Also available are High School modules on a variety of environmental topics, including Forests, Risk, Municipal Solid Waste/Recycling, and Place-based learning. *Project Learning Tree* resource trunks may be borrowed by educators in New Jersey. In-service workshops are available upon request.

Project Learning Tree Phone: (732) 833-9816
Forest Resource Education Center Fax: (732) 928-8472
370 East Veterans Highway E-mail: Elizabeth.Faircloth@dep.state.nj.us
Jackson, NJ 08527 www.newjerseyplt.org

Project Mayfly

This guidebook provides educational study units which allow high school students to monitor the health of streams, rivers, and lakes in their own area. Written for teachers, youth group leaders, and other interested adults, the *Project Mayfly* Handbook provides for chemical, biological, and physical investigations of water.

Project Mayfly Handbook Phone: (717) 213-6880, ext. 14
Audubon Pennsylvania <http://pa.audubon.org/PDFs/PA-Ed-Materials.pdf>
100 Wildwood Way
Harrisburg, Pennsylvania 17110

Project Seasons

Hands-on activities for discovering the wonders of the world! *Project Seasons* is a collection of

seasonal, interdisciplinary activities and teaching ideas developed by teachers for teachers. Link your curriculum with exciting multidisciplinary activities designed for the pre-kindergarten and elementary classrooms. Lessons encourage exploration, develop process skills, and emphasize inquiry-based learning. *Project Seasons* is published by Shelburne Farms, a working farm and a nonprofit environmental and agriculture education organization, located in Shelburne, Vermont. Its mission is to cultivate a conservation ethic by teaching and demonstrating the stewardship of the natural and agricultural world.

Shelburne Farms
1611 Harbor Road
Shelburne, VT 05482

Phone: (802) 985-8686
Fax: (802) 985-8123
E-mail: info@shelburnefarms.org
www.shelburnefarms.org

Project Terrapin

Project Terrapin is a research and education initiative of the Marine Academy of Technology and Environmental Science (MATES), focusing on diamondback terrapins at Barnegat Bay, New Jersey. Our goal is to learn more about diamondback terrapin ecology, life history and conservation methods. Education is an integral part of the program. Teachers, students and volunteers participate in working with us in meeting these goals. Project terrapin includes the following research objectives in conjunction with scientists at Drexel University, PA: mark and recapture of terrapins; study nesting terrapins and their habitats, and establish and monitor hatcheries at Long Beach Island, N. Sedge Island and Southern Ocean County; educate others about the biology, life history and conservation of terrapins including school groups; promote the conservation of terrapins using current scientific information through research; and work with other terrapin-sponsored programs throughout the State of New Jersey. To volunteer or learn more, contact Project Terrapin at projectterrapin@gmail.com

Project Terrapin
195 Cedar Bridge Road
Manahawkin, NJ 08050

Phone: (609) 978-8439

Project WET

A very comprehensive coverage of water and water-related topics in a K-12 supplementary curriculum, activity guide. Many of the activities are action-oriented and adaptable for a variety of audiences. Lessons were developed by teachers for teachers. A six-hour teacher training workshop is required to obtain the WET Curriculum Guide. For information contact: NJWET@dep.state.nj.us. Curriculum Guides as well as the *Healthy Water Healthy People Water Quality Educators Guide* are available for purchase from the Project WET Foundation.

The Wetlands Institute
1075 Stone Harbor Boulevard
Stone Harbor, New Jersey 08247

Phone: (609) 368-1211
Fax: (609) 368-3871
www.wetlandsinstitute.org

Project WET Foundation

Phone: (866) 337-5486

1001 West Oak Street, Suite 210
Bozeman, MT 59715

Fax: (406) 522-0394
www.projectwet.org

Project WILD & WILD School Sites

A supplementary, multi-disciplinary conservation education activity guide for K-12 that emphasizes wildlife and wildlife resources. Activities are designed to assist learners to progress from awareness to action regarding the environment. A specialized program that trains educators to design an outdoor classroom/natural wildlife habitat on their school property is available through *Homes for Wildlife*. Also offered are specific opportunities to incorporate and integrate the outdoor classroom into the curricula. *Taking Action* is also a helpful guidebook available that gives suggestions and hints about leading students into environmental action and stewardship projects.

NJ Division of Fish and Wildlife
Pequest Trout Hatchery and Natural Resource
Education Center
605 Pequest Road
Oxford, New Jersey 07863

Phone: (908) 637-4125
Fax: (908) 637-6735
E-mail: liz.jackson@dep.state.nj.us
www.njfishandwildlife.com/pwinfo.htm

Project WILD – Aquatic

Aquatic WILD is a K-12 interdisciplinary curriculum supplement designed to increase knowledge and awareness of our marine, coastal and inland aquatic environments as well as human domestic, recreational, and industrial water use. Both Project WILD and the companion Aquatic WILD activity guides contain hands-on activities that teachers use with their K-12 students that are designed to take students from awareness to action. Activities can easily be incorporated into most major subject areas, strengthening basic skills while teaching about wildlife and their respective habitats.

Numerous professional development opportunities are available through this office, including programs at the Sedge Island Natural Resource Education Center, located on an island within the state's first Marine Conservation Zone near Island Beach State Park in Barnegat Bay. Programs are designed for teachers and/or teachers with interested natural resource-based student groups. *Green Eggs & Sand*, a unique and nationally-recognized curriculum developed by scientists and educators in New Jersey, Delaware, and Maryland, is based on the horseshoe crab-shorebird phenomenon. For more information on these and other programs offered by the Division of Fish & Wildlife's Aquatic Resource Education program, please contact us by phone, e-mail, or regular mail (see below). In addition, all program information, including workshop dates and fees, is available at our website.

NJ Division of Fish and Wildlife
Aquatic Resource Education Program
Nacote Creek Marine Research Lab
P.O. Box 418

Phone: (609) 748-4347
Email: karen.leskie@dep.state.nj.us
www.njfishandwildlife.com/aqtedres.htm

Port Republic, New Jersey 08241

#The Reptile and Amphibian Resource Package for Teachers

Created by the New Jersey Division of Fish and Wildlife and the Conserve Wildlife Foundation of New Jersey, this resource package includes: *The Field Guide to Reptiles and Amphibians of New Jersey* and *The Calls of New Jersey Frogs and Toads*.

Conserve Wildlife Foundation of NJ
P.O. Box 420
Trenton, NJ 08625-0400

Phone: (609) 984-6012
Fax: (609) 984-1414
www.conservewildlifenj.org

The Roof Is Growing!

The Roof is Growing! Is a classroom program developed by the American Society of Landscape Architecture to engage and education middle school students (grades 6-8) about green roofs and their environmental benefits. A green roof is a roof substantially covered with vegetation. The program consists of a teacher's guide, web component, student workbook, and field trip (for Washington DC area students only).

American Society of Landscape Architecture
636 Eye Street, NW
Washington, DC 20001-3736

Phone: (202) 898-244
Toll free: (888) 999-ASLA
Fax: (202) 898-1185
E-mail: info@asla.org
www.asla.org/greenroof/

SeaQuest Summer

Treat your kids to a week of learning and fun with American Littoral Society educators and naturalists this summer. The camp will feature their SeaQuest marine science and environmental science curriculum which has been successfully used in New Jersey after school enrichment programs for the past 5 years. This summer, kids entering grades 5, 6, 7, and 8 can participate in outdoor, field-based learning about coastal habitat, wildlife, and human impacts on them – \$250 for the week.

American Littoral Society
Education & Outreach Coordinator
18 Hartshorne Drive, Suite #1
Highlands, NJ 07732

Phone: (732) 291-0055, ext. 109
Fax: (732) 291-3551
E-mail: stevie@littoralsociety.org
www.littoralsociety.org/education.aspx

#Soil Conservation Topics Education Kit

This packet of activities provides curriculum enhancement materials to teachers for supplementing existing lesson plans in Language Arts, Mathematics, Science, Social Studies and Art. The materials emphasize four themes: Soil Resources, Water Resources, Ecological

Resources, and Soil and Water Conservation. Each section also contains background information on the theme and the use of local resource people to supplement the programs. Activities and projects are designed for three scholastic levels: K-2, 3-4 and 5-6.

Available locally from:

Ocean County Soil Conservation District
714 Lacey Road
Forked River, New Jersey 08731

Phone: (609) 971-7002
Fax: (609) 971-3391
E-mail: info@ocscd.org
www.ocscd.org

Stormwater Pollution: Learn and Share (SPLASH)

The *SPLASH* curriculum was developed for use by educators in the local Eugene/Springfield, Oregon area. Although many water units stress the value of clean, safe water, this unit encourages students to explore their local water resources and increase their awareness of water quality. The curriculum focuses on nonpoint source pollution and the activities are easily adaptable to any region. The activities in *SPLASH* foster direct student participation, enhance critical thinking skills, and address a variety of learning styles. Activities include making models and maps, observing and recording, graphing, writing, guest speakers, art, songs and field trips. The curriculum was revised and reprinted in 2001 and now contains the curriculum for grades K-8. All materials are available for download from the Eugene website—just search the curriculum name.

Stormwater Information Specialist

101 East Broadway, Suite 400
Eugene, OR 97401

Phone: (541) 682-2739
Fax: (541) 682-6826
E-mail: kathy.a.eva@ci.eugene.or.us
www.eugene-or.gov

*** A Student's Guide to Global Climate Change**

The US Environmental Protection Agency developed *A Student's Guide to Global Climate Change* to help provide students and educators with clear, accurate information about the causes and effects of climate change—as well as the steps we can all take to help solve the problem. Explore the website for tools to help you and your students learn about this increasingly important global issue.

US Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Phone: (202) 343-9990 (CCD)
Phone: (202) 272-0167 (EPA)
<http://epa.gov/climatechange/kids>

*** Teach the Tap**

While the simple decision to stop at the water fountain rather than the vending machine can make a real difference, students can make a much bigger impact by becoming experts and advocates for the right to clean, safe, and affordable tap water. Food and Water Watch has designed this curriculum around middle school standards from the four core subject areas: English, math, social studies and science. While the lessons can be taught in any configuration, they're organized for teaching in one day or one week.

Food & Water Watch
1616 P Street, NW, Suite 300
Washington, DC 20036

Phone: (202) 638-2500
Fax: (202) 683-2501
www.foodandwaterwatch.org

Teacher's Resource Guide to Recycling in Ocean County

This on-line Guide was updated in 2004 and is geared for grades 4-6. It includes many activities that teachers can integrate within their lesson plan. Hard copies of the guide are also available from the Department of Solid Waste Management office. The Guide is available as well in CD-Rom format.

Department of Solid Waste Management
P.O. Box 2191
Toms River, NJ 08754-2191

Phone: (732) 506-5047
Toll free: (800) 55-RECYCLE
Fax: (732) 244-8396
E-mail: ocrecycles@co.ocean.nj.us
www.co.ocean.nj.us/SolidWaste/

*** Teaching Teens about Global Warming**

The Union of Concerned Scientists has compiled peer-reviewed materials for use in the classroom. The *Renewables Are Ready* guide (grades 6-12), *Confronting Climate Change in California and the Gulf Coast Region* curriculum guides (grades 9-12), and *Global Warming: Early Warning Signs* curriculum guide (grades 9-12) are available for download from the USC website.

Union of Concerned Scientists
National Headquarters
2 Brattle Square
Cambridge, MA 02138

Phone: (617) 547-5552
Fax: (617) 864-9405
www.ucsusa.org

That Magnificent Groundwater Connection

Two complete groundwater resource books are now available for teachers: one for grades K-6 and the other for grades 7-12. They include selected groundwater-related activities adapted from available curricula. Incorporating the groundwater theme into science, stories, songs, math, social studies, art, and writing makes the resource books applicable over a range of subjects.

The activities focus on groundwater issues in New England. Presenting the information with a New England spin teaches students about the region's geologic and hydrologic idiosyncrasies and

how groundwater and the water cycle function locally. Recognizing today's children as tomorrow's leaders, the curricula challenges students to think, sort out facts, brainstorm, experiment, and learn.

That Magnificent Groundwater Connection costs \$25. To order your copy or copies, and/or to organize teacher training in how to use the curricula, send an e-mail to our Lowell office. Please put "Groundwater" in the subject line.

New England Interstate Water
Pollution Control Commission (NEIWPC)
116 John Street
Lowell, MA 01852

Phone: (978) 323-7929
Fax: (978) 323-7919
E-mail: mail@newipcc.org
www.newipcc.org

Water Conservation Education Project

Georgian Court University (GCU) provides free lesson plans and associated activities to support middle school teachers in providing a 2-week learning unit for their students, centered on water conservation. Lesson plans are designed to meet federal and state core content standards for middle school educators and include a series of interconnected, inquiry-based activities. While these materials have been designed to specifically reference the Barnegat Bay watershed, teachers from any area can use the lesson plans with only minor adaptations. Contact curriculum developer Louise Wootton, Ph.D., of GCU for more information.

Georgian Court University
School of Science and Mathematics
900 Lakewood Avenue
Lakewood, NJ 08701

Phone: (732) 987-2349
Fax: (732) 987-2010
E-mail: woottonL@georgian.edu

http://gcuonline.georgian.edu/wootton_l/waterconservation.htm

Water Wise Educator Resources

The Georgia Water Wise Council has compiled a list of water conservation resources teachers can utilize in or out of the classroom.

Georgia Water Wise Council
1655 Enterprise Way
Marietta, Georgia 30067

Phone: (770) 618-8690
Fax: (770) 618-8695
www.gwwc.org

WaterLife: Where Rivers Meet the Sea

Set in California's Elkhorn Slough National Estuarine Research Reserve, this game explains what an estuary is and describes diverse ecosystems in estuaries, tidal influences, restoration efforts, and marine debris. It emphasizes personal responsibility in caring for the environment. An accompanying Field Guide contains educational information to assist the user and provides links to additional resources. It is designed for students at the fourth through seventh grade levels.

NOAA's National Ocean Service

Phone: (301) 713-310

SSMC4, Room 13317
1305 East-West Highway
Silver Spring, MD 20910

E-mail: games@noaa.gov
<http://games.noaa.gov/oscar/>

Wetlands Lesson Plans

The Teacher's Guide offers free lesson plans, links to teaching supplies, worksheets, clipart, songs, stories and activities on various subjects including wetlands and climate change. Another link is "Teacher Created Resources," which includes free lessons and activities, as well as lesson books for sale.

Teacher Created Resources
6421 Industry Way
Westminster, CA 92683

Phone: (888) 343-4335
Fax: (800) 525-1254
E-mail: custserv@teachercreated.com

Wildlife Classroom Programs

The Conserve Wildlife Foundation of New Jersey's (CWF) classroom programs are interactive and entertaining 60-minute PowerPoint presentations with hands-on activities that reinforce core concepts. Programs highlight NJ's rare wildlife and how CWF works to protect them. Programs on threatened wildlife, bald eagles, peregrine falcons, shorebird migrations, reptiles and amphibians, and bats are offered throughout the year and address the NJ Core Curriculum Content Standards. CWF can also create a specific program that suits your classroom needs and abilities. Contact Maria Grace for more information.

Conserve Wildlife Foundation of NJ
Education & Outreach Manager
501 E. State Street, Building 5, 3rd Floor
P.O. Box 420
Trenton, NJ 08609

Phone: (609) 984-0621
E-mail: maria.grace@conservewildlifenj.org

The Wonders of Wetlands (WOW)

A wonderful activity guide that focuses on the wetland environment. Each activity and lesson plan addresses a different aspect of the wetland environment. Many of the activities instruct students to create their own investigative study tools for wetlands experiments. A "must have" if investigating or planning a field trip to a wetland area.

Environmental Concern, Inc.
201 Boundary Lane
P.O. Box P
St. Michaels, MD 21663

Phone: (410) 745-9620
Fax: (410) 745-3517
E-mail: wow@wetland.org
www.wetland.org

* * *

**Other Resource Guides, Directories, and Web Sites
With Information Related to Barnegat Bay Watershed Topics**

Earth Day New Jersey – www.earthdaynj.org

Register your Earth Day event on the NJ Department of Environmental Protection Earth Day website and get information and resources on how to have a successful event.

**Educating Young People About Water – A Guide to Goals and Resources –
www.uwex.edu/erc/ey paw/**

A guide for teachers who want to organize and teach a program about water quality. Includes suggested methods and references for additional education materials and curricula.

Estuary Lesson Plans -- <http://oceanservice.noaa.gov/education/lessons/welcome.html>

Lesson plans on estuaries have been developed for students in grades 9–12, but are easily adaptable for students at the middle school or undergraduate level.

General Environmental Education Resources -

www.eeweek.org/resources/generalresources.htm

A resource list for K-12 teachers on various environmental topics, compiled by the National Environmental Education Foundation.

Living and Landscaping in New Jersey's Pinelands –

www.state.nj.us/pinelands/infor/yard/index.html

A landscaping guide that describes the do's and don'ts of Pine Barrens landscaping.

Marine Education Resource Guide – (609) 748-2031

The newly updated 90-page guide lists more than 350 items from 200 sources for K-12 teachers who wish to include topics on the marine, coastal and wetland environments in the classroom. The guide lists curricula, workshops, field trips, films and videos, and much more. Also see www.njfishandwildlife.com for more information on workshops and educational materials.

New Jersey Commission on Environmental Education –

www.nj.gov/dep/seeds/njcee/index.htm

The New Jersey Commission on Environmental Education and Interagency Work Group (on Environmental Education) are state level groups charged with guiding, supporting, promoting, assisting, and monitoring the state's environmental education efforts, including school-based, youth, family, adult, business and public education efforts on such broad themes as natural resources, ecology, pollution, waste, conservation, energy, and environmental health.

New Jersey State Parks – (800) 843-6420, www.njparksandforests.org State parks day-use and camping brochures available.

Ocean County Government Directory – (800) 722-0291, www.ocean.nj.us/GovtDirPage.aspx

An annual directory that lists all county government offices and their contact information. Includes the Parks and Recreation Department, State and Federal Elected Officials, Museums, and even the News Media contacts for Ocean County.

Pinelands Guide – (609) 894-7300, <http://www.state.nj.us/pinelands/pastimes/guide/webpage%20guide.pdf>

This booklet contains a representative sampling of places to visit and things to do in the Pinelands National Reserve. It contains a description of 21 different locations, their unique features, and the contact information for visiting or touring each site.

Pinelands Speakers Directory – (609) 894-7300, www.state.nj.us/pinelands/edu/speakers/PSD.pdf

The directory lists topics related to the Pinelands and correlates them to an alphabetical listing of speakers. Updated annually. Some speakers require a fee.

SEEDS – The State Environmental Education Directory Website – www.nj.gov/dep/seeds
An on-line catalog of environmental education classroom materials, field trip and in-class program information and professional development resources available through the New Jersey Department of Environmental Protection.

Map Resources for Exploring the Watershed

Ocean County Department of Planning

129 Hooper Avenue

P.O. Box 2191

Toms River, NJ 08754

www.planning.co.ocean.nj.us/databooktoc.htm

Phone: (732) 929-2054

Fax: (732) 244-8396

E-mail: ocplanning@co.ocean.nj.us

The Planning Department has extensive map resources available in their publication "Ocean County Data Book." This book is available by mail and online at their website.

U.S. Geological Survey Topographic Maps -- (800) USA-MAPS, <http://topomaps.usgs.gov>

Watershed boundaries are determined by topography, making the use of topographic maps inherent to any investigation or exploration of the watershed. Topographic maps are available for the entire country by areas referred to as quadrangles.

In New Jersey:

New Jersey Geological and Water Survey

Mail Code 29-01

P.O. Box 420

Trenton, NJ 08625-0420

Attn: Maps and Publications

Phone: (609) 292-1185

Fax: (609) 633-1004

www.state.nj.us/dep/njgs

View the entire Barnegat Bay Watershed (a wall mural of all the connecting quadrangles) at the Cooper Environmental Center in Cattus Island County Park, off Fischer Boulevard in Toms River.

Topographic maps are also available on CD-Rom

MyTopo

1 South Broadway

Billings, MT 59101

Phone: (877) 587-9004

www.mytopo.com

Topographic Maps of the Entire State

New Jersey Atlas & Gazetteer

DeLorme

2 DeLorme Drive, P.O. Box 298

Yarmouth, ME 04096

Phone: (800) 561-5105

www.delorme.com

These handy small version (and scale) topographic maps are affordable and widely available at any major book/map store.

Source of statewide watershed and drainage basin maps and publications

NJDEP

Division of Watershed Management
P.O. Box 418
Trenton, NJ 08625

Phone: (609) 984-0058
Fax: (609) 292-0687
www.state.nj.us/dep/watershedmgt

New Jersey Geological Survey: See a geologic map of New Jersey at www.nj.gov/dep/njgs.

* * *

**Barnegat Bay Watershed Environmental Educators Roundtable
Steering Committee Members**

The *Barnegat Bay Environmental Educators Roundtable Steering Committee* was formed in 1995, to partner in a coordinated and collaborative effort to bring Barnegat Bay watershed topics and issues to the teachers of Ocean County. Representatives from the “who’s who” of environmental education at work in the county were brought together and have remained together as a successful and productive advisory group for OCSCD’s educational efforts. The group’s accomplishments have included: the development of the Barnegat Bay Watershed Educational Resource Guide (1999, revised 2006), the development and implementation of [Discovering Barnegat Bay](#) activity guide and Treasure Chests (2003), and the ever popular annual [Barnegat Bay Environmental Educators Roundtable](#), now in its 15th year. Members of the *Barnegat Bay Environmental Educators Roundtable Steering Committee* serve as instructors for the Roundtable and their facilities as host sites for [Discovering Barnegat Bay](#) workshops. The organizations and groups that they each represent offer wonderful resources and opportunities for teachers and students to explore the wonders of the Barnegat Bay watershed. OCSCD would like to thank and acknowledge the efforts of this group and to provide those interested with links to their individual websites which each offer a unique perspective and opportunity for continued watershed education.

Claire Antonucci, New Jersey Sea Grant Consortium

<http://www.njmsc.org/>

Chris Claus, Cattus Island County Park

<http://www.co.ocean.nj.us/parks/cattus.html>

Cindy Claus, Jenkinson’s Aquarium

<http://www.jenkinsons.com/aquarium/>

Elizabeth Faircloth, New Jersey Forest Resource Education Center

http://www.state.nj.us/dep/parksandforests/forest/njfs_frep.html

Kyra Hoffman, NJDEP, Division of Watershed Management

<http://www.nj.gov/dep/watershedmgt/>

Karen Walzer, Barnegat Bay Partnership

<http://bbp.ocean.edu>

Karen Leskie, New Jersey Division of Fish & Wildlife

<http://www.state.nj.us/dep/fgw/>
Dr. James Merritt, Sedge Island Natural Resource Education Center
<http://www.state.nj.us/dep/fgw/sedgtr00.htm>
Cara Muscio, Marine Agent, Rutgers Cooperative Research and Extension
<http://www.rce.rutgers.edu/>
Terry O'Leary, Forest Resource Education Center
http://www.state.nj.us/dep/parksandforests/forest/njfs_frep.html
Christine Raabe, Education Outreach Specialist, Ocean County Soil Conservation District
<http://www.ocscd.org/>
Melanie Reding, Rutgers University Institute of Marine & Coastal Sciences
<http://www.imcs.rutgers.edu/>
Tuckerton Seaport
<http://www.tuckertonseaport.org/>
Amanda Truhan, Wells Mills County Park
<http://www.co.ocean.nj.us/OCParks>
Michelle Urban, Wells Mills County Park
<http://www.co.ocean.nj.us/OCParks>
John Wnek, Ocean County Vocational-Technical School
<http://www.ocvts.org/>