



Barnegat Bay Watershed Resources for Environmental Education 2011-12



SAMPLER: PLACES AND THEIR OFFERINGS

Barnegat Lighthouse Interpretive Center and State Park is located on the northern tip of Long Beach Island. In addition to visiting the historic Barnegat Lighthouse and walking the beach, the center offers to groups engaging exhibits about the natural and cultural history of the Barnegat Bay.
(609) 494-2016

www.nj.gov/dep/parksandforests/parks/barnlig.html

Cooper Environmental Center is part of Cattus Island County Park and is located in Toms River on 500 acres of protected land. Naturalists offer programs that are designed to study or explore the salt marsh, maritime forest, and Barnegat Bay. Programs are designed for teachers or students and can be held on site or at the school.
(732) 270-6960

www.ocean.nj.us/parks/cattus.html

Double Trouble State Park Interpretive Center is located in Bayville on state park land that includes wetlands, upland pine forests and meadows. The park naturalist offers free programs for teachers and/or students on the Cedar Creek Sub-watershed and Water Use and can be held at the park or in the classroom.
(732) 341-4098

<http://njparksandforests.org/parks/double.html>

Forest Resource Education Center is a State facility located in Jackson on 660 acres of woods, fields, wetlands and streams. Its staff strives to teach and practice forest stewardship in the watershed. On-site programs for grades K-12 focus on ecology, watersheds, wildlife and habitat, tree growth and forest products.
(732) 928-0987

www.njforestrycenter.org

Island Beach State Park is on a narrow barrier island that stretches between the ocean and Barnegat Bay. The park's natural sand dune formations and vegetation create a unique outdoors experience to study a barrier island ecosystem. School groups interested in visiting the park for self-guided tours must make advance reservations.

(732) 793-0506

www.nj.gov/dep/parksandforests/parks/island.html

Jenkinson's Aquarium is located in Point Pleasant Beach and offers several outreach programs for schools, many of which include live animal visits. Topics include invertebrates, reptiles and amphibians. All programs are aligned with the NJ Core Curriculum Standards. Visit the Teacher's Corner at the aquarium's website.

(732) 899-1659

www.jenks.com/aquarium

Lighthouse Center for Natural Resource Education is located along the bayshore in Waretown on 194 acres of coastal habitat that includes salt marshes, maritime forests, tidal creeks and sandy beach. The center offers a variety of on-site programs for all ages that focus on marine ecology, cultural history and other topics.

(609) 698-8003

www.experiencebarnegatbay.org

Sedge Island Natural Resource Education Center is a State facility located on Sedge Island, just off the shore of Island Beach State Park. This seasonal lodge offers space for residential stays with easy access to staff for engaging lessons on marine science, local history, natural resource management, clamming and fishing.

(609) 748-4347

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

SAMPLER: STEWARDSHIP AND ACTION PROGRAMS

Adopt a Species EDU is the classroom version of the State's Adopt A Species program. Through this program students and faculty can learn about and help protect the Barnegat Bay watershed's rare wildlife. Species like ospreys, piping plovers, loggerhead sea turtles, and Pine Barrens tree frogs can be supported through this program.
(609) 984-0621

www.conservewildlifenj.org/education/adopt

Barnegat Bay Buddy Program is an action-oriented program that focuses on water quality and habitat and encourages the reduction of nitrogen in Barnegat Bay through education and behavior modification. Recognition and certification is provided by Clean Ocean Action to any "Buddy" that conducts these actions.
(732) 872-0111

www.cleanoceanaction.org/index.php?id=719

Bayscape for Barnegat Bay is a hand-on program that engages homeowners, groups and students with managing and enhancing an outdoor property. Administered by the American Littoral Society, the program focuses on native plantings, fertilizer and pesticide use, water conservation and other ecological improvements.
(732) 291-0055

www.littoralsociety.org/Bayscape_for_Barnegat_Bay

Rain Gardens are practical and educational outdoor enhancement projects for schools and communities that help filter runoff, improve water quality, increase groundwater recharge and reduce potential for flooding. Various experts, supplemental resources, demonstration projects and guidance are available to interested schools.
(609) 971-7002 ext. 21

www.ocscd.org/raingarden.shtml

Shellfish in the Classroom is administered by ReClam the Bay and the Rutgers Barnegat Bay Shellfish Restoration Program. It raises student awareness about the watershed and water quality through lessons and the "hands-on" experience of growing shellfish, specifically oysters, in a classroom environment.
(609) 361-9378

www.reclamthebay.org/edu.html

Trout in the Classroom engages students with real-life water quality and wildlife problems and solutions through the raising of brook trout in the classroom, from eggs to fingerlings, to their eventual release. The program offers classroom support with lessons, speakers, manuals, videos and other types of assistance.
(908) 637-4125

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

Watershed Ambassadors Program is an Americorps initiative designed to raise public awareness about water issues in New Jersey. Barnegat Bay's Ambassador, Amanda Lotto, is hosted by the Forest Resource Education Center in Jackson. She is available for school programs, water monitoring assistance, and public events.
(732) 928-2360

www.nj.gov/dep/watershedmgt/outreach_education.htm#njwap

Sampler: Curriculum & Professional Development Resources

Barnegat Bay Teacher Research Institute is an annual summer enrichment institute for educators in the Barnegat Bay watershed. Its goal is to provide a hands-on opportunity to learn how to apply scientific concepts while working on Barnegat Bay research projects. It is held at the Lighthouse Center for Natural Resource Education in Ocean Township, and is slated to be held on July 9 – 13, 2012.

(609) 698-8003

www.experiencebarnegatbay.org

Discovering Barnegat Bay contains 40 lessons with a focus on Ocean County and the Barnegat Bay watershed. It is designed for integration into existing curricula and though it targets the upper elementary to middle school grades, it offers significant adaptability to all grades. In-service workshops are available.

(609) 971-7002 ext. 21

www.ocscd.org

Jacques Cousteau National Estuarine Research Reserve provides a variety of no and low cost professional development workshops for teachers who are interested in learning more about estuary and marine literacy, ocean exploration, weather and climate literacy. These are held at the Reserve or at the school.
(609) 812-0649 ext. 206
www.jcnerr.org/education/educators.html

New Jersey Waters – A Watershed Approach to Teaching the Ecology of Regional Systems is a guide for middle and high school educators that encourages students to explore their watershed from ecological, social and economic viewpoints. It is available for purchase from New Jersey Audubon.
(609) 861-1608
www.njaudubon.org/SectionEducation/NewJerseyWaters

Pine Barrens – Up Close and Natural is a curriculum that uses the Pinelands as a vehicle to teach about ecology, biology, geology, history and social science. It is made available to educators by the Pinelands Preservation Alliance through summer teacher institutes as well as through requests from schools.
(609) 859-8860 ext. 24
www.pinelandsalliance.org/teachers/teacherresources

Pinelands Online Curriculum Project was developed by the Pinelands Commission and is designed to increase student understanding and appreciation of the New Jersey Pinelands. It features an audiovisual program and lessons on Pinelands soils, water, fire, plants, animals and people, for grades 4 – 8.
(609) 894-7300 ext. 125
www.state.nj.us/pinelands/edu/curriculum/pinecur/index.htm

What the Bay HINGES On is an online activity guide developed by the Cooperative Extension of Ocean County that connects stewardship with water quality, shellfish aquaculture and human needs and actions. The guide includes lessons, slides and worksheets on shellfish biology, bay ecology, seafood and nutrition and water quality.
(732) 349-1152
<http://ocean.njaes.rutgers.edu/hinges/index.html>

WAIT, THERE'S MORE!

Barnegat Bay Partnership is a partnership of federal, state, municipal, academic, business, and private organizations that work together with communities to help restore, protect, and enhance the natural resources of the watershed. The partnership has staff, programs and services dedicated to education about the bay. These include:

- Barnegat Bay Watershed Educational Resource Guide: The most comprehensive online guide for educational resources available about the watershed: <http://bbp.ocean.edu/pages/166.asp>
- Barnegat Bay Speakers Bureau - An online listing of speaker programs: <http://bbp.ocean.edu/pages/316.asp>
- Barnegat Bay Plants and Animals – An Interactive field guide: <http://bbp.ocean.edu/pages/298.asp>
- About Barnegat Bay: Information, data and maps: www.crssa.rutgers.edu/projects/runj/habitat/tour.html

SEEDS (State Environmental Education Directory Site) features over 400 educational resources that are sponsored by the NJ Department of Environmental Protection. Visit **SEEDS** often at www.nj.gov/dep/seeds. Additional water education resources offered by the Department include:

- Stormwater Lessons and Resources: www.nj.gov/dep/seeds/stmwtr/edres.htm
- Watersheds – Outreach and Education: www.nj.gov/dep/watershedmgt/outreach_education.htm
- Clean Water NJ: www.cleanwaternj.org

Governor Christie's Action Plan for Barnegat Bay is being implemented through the NJ Department of Environmental Protection. To learn more about the action plan, outreach and education resources, and progress that is being made by the Department and partners, visit www.barnegatbay.nj.gov on a regular basis.

Sign up at this site to receive Barnegat Bay Action Updates! www.nj.gov/dep/barnegatbay/subscribe.htm

Barnegat Bay Educator Workshop Series

Project Learning Tree Project WILD Project WILD Aquatic Project WET

Lighthouse Center for Natural Resource Education on Barnegat Bay in Waretown, NJ



NJ DEP is offering hands-on professional development workshops for classroom PreK-12 teachers, naturalists, pre-service teachers, university and college professors, homeschool educators, scout and youth group leaders, natural resource professionals, or anyone who educates students.



Discovering Barnegat Bay and Project WILD

Aquatic \$20/teacher

November 16 9am—3pm

You will receive: *Discovering Barnegat Bay Curriculum Guide* and *Project WILD Aquatic K-12 Curriculum Guide*.

Season of the Pines \$40/teacher

December 7 9am—2:30pm

You will receive: The interactive *Season of the Pines CD*, autographed *Season of the Pines* book, *Season of the Pines* curriculum guide, *PLT Exploring Environmental Issues in the Places We Live*, plus a Pine Barrens Tree Frog tote bag.

Project WET \$20/teacher

January 18 9am—3pm

You will receive: *Project WET K-12 Curriculum Guide*.

Early Childhood Combo \$20/teacher

March 14 9am—3pm

You will receive: Both Project WILD's *Growing Up WILD* and Project Learning Tree's *Environmental Experiences for Early Childhood Guide & CD*

Rain Garden and WILD School Sites \$20/teacher

March 28 9am—3pm

You will receive: *Homes for Wildlife* planning guide.

Project Learning Tree's Exploring Environmental Issues: Focus on Forests \$20/teacher

February 29 9am—3pm

You will receive: Secondary Module Activity Guide

15th Annual Environmental Educator's Roundtable \$20/teacher (Sponsored by Ocean County Soil Conservation District)

April 25 3:30pm—7:30pm

You will receive: A variety of field trips and classroom presentations, a light dinner, networking opportunity, FREE resource sharing table, and door prizes.

Project WILD \$20/teacher

May 3 9am—3pm

You will receive: *Project WILD K-12 Curriculum Guide*.

For more information about these programs visit www.teachnjenv.org

To Register fill out the form and mail it with your check payable to the **NREF** to
Lighthouse Center for Natural Resource Education, PO Box 747, Waretown, NJ 08758

Name: _____ Organization: _____

Address: _____

Phone: _____ Email: _____

I am registering for the following (you may select more than one):

- | | | | |
|---|--|---|--|
| <input type="checkbox"/> Project Learning Tree \$20 | <input type="checkbox"/> Disc. Barnegat Bay \$20 | <input type="checkbox"/> Season of the Pines \$40 | <input type="checkbox"/> Project WET \$20 |
| <input type="checkbox"/> Early Childhood \$20 | <input type="checkbox"/> Rain Garden \$20 | <input type="checkbox"/> Focus on Forests \$20 | <input type="checkbox"/> Project WILD \$20 |