



Welcome to the Albemarle-Pamlico National Estuary Program E-Update – a monthly summary of selected activities of the APNEP staff, committees and our partners...

The Albemarle-Pamlico National Estuary Program Science & Technical Advisory Committee met at Chowan University on August 2, 2006 in Marks Hall beginning at 10:00am. For more information go to www.apnep.org or contact Dean Carpenter at (919) 7157735 or email Dean at dean.carpenter@ncmail.net

The second Hampton Roads Planning District Commission (HRPDC) Green Infrastructure Workshop will be held on September 14, 2006 at the Regional Boardroom in Chesapeake, Virginia. The focus of the second workshop will be the funding and implementation of green infrastructure plans. Please save the date if you would like to attend this workshop. To learn more, contact Eric J. Walberg, AICP at the Hampton Roads Planning District Commission (757)-420-8300 or email Eric at ewalberg@hrpdc.org

Applied Environmental Education Program Evaluation University of Wisconsin-Stevens Point (new online course) This 11-week on-line course entitled "Applied Environmental Education Program Evaluation," will be offered this fall (September 18 – December 1, 2006) through the University of Wisconsin-Stevens Point. **The deadline to register for the fall is August 18, 2006.**

The course is designed to assist environmental educators and natural resource professionals in evaluating their education programs. Participants have the opportunity to develop and apply skills in designing evaluation tools such as surveys, observation forms, and interview and focus group guides. This course was developed as a cooperative effort between the Environmental Education and Training Partnership (EETAP) at the University of Wisconsin-Stevens Point and the U.S. Fish and Wildlife Service (FWS) National Conservation Training Center. Participants may obtain three undergraduate or graduate credits from the University of Wisconsin-Stevens Point. All participants, regardless of location, are eligible for the in-state tuition rate. The course is also offered as a non-credit workshop for those who are not seeking college credit.

For more information, please visit www.eetap.org or contact Angela Arkin (Angela.Arkin@uwsp.edu) for a registration form.

Professional Training Opportunities for Teachers from the Smithsonian Institute - Register online at

<http://nationalzoo.si.edu/education/teacherworkshops>

The Conservation and Research Center of the Smithsonian's National Zoo offers teachers advanced opportunities to learn from Smithsonian scientists, new ways to make science come alive with students.

Their goal is to build capacity in schools where meaningful, inquiry-based activities, using the natural world as a living laboratory, are a part of the culture for teaching and learning. Courses are designed to increase teachers' confidence and skills to enhance school curricula with hands-on, science-based activities, both in the classroom and in the field. Instructional materials, lessons and exercises emphasize student inquiry and service learning, and are rooted in Smithsonian strengths in conservation science.

Tuition includes: meals and snacks for five days, transportation to field sites, training materials and curricula. Lodging is available at the Zoo's Conservation and Research Center in Front Royal, Virginia for \$25/night. Graduate course credits are available from Virginia Commonwealth University for an additional fee.

Project Learning Tree Workshop - Project Learning Tree is an award-winning environmental education program designed for teachers and other educators working with students in kindergarten through grade twelve. PLT uses the forest as a "window" into the natural world, helping young people gain an awareness and knowledge of the world around them, as well as their place within it.

PLT is a source of interdisciplinary instructional activities and provides workshops and in-service programs for teachers, foresters, park and nature center staff, and youth group leaders. To receive information on where this workshop is being conducted in your area please call [Robin Carter](mailto:Robin.Carter@ncplts.org) at (919) 733-2162, extension 262, or the [Forestry office](mailto:Forestry.office@ncplts.org) in your area. Workshop information may also be found on the [online calendar](#), or by contacting the NC PLT State Coordinator, [Renee Strnad](mailto:Renee.Strnad@ncplts.org), at 919-515-5518.

The US Environmental Protection Agency has listed, among others, the Tar-Pamlico basin among its Section 319 Nonpoint Source Success Stories. To view the good news, go to: <http://www.epa.gov/nps/success/> and follow the prompts for North Carolina and the Tar-Pamlico basin.

The Pamlico-Tar River Foundation (PTRF) invites members of the public to hear PTRF's RIVERKEEPER®, Heather Jacobs, talk about her recent aerial survey of the waterways of Pitt and Beaufort counties made possible by "Southwings" on July 31. (Learn more about Southwings at www.southwings.org.) Ms. Jacobs' photos from the flight provide a unique perspective of developing environmental issues in the area. Join PTRF for a bird's eye view of our lower river and learn more about some of the growth challenges that lie ahead.

This meeting, a part of the series of events in celebration of PTRF's 25th Anniversary, will begin at 7 pm on August 24th at Brown Library, 122 Van Norden St. (parking and main entrance from Second St.) in Washington. There will be ample time for discussion, questions, and refreshments. Please call the PTRF office to register, as seating is limited. (252) 946-7211.

The Pamlico-Tar River Foundation is a non-profit, grassroots, environmental organization dedicated to the protection and improvement of environmental quality in the Pamlico-Tar River basin. PTRF provides to the community education, advocacy, and research concerning the river, its estuary, and its watershed. For more go to www.ptrf.org

Boys & Girls Club Helps Create Wetland - More than 3,000 fresh and brackish water plants will take root in a wetland BMP (Best Management Practice) area along the Carteret Community College shoreline on Wednesday, August 9 from 10:00 a.m. to 12:00 p.m. The Morehead City Boys and Girls Club, NC Coastal Federation volunteers and staff and Carteret Community College (CCC) students will help to restore 0.25 acre of wetlands, which will eventually help reduce stormwater pollution into Bogue Sound.

The stormwater BMP restoration is part of a larger shoreline restoration project at Carteret Community College, which will restore approximately 1,200 linear feet of shoreline. This portion of the project, creation of a wetland BMP, is funded by the National Fish and Wildlife Foundation, the Clean Water Management Trust Fund, and the Albemarle-Pamlico National Estuary Program. The goal of this project is to provide a buffer for stormwater before it enters the adjacent waters of Bogue Sound.

The project offers numerous opportunities for area children: Boys & Girls Club youth will learn about wetland ecology and water quality in their community; the college students will serve as mentors to the children; and community volunteers will assist both groups with the wetland planting, strengthening community partnerships. The youth will also work with CCC students to conduct post-project monitoring and to create educational signage for the site.

Federation staff, community volunteers, CCC students, and Boys & Girls Club youth and staff will plant over 20 different species of fresh and brackish water plants. This wetland BMP will filter or "polish" stormwater that currently flows from a ditch into Bogue Sound. Once complete, the vegetation will provide habitat area for many animals and filter contaminants from urban runoff to protect the water quality in the sound. Without intact forest, salt marsh, and wetland habitats to provide natural buffers, water quality and habitat along Bogue Sound will continue to decline. (See photos below!)

Earth Science Week Contests are being offered by the American Geological Institute during Earth Science Week, October 8-14, 2006. This year's theme, Be a Citizen Scientist!, engages students and the public in conducting citizen science research and helps to spread science literacy. As part of Earth Science Week 2006, the institute is sponsoring three national contests, offering opportunities for both students and the general public to participate in the celebration, learn about the Earth sciences, and

compete for prizes.

- Photography - Using and Studying Earth's Resources, open to all ages
- Visual arts - Earth Science in Your Home Town, students in grades K-5
- Essay - Be a Citizen Scientist!, students in grades 5-9

The deadline for application is October 5, 2006.

<http://www.earthsciweek.org/contests>

Project Archaeology - Project Archaeology is a national heritage education program founded by the Bureau of Land Management for educators and their students and is currently housed at Montana State University in Bozeman under a partnership agreement. Project Archaeology uses archaeological inquiry to foster understanding of past and present cultures; improve social studies and science education; and enhance citizenship education to help preserve our archaeological legacy. It is a comprehensive archaeology and heritage education program for everyone interested in learning or teaching about our nation's cultural legacy and protecting it for future generations to learn from and enjoy. The project offers publications, professional development for educators, networking opportunities, and continuing support for participants. Using an innovative hands-on approach to history, Project Archaeology teaches scientific inquiry, citizenship, personal ethics and character, and cultural understanding.

The project operates through a network of state programs. State programs offer professional development workshops for educators, distribute the national curriculum along with state and regional materials, and support teachers in their archaeology education efforts. Programs have been established in 21 states and are currently under development in 20 more. To date, more than 6,000 educators have received professional development.

Project Archaeology uses *Intrigue of the Past: A Teacher's Activity Guide for Fourth through Seventh Grades*, which is divided into three sections:

- Fundamental Concepts - a series of lessons covering the basic concepts of archaeology;
- The Processes of Archaeology - explains how archaeologists do their work and interpret their results; and
- Issues in Archaeology - relates archaeology to personal ethics, stewardship of our heritage resources, citizenship, and cultural understanding.

The guide is delivered to educators through professional development workshops taught by a team of facilitators: an educator and an archaeologist. The teachers learn to use the guide, discuss the ethical issues surrounding archaeology, learn the perspectives that Native Americans and other ethnic groups have on archaeology and the past, and participate in field trips to museums or sites.

Coastal environments offered rich marine resources in the past, as they continue to today. Archaeologists often find significant sites and artifacts along the coasts. Several state Project Archaeology programs (Alabama, Arizona, Alaska, Colorado, Nevada, New Mexico, **North Carolina**, Utah, and Wyoming) have developed supplementary materials to cover local and regional archaeology and history. All of these supplementary

materials include discussions of the Bering Land Bridge and its role in the peopling of the Western Hemisphere. **Intrigue of the Past: North Carolina's First Peoples contains a lesson on shifting coastlines and human occupation at the close of the Pleistocene era.** Intrigue of the Past: Discovering Archaeology in Alaska contains chapters on Eskimo whaling in the Bering Sea and northwest coast marine adaptations in southeast Alaska. Project Archaeology is currently developing new materials on the archaeology of shelters which will include an investigation of a Tsimshian Plank House on the coast of British Columbia.

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

Did You Know the NC General Assembly, during budgetary negotiations for the 2006-2007 fiscal year, allocated \$3,331,338 to the Department of Environment and Natural Resources as grants for grass roots science programs? In the APNEP region recipients include the Aurora Fossil Museum, Eastern North Carolina Regional Science Center, Imagination Station, NC Museum of Life and Science, Port Discover: Northeastern North Carolina's Center for Hands-On Science, Inc., and the Rocky Mount Children's Museum.



Joan Giordano
Outreach Coordinator
Albemarle-Pamlico National Estuary Program
August 2006