


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

At the suggestion of the APNEP Science & Technical Advisory Committee (STAC) an APNEP Indicators Steering Committee (ICS) has been formed. Consisting of members from the STAC, Policy Board (PB) and Citizens' Advisory Committee (CAC) the group currently has six members with an anticipated total of nine. The ISC will oversee further development of the APNEP environmental indicators and will prepare a report including marketing and funding strategies, by the end of the year.

Chris-Craft (and Indian Motorcycles) Relocate to North Carolina- Media saturation is an apt description following the announcement by Chris-Craft that it will relocate its yacht division from Sarasota, FL to Kings Mountain, NC. Founded in 1874, Chris-Craft is the oldest boat manufacturer in the United States. The company is expected to create 640 new jobs in skilled production positions at the new location. In addition, Indian Motorcycle Company, a sister firm of Chris-Craft's, is also bringing a new manufacturing plant and its headquarters to Kings Mountain and expects to hire about 165 employees. For more information: http://www.chriscraftboats.com/comp_press.aspx.

Forbes: NC Third in Nation for Business

Forbes magazine has named North Carolina the third-best state in the nation for conducting business. States were ranked against each other in six different categories: business costs, labor, regulatory environment, economic climate, growth prospects and quality of life. Ranking behind only Virginia and Texas, respectively, North Carolina finished among the top four states in three of the six categories. North Carolina ranked third in regulatory environment and fourth in both business costs and growth prospects. The state finished 26th in labor and quality of life and 30th in economic climate. Site Selection magazine ranked North Carolina fifth in the nation last year in terms of business climate, and Expansion Magazine placed the state fourth for workforce training. (Triangle Business Journal, 8/16/06)

Oregon Inlet Impact Study Shows Value of NC Boating Industry  A 211-page [Internet] document entitled, "A Study of the Benefits of Oregon Inlet to the Economy of Dare County and the Surrounding Region," was

prepared by Moffat & Nichol for the Dare County Inlet and Waterways Commission. It reviews all aspects of the revenue stream associated with the inlet, including the commercial fishing, boat building, recreational fishing, sport fishing and tourism industries. The objective of the report was to examine the benefits of keeping the inlet navigable to the region. [Read more and download the study...](#)

Environmental Educators of North Carolina Annual Conference -"Save-the-Date" for the Environmental Educators of NC Annual Conference—November 2-5, 2006

Renew your Sense of Wonder with Environmental Educators of North Carolina (EENC) at the Annual EENC Conference November 2-5, 2006 at Fort Bragg, NC. The 2006 Conference theme, "Renewing a Sense of Wonder" celebrates the centennial of Rachel Carson (born May 27, 1907), "the patron saint of the environmental movement." Broadway actress and television star, Kaiulani Lee, will inspire you with her captivating portrayal of Carson in her original play, "A Sense of Wonder."

Also confirmed on the program are two experts cited in Richard Louv's popular book, *Last Child in the Woods*. Dr. Paul Dayton of Scripps Institution of Oceanography at the University of California in San Diego, CA and Robin Moore, Professor in the School of Design at North Carolina State University, will lead a dinner table conversation about children's "nature-deficit disorder."

Larry Earley, NC author of *Looking for Longleaf, the Fall and Rise of an American Forest*, will challenge attendees to make a commitment to the survival of native longleaf pine trees as they disperse into the woods on unique field trips.

This 16th annual Conference will be the first ever held in the Sandhills by EENC. Conference attendees will have a rare opportunity, not available to the general public, to visit the unique Longleaf Pine Forest ecosystem, including plant communities of Carolina Bays and Sandhills Seeps, plus the habitat of five endangered species and 30 species-of-concern, which are managed and protected at Fort Bragg.

Plan to attend the 2006 EENC Annual Conference for once-in-a-lifetime experiences in a unique habitat! This gathering promises to renew your sense of wonder with outstanding professional development, celebrating excellence in environmental education and the richness of biodiversity in the NC Sandhills.

Updated information on the EENC website: <http://www.eenc.org/conference.html>

Or email: conference@eenc.org

Nov. 2-5, 2006 at Fort Bragg in the Sandhills of NC

NC Estuarium in Washington September Calendar, 2006

Nature Photographer Laura Roebuck of Charlotte focuses on scenes of eastern North Carolina. She is the featured artist for September.

River Roving Educational River Tours- Learn about the history and habitats of the Washington waterfront. These boat tours cruise the Pamlico River Wednesday through Friday at 10:15 and 12:45, and Saturdays at 10:15. No admission fee or other cost is involved for the tour, but advance reservations are required. Children must be at least 8 years old to ride; a responsible adult must accompany children under 16. Call 252-948-0000 for reservations.

Wildflower River Roving September 14- Take a cruise up the river and view the wildflowers that bloom during the time of the fall equinox. The boat leaves at 10:15 and will return at noon. There is no charge for the program but pre-registration is required. Call 252-948-0000

Maritime Education Days, September 19-21- with the Beaufort County Schools.

“Drawing and Painting from Nature”, September 26-November 14- - 1:00-3:00- \$25 fee for eight week class which explores watercolors with a natural theme. Reservations required. Materials list available. Call 252-948-0000.

Special Group Programs are available. These programs include Black Bears, Reptiles and Amphibians, Birds, Wetlands, Crabs, and a music and puppet program.

The Estuarium is located at 223 E. Water Street, Washington, NC, and is open Tuesday-Saturday, 10:00-4:00. Admission is \$3.00 adults and \$2.00 students. The Estuarium is a Partnership for the Sounds facility, an organization promoting eco-tourism and sustainable economic development in the Albemarle-Pamlico region. www.partnershipforthesounds.org. For more information, contact estuary@beaufortco.com or 252-948-0000.

North Carolina State University and North Carolina A&T State University established the Center for Environmental Farming Systems (CEFS) with the North Carolina Department of Agriculture at the Cherry Farm facility near Goldsboro, NC in 1994. These partners work closely with state and federal agencies, non-governmental organizations (for example, Carolina Farm Stewardship Association, Rural Advancement Foundation International, Farm Bureau), farmers, and citizens to provide agricultural research, extension, and education for our state. The development of CEFS is a national model for partnership, innovation, and interdisciplinary cooperation.

Center for Environmental Farming Systems Fall Festival! Saturday, September 16, 10am-4pm. Admission and parking for this event are free.

Exhibits - Learn about organic and sustainable farming, home gardening, small farm equipment, healthy eating, and more through exhibits hosted by extension offices, university faculty and staff, non- profit organizations and other agricultural organizations in North Carolina.

Kids' Activities - Children of all ages will enjoy hands-on agricultural activities including games, crafts, and a sorghum maze (a close relative to the corn maze!).

Demonstrations - Learn how to build your own home compost bin, watch a flame weeder in action, or visit a field demonstration of summer cover crops. Local experts will offer hourly demonstrations on topics of interest to farmers and home gardeners.

Live Music - Enjoy live music from North Carolina bluegrass bands Constant Change and the Back Porch Boys.

Farmer's Market - Purchase farm fresh products from local farms at the Festival Farmer's Market.

Farm Tours - Tours of the CEFS farm will be offered throughout the day. Tour stops include the pasture-based dairy and beef facilities, swine hoop houses, and cropping system research areas.

Food & Refreshments - Food & drinks will be available for purchase all day.

Perfect for a picnic under the trees!

Form more info, visit <http://www.cefs.ncsu.edu/fallfestival.html>.

Hampton Roads Green Infrastructure Workshop II: Funding and Implementation of Green Infrastructure, September 14, 2006, HRPDC Board Room, 723 Woodlake Drive, Chesapeake, VA 23320

The second in a series of workshops on green infrastructure topics will be held on Thursday, September 14, 2006 at the Hampton Roads Planning District Commission Board Room in Chesapeake, Virginia. The workshop will start at 10:00 AM and end at 3:00 PM. The focus of the second workshop will be the funding and implementation of green infrastructure.

The agenda includes:

- Keynote speakers for the workshop are Dan Nees, director of the Environmental Finance Center at the University of Maryland and David Carter with the Trust for Public Land. Both speakers will provide an overview of the tools and techniques needed to move from planning to implementation of open space networks. Ample time will be provided for discussion of the potential for the application of these tools and techniques in Hampton Roads.
- Tyla Mattason of the Hampton Land Conservancy and Caren Schumacher of the Williamsburg Land Conservancy will discuss the efforts of these land trusts to conserve land in Hampton Roads.
- A representative from the Elizabeth River Project will discuss their wetlands and riparian corridor restoration work.

- Gene Crabtree of the Natural Resources Conservation Service will discuss the range of cost share programs available to private landowners in Hampton Roads to protect and restore features such as riparian buffers and wetlands.

You may register by email (ewalberg@hrpdc.org) or fax at 757 523-4811. Attendance will be limited to 70 persons. The workshop is free and lunch will be provided.

This workshop is being funded through a grant from the Virginia Department of Conservation and Recreation.

Scientists have identified a crab found in the Chesapeake Bay last year as a Chinese mitten crab, raising further concerns of the competitive crab taking the native blue crab's food and damaging the bay's most lucrative resource. Like the blue crab, the mitten crab eats small worms and shellfish and occupies a similar habitat. The first mitten crab was discovered a couple of years ago. If the two crabs were randomly discarded, the species has probably not established itself. But if they were among many crabs that arrived in the area a while ago, there could be more out there, researchers said.

"There are a lot of hurdles a species like this would have to overcome to become resident," said Virginia Institute for Marine Science researcher Rom Lipcius. "We've done many, many surveys throughout the bay, and you'd think we'd have caught them ... It's not likely that we have an actual resident viable population, but of course we're on the lookout" (Williamson/Fahrenthold, [Washington Post](#)).

The mitten crabs have established themselves in England, Germany and San Francisco in recent years, clogging water intake pipes, ripping fishing nets and digging holes in earthen dams. Scientists said they might conduct DNA tests on the two crabs to see if they arrived from the same area (Tom Pelton, [Baltimore Sun](#)).

Congress Breaks for August Recess – Congress is currently out of session for the August recess. The Senate is expected to reconvene at 11 a.m. on Tuesday, September 5th and the House will reconvene at 2 p.m. on Wednesday September 6th. Congress will have a short four-week session before breaking on September 29th to campaign for the November elections.

North Carolina Law Increases Fines for Coastal Violations

Developers violating coastal permitting or reporting violations in North Carolina face increased fines under a bill signed into law by Governor Mike Easley on August 10. North Carolina's existing Coastal Area Management Act requires parties that develop on environmentally sensitive coastal areas of the state to obtain special permits and comply with certain reporting requirements. The changes to the law increase the maximum civil penalty for permitting, reporting and other violations related to major developments from \$2,500 to \$10,000, and those related to minor developments from \$250 to \$1,000, effective on December 1, 2006. Major developments are those that either require authorization from state agencies, are larger than 20 acres, involve drilling or excavating natural resources, or occupy on a single parcel a structure or structures in excess of

ground area of 60,000 square feet. Minor developments are those not considered major. The new law also expands the factors to be considered when imposing fines and allows for investigative costs to be charged to violators. Text of the legislation can be seen at www.ncga.state.nc.us

USGS Releases National Coastal Program Plan -

The U.S. Geological Survey (USGS) has released A Plan for a Comprehensive National Coastal Program. The Plan describes the unique assets USGS brings to bear on addressing regional and national coastal needs and proposes a comprehensive National Coastal Program strategy aimed at providing science-based tools responsive to specific management needs. The overall goal of this program is to provide the scientific information, knowledge, and tools required to ensure that decisions about land and resource use, management practices, and future development in the coastal zone and adjacent watersheds can be evaluated with a complete understanding of the probable effects on coastal ecosystems. Among other mapping, inventory, monitoring and research activities, USGS will also conduct the following:

- * Establish a National Coastal Information Infrastructure to provide consistent and reliable information to support research and decision-making;
- * Establish an integrated monitoring network to document and understand change in complex coastal systems across all important time scales;
- * Expand and coordinate efforts to provide the environmental characterization essential to understanding, modeling, and managing all coastal systems;
- * Expand process studies to provide the science foundation for the development of broadly applicable tools and models; and
- * Expand regional 'system-scale' studies and integrate the research with other regional activities.

For more information, please visit <http://marine.usgs.gov/coastal-plan/index.html>.

EPA Seeks Governors' Nominations for Watershed Projects

The Environmental Protection Agency is inviting the nation's Governors and tribal leaders to nominate their leading watersheds organizations for the Agency's fourth round of Targeted Watershed Grants Program. EPA will award up to \$16 million in grants for projects to restore and protect watersheds. The agency expects to award between 9-20 grants or cooperative agreements at about \$600,000 to \$900,000 to restore and protect watersheds. The projects are expected to last from three to five years. The total amount of grant money is expected to range from \$6.1 million to \$16 million, depending on the availability of combined funds from fiscal years 2006 and 2007 and the quality of proposals submitted. For more information visit <http://www.epa.gov/twg/implementation.html>

NOAA Continues to Predict Above-Normal Hurricane

Season-With the peak of the Atlantic hurricane season upon us, experts from NOAA are reiterating their prediction for an above-normal number of storms. NOAA scientists warn this year's relatively quiet start is not an indication of what the remainder of the season has in store. For the entire 2006 season, which ends November 30, NOAA is projecting a total of 12 to 15 named storms of which seven to nine will intensify to hurricanes, including three or four becoming major hurricanes-rated at Category 3 or

higher. This forecast is slightly lower than the outlook issued in May, but remains above the seasonal average of 11 named storms.

Governor Easley Urges Citizens to be Prepared for

Hurricanes – Governor Mike Easley reminds North Carolinians, as Hurricane Ernesto heads toward Florida, that citizens need to pay attention to storm reports and check to be sure they are prepared for the storm season. “I’m asking everyone to prepare for hurricanes as the busiest time of the season is upon us. If you have waited to put together your emergency plan and disaster supply kit, you can wait no longer,” Easley said. “Just last week a regular summer storm caused flooding in Wilmington. Early this summer, Tropical Storm Alberto caused significant flooding in Wake County. It does not take a full-fledged hurricane to create dangerous situations.”

During a news conference in Wilmington, Easley urged families to update emergency plans, make sure they have a disaster supply kit ready and pay attention to weather forecasts and instructions from local officials. A disaster supply kit should include at least a three-day supply of bottled water, non-perishable food, first aid supplies and prescription medicines along with a battery-operated radio, copies of insurance papers and extra cash.

“Even in a minor emergency, the power might go out and our daily routines can be disrupted,” Easley said. “You must have the basic necessities available until power is on, water is safe to drink and things begin to return to normal. That way, first responders can focus on taking care of people who are in life threatening situations.”

While forecasts indicate Ernesto will not be a major event for North Carolina, storms are unpredictable. North Carolinians still need to prepare for the hurricane season and keep track of the weather reports. Log onto www.readync.org for detailed help on storm preparation.

National Sea Grant Library Updates its Web Site

The National Sea Grant Library is pleased to introduce its new web site. On this site, visitors will find many familiar features in an updated, visually-enhanced and user-friendly site. Through the web search engine, information on over 33,000 Sea Grant titles and publications, of which approximately 13,000 may be downloaded as full-text pdf documents. Please visit <http://nsgl.gso.uri.edu>

Ecosystem Based Management Symposium to be held in Rhode Island at The Roger Williams University School of Law, Rhode Island Sea Grant, and the University of Rhode Island will host "The Evolution of Ecosystem Based Management: From Theory to Practice" symposium on October 19-20, 2006 in Bristol, RI. The two-day symposium will analyze challenges and successes of ecosystem based management related to the use and protection of the marine environment. Leaders implementing ecosystem based management on large and small scales will present their experiences with an eye toward lessons and pitfalls. Keynote speakers will place ecosystem based management in a larger social context through discussion of ethical considerations, the role of research, and best management and business practices. The goal of this symposium is to add to the information developed from a series of meetings focused on

marine ecosystem management by assessing lessons and successes of on-the-ground ecosystem based management and present innovative ideas from the private and nonprofit sectors. For more information, please visit <http://law.rwuedu/sites/marineaffairs/symposia/sixthMLS.aspx>

APNEP's Citizens' Monitoring Network (CMN) has a new

Coordinator - Chad Smith is the new coordinator for the CMN. He is originally from Wilson, NC and recently received his Master's Degree in Biology from East Carolina University (ECU). His thesis research, which was partially funded by the U.S. Fish and Wildlife Service, focused on habitat use and the potential impacts of physical obstructions (dams, highway culverts, etc.) on migratory fishes in the lower Tar River. During his time at ECU, he enjoyed teaching environmental biology, general biology, and ecology laboratory techniques. Chad is an active member in the American Fisheries Society (AFS), a professional society for fisheries scientists. He has presented his thesis research at several AFS conferences including the 2005 National Meeting in Anchorage, Alaska. He also presided over the ECU-AFS Student Subunit during the 2004-2005 academic year. Chad has been on the job for a few weeks and is working hard to continue the success of the CMN. He enjoys social interaction with program volunteers and is looking forward to participating in outreach events, helping to promote environmental awareness. His office is located at the Institute for Coastal and Marine Resources (ICMR) on ECU's main campus. For more information and updates about the CMN, please visit the website, <http://www.ecu.edu/icmr/cmn>. Chad can be contacted at 252-328-1747 or mcs0514@ecu.edu.

North Carolina's Coastal Habitat Protection Plan (CHPP)

North Carolina's approximately 2.5 million acres of estuarine and marine waters are spawning, nursery, and feeding areas for most of the state's important coastal fishery species, including many that migrate throughout the Atlantic coast. In the 19th century, fish and shellfish resources were considered inexhaustible. We now know that is not true. Increasing pressures on coastal and marine resources and habitats, including loss of habitat and degradation of water quality and habitat, are threatening North Carolina's fisheries.

Recognizing the need to protect habitat and prevent overfishing, the NC General Assembly passed the Fisheries Reform Act in 1997. The law contains the directive to protect and enhance habitats supporting coastal fisheries. The law requires cooperation among three rule-making commissions: Environmental Management Commission (EMC), Coastal Resources Commission (CRC), and Marine Fisheries Commission (MFC). The commissions must work together to develop, adopt, and implement plans to protect and restore fisheries habitats. The Division of Marine Fisheries (DMF) was charged with writing the plan.

What is a CHHP? - North Carolina's Coastal Habitat Protection Plan was written and developed to:

1. Document the ecological role and function of aquatic habitats for coastal fisheries.
2. Provide status and trends information on the quality and quantity of coastal fish habitat.
3. Describe and document threats to coastal fish habitat, including threats from both human activities and natural events.
4. Describe the current rules concerning each habitat.
5. Identify management needs.
6. Develop options for management action using the above information.

Items 1-5 (above) are discussed for each of six habitat types, comprising the primary sections of the CHPP (Water Column, Wetlands, Shell Bottom, Submerged Aquatic Vegetation, Ocean Hard Bottom and Soft Bottom). The Chairmen of the Environmental Management, Coastal Resources, and Marine Fisheries Commissions, and the Secretary of the Department of Environment and Natural Resources (DENR) formally signed the North Carolina Coastal Habitat Protection Plan in a ceremony in Morehead City in February 2005. The three Commissions adopted the joint implementation plan during summer 2005. For more on the CHHP, go to:

<http://www.ncfisheries.net/habitat/chpp2.html>



Image Courtesy of NOAA

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