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

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APNEP staff member Kelly Williams, our restoration specialist, has accepted a position with the NC Ecosystem Enhancement Program (EEP) beginning October 1st. Kelly has been with the APNEP since October 2003 and with the State of NC for the past 10 years. She is a professional wetland scientist with a background in wetland restoration and plant community ecology. A graduate of UNC-G where she majored in biology, Kelly also possesses a master's degree in forestry from NCSU. Her thesis work includes the study of the vegetation, soil, and hydrology characteristics of riverine wetland systems in eastern North Carolina, all which will stand her in excellent stead for her new job responsibilities. While we'll miss her greatly, we wish her much good luck in her new efforts!

Advanced Stormwater BMP Design: Ask the Researcher, a workshop, will be held on December 6th at the JC Raulston Arboretum at North Carolina State University. To register, or to see complete conference details visit: http://www.soil.ncsu.edu/swetc/stormwater/main06.htm. Professional education credits are available.

Field research has been conducted on several stormwater practices used throughout the Mid-Atlantic and Southeast. This workshop targets professionals who are actively engaged in either the review or design of the following innovative stormwater practices: bioretention, green roofs, stormwater wetlands, permeable pavement, level spreaders, and water harvesting/cisterns.

This workshop will inform designers and reviewers of how recent research impacts BMP design standards. This workshop is meant to informative and interactive. Registrants are encouraged to submit questions to Dr. Hunt and his colleagues in advance. Many of these questions will be answered throughout the workshop. This advanced-level workshop is specifically designed for "Stormwater BMP Practitioners."

Conference speakers include William F. Hunt, III, PhD, PE - Assistant Professor & Extension Specialist, Jon M. Hathaway, EI - Extension Engineer, William G. Lord - Area Environmental Agent, Matthew P. Jones, EI - Graduate Research Assistant, and Kelly A. Collins, EI - Graduate Research Assistant. Early Bird Fee: \$135 (for participants who need a certificate of attendance and/or professional education

credit); and \$95 (for participants who do not need a certificate or professional education credit) Late Fees apply after 11/22/06: \$185 (certificate and/or credit); \$145 (no certificate or credit) For additional information phone 919-515-7154, or email kathryn_murray@ncsu.edu

The following article has been excerpted from the Barnegat Bay National Estuary Program's newsletter, *The Barnegat Bay Beat.*

National Estuary Program Faces Cut Backs, by Dave Wilson, Jr., Public Outreach Coordinator for the Maryland Coastal Bays Program

In the United States, there is one program charged with working with local citizens to protect and preserve coastal estuaries – the National Estuary Program (NEP). But this year, funding for the NEP is proposed to be slashed by 25 percent.

Last year, the country's 28 National Estuary Programs received \$24.5 million to achieve the monumental task of conserving what's left in estuaries on the East, Gulf, and West Coasts. This year the president's budget wants that number cut to \$18 million. This number is almost half of the \$25 million authorized by Congress in 2006. Last year, after a portion was given to other federal programs, the funds to each National Estuary Program came in at about \$500,000

This year the Association of National Estuary Programs (ANEP) is asking to finally receive full funding at the \$35 million level, which would mean that each of the programs receive at least \$800,000.

The urgency of restoring and protecting our coasts and estuaries has never been greater. Recent reports by the Pew Ocean Commission and the US Commission on Ocean Policy (USCOP) underscored the widespread agreement that our oceans and marine resources are in serious trouble. The US Ocean Action Plan to implement the USCOP recommendations placed significant emphasis on managing our coasts and their watersheds.

In fact, the President's recently released fiscal year 2007 budget request noted that "the National Estuary Program (NEP) is EPA's flagship watershed protection effort. The NEP provides inclusive, community-based planning and action at the watershed level and has an established record of improvements to ecosystem conditions."

In 1987, Congress created the National Estuary Program to restore designated estuaries of national significance. There are 28 estuaries in the NEP, all of which are implementing their Comprehensive Conservation and Management Plans (CCMPs). More than 42 percent of the continental U.S. shoreline is included in the NEP, and 15 percent of all Americans live within NEP-designated watersheds, with thousands of new residents arriving every year. In the United States, estuaries provide habitat for more than 75 percent of American's commercial fish catch, and 80-90 percent of the recreational fish catch. Estuarine-dependent fisheries are among the most valuable, with an estimated worth of \$1.9 billion nationwide.

Coastal recreation and tourism generate an additional \$8 to \$12 billion annually. According to recent EPA analyses, estuaries of the NEP employ 39 million people and support total economic output and employee wages estimated in the trillions. The tourism sector alone employs 1.2 million people and generates more than \$87 billion in expenditures. We believe the NEP warrants full funding at the 35 million authorized-level because it has proven to be one of the most effective and efficient national environmental programs. Full funding is necessary to continue ongoing work to implement all 28 CCMPs, and to ensure the restoration and protection of our nation's estuaries.

EPA estimates that the NEP has preserved, restored or created more than 700,000 habitat acres. The NEP has accomplished this by fostering and maintaining strong partnerships among federal, state, and local governments, the private sector, and local stakeholders, and by using a consensus, community-based approach with strong local control in developing and implementing management plans.

In the weeks ahead, we look forward to working with congress and citizens to realize a strong and successful National Estuary Program.

The NC Coastal Federation and the National Oceanic & Atmospheric Administration (NOAA) will celebrate NOAA's 500th Restoration Celebration at North River Farms in Carteret County (CWMTF #2001B-024) at 11:00 am on October 18, 2006. The legislative Joint Commission on Seafood and Aquaculture will also participate in the event. Contact Sarah King at 252-393-8185 or sarahk@nccoast.org.

Cindy Van Dover Named Director of Duke Marine Lab-

Cindy L. Van Dover, associate professor of marine biology at the College of William & Mary, has been named director of the Duke University Marine Laboratory, effective August 7th.

Van Dover succeeds Michael K. Orbach, who will continue on the faculty at Duke's Nicholas School of the Environment and Earth Sciences as professor of the practice of marine affairs and policy, a position he has held concurrently with the marine lab directorship since 1993.

The Duke University Marine Lab is a unit of the Nicholas School. Located in Beaufort, N.C., the lab offers a year-round curriculum for undergraduate, master's and doctoral students as well as a full range of research, residential and teaching facilities. In addition, it serves as homeport for the R/V Cape Hatteras and a fleet of smaller research and transport vessels.

The Marine Lab's resident faculty has expertise in oceanography, marine biology, ecology, physiology, biochemistry, cultural anthropology and marine policy. This fall, the Marine Lab will open its newest building, the 5,600-square-foot Ocean Science Teaching Center, which is being built to the highest standards of energy and environmental efficiency adopted by the U.S. Green Building Council. Van Dover, who specializes in the study of deep-sea hydrothermal vents and chemo synthetic communities, has received numerous honors for her research and teaching, including a

Fulbright Research Scholarship in 2004, a National Science Foundation CAREER Award in 2000, and a William & Mary Alumni Fellowship Award for Outstanding Teaching in 2003. In 2002, she was elected a Fellow of the American Association for the Advancement of Science. She has served as a scientist or submersible pilot on more than 100 dives to the bottom of the deep sea.

"I am honored to have the opportunity to lead the Duke Marine Lab and to build upon the strong foundation provided by Mike Orbach in his years as director," Van Dover said. "As a coastal facility within the Nicholas School, the Marine Lab is renowned for the strength of its research and its Ph.D. and professional graduate degree programs. It also is ideally situated for training undergraduates in marine conservation and science," she said.

Officials said Van Dover's selection, following a national search, comes at a critical time for the Marine Lab's development. "These are exciting times at the Marine Lab," said William H. Schlesinger, dean of the Nicholas School and James B. Duke Professor of Biogeochemistry, to whom Van Dover will report. "Cindy Van Dover convinced all of us in the search process that she has a special combination of skills, scholarship and vision to lead the lab as it expands its mission and tackles new challenges and opportunities in the years to come."

Duke Provost Peter Lange, the university's chief academic officer, added, "I am confident that under Professor Van Dover's leadership, the Marine Lab will continue to evolve and grow as a world-class research and teaching campus."

Van Dover received a doctoral degree in biological oceanography in 1989 from the Massachusetts Institute of Technology and Woods Hole Oceanographic Institution Joint Program. She received a master's degree in ecology in 1985 from the University of California at Los Angeles and a bachelor's degree in environmental science in 1977 from Rutgers University.

She has been on the faculty at the College of William & Mary in Williamsburg, Va., since 1998, and has taught or conducted research at numerous other top marine science institutions, including Woods Hole, the Oregon Institute of Marine Biology at the University of Oregon and the Institute of Marine Science at the University of Alaska-Fairbanks.

Her appointment as director of the Duke Marine Lab represents a homecoming of sorts: In 1994-95, she served as Mary Derrickson McCurdy Visiting Scholar at the lab and, in the late 1970s, she worked as a technician there after graduating from Rutgers. "Through education and research, the Marine Lab contributes to the resolution of national and global issues in marine ecosystems," Van Dover said "It will be a privilege to work with the lab's faculty, Dean Schlesinger and the Duke administration to accomplish an ambitious agenda for the lab."

North Carolina Fisheries Chief to Retire - Long-time fisheries director, Preston P. Pate Jr., has announced plans to retire effective Feb. 1, 2007.

Pate, 59, has served at the helm of the N.C. Division of Marine Fisheries since 1997. The division has a lead role and responsibility in managing and regulating the state's saltwater fisheries. The saltwater fishing industry in North Carolina is a billion dollar per year enterprise. North Carolina's estuaries and coastal waters are nursery areas for fisheries extending up and down the Atlantic seaboard.

"Preston's leadership at Marine Fisheries, in a tremendously challenging field during very challenging times, has been remarkable," said Secretary Bill Ross of the Department of Environment and Natural Resources. "He has provided outstanding direction for nearly 10 years to the division's efforts in fisheries management, oyster restoration and protection of critical fisheries habitat." One of the first tasks facing Pate when he assumed oversight of the division was implementing the 1997 Fisheries Reform Act, a far-reaching reform package that changed the way coastal and ocean fisheries are managed in North Carolina. Pate oversaw the restructuring and launch of a new commercial licensing system, development and implementation of a fisheries management plan process for each of the state's significant species and design of a plan to protect coastal habitat, which is vitally important to the health of Tar Heel fisheries.

"Through the successful implementation of these major initiatives, Preston and the Division of Marine Fisheries, working with many interested parties, partners and state leaders, gained the public support necessary for the General Assembly to create the new Coastal Recreational Fishing License," said Ross. This new license, which goes on sale Jan. 1, 2007, will provide much needed data on the numbers of coastal anglers and the amount and types of fish they are catching. It will also provide critical funding for habitat protection and enhancement, as well as public access.

Pate has been an effective leader outside North Carolina's boundaries as well. He has served on and currently chairs the Atlantic States Marine Fisheries Commission, a compact of the 15 East Coast states that regulate near shore migratory fisheries. He also serves on both the Mid and South Atlantic Fisheries Management councils where he has helped develop management policy for fisheries in federal ocean waters out to 200 miles offshore.

During his career, Pate has not been a stranger to resource conservation issues. From 1980 until 1997 he worked with the N.C. Division of Coastal Management and won high marks for being a skilled negotiator in enforcing rules that govern development in North Carolina's 20 coastal counties. Pate started his resource management career in 1971 with the Division of Marine Fisheries, studying river herring in the Albemarle Sound area.

A native North Carolinian, Pate grew up in Snow Hill and attended N.C. State University. He is married with two children. Pate plans to stay busy during his retirement cycling, woodworking, running and fishing for speckled trout.

DENR leadership has begun a comprehensive search for Pate's replacement.

Saturday, October 07, 2006 (9:00 AM - 6:00 PM) - North Carolina Sustainable Energy Association is hosting its annual statewide Green Building and Solar Tour in order to educate and empower thousands of North Carolinians and communities on sustainable energy issues and solutions involving green building, energy efficiency, biodiesel and renewable energy. The 2006 NC Green Building and Solar Tour is part of the American Solar Energy Society's national tour, which includes a record 44 U.S. states.

In response to overwhelming member and public interest, NCSEA and community partners expanded this year's Tour to showcase a diverse array of residential, commercial, state and local government, and industrial green buildings, and are

including solar PV, solar thermal, micro-hydropower, biodiesel production, geothermal and small wind renewable energy solutions. Participating communities include: Asheville, Boone, Catawba Valley, Chapel Hill, Charlotte, Durham, Greensboro, Greenville, Raleigh, Southern Pines, Wilmington and Winston-Salem.

For local community contacts go to: www.ncsustainableenergy.org or contact McCayne Miller, Tour Organizer 919-832-7601 or ncsea@mindspring.com.

NC art museum unveils expansion plan that combines art and nature-The North Carolina Museum of Art recently unveiled plans for an expansion that incorporates steinless steel, glass and natural light in a plan that brings

expansion that incorporates stainless steel, glass and natural light in a plan that brings together art and nature.

The 127,000-square-foot building will be home not only to the museum's existing permanent collection, but also casts of 22 bronze sculptures by Auguste Rodin, including "The Thinker" and "The Kiss."

The building "is not about architectural bravado," museum director Larry Wheeler said. "It's not about soaring flourishes that we associate often with public buildings, in particular cultural expressions in architecture today.

"It's a beautiful, quiet, simple place where our people can come together. They can come alone. They can find peace. They can let their spirits soar. They can nurture their own creative impulses because this is who we are. This is who we will be. This is Carolina."

The museum is scheduled to break ground on the building in October. The opening date is spring 2009.

As part of the \$138 million expansion, the museum's existing building will be renovated and used for temporary exhibitions, collections management, education and administration. The museum has raised \$78 million, including \$52 million from the Legislature and \$15 million from the city of Raleigh and Wake County. The museum also wants to raise \$50 million for an endowment.

North Carolina has a long history of public support for the museum. In 1947, "a very bold Legislature" appropriated \$1 million for public art _ not for the building, but for art, as Wheeler pointed out. It was the first time any publicly elected body in the United States had appropriated public money for the acquisition of art.

When designing the building, architect Thomas Phifer of Thomas Phifer and Partners, New York, said he looked to combine art with North Carolinians' love of land.

"When you come to a place like this, you wonder what is it going to be about the place that's going this building apart," said Phifer, known for incorporating buildings into the natural environment. "What is it about the place that wants a museum here? And you look at the landscape ... from the Outer Banks to the Blue Ridge Mountains. I think the

land here has been so important to the people of North Carolina. It defines this state, I think."

That history, combined with the 164 acres that the museum owns, set the tone for the design, a melding of stainless steel, glass, water designs and natural lighting. Just 1 percent of the available daylight will filter into the building in order to protect the paintings, Phifer said. One focus of the new building is a gallery for the Rodins, which the Iris and B. Cantor Foundation promised on the condition that they have a new home. Once the Rodins arrive, the museum will have the largest collection of his works in the Southeast. The collection is valued at \$25 million.

Last Child In the Woods



Richard Louv's book, *Last Child in the Woods*, describes the phenomenon of "nature deficit disorder" among today's children and examines how our children's lack of personal experiences in nature will affect our environment and their learning. He explores the connection between this deficit and some of our most troubling threats to childhood health including obesity and Attention Deficit Hyperactivity Disorder (ADHD). You'll enjoy this review of his book from one of North Carolina's environmental educators, Parks Chief Naturalist Marti Kane!

What is more frightening to an environmental educator than global warming? I'll tell you what it is – no children playing in the woods! Many of us can remember a time not too long ago when, as children, we played in the woods, made forts and tree houses, and explored nature in her wildest forms. But, as journalist Richard Louv documents in his new book, *Last Child in the Woods*, this type of natural play is endangered and, perhaps, on the verge of extinction.

There are many reasons why this is so. The death of the family farm and the lack of natural places in which to play have certainly contributed. Larger homes, air conditioning, TV, videogames and computers make the indoors a more inviting place. And then there is fear – the fear that parents feel about allowing their children to roam anywhere these days unsupervised. Human predators seem to lurk everywhere. Messages of "have you seen this missing child?" show up on our milk cartons and in our mailboxes. And what about deadly diseases such as rabies and bird flu that we might catch from wild animals?

Louv addresses these fears and presents strategies for overcoming the barriers that prevent children from experiencing the natural world. As environmental educators, we can employ Louv's strategies in our work. For example, we could examine the educational services we offer to determine how well we are allaying fears. Those of us fortunate enough to be working at Environmental Education Centers could take the lead in developing partnerships with schools, scouts and other youth organizations.

Why is it so important to save our children from nature-deficit disorder? So what if children don't play in the woods anymore? Well, we are in the midst of a childhood obesity crisis, for one. Louv also quotes studies, such as "Closing the

Achievement Gap" from the State Education and Environmental Roundtable, that show remarkable improvements in the test scores of children involved in environment-based education. Other studies demonstrate that natural play can be used successfully as therapy for children with Attention Deficit Hyperactivity Disorder (ADHD). In fact, the absence of nature in the lives of children may aggravate symptoms of ADHD.

Even more important is this question that Louv asks: "Where will future stewards of nature come from?" As the number of children with hands-on emotional attachment to nature decreases, can we expect that they will advocate in the future for the protection of habitats, biodiversity or the natural processes on which the health of our ecosystem depends? Probably not. If we care about sustaining life on planet Earth, we had all better be concerned about the environmental education of our children. If we are to survive and thrive here, then no child can be left behind!

-- Marti Kane, Parks Chief Naturalist, N.C. Division of Parks and Recreation

River Park North in Greenville offers a ten-hour hunter safety course which fulfills requirements for obtaining a NC hunting license. Below is a listing of the scheduled class times preparatory to this year's hunting season. Instructors are Howard Vainright and Milton Jones. All participants must be 12 years of age by the class date. There is no fee for the course and pre-registration is required. To register go to: www.ncwildlife.org or phone (919) 707-0031.

Weeknight Classes:

Session 1: Oct. 3, 5, 10, & 12, 6:30-9 pm; **Session 2**: Nov. 7, 9, 14 & 16, 6:30-9 pm; **Session 3**: Dec. 5, 7, 12 & 14 6:30-9 pm; **Session 4**: Jan. 9, 11, 16 & 18, 6:30-9 pm

The APNEP Policy Board, Science and Technical Advisory Committee (STAC), and Citizens' Advisory Committee (CAC) will meet jointly on November 8, 2006 at a time and place to be arranged. Please watch your email for details coming soon.



Joan Giordano * Outreach Coordinator * Albemarle-Pamlico NEP * October 2006