**North Carolina Sea Grant** 

www.ncseagrant.org

Winter 2006

### **Greetings!**

Are you a North Carolina teacher whose curriculum standards include weather patterns, hazards, energy transfer and atmospheric phenomena?

If so, don't miss your opportunity for a FREE "Forming Hurricanes" poster and access to curricular materials.

Help your students learn to define, describe and

analyze the nature of hurricanes, as well as their regional significance in the Atlantic. These materials are provided by the South-East Atlantic



Coastal Ocean Observing System (SEACOOS), The Center for Ocean Sciences Education Excellence SouthEast (COSEE-SE) and North Carolina Sea Grant.

This poster supports the SEACOOS Virtual Hurricane Classroom that can be found on the SEACOOS Web site. There, you can find classroom activities, a hurricane fact sheet, real-time hurricane information, and a hurricane glossary. To locate these resources, just go online to: <a href="https://www.seacoos.org">www.seacoos.org</a> and click on "Community and Classroom." Teachers from other SEACOOS states — South Carolina, Georgia and Florida — can find their hurricane poster contact on the Web site.

The posters will be mailed to North Carolina schools in quantities of three to five — as long as the supply lasts. No single copy requests, please. E-mail your request for three to five FREE posters to Terri Kirby Hathaway, North Carolina Sea Grant marine

education specialist at *terrikh@csi.northcarolina.edu*. Include the name and mailing address of your school.

# What's New at The Bridge? www.vims.edu/bridge

Each month, The Bridge online site offers data tips with background information and activities using real data on various topics. December's data tip looked at the correlation between wind direction and ocean water temperature on the Outer Banks in the summer — which is a very interesting topic of discussion because the water temperature can remain in the 50s during July! Data activities in the near future will focus on ocean observing systems — an up-and-coming topic. Visit The Bridge online site often — you never know what interesting tidbits of information and new activities you might find.

# NMEA 2006 in New York City nysmea.org/con06/

Get ready for a summer experience in a city of islands, otherwise known as the Big Apple. Yes, the New York State Marine Education Association is inviting the National Marine Educators Association to New York City July 16-22.

Long Island University in Brooklyn will be the host site for the conference. Special events include an evening in the American Museum of Natural Science's Hall of Ocean Life, an evening at the New York Aquarium and a dinner cruise around the island of Manhattan.

Keep an eye on the Web site for updates! Don't miss this opportunity to explore the islands of New York City in a very special way!

# Aquarium Expansion Nears Completion www.ncaquariums.com

The \$25-million expansion/rebuilding of the N.C. Aquarium at Pine Knoll Shores is on schedule and moving smoothly. The two-and-a-half-year project will triple the size of the former aquarium to 96,000 square feet. The makeover features a stunning array of new displays, exhibits and activities. Reopening is scheduled for late May.

The real show-stopper will be the 306,000-gallon Living Shipwreck Exhibit. This striking display will be home to the aquarium's largest collection of marine life, including large sand tiger sharks, schools of fishes, loggerhead turtles and other animals.

Myriad inhabitants will glide amid a replica of the German U-352 submarine that was sunk off the North Carolina coast in 1942. Visitors will be able to view the animals through three observation windows, the largest of which measures 10 feet tall, 8 inches thick, and more than 63 feet long!

The expansion also includes a new discovery room, a 150-seat auditorium, a large gift shop, a snack bar and expanded visitor parking. Behind the scenes, there will be a school classroom, a large multi-purpose room and a catering kitchen. In addition, design features have been incorporated to accommodate weddings, parties and evening rentals.

For expansion updates, or information on programs and activities, visit the Web site, or call 252/247-4003.

### NOAA Workshop www.csc.noaa.gov/cms/cls

Calling all coastal resources professionals, extension staff and educators. The National Oceanic and Atmospheric Administration's (NOAA) Coastal Services Training Staff will be offering a free two-day "Project Design and Evaluation" workshop Feb. 13-14 at the N.C. Aquarium on Roanoke Island.

This course provides coastal resource management, extension and education professionals with the knowledge, skills and tools to design and implement projects that have measurable impacts on audiences they want to reach. This interactive curriculum can increase the effectiveness of your projects by teaching you to apply valid instructional design theory.

Preregistration is required. Contact the aquarium's registrar, 252/473-3494, ext. 232; or wanda.m.best@ncmail.net.

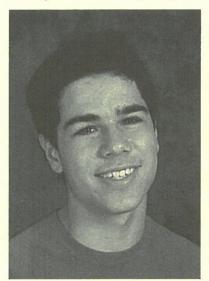
# N.C. Teen Honored www.actionfornature.org

Since the age of 12, Adam Meyer of Raleigh has been concerned about the environment and wanted to contribute financially to various organizations. But Adam was disappointed with the amount of money that he could contribute on his own. So he developed the idea to sell calendars that he could create with his own photographs on his home computer. For three years, he sold beautiful calendars that included environmental stewardship tips. Now, Adam has developed note cards that will help his cause.

The San Francisco-based organization Action for Nature, annually acknowledges the work of young

people between the ages of 8 and 16 who have done creative environmental projects. Recently, Adam, now 15 and a student at Raleigh Charter High School, caught their eye and was named one of the "International Young Eco-Heroes" for 2005.

The next agenda item for Adam: he plans to start a tree preserva-



tion campaign early this year. He currently serves on the board of directors of the Environmental Education Fund and works on the group's fundraising committee.

Adam is so excited about his products. "When I was younger, I felt powerless to change the environment," he says. "Now, through the calendar sales, I can make a difference."

Congratulations to North Carolina's own Eco-Hero, Adam Meyer. To find out more about Eco-Heroes, visit the Web site above and follow the links to "Eco-Hero Awards."

## New Maritime Museum Exhibit www.ah.dcr.state.nc.us/sections/maritime/

The new N.C. Maritime Museum exhibit "Life at Sea: A Sailors' View" will tell the story of what daily life aboard ship was like for the ordinary sailor during the 19th century. Known as the "Great Age of Sail," the 1800s was a period when "the greatness of a grow-

ing nation was measured by its naval muscle." The exhibit, which will concentrate on the living conditions, clothing, diet, work and recreation of the typical sailor, will be on display Jan. 21 through April 23 at the Beaufort museum.

The display will include a combination of static displays, photographs and two- and three- dimensional objects, as well as interactive features. Visitors can recreate the living conditions and experience a sailor's small personal space by lying down in a berth. They also can try on sailors' clothing in sail bags and sea chests.

Local middle school students can research biographies of area seafarers and provide their stories for the public in a booklet form.

Further opportunities for interactive learning and reinforcement of history lessons will be offered on March 31 during the museum's day-long Family Day that will include activities for children of all ages.

A maritime historian will dress up as a 19th-century sailor and tell stories, and an instructor will demonstrate scrimshaw art that is carved or engraved into whalebone or whale ivory. Also, students who have researched the diets of ordinary sailors will be on hand to set a table and provide samples of sailors' typical daily fare.

Can't get enough maritime history? Don't miss the Pepsi Americas' Sail coming to Beaufort June 30 through July 5. The Winter 2006 issue of *Coastwatch* will include a feature article on the event. Further information on the America's Sail can be found online at www.americassail.com.

# Natural Sciences Museum www.naturalsciences.org

The N.C. Museum of Natural Sciences has some wonderful educator opportunities to spice up your winter season.

Visit the Web site for additional information, or contact Mike Dunn, teacher education coordinator, *mike.dunn@ncmail.net* for details and updates. The programs are at the museum unless otherwise noted.

#### Cast And Mold Madness

Sat., Feb. 4; 10 a.m. – 4 p.m.; Cost: \$20 (includes mold making materials and tracking book).

• Museum Field Trips With Young Children Tues., Feb. 21; 3:30 – 5:30 p.m.; Cost: \$5; Day-Care Credit: 2 hours. For preschool and elementary school teachers.

### · Amphibian Days and Nights

Sat., March 4; noon – 8 p.m.; Chatham County. Cost: \$20 (includes a light dinner).

### Coastal Awakening

Fri., April 7 (depart Museum at 4:30 p.m.) – Sat., April 8; Rachel Carson National Estuarine Research Reserve and Fort Macon State Park. Cost: \$55 (includes lodging, breakfast, lunch, and transportation from Raleigh).

#### · Bounty of Bluebirds

Sat., April 22; 10 a.m.—4 p.m.; Museum and Prairie Ridge Ecostation, Raleigh. Cost: \$25 (includes bluebird box and mounting poles).

#### **New Reference Books**

Zooplankton of the Atlantic and Gulf Coasts: A Guide To Their Identification and Ecology. William S. Johnson and Dennis M. Allen \$44.95, paperback; \$80 hardcover. Order online: (www.press.jhu.edu/bp-pls/title\_pages/3235.html).

There has never been a comprehensive manual to the zooplankton of the Atlantic and Gulf coasts — but now there is!

Bill Johnson of Gaucher College and Dennis Allen of Baruch Marine Lab teamed up to offer an incredible guide to coastal and estuarine zooplankton. This book offers detailed line drawings and descriptions of many common species, including some phytoplankton, in a user-friendly fashion. This is a great addition to your marine biology book collection!

Marine Reserves: A Guide to Science Design, and Use. Jack Sobel and Craig Dahlgren. \$35 paperback; \$70 hardcover. Order online: (www.islandpress. com/books/detail.html/SKU/1-55963-841-9).

How about some winter reading on a promising method of protecting marine biodiversity? Jack Sobel (Ocean Conservancy) and Craig Dahlgren (Caribbean Marine Research Center) have come up with the first guidebook on no-take marine reserves — focusing on the science behind them, as well as on design and implementation issues.

Case studies from California, Belize and the Bahamas are also covered, exploring how their marine reserves were created and the effects that they have on marine and human communities.

### **Nautical Word Origins**

"Dragging your anchor" – meaning to be hesitant or tired. On a sailing vessel, this was a last ditch effort to slow or stop a boat that was caught in a storm and/or headed for the rocks. The anchor was tossed overboard, hoping that it would catch bottom and save the vessel from running aground or wrecking.

"Under the weather" – meaning sick or not feeling well. Sailors who were standing watch on the "weather side" of the boat were hit by the wind and the spray. These crew members were said to be "under the weather" — and probably got sick as a result of that exposure to foul weather!

Reprinted with permission from *Captain Bucko's Nauti-Words Handbook* (ISBN 0-595-31529-1) by Roger Paul Huff; published in 2004 by iUniverse, Inc.

#### To Contact Me

My mailing address is: North Carolina Sea Grant, PO Box 699, Manteo, NC 27954. To reach me by phone, call 252/475-3663; fax: 252/475-3545; e-mail: terrikh@csi.northcarolina.edu.

Please check your mailing label — if we need to make changes to your address, or if you're getting more than one copy of *Scotch Bonnet*, let me know! Don't forget to recycle this newsletter after sharing it with friends and colleagues.

Best Fishes!



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### **Scotch Bonnet**

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