



Welcome to the newest online issue of *Scotch Bonnet*. And the newsletter is also available as a portable document file (.pdf) — if you're like me and want to keep a hard copy!

What a fabulous summer; I hope yours was as filled as mine! I participated in the mobile 2010 Marine Mammal Institute (MMI) and traveled from North Carolina through Virginia, Maryland, Connecticut, Massachusetts and then back to Washington, D.C., learning about how climate change affects marine mammals. The 19 educators who traveled together will never forget this opportunity!

To follow our adventures, please check our online blog at www.marinemammalinstitute.wordpress.com and enjoy the photos, as well as our travelogue. Watch for a GeoDome presentation at a facility near you! Each MMI participant will be hosting a GeoDome event at his or her free-choice learning facility, or at one nearby.

I hope you're geared up for an eventful fall. There are many professional development opportunities for all of us. Try to take advantage of these wonderful conferences, workshops and more. Keep reading for those unique opportunities and ideas for educators. There is a lot going on in North Carolina!

Sea-Beans and Beachcombing — A One-Two Knockout Punch for Fall!

www.seabean.com/symposium/2010

www.beachcombingconference.com

Anyone emotionally or physically involved with the beach will want to learn more about (and possibly attend) these two events this fall!

The 16th annual Sea-Bean Symposium is set for Oct. 22–23, in Cocoa Beach, Fla. And yes, I'll be there! You'll find a detailed schedule at www.seabean.com/symposium/2010. This year's keynote speaker is meteorologist John Pendergrast who will share "A Weather Map for Finding Seaside Treasures" on Saturday evening, Oct. 23.

Talks on Friday, Oct. 22, include:

- "The Archaeology of Beachcombing" by Deacon Ritterbush, author of *A Beachcomber's Odyssey: Treasures from a Collected Past*;
- "A Sea-Bean's Journey" by Blair Witherington, co-author of *Florida's Living Beaches*; and
- "What's Floating in Our Ocean Now?" by Curtis Ebbesmeyer, author of *Flotsametrics and the Floating World*.

Before the keynote address on Saturday evening, enjoy these talks earlier in the day:

- "I Think It's a Jellyfish" by David McRee, author of *Florida's Beaches*; and
- "Everything You've Always Wanted to Know about Sea Glass" by Deacon Ritterbush.

Catch up on all things sea-beans by reading *The Drifting Seed*, an online newsletter found at www.seabean.com/newsletters/.

The 2nd annual International Beachcombing Conference will take place Nov. 12–14 at the University of Delaware's Virden Retreat Center in Lewes, the site of the 2009 Mid-Atlantic Marine Education Association conference. A day of lectures followed by a day of field trips and workshops will bring joy into every beach lover's life!

A detailed schedule of events is available on the conference website. Saturday, Nov. 13, lecture topics include: shipwrecks and beach booty, coastal fossils, beach rocks from Maine to Florida, storing and caring for beach treasures, sea glass origins, English sea glass and more. On Sunday, Nov. 14, you can hunt for sea glass and fossils, make sea glass jewelry, create flowers with oyster shells and photograph your beachcombing treasures.

In addition, vendors will be offering their wares (a great time for some early Christmas shopping) and beachcombers will be sharing and swapping their extra treasures. Bring your extra beachcombing goodies to trade and go home with some new booty!

Don't miss these two chances to learn new things about the seashore that we all love!

Help Spot Jellies!

www.jellyfish.appstate.edu

Two researchers from Appalachian State University in Boone, N.C., are stalking jellies along the North Carolina coast — and they're asking for your help!

Vicki Martin and Monique Eckerd raise box jellies in their lab in Boone, conducting temperature and feeding studies. They have discovered that jellies can survive in just about any situation. With climate change still in the news and with blooms of jellies occurring around the world, Martin and Eckerd decided to delve more deeply into jellies on our coast and wanted to involve citizens in their research. They're enlisting the help of fishermen, beachcombers, homeschoolers and more.

Everyone can assist with this scientific research! If you're anywhere on the coast of North Carolina and you see a cabbage head, a moon jelly or any other jelly, visit www.jellyfish.appstate.edu and help Martin and Eckerd collect data and track jellies. I have submitted some jelly sightings on the site, so I'm helping, too!

And for more information about jellies and their durability in various water conditions, check out the article in the August 2010 issue of *Smithsonian Magazine* at www.smithsonianmag.com/specialsections/40th-anniversary/Jellyfish-The-Next-Kings-of-the-Sea.html.

Roanoke Island Festival Park

roanokeisland.com

This fall, Roanoke Island Festival Park welcomes the artistic eyes of Duane Raver, wildlife illustrator, and Jeff Lewis, nature photographer. From Oct. 3 through Nov. 29, the collective works of these two talented gentlemen will be exhibited in the Art Gallery.

Raver has provided the art for more than 200 *Wildlife in North Carolina* covers and also for North Carolina Sea Grant's *Coastwatch* magazine and *Shark Sense* brochure. He illustrated the *Fisherman's Guide: Fishes of the Southeastern United States* by Charles S. Manooch. Lewis is the gardens and nursery manager of the Elizabethan Gardens in Manteo and an avid birder and amateur naturalist. He's had more than 1,000 photos published in books, magazines, newspapers and a variety of other media.

The opening reception for this extended exhibit is set for Sunday, Oct. 3, from 2–4 p.m. Gallery hours are 9 a.m. to 5 p.m. Mondays to Fridays and 10 a.m. to 4 p.m. on Saturdays.

On Friday, Nov. 12, at 7–9 p.m., Duane Raver and Charles S. Manooch will discuss their book project and share anecdotes during a public lecture in the Art Gallery. The two combined their talents for the *Fisherman's Guide: Fishes of the Southeastern United States*, a valuable resource for anyone interested in learning about our coastal fishes.

For more information, please contact Roanoke Island Festival Park at 252/475-1500.

Fall Special Programs at N.C. Aquarium on Roanoke Island

www.ncaquariums.com/roanoke-island

What: Wild Women on the Outer Banks Weekend

When: Friday, Saturday and Sunday, Oct. 15–17

The N.C. Aquarium on Roanoke Island, in partnership with The Nature Conservancy's Nags Head Woods Preserve, is hosting the Wild Women on the Outer Banks Weekend. This popular program incorporates field opportunities like kayaking, hiking, wild edibles, digital photography and more with contemplative explorations into nature through journaling and field sketching. Adventurous women can "sleep with the sharks" on Saturday night! Fee includes meals, as well as the instruction and equipment needed to explore our sense of place. Space is limited to 22 women. Cost is \$250 (discounts for Aquarium members) and does not include housing. For registration, call 252/473-3494, x232. For more information, call 252/473-3494, x266.

What: Astral Explorations

When: Wednesday, Nov. 10, 6–8 p.m.

Stars have mystified humans for centuries, inspiring mythological stories, providing navigation and stimulating a desire to view the night sky closer. Join the N.C. Aquarium on Roanoke Island on Wednesday, Nov. 10, at 6 p.m. for Astral Explorations, an investigation of those celestial bodies that enthrall everyone. The evening will begin with guest speaker and physicist Bob Bateman using Science on a Sphere®, a 68-inch diameter globe with projected images of the sun, stars and planets. There will also be a discussion on celestial navigation, the technique mariners used to find their way for centuries. After nightfall, participants will go outside to observe the stars in all their glory, picking out constellations, planets and galaxies. Afterwards, they will gather around a fire while roasting marshmallows and listening to stories inspired by the stars. The program is free to the public. Pre-registration by Nov. 9 is required. For registration and additional information, please call 252/473-3494, x232.

What's New at the N.C. Maritime Museum

www.ncmaritimemuseum.org

Here's a sampling of what you can see and do at the N.C. Maritime Museum this fall!

Learn something new at lunch with our Brown Bag Gam program held on select weekdays from noon to 1 p.m., September through May. Pack a snack and meet at the museum during your lunch hour for informal presentations on topics of maritime history, culture and the natural environment of coastal North Carolina. Topics rotate weekly and are posted at www.ncmaritimemuseum.org.

A brand new course, Kayak Fishing Basics, will be held Oct. 8 and Oct. 27, 8 a.m. to 3 p.m. Learn the basics of saltwater trout fishing from a kayak. Kayaks are provided, and your own fishing license and rod are required. Space is limited, reservations required, cost is \$80.

Spend a night at the museum, Friday, Oct. 29, 5:30–8 p.m., for Fright Night. Don't miss the spooky haunted exhibit hall, sweet treats and a few tricks at this unique museum event. Hear tales of Maritime Myths and Legends at 7 p.m. Proceeds from this partnership event benefit the Museum Education Fund and the East Carteret High School Drama Club.

A new exhibit opens this fall featuring marine life and seaside environments by local artist Martha Bruno. The exhibit opens Nov. 20 and will be open daily from 9 a.m. to 5 p.m. The opening reception will be held Nov. 20, 6–8 p.m.

To make program reservations, or to find out more about educational programs offered at the Maritime Museum, visit www.ncmaritimemuseum.org or call 252/728-7317.

Fall at the N.C. Estuarium

www.partnershipforthesounds.org

Art exhibits scheduled for the fall include:

- October: Bird photographs by Durham photographer Bill Majoros
- November: Watercolors by Bath artist Billy Jones
- December: Photographs by Mary Jean Peters

Program highlights for October include the following:

- **River Roving Educational River Tours:** Learn about the history and habitats of the Washington waterfront. These boat tours cruise the Pamlico River Wednesdays through Fridays at 10:30 a.m. and 12:45 p.m., and Saturdays at 10:30 a.m. No admission fee or other cost is involved for the tour, but advance reservations are required. Riders should check in 15 minutes in advance. Children must be at least 6 years old to ride; a responsible adult must accompany children under 16. Call for reservations.
- **Big Sweep River Roving Clean Up:** Oct. 1, 12:45 p.m. to 3 p.m. Help clean up the beaches along the Pamlico-Tar River. Wear old clothes and closed-toe shoes and bring work gloves. Children must be at least 8 years old to ride; a responsible adult must accompany children under 16. Call for reservations. Contact the Beaufort County Coordinator, Linda Boyer, at the Estuarium or www.ncbigssweep.org if you are interested in participating in N.C. Big Sweep in your community.
- **Nature Photography Seminar:** Oct. 9, 10 a.m. to 4 p.m.; cost = \$50. This seminar, taught by professional nature photographer Sol Levine, is open to beginners as well as advanced photographers. It includes a morning classroom session and an afternoon photography session on the Tar River aboard the Estuarium's River Rover pontoon boat. Pre-registration and pre-payment required. Bring a bag lunch. Call the Estuarium for more information, or check www.naturesimagesbysol.com.
- **Paddle for Clean Water:** Oct. 14, 1 p.m. to 2 p.m.; cost = \$2. Enjoy highlights of Pamlico-Tar River Foundation Riverkeeper Heather Jacobs Deck's paddle down the Tar River to Washington to raise awareness of the need for clean water. Please call for reservations.
- **Washington's Constructed Wetland and the Positive Impact it Makes on the Community:** Oct. 21, 1 p.m. to 2 p.m.; cost = \$2. Join Mike Apple, Washington's storm water management technician, as he talks about the history and the success of the constructed wetlands project adjacent to the Estuarium.

Program highlights for November include the following:

- **Home School Days:** Nov. 17 and 18; admission fees = \$4 per adult; \$2 per student; program fee = \$2 per student. Special program for Nov. 17, 11 a.m. to 12 p.m., Native Americans of Eastern Carolina; special program for Nov. 18, 11 a.m. to 12 p.m., Critters of the Pamlico. Programs are suitable for students age 6–12.

- **Tellabration:** Nov. 20, 1 p.m. to 2 p.m.; cost = \$2. What is a Tellabration? It's a day of storytelling held around the world traditionally on the Saturday before Thanksgiving. The storytellers are members of the Inner Banks Storytellers Group. Stories are suitable for school-age children and adults. Please call for pre-registration.

Program highlights for December include the following:

- **Holiday Cookie Swap and Candy Mints Demonstration:** Dec. 1, 10:30 a.m. to 11:30 a.m.; cost = \$2. Please bring one dozen cookies and a cookie recipe to swap. Also enjoy a demonstration in making pull mints, a southern traditional holiday favorite. Call for reservations.
- **Wreath Making with Native Evergreens:** Dec. 8, 10:30 a.m. to 12 p.m.; cost = \$5. Learn about fragrant evergreens and make a fresh wreath for the holidays. Take a break and enjoy refreshments in the Nature Room. Bring small garden clippers, if possible. Call for reservations.
- **Mistletoe River Roving:** Dec. 14, 15 and 16, 10:30 a.m. and 1:30 p.m. The pontoon boat makes its annual voyage to gather mistletoe, a holiday tradition. Children must be at least 6 years old. No admission fee or other cost is involved for the trip, but advance reservations are required.

The Crab Pot Gift Shop is full of unique gifts with a natural flair. North Carolina products and books are featured — a great place for holiday shopping.

The Estuarium is located at 223 E. Water Street, Washington, N.C., and is open Tuesdays to Saturdays, 10 a.m. to 4 p.m. Admission is \$4 for adults and \$2 for students. Please call ahead for program information as space may be limited. The Estuarium is a Partnership for the Sounds facility, an organization promoting ecotourism and sustainable economic development in the Albemarle-Pamlico region (www.partnershipforthesounds.org). For more information or for reservations, contact estuarium@embarqmail.com or 252/948-0000.

Curriculum/Activity Guides Still Available

Centers for Ocean Sciences Education Excellence SouthEast's (COSEE SE's) *The Educator's Guide to Marine Debris: Southeast and Gulf of Mexico* is a regional introduction to three main categories of marine debris: litter, derelict or abandoned boats, and lost or abandoned commercial and recreational fishing gear. This publication is available for free download on the COSEE SE website at www.cosee-se.org/marinedebris.php and is also available in hard copy, while supplies last.

N.C. Big Sweep's publication, *Undercurrents: A Big Sweep Middle School Teacher's Guide*, includes litter-awareness lessons that are correlated with state learning objectives for 8th grade science and math, as well as for healthful living, language arts and information skills. *Undercurrents* is available free to North Carolina educators while supplies last.

The *Coastal Processes and Conflicts* curriculum includes extensive background information for teachers, as well as student lessons that are relevant in any setting — not just the island environment. It is appropriate for middle and high school students. The curriculum can be downloaded free from www.ecu.edu/educ/csmte/coastal_processes.cfm. Or you can order a hard copy (\$10 includes postage), which comes with a CD containing color copies of figures used in the student activities.

Each of these education resources is available from Terri Kirby Hathaway, North Carolina Sea Grant, terrikh@csi.northcarolina.edu.

Need to Contact Me?

If you ever have information to share with other marine educators, please don't hesitate to send it my way for inclusion in a future issue of the *Scotch Bonnet*. Let me know what you're hearing from the sea!

Please share this website with others — and share my e-mail address with anyone who wants to receive a message when each *Scotch Bonnet* is available online! Thanks for all you do for students and for other educators!

My contact information is: North Carolina Sea Grant, PO Box 699, Manteo, NC 27954; phone: 252/475-3663; fax: 252/475-3545; e-mail: terrikh@csi.northcarolina.edu.

Best Fishes!

A handwritten signature in black ink that reads "Terri". The letters are cursive and fluid, with a prominent horizontal stroke for the top bar of the "T".

Terri Kirby Hathaway
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