

Welcome to the newest online issue of *Scotch Bonnet*. This marine education newsletter also is available as a PDF, if you're like me and want to keep a hard copy.

You probably noticed this issue is labeled Spring. Don't worry, you haven't missed any editions. We've decided to rename each publication to correspond with the timing of the events described. In the future, you can expect Summer and Fall issues as well.

Thanks to Lauren Daniel, Lori Davis, Susie Hill, C.C. King, Kelley King, Gail Lemiec, Rod Martin, Katy Menne, Tanya Poole, Megan Rodgers, Becky Skiba, Renee Strnad, Dave Sybert, and Dana Thomason for their contributions to this issue.

Hope your winter is going well, and wishing you all a wonderful spring season!

As you explore this new issue of *Scotch Bonnet*, you will notice professional development opportunities and family adventures for everyone. Take advantage of these wonderful conferences, workshops and more, especially if you're working on your Environmental Education (EE) Certification or collecting continuing education units (CEUs). There's a lot going on in North Carolina and beyond!

2020 Blue Heron Bowl Winners!

nosb.org

The 2020 Blue Heron Bowl, a regional part of the National Ocean Sciences Bowl (NOSB), was held at the Coastal Studies Institute on North Carolina's Outer Banks on Saturday, Feb. 1.

Congratulations to Raleigh Charter School's A team for becoming Blue Heron Bowl champions for 2020! The N.C. School of Science and Math took home second place, while Currituck County High School came in third. The Currituck County High School team, a first-year Blue Heron Bowl entrant, also received the Sportsmanship Award.

The Blue Heron Bowl is a regional marine science quiz bowl. Two teams, each composed of four students and one alternate, square off against each other to answer questions related to marine science. Many of these students are coached by a marine science or general science

teacher who sponsors their training. Each match consists of two team challenge questions, followed by two six-minute rounds of toss-up and bonus questions. North Carolina Sea Grant is proud to be a long-time supporter of the Blue Heron Bowl.

Raleigh Charter's A team will advance to the NOSB national finals, which will take place April 16 to 19, in Long Beach, Mississippi. Good luck to the Blue Heron Bowl 2020 Champions!

N.C. Wildlife Professional Development Opportunities from Mountains to Sea

The Wildlife Resources Commission (<u>ncwildlife.org</u>) offers professional development workshops across the state for anyone interested. You must attend all days of the training to receive credit and all materials.

Project WILD — Wednesday, Feb. 12, and Wednesday, March, 4, 2 to 5 p.m., Brevard College, Brevard. Email <u>jefrick@brevard.edu</u> to register.

Flying WILD — Thursday, Feb. 13, and Thursday, Feb. 20, 1 to 4 p.m., Warren Wilson College, Swannanoa. Email <u>mmcduff@warren-wilson.edu</u> to register.

Project WILD — Saturday, Feb. 15, 10 a.m. to 4:30 p.m., EnergyExplorium at McGuire Nuclear Station, Huntersville. Go to

events.r20.constantcontact.com/register/eventReg?oeidk=a07eguouht5ec8ce381&oseq=&c=& <u>ch</u> to register.

Nonbreeding Shorebird ID — Saturday, Feb. 22, 10 a.m. to 2 p.m., Environmental Education Center, Onslow County Museum, Sneads Ferry. Email <u>Rebecca.skiba@ncwildlife.org</u> to register.

Growing Up WILD — Friday, Feb. 28, 10 a.m. to 4:30 p.m., Buckeye Recreation Center, Beech Mountain. Email <u>msedlak@townofbeechmountain.com</u> to register.

Growing Up WILD — Saturday, Feb. 29, 9 a.m. to 3 p.m., Neuseway Nature Park, Kinston. Email <u>sarah.barlett@ci.kinston.nc.us</u> to register.

Project WILD – Tuesday, March 3, and Tuesday, March 17, 6 to 9 p.m., Montreat College, Montreat. Email <u>dshuman@montreat.edu</u> to register.

Flying WILD — Saturday, March 7, 9 a.m. to 4 p.m., Haw River State Park, Browns Summit. Email <u>Kelley.king@ncparks.gov</u> to register.

Growing Up WILD — Tuesday, March 24, and Tuesday, March 31, 6 to 9 p.m., Montreat College, Montreat. Email <u>dshuman@montreat.edu</u> to register.

Aquatic WILD — Wednesday, March 25, and Wednesday, April 1, 2 to 5 p.m., Brevard College, Brevard. Email <u>jefrick@brevard.edu</u> to register.

Coastal Birding — Friday, March 27, 9 to 11 a.m., Serenity Point, Topsail Beach (parking at Access 19). Email <u>Rebecca.skiba@ncwildlife.org</u> to register.

Upcoming Project WET Workshops

<u>deq.nc.gov/about/divisions/water-resources/water-resources-</u> <u>training/public-involvement/project-wet</u>

When:	Monday, Feb. 17, 9 a.m. to 3:30 p.m.
Where:	Kings Mountain State Park, 522 Park Office Lane, Kings Mountain
Cost:	\$25
Credits:	Six contact hours CEU credit; EE Certification Criteria I
RSVP:	Email Andrew Rawlings at <u>andrew.rawlings@ncparks.gov</u>
When:	Saturday, March 14, 9 a.m. to 4 p.m.
Where:	McDowell Nature Center, 15222 York Road, Charlotte
Cost:	\$25
Credits:	Six contact hours CEU credit; EE Certification Criteria I
RSVP:	Email Rachel Smith at <u>rachel.smith@mecknc.gov</u>
When:	Tuesday, May 5, 9 a.m. to 3:30 p.m.
Where:	Wilkes County Cooperative Extension, 416 Executive Drive, Suite A, Wilkesboro
Cost:	\$25
Credits:	Six contact hours CEU credit; EE Certification Criteria I
RSVP:	Email Julia Hardy at <u>jhardy.wilkes@gmail.com</u>

Project WET is an interdisciplinary water science and education program for formal and informal educators of K-12 students. The keystone of the Project WET program is the Project WET Curriculum & Activity Guide. The hands-on, supplemental activities are meaningful and relevant to children and are correlated with the 2013 N.C. Essential Standards for science, social studies and health education for grades K-8 and for high school earth/environmental science and biology.

The Project WET Guide is only available through a six-hour Project WET workshop. WET is a Criteria I workshop for the N.C. Environmental Education Certification Program and consists of six contact hours that may count toward CEUs for teachers.

Participants should dress in comfortable clothes and shoes suitable for physical activity. Help keep our environment plastic-free by bringing a waste-free lunch and a reusable water container and/or coffee cup.

Upcoming Project Learning Tree Workshops

forestry.ces.ncsu.edu/events/?q=PLT

Since 1976, Project Learning Tree (PLT) has been using trees as a lens into our natural and built environments to teach students "how to think, not what to think" about complex environmental issues.

What:	Project Learning Tree, K-8 Workshop
When:	Saturday, Feb. 22, 9 a.m. to 3:30 p.m.
Where:	Union County Agriculture Building, 3230-D Presson Road, Monroe
Cost:	\$20
Credits:	Six contact hours CEU credit; EE Certification Criteria I
RSVP:	go.ncsu.edu/ncplt_unionswcd (registration deadline: Feb. 17)

Join other K-8 classroom and informal educators as we explore activities in the Project Learning Tree K-8 Curriculum Guide. Every participant will leave the workshop with this guide, which includes 96 activities correlated with the N.C. Standard Course of Study and Essential Standards.

The PLT activity guides are provided free of charge to participants through support from the N.C. Forestry Association. CEU credits are available. This workshop qualifies for Criteria I in the EE Certification Program. Questions? Email Tammi Remsburg at <u>tremsburg@cabarruscounty.us</u>.

What:	Project Learning Tree, K-8 Workshop
When:	Thursday, Feb. 27, 9 a.m. to 3:30 p.m.
Where:	Sylvan Heights Bird Park, 500 Sylvan Heights Park Way, Scotland Neck
Cost:	\$20
Credits:	Six contact hours CEU credit; EE Certification Criteria I or II
RSVP:	go.ncsu.edu/ncplt_sylvanheights (registration deadline: Feb. 21)

Join other K-8 classroom and informal educators as we explore activities in the Project Learning Tree K-8 Curriculum Guide. Every participant will leave the workshop with this guide, which includes 96 activities correlated with the N.C. Standard Course of Study and Essential Standards. This workshop will also use the secondary module, Focus on Forests, for educators working with middle and high school students. The PLT activity guides are provided free of charge to participants through support from the N.C. Forestry Association. CEU credits are available. This workshop qualifies for Criteria I or II in the EE Certification Program. Questions? Email Renee Strnad at <u>renee_strnad@ncsu.edu</u>.

Spring Break and Summer Camps at N.C. Aquarium on Roanoke Island

ncaquariums.com/roanoke-island-camps

The 2020 summer camp registration opens Monday, Feb. 24. Most camp weeks fill up quickly, so get ready to call and sign up. The aquarium is offering three single-day camps in June and 11 week-long day camps in the summer.

Children will have the opportunity to participate in a variety of day camps during spring break, such as "Incredible Invertebrates" on April 13, "Rompin' Reptiles" on April 14, "Something's Fishy" on April 16, and "Aquarium Time!" on April 17.

The N.C. Aquarium on Roanoke Island, with support from the Outer Banks Community Foundation, is offering scholarship opportunities for our week-long summer and single-day camps in 2020.

Apply online using a Google form at <u>forms.gle/nRctQQkhKJ3iocF48</u>, or obtain a hard-copy application from the aquarium. Applicants must be Dare County residents. The application deadline is March 25.

For more information on camps and scholarships, please visit <u>ncaquariums.com/roanoke-island-camps</u>, or contact Dana Thomason at 252-475-2332.

Wildlife Weekend at Jockey's Ridge State Park

ncparks.gov/jockeys-ridge-state-park/home

Join other educators from around the area for a series of three professional development workshops at Jockey's Ridge State Park, led by an education specialist from the Wildlife Resources Commission.

What:Shorebird IdentificationWhen:Friday, March 6, 9 a.m. to 12 p.m.

Discover the shorebirds and waterfowl that winter in North Carolina along their migratory paths. We will review field guides, birding apps, birding techniques, birding ethics and local

citizen science birding programs that you can participate in to help protect our beach nesting shorebirds during the early spring and summer months. Participants are eligible for Criteria II credit toward N.C. EE Certification; classroom teachers receive CEU credit.

What:	Coastal Wildlife
When:	Friday, March 6, 1 to 4 p.m.

Learn more about the biology, ecology and conservation of wildlife living in North Carolina's coastal region. Learn to identify species by appearance, habitat type, skulls, scat and tracks. After an in-classroom portion, we will go for a hike around the state park to look for animal signs and observe wildlife. Participants are eligible for Criteria II credit toward N.C. EE Certification; classroom teachers receive CEU credit.

What:	Flying WILD
When:	Saturday, March 7, 9 a.m. to 3:30 p.m.

Flying WILD offers practical hands-on classroom and outdoor field investigation opportunities connecting real-world experiences in bird biology, conservation and natural history. Through activities involving language arts, social sciences and math, coupled with community outreach and service learning applications, Flying WILD offers a whole-school approach to environmental education using birds as the focus.

Participants of this six-hour workshop receive the *Flying WILD: An Educator's Guide to Celebrating Birds*, along with materials specifically about N.C. wildlife. The guide provides activities that teach students about birds, their migration, and what people can do to help birds and their habitats.

Participants are eligible for Criteria I credit toward N.C. EE Certification; classroom teachers receive CEU credit. A homework option is available to add four credit hours.

Where:	Jockey's Ridge State Park, Nags Head
Who:	Informal educators, classroom teachers, home school teachers, etc.
Cost:	FREE
RSVP:	To register for any or all of these, contact Austin Paul at 252-441-7132 or
	austin.paul@ncparks.gov.

Celebrate 50 Years of Earth Day

reservations.ncaquariums.com/roanokeisland/Info.aspx?EventID=31

In celebration of the 50th anniversary of Earth Day, join the N.C. Aquarium on Roanoke Island for their new Your Yard and Beyond workshops to learn innovative skills for keeping your home and the environment green.

March 7 – Bat Box Building March 21 – Invasive Plant Pull and Maritime Forest Restoration April 12 – Planting for Pollinators April 17 – Gardening for Songbirds

For more information on time, registration and fees, please visit reservations.ncaquariums.com/roanokeisland/Info.aspx?EventID=31.

At Water's Edge — Current Watershed Science for the Classroom

ie.unc.edu/at-waters-edge/

What:	At Water's Edge — A FREE Professional Development Experience
When:	11 a.m. Monday, July 6, to 2 p.m. Thursday, July 9
Where:	Trinity Center, 618 Salter Path Rd, Pine Knoll Shores
Who:	Science teachers of grades 8-12
Cost:	FREE, but a \$100 refundable deposit is required of selected participants to
	reserve your spot
RSVP:	Apply at this URL: <u>bit.ly/AtWatersEdgeInstitute</u>
	Application process closes Friday, March 13!

During this four-day teacher institute, eighth through 12th grade science teachers will explore and compare several unique coastal ecosystems through inquiry-based, hands-on activities, and evaluate human impacts on these systems alongside scientists and expert environmental educators. Teachers will learn about current research and receive instructional resources designed to foster student learning about watershed science and stewardship. Content and activities are aligned with the N.C. Essential Standards for eighth grade science, earth/environmental science and AP environmental science.

Hands-on, real-world, STEM-based experiences will be emphasized. Be prepared to get wet, sandy and energized!

Participants will:

- Actively participate in hands-on, STEM-based experiences in North Carolina's coastal aquatic ecosystems
- Engage with a variety of outstanding environmental educators, researchers and scientists

• **Gain knowledge** about current watershed science, human impacts to coastal watersheds, and strategies to protect watersheds

Participants will receive:

- A wealth of new ideas and instructional resources, including curriculum-related materials
- An opportunity to network with colleagues in a relaxed professional development setting
- Excellent food and lodging at beautiful Trinity Center in Salter Path
- CEU and EE Certification credits

Participants will be expected to:

- Commit to the entire institute
- Incorporate learned skills and experiences into lesson plans and teaching
- Share their experiences and mentor other teachers in their school or system
- Participate in evaluation of the program
- Be in good physical condition. Activities will include hiking, walking, wading, etc., in potentially hot, humid conditions.

The institute will begin at 11 a.m. Monday, July 6, and end by 2 p.m. Thursday, July 9. Lodging will be provided Monday, Tuesday and Wednesday nights. Meals will be provided from Monday lunch through Thursday lunch.

Please note: There are a limited number of seats available for this institute. All applicants will be notified of their acceptance status on or before April 1. If you are accepted, a \$100 refundable deposit will be required to reserve your spot. Your spot will be forfeited if your deposit is not received in a timely manner. Your check will not be deposited and will be returned to you upon check-in at the institute on July 6. Cancellations made after June 22 will result in the forfeiture of the deposit; your check will be cashed and considered a tax-deductible donation to the UNC Institute for the Environment.

Questions? Contact Megan Rodgers at megan.rodgers@unc.edu or 919-966-7238.

Professional Development at N.C. Aquarium at Fort Fisher Features Sea Turtles

ncaquariums.com/fort-fisher

What:	Sea Turtle Exploration Workshop
When:	Saturday, March 14, 9 a.m. to 3:30 p.m.
Where:	N.C. Aquarium at Fort Fisher, 900 Loggerhead Road, Kure Beach

Cost:\$25 (includes admission, behind-the-scenes tour, access to the curriculum)Credits:Six contact hours CEU credit; EE Certification Criteria IRSVP:reservations.ncaquariums.com/fortfisher/Info.aspx?EventID=20

The N.C. Aquarium at Fort Fisher is offering a workshop featuring their Sea Turtle Exploration, a curriculum to help educators engage students in the fundamentals of STEAM through ready-to-use, standards-based lesson plans centered on sea turtles. Join them on Saturday, March 14, for a hands-on teacher workshop that will guide you through the new curriculum and website.

Participants will learn about additional resources, such as weekly blog posts during the school year. Topics will include species profiles, aquarium staff spotlights, behind-the-scenes videos, new lesson plans and more. Follow the growth of aquarium hatchling sea turtles by visiting the blog each week.

Your class will be able to "adopt" a turtle and learn about its care and growth — an activity aligned with the Common Core standards. Once you adopt your turtle, you will receive weekly updates with information, including the turtle's current weight and length. Each class also will receive a certificate of participation.

The workshop will include a behind-the-scenes tour to meet one of the aquarium's sea turtles.

Please bring a reusable water bottle. If you choose to pack your own lunch, please make it waste-free. Shark Bites, the aquarium's snack shop, will be open, and there are lunch options off-site.

This workshop counts toward N.C. EE Certification (Criteria I), and consists of six contact hours that may count toward CEUs for teachers.

Coastal Explorations Workshop on Northern Outer Banks

nccoastalreserve.net

What:	Coastal Explorations
When:	Tuesday, April 7, 9 a.m. to 3 p.m.
Where:	Outer Banks Center for Wildlife Education, 1160 Village Lane, Corolla
Who:	Classroom and informal educators of all grades
Cost:	FREE
Credits:	10 contact hours (1 CEU credit); EE Certification Criteria I or II – 10 hours (six
	hours on site, plus four hours homework)
RSVP:	To register, contact Lori Davis, education coordinator at 252-838-0883 or
	lori.c.davis@ncdenr.gov

Coastal Explorations Workshop participants will learn about estuaries, the National Estuarine Research Reserve System, the North Carolina coast and current estuarine research. Classroom activities and a field exploration conducted on the Currituck Banks Reserve will be presented so participants can integrate lessons into their learning environment. This workshop will include information on the following topics:

- North Carolina's 2 million acres of estuaries and their importance,
- Coastal ecology and geology,
- Human impacts on estuaries, and
- Field experiences for students.

This workshop is aligned with the N.C. Essential Standards, Ocean Literacy Concepts and National Education Standards. Participants will leave with copies of all activities to use in their classrooms.

Participation is open to all educators and teachers and is free of charge. Credit for this workshop is offered in teacher renewal credits (1 CEU) and EE Certification for 10 hours (six hours on site, four hours homework). This workshop is approved for Criteria I or II.

N.C. Maritime Museum at Southport

ncmaritimemuseumsouthport.com/

What:	School Year Day Camps
When:	Tuesday, April 14, to Friday, April 17; 9 a.m. to 5:30 p.m.
Where:	N.C. Maritime Museum at Southport, 204 E. Moore Street, Southport
Who:	Students ages 5 to 17
Cost:	\$30 (discount for members); all fees are subject to state and local taxes
RSVP:	For more information or to register, please call 910-477-5151.

When your students are out of school for spring break, sign them up for awesome day camps at the N.C. Maritime Museum in Southport, where they can learn and have fun simultaneously. Topics for the week include seaside spring creatures, sea turtles on Bald Head Island, shipboard cuisine, and the concept "reduce, reuse, recycle."

Outdoor Festival — Elizabeth City

visitelizabethcity.com/Love-your-river-earth-day-celebration

What:	Love Your River Earth Day Celebration
When:	Saturday, April 18, 10 a.m. to 4 p.m.

Where:Museum of the Albemarle and Elizabeth City Waterfront Parks, 501 S. Water
Street, Elizabeth CityWho:EveryoneCost:FREE

Celebrate our beautiful rivers and discover their interesting history! Join us for the Green \$aves Green: Love Your River, a free, family-friendly event. Learn about "Fifty Ways to Love Your River" and have a lot of fun, too, on Saturday, April 18, from 10 a.m. to 4 p.m.

- Pontoon boat tours
- Canoeing
- Kayaking
- Fishing
- Sailing

- Live music
- Kids' activities
- Drone demonstrations
- Food trucks
- Environmental education exhibits

Did you know that northeastern North Carolina is uniquely made up of half-land and halfwater? Clean waterways benefit us all. Learn how you can help keep our rivers clean and healthy while enjoying safe recreation and life near beautiful, historic waterways.

Exhibits will be on the Museum of the Albemarle portico, the museum front lawn and in the adjacent waterfront parks. If you are interested in being a vendor or an exhibitor, email <u>GreensavesgreenNC@gmail.com</u> for more information.

Mid-Atlantic Regional ROV Competition in April

materovcompetition.org/midatlantic

What:	Annual Mid-Atlantic Regional ROV Underwater Robotics Competition
When:	Saturday, April 25, 8 a.m. to 4 p.m.
Where:	Old Dominion University Recreation and Wellness Center, Norfolk, VA
Cost: Registration fees for ROV competition are as follows:	
	\$50 per Scout team
	\$100 per Navigator team
	\$200 per Ranger team
RSVP:	Contact Susie Hill, Mid-Atlantic regional ROV competition coordinator, at
	757-664-1041 or <u>rebecca.hill@norfolk.gov</u> .

The Marine Advanced Technology Education (MATE) Center uses underwater robots — also known as remotely operated vehicles, or ROVs — to teach science, technology, engineering and math (STEM) and prepare students for technical careers. Working in partnership with the Marine Technology Society ROV Committee, MATE created the ROV competition as a way to:

• Engage students in STEM and expose them to science and technology careers;

- Encourage students to develop and apply technical, teamwork and problem-solving skills;
- Provide funds, materials and technical expertise to support student learning; and
- Provide industry with skilled individuals who can fill workforce needs.

The MATE competition challenges K-12, community college and university students from all over the world to design and build ROVs to tackle missions modeled after real-world scenarios. The competition's class structure — which includes beginner, intermediate and advanced levels — provides students with the opportunity to improve their skills, and how they apply them, as they engineer increasingly complex ROVs for increasingly complex mission tasks.

The competition is divided into three classes that vary depending on the team's level of experience, the vehicle specifications and the complexity of the mission tasks.

- SCOUT (Beginner) upper elementary to high school teams new to robotics (regional only)
- NAVIGATOR (Intermediate) upper elementary to high school teams with some robotics experience (regional only)
- RANGER (Advanced) middle to high school teams with major robotics experience (regional winner advances to world championship)

Questions? Contact Susie Hill, Nauticus education specialist and special program manager, at One Waterside Drive, Norfolk, VA 23510, or 757-664-1041 or <u>rebecca.hill@norfolk.gov</u>.

Student Offerings at the Roanoke/Cashie River Center

partnershipforthesounds.net/

The Roanoke/Cashie River Center (RCRC) is a facility of the Partnership for the Sounds located in Windsor, North Carolina. It provides curriculum-based programs that emphasize the importance of regional ecosystems, including the Cashie, Chowan and Roanoke rivers; surrounding bottomland forests and other wetlands; the Albemarle and Pamlico sounds; and the nearshore Atlantic Ocean.

A visit to the RCRC offers students an opportunity to observe nature; take water samples and test for quality; and experience the habitat firsthand. Students will compare and contrast various ecosystems and discover what is unique to the natural areas of Bertie County and northeastern North Carolina.

Each visit to the RCRC will also incorporate information on a variety of topics, such as recent archaeological findings around nearby Salmon Creek Nature Area (Site X); regional Native American history; neotropical songbird migration; local fisheries and animal life; a blackwater

aquarium; a live honey bee hive; a turtle tank; and much more. Student comprehension is reinforced by a scavenger hunt in the RCRC exhibit hall, classroom discussion and interactive quizzes.

We are more than happy to collaborate with educators to customize programs to meet their curriculum and student needs. Alternatively, let us come to you. Within reasonable travel distances, we can schedule program activities at your school. For more information, call the Roanoke/Cashie River Center at 252-794-2001.

The Roanoke/Cashie River Center is located at 112 West Water Street in Windsor, NC. Find them on Facebook at <u>facebook.com/Roanoke-Cashie-River-Center-165881840104344/</u>.

Save the Dates

Join your fellow marine educators and beach lovers at one or more of these upcoming learning opportunities.

<image/> <section-header><section-header><section-header><section-header><text><text></text></text></section-header></section-header></section-header></section-header>	International Beachcombing Conference <u>thebeachcombingconference.com</u> March 23 to 26 Annapolis, Maryland
National Marine Educators Association	National Marine Educators Association's Annual Conference <u>marine-ed.org</u> July 13 to 17 Honolulu, Hawaii
EENC	Environmental Educators of North Carolina Annual Conference <u>eenc.org</u> Sept. 17 to 19 Hendersonville, North Carolina

International Sea-Bean Symposium	International Sea-Bean Symposium seabean.com Oct. 16 to 17 Galveston, Texas
MAMEA	Mid-Atlantic Marine Education Association Annual Conference <u>mamea.org/conf.html</u> Nov. 6 to 8 Solomons, Maryland

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 *Scotch Bonnet*. Let me know what you're hearing from the sea!

Please share this website or newsletter with others — and share my email address with anyone who wants to receive a message when a new issue of *Scotch Bonnet* is available online. Thanks for all you do for students and for other educators!

Best Fishes!

Terri Kirby Hathaway Marine Education Specialist North Carolina Sea Grant

Email: <u>hathawayt@ecu.edu</u> Phone: 252-475-5486 Address: North Carolina Sea Grant, PO Box 699, Manteo, NC 27954