#### **NC STATE UNIVERSITY**



# C M A S T COMMUNICATOR

THE CENTER FOR MARINE SCIENCES AND TECHNOLOGY

Discovering Coastal Solutions

**VOLUME 2 NUMBER 4** 

SPRING 2010



Bob Simpson first came to North Carolina in 1949. In the six decades since, he has been a tireless advocate for the state's coastal regions and the outdoors in general. Through a recent planned gift to the College of Physical and Mathematical Sciences (PAMS), Bob and his wife, Conni have guaranteed their legacy advocacy for environmental education will live on for generations to come.



Bob and Conni Simpson

Working closely with their own attorneys and the NC State University Office of Planned Giving, the Simpsons have established a real estate gift that will deed their home and property in Carteret County to the PAMS Foundation. Upon transfer to PAMS, the property roughly 2.5 acres with about 200 feet of frontage on Peletier Creek off Bogue Sound – will become the **Bob Simpson Visiting Scholars** and Research Residence. It will be used to provide short-term housing and dockage facilities that will enhance multidisciplinary studies among research scientists, educators, extension specialists and students concerned with marine sciences and coastal natural resources. Faculty and staff of the NCSU Center for Marine Sciences and Technology (CMAST) will oversee the property on a dayto-day basis. PAMS is represented

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#### **CURRENT EVENTS**

CMAST SEMINARS ROOM 205 • 11:00 AM

#### April 9

**Dr. Mark Butler**Old Dominion University
Biological Sciences

Topic: "Connectivity of Caribbean Spiny Lobster: the Roles of Behavior, Oceanography & Disease"

#### April 23

#### Dr. Chris Osborn

NC State University, Department of Marine, Earth, and Atmospheric Sciences

Topic: "Resolving sources of dissolved organic matter in the Baltic-North Sea transition zone"

#### **CALLING ALL VOLUNTEERS**

CMAST is looking for enthusiastic people with a passion for marine science education to begin our "All Hands On Deck" volunteer program. Our goal is to assemble a team of volunteers to provide tours and present informational programs about the research being conducted at CMAST and, if interested, assist in marine science research projects.

Education outreach activities range from hands-on examples of the effects of global climate change on marine ecosystems, to ecological restoration projects such as shoreline stabilization with living shorelines, the use of beach seining to illustrate the types of organisms that inhabit our estuaries and how they live.

Contact Jill Miller for more information at 252-222-6334 or jill miller@ncsu.edu.

CMAST Communicator is published quarterly and distributed electronically. If you'd like to subscribe contact 252.222.6334 or jill\_miller@ncsu.edu or visit www.cmast.ncsu.edu



## From the Director

#### Welcome to the CMAST Communicator

Research and my personal experience shows that

new ideas from visiting faculty stimulate and help grow research and education programs at the host institution. We are honored that Bob and Conni Simpson of Morehead City, NC, have provided a planned gift of waterfront property and housing that will serve as the Bob Simpson Visiting Scholars and Research Residence. Their generous donation will help meet critical housing shortages for visiting scholars, but more importantly will provide a mechanism for the exchange of new ideas, and inspire future generations of scholars to give back to the research and education community that nurtured them.

This issue also highlights the Marine Science and Education Partnership (MSEP), based in Carteret County, that has grown to be one of the largest such partnerships in the country. With 19 members that represent- nearly all of the university marine science programs in North Carolina, state and federal laboratories, public attractions that provide educational programs, a public school system, community college, state biotechnology development, military research groups, and state and federal elected leaders, they generously share their ideas, expertise, and resources. MSEP is a valuable resource for marine and coastal science faculty at NC State's main campus as a means to facilitate communication and collaboration with this broad and diverse group.

We also highlight CMAST activities in response to one of the worst sea turtle cold stuns on record, the Marine Mammal Stranding Program located at CMAST, the first ever Scientific Diving Symposium in Carteret County, as well as accolades for our faculty and graduate students. I invite you to visit our web-site, our beautiful facility located on Bogue Sound in Morehead City, or contact any of our faculty, staff or students with questions.

Lastly, I want to mention how excited we are to welcome our new chancellor Dr. Randy Woodson to North Carolina State University! We look forward to sharing the valuable research being conducted at CMAST with him in the near future.

Best wishes, Dave Eggleston at CMAST along with the Colleges of Agriculture and Life Sciences, and Veterinary Medicine.

#### The long road from Dakota to Carolina

The gift is the culmination of a 60-year love affair between Bob Simpson, 84, and the North Carolina coast, that began when he first arrived in Carteret County as a young World War II veteran after serving three years as a navigator in the Marine Corps. A native of Havana, North Dakota, Bob returned to the Great Plains briefly after the war before a lead on a job with the *Carteret News Times* brought him to North Carolina.

"The editor said, "Pay your own way, and we'll give you a six-week trial," Simpson recalls. "So I loaded up my wife and all of my possessions into an old Model A Ford and hit the road for Morehead City."

When they arrived, Simpson and his young



The Sylvia II was gifted along with property.

Around the same time, he began to write a regular column for the *News & Observer*, where his nature pieces continue to run each Sunday on the editorial page. He also began working in his spare time – Simpson likes to brag that he's never had a "real" job – on a variety of other projects to promote the region.

Today, those projects read like a laundry list of what makes coastal North Carolina such a wonderful place to visit and live.



At a reception held in their honor, Bob and Conni Simpson are recognized for their support of marine science research by CMAST Director Dr. David Eggleston (I) and PAMS Dean Dr. Daniel Solomon (r).

wife, Mary, who died in 2005, needed an affordable place to stay. They found that buying a used boat was going to be cheaper than renting a room, so they bought the 45-foot cruiser, Silver Spray. It would be the Simpsons' home for the next 17 years, splitting time between North Carolina and Florida.

Simpson returned to military service during the Korean War. Upon his return to the States, he began working as a freelance writer for various boating and outdoor publications and began contributing.

- Simpson and a small group of friends started the Fabulous Fishermen contest as a way to promote marlin fishing off of Morehead City. Today, the contest is known as the Big Rock Blue Marlin Fishing Tournament, one of the largest and most prestigious events of its kind in the country.
- He was a driving force behind the establishment of a mariners' museum in Beaufort, known today as the North Carolina Maritime Museum.
- · He was instrumental in creating the



Skippers Roster in downtown Morehead City, which memorializes many of the captains who contributed to North Carolina's reputation as a world-wide sports fishing center.

· He was also a leader in the fight to prevent a highway from running through Cape Lookout National Seashore. Much to Simpson's credit, the shore looks much the same as it did when he began his fight.

#### A place to "turn the lights on"

The logic behind the recent gift from Bob and Conni Simpson, who were married on Valentine's Day 2009, is in much the same vein as Bob's fight to protect Cape Lookout. When asked why he chose to give the property away when developers were offering upwards of \$2 million for it, Simpson's answer is as feisty as it is heartfelt.

"I'm giving it away because I'm ornery," he says. "I've seen too much natural beauty destroyed around here in my life, and I

didn't want to see this property turned into more condos or apartments."

Instead, Simpson decided that his personal oasis will be used as a place to house and, hopefully, inspire those who may help us better understand how to balance natural beauty and economic success in coastal areas.

"I'm hoping this is a place that will help 'turn the lights on' for students," he says. "It will be a place where they can be totally immersed in the culture and the environment and see if studying, understanding and protecting them is really something they want to devote their life to."

Much like Bob Simpson devoting his life to the same cause.

This article was adapted from a version that originally ran in Scope, the official magazine of the NC State University College of Physical and Mathematical Sciences. For more information, please visit www.pams.ncsu.edu.





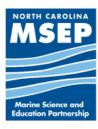




## CMAST and the Marine Science Education Partnership Team to Discover Coastal Solutions

"It takes a village to raise a child" is a well-known proverb embracing the idea that not only the parents, but the community as well assists in the upbringing of a child. Oddly enough, the same philosophical concept can be applied to the marine sciences community in North Carolina.

The Center for Marine Sciences and Technology (CMAST) is part of a large, well established and growing network, or community, of marine science research institutions in and around Carteret County that perform much like that proverbial village. Many researchers in this network either work, or have worked, with other facilities and researchers on a myriad of projects encompassing "all things coastal," not only in North Carolina but also the nation and world.



The Marine Science and Education Partnership's (MSEP) initial purpose was to raise awareness of the marine research and education being conducted in Carteret County, and to highlight

the significant economic impact of this industry. MSEP has become a model partnership for sharing information, ideas, resources and expertise, and continues to attract partners state-wide.

CMAST is a charter member of MSEP and has worked closely with the partnership since it formed in 2002. Other charter members include:

- · Carteret Community College
- Carteret County Economic Development Council
- Duke University Marine Laboratory, Nicholas School of the Environment and Earth Sciences
- National Oceanic and Atmospheric Administration (NOAA) Center for Coastal Fisheries and Habitat Research
- · NC Aquarium at Pine Knoll Shores
- · NC Division of Marine Fisheries
- NC Maritime Museum
- NC Sea Grant
- University of North Carolina Institute for Marine Science



Monthly MSEP meetings focus on specific issues that can best be addressed as a group - or "roundtable" - where each partner provides informative updates, and guest speakers on topics of relevance to our various missions. MSEP and the high concentration of marine sciences in Carteret County has been compared at times as the southern equivalent of the renowned Woods Hole Oceanographic Institution in Massachusetts and Monterey Bay area of California.

The partnership has grown since its inception, encompassing a broader network of government and educational representatives, including East Carolina University, Department of Biology; Carteret County Public Schools; Carteret County Shore Protection Office; NC Cooperative Extension; NC Division of Coastal Management; NC Shellfish Sanitation and Recreational Water Quality Section; NC Biotechnology Center; Carteret News-Times; and staff from the offices of U.S. Senator Burr and U.S. Congressman Walter Jones.

CMAST has a similar role as MSEP by having its own NC State University partnerships. Faculty, staff and students representing three colleges and multiple departments from within NC State University call CMAST home and take part singly, and collectively, in research, education and outreach activities in the marine sciences. Additionally, MSEP partnerships allows CMAST faculty even more opportunities to conduct research on a broader scale, and provides easy access

for main-campus faculty to partner with institutions and legislative representatives. What follows is a sampling of some of the many projects conducted at CMAST in collaboration with MSEP partners.

## College of Agriculture and Life Sciences



#### Department of Environmental and Molecular Toxicology

Dr. Patricia McClellan-Green, head of the Toxicology Laboratory at CMAST, has been the lead on many collaborative research

projects, and for the past several years has hosted graduate and undergraduate students from the Duke University Marine Laboratory. Past research topics include identification and quantification of contaminants in sea turtles - resulting in the modification of a blood-extraction method used in mammalian studies and adapted to marine animals; effects of anti-fouling agents on non-target species (i.e. oysters, snails, sea urchins); pesticide effects on oyster immune system response; and the latest work on the Toxicological Effect of Engineered Nanoparticles, Quantum Dots, in Marine Teleosts with Ph.D. student Michelle Blickley.

McClellan-Green has also collaborated with NOAA on a Rachel Carson Fellowship by providing a research position in her toxicology lab for anti-fouling research. She recently was awarded a grant from the NC Division of Marine Fisheries Commercial and Recreational Fishing License Grant Program to study the "Spawning characteristics and reproductive capacity of blueback herring stocks in the Albemarle Sound."

Her lab also relies on relationships with the NC Aquarium at Pine Knoll Shores and at times local retailers such as J and B Aqua Foods who provide oysters for use in various toxicology studies.



Seafood Laboratory, Department of Food, Bioprocessing and Nutrition Sciences

The history of this CMAST-based program runs deep in Carteret County beginning in the

#### **CMAST AND MARINE SCIENCE PARTNERSHIPS**

early 1960s with food scientist Dr. Frank Bancroft Thomas. It was through Thomas' collaborative efforts with state, industry and institutional partners such as the UNC Institute of Fisheries Research (now IMS), NC Division of Commercial and Sport Fishing (now DMF) that established this program in 1970. Working with technical and industry advisors, Thomas was awarded an extension service project for the local seafood industry entitled "Carteret County Seafood Processing Project." Over time the program expanded, as the seafood industry was progressing, and so the foundation for the NCSU Seafood Laboratory was laid. Applied research, extension education and technical services continue in collaboration with state. federal, institutional and industry partners today under the current direction of Dr. David Green.

The Seafood Lab began with a grant from the National Sea Grant Program in 1969 and continues to work in collaboration with NC Sea Grant. One long standing program, led by Sea Grant Seafood Education Specialist Joyce Taylor and the Nutrition Leaders' volunteers, is in seafood utilization. Taylor's volunteers developed seafood recipes and a resource book entitled Mariner's Menu featuring many of the volunteers and tips in handling and preparing seafood. More recently, the group developed an Internet-based "blog" Mariner's Menu, named after the original publication, as a modern-day resource on all types of North Carolina seafood including recipes, handling, availability, cultural history and more. The blog is a collaborative grant project with contributors from the Seafood Lab, NC Sea Grant and the Core Sound Waterfowl Museum and Heritage Center.

In addition to utilization studies, the Seafood Lab provides technical assistance for industry with an interest in development of value-added seafood products for retail and foodservice. Barry Nash has provided



technical services for numerous North Carolina seafood businesses, helping them diversify their businesses from commoditybased to niche marketing of value-added products.

Green has continued to work at the Seafood Lab leading industry efforts to improve the quality and safety of North Carolina seafood products. He credits the many successes and longevity of the Seafood Lab to the strong foundation laid by Dr. Thomas and the collaborative relationships built over time.



Department of Biology, Marine and Estuarine Fisheries Research

NC State University has built a strong reputation in fisheries research, due in part from work conducted

in the Department of Biology's Fisheries Research Laboratory at CMAST, directed by Associate Professor Dr. Jeffrey Buckel. By conducting applied and basic research with graduate students, research assistants and post-graduates, he has made this program an integral part of the marine science network – forming partnerships that not only promote the continued study of finfish population dynamics but provide an avenue for future fisheries scientists to learn.

The NC Division of Marine Fisheries (DMF) is a close collaborator and recipient of many study results from the Buckel lab. For example, with some types of research data derived on fish populations, the DMF can more accurately prepare Fishery Management Plans in an effort to prevent overfishing of a particular species to protect future harvests.

Additionally, a Marine Fisheries
Management Fellowship was created in
2002, with collaboration and funding from
NC Sea Grant and DMF. Buckel is the
NCSU mentor for the one-year program
giving post-graduate fellows, fresh from
an academic setting, the opportunity to
work in an applied setting. In return, these
graduates bring the latest approaches in
marine fisheries to the DMF.

Other MSEP partners collaborate on various research projects with the Buckel lab. Some specific project titles and collaborators are:

- Movement and mortality of spotted seatrout in North Carolina. NCSU and NCDMF
- Telemetry based estimates of natural mortality in juvenile spot. NCSU and NCSG



- A Comparison Between Circle and 'J' Hook Performance in the Wahoo, Yellowfin Tuna, and Mahi Troll Charter and Recreational Fishery of North Carolina. NCSU, NCDMF, and NCSG Fisheries Resource Grant, (Cooperative research project with NCSU and NC commercial fisherman)
- Feasibility of using hydroacoustics to estimate river herring run size in Albemarle Sound, NC. NCSU, NOAA, and NCSG – Fisheries Resource Grant, (Cooperative research project with NCSU and NC commercial fisherman)
- Novel approach to estimating relative long-term survival of black sea bass and red porgy in the NC reef fishery. NCSG – Fisheries Resource Grant, (Cooperative research project with NCSU and NC commercial fisherman)

## College of Physical and Mathematical Sciences



Department of Marine, Earth and Atmospheric Sciences, Marine Ecology and Conservation

Dr. David Eggleston, marine ecologist and Director of CMAST,

heads up the Marine Ecology and Conservation group that is dedicated to answering research questions that, whenever feasible, test and refine general ecological theory, while simultaneously providing answers that can be applied to sustainable management of fisheries or their habitats. Eggleston also stresses the need to integrate middle and high school

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#### **CMAST AND MARINE SCIENCE PARTNERSHIPS**



students into his research when possible. Much of Eggleston's NC-based research is in collaboration with the NC Division of Marine Fisheries (DMF), UNC-Institute for Marine Sciences, the NC Coastal Federation, NC Sea Grant (NCSG), NOAA's National Marine Fisheries Service, and numerous coastal county high schools.

With a \$5 million grant from the NC Coastal Federation and NOAA, and in collaboration with UNC-IMS and NC SG, Eggleston is working in Pamlico Sound to couple field measurements of oyster settlement, growth, survival, and egg output, with physical oceanographic modeling that predicts estuarine currents, and biological models that predict larval dispersal and connectivity among a network of no-fishing marine reserves. The data collected will better guide where oyster reefs should be built and at what sizes.

This collaborative project with DMF will determine why some oyster sanctuaries created by DMF are more productive than others. Middle and high school students are enlisted to help monitor oyster settlement in the Pamlico Sound region. Involving youth in a hands-on scientific process not only provides them with the awareness of the importance of the environment around them it also provides much needed data to researchers and the DMF. Eggleston's work also informs fishery management plans for state and federally managed species, as well as research on aquaculture that will aid farmers in diversifying their incomes via blue crab grow-out in fresh-water ponds.

Other collaborative projects include:

- Determining migration corridors of mature female blue crabs to spawning sanctuaries. MEAS, NCSG, and commercial crabbers
- Determining the status of the blue crab fishable stock in NC and the impacts of spawners and storms on population persistence. MEAS, NCSG and DMF

 Assessing the impact of land use and shoreline development on water quality and biological response in tidal creek nursery areas. MEAS and DMF

#### **College of Veterinary Medicine**



Department of Clinical Sciences, Aquatic Animal Health Group

Doctors and researchers representing the College of Veterinary Medicine's Aquatic Animal Health

Group add a unique aspect to CMAST's contribution to the marine science network in Carteret County. Marine animals in Carteret County and beyond – whether wild or captive – reap the benefits of their expertise and research, as does the MSEP partnership itself.

Led by Dr. Craig Harms, Associate Professor in Aquatic, Wildlife, and Zoologic Medicine, the group provides animal health care at all of the NC Aquariums under a contractual agreement, collaborates locally with NOAA's National Marine Fisheries Service on marine mammal and sea turtle investigations, and has temporarily taken the lead role in marine mammal stranding responses in central coastal North Carolina. In addition, the group works with the NC Wildlife Resources Commission on sea turtle health assessments, and provides care for patients in rehabilitation at the nearby, privately-funded Sea Turtle Hospital in Topsail Beach.

Other collaborative research projects include:

- Conducting postmortem investigations of over 400 sea turtles killed in a January 2010 cold stunning event in Florida, collecting valuable life history data, determining frequency of debilitating conditions such as fibropapillomas (a suspected viral induced, tumor-like condition) and injuries from fishery interactions, and collecting samples for multiple research groups. NOAA, CVM and WRC
- Monitoring lionfish movements along the North Carolina coast – surgically implanting live fish with tracking transmitters. NOAA and CVM
- Establishing baseline health parameters of lionfish in their invaded habitats off the North Carolina coast and in captivity.
   CVM, NOAA and the NC Aquariums

#### **CMAST RESEARCH**

## Marine Aquaculture Research Center Opens

In the planning stages since 2007 and after breaking ground in January 2009, the Marine Aquaculture Research Center (MARC) located in Marshallburg in the "down east" area of Carteret County, officially opened on December 12, 2009. Built with funding provided mostly from private donors, the facility includes specialized equipment for saltwater aquaculture research.

This new facility makes possible the increased study of saltwater aquaculture (mariculture), which currently lags behind the freshwater aquaculture industry in terms of research and technology transfer. A unique feature at MARC is a flowing seawater system utilizing a specialized intake bringing water in from a nearby creek, cleans it for laboratory use and then a state-of-the-art water treatment system returns the water into the creek without any environmental impact.

Principal investigators at MARC are Dr. Thomas Losordo, Extension Specialist, Biological and Agricultural Engineering; Dr. Marc Turano, Mariculture and Blue Crab Specialist, NC Sea Grant Program; and Dr. Harry Daniels, Biology Professor and Aquaculture Specialist, NCSU Department of Biology. All will work cooperatively with Dr. James Morris, researcher from the NOAA Beaufort Laboratory, on a variety of projects. Turano will be moving to Carteret County and become resident at CMAST to oversee the day-to-day operations of the facility in addition to his own research. Currently there are two employees and full-time graduate student at MARC from NC State and NOAA.

MARC also adds to the university's teaching capabilities along the coast. Students from the main campus in Raleigh will be able to utilize the facility. Three current projects are the study of (1) new



technology to treat salty effluent from aquaculture, funded by USDA and the NCSG Fisheries Resource Grant (FRG) program; (2) use of soy-based protein in the diets of marine fish; and (3) mariculture of Red Porgy fish.

#### **CMAST OUTREACH**

### Marine Mammal Stranding Volunteer Program Organized

In summer 2009, CMAST became the home to the Marine Mammal Stranding Program supervised by newly appointed coordinator Dr. Vicky Thayer. The project, formerly a program of the National Marine Fisheries Service, is now funded yearly with a Prescott Grant from the federal government.

Thayer and aquatic animal veterinarian Dr. Craig Harms collaborated to form a local network of people to take part in a volunteer program to help with strandings along the coast This volunteer network is similar to stranding networks in other coastal states around the country.

Fourteen people from various institutions, including the NC Maritime Museum, the NC Aquarium at Pine Knoll Shores, Duke University Marine Laboratory, Carteret Community College, local veterinarians and a veterinary technician, all with complementary scientific or medical backgrounds, have joined the group. The team mobilizes and assists as needed when a marine mammal – such as dolphin, whale, porpoise, seal, or manatee – has been reported stranded along the assigned central coastal area from south of Ocracoke to Camp Lejeune.

North Carolina averages 120 marine mammal strandings per year. During a stranding event, the volunteers assist veterinary experts and the coordinator in assessing the animal's condition if still alive, help with moving the animal if possible, and assist with any necropsy performed on site to collect tissue samples needed to determine a cause of death, or to be used for research. The Marine Mammal Protection Act of 1972 organized a system of stranding networks around the country. The goals of the stranding network are to minimize possible threats of stranded animals to human health and safety, minimize pain and suffering of live-stranded animals, derive maximum scientific and educational benefit from stranded marine mammals, and establish a long-time series of data for monitoring marine mammals and their environment.

If you happen upon a stranded, injured or dead marine mammal, contact the coordinator at CMAST in Morehead City at 252-241-5119 or 252-222-6371 for instructions and assistance.



Marine Mammal Stranding Volunteers: L to R front row: Jim Thullen, Brooks, Katie Willis, Caroline Loomis, Coordinator Vicky Thayer, Heather Yonce, John Russell. L to R back row: Maureen Dougherty, Dail Bridges, Michele Lamping, Wayne Justice, Danielle Waples, Dr. Craig Harms - NCSU Veterinary Medicine. Volunteers not pictured: Keith Rittmaster, Meredith Owens, Kristina Cammen.

### Cold-Snap Kills Record Numbers of Sea Turtles

In January 2010, NCSU Veterinary School resident faculty and staff located at CMAST were called on to assist with necropsy studies on nearly 500 sea turtles, products of a large-scale cold stun that killed an estimated 4,000 turtles in Florida. NOAA offices in Beaufort accepted the carcasses to process, which allowed Florida agencies to concentrate on saving as many surviving turtles as possible.

A team of about 30 people were involved in the collaborative effort, not only from NOAA and the Veterinary School, but also from the Wildlife Resources Commission, the NC Aquarium, the Duke University Marine Laboratory (DUML) as well as local volunteers.

Although unfortunate, a large event such as this is an opportunity for researchers to assess the effects of a cold stun, to learn more about turtle health and turtle populations in general, and gather baseline data on sea turtle anatomy. Specimens and samples were sent to a host of laboratories nationally and are being used in a wide-range of research studies.

Veterinarians Dr. Craig Harms, Dr. Eric Anderson, Dr. Tres Clarke, and Dr. Kennedy-Stoskopf, Veterinary Research Assistant Ray Mroch and Marine Mammal Stranding Coordinator, Vicky Thayer, all from CMAST, assisted in the project.

## Science and Education Diver Symposium Held

In February, CMAST collaborated with other university, state and federal agency scientific diving programs to host the first annual Carteret County Scientific Diving Symposium at the NC Aquarium in Pine Knoll Shores. The goal of the meeting was to identify ways to share training, technology, and diving experiences among scientific diving programs, as well as to showcase examples of the various marine research and underwater archaeology programs in North Carolina.

Presentations at the meeting revealed that the NC coast is ranked as one of the top ten dive destinations in the world with an amazing array of cultural underwater resources ranging from Blackbeard's

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ship the Queen Anne's Revenge to German U-boats, particularly the U-352, to a diversity of natural resources such as hard-bottom habitats that host soft and hard corals, to some of the largest concentrations in the world of large pelagic species, such as sand tiger sharks.

There are over 100 certified scientific divers in North Carolina distributed among various marine science programs at universities, as well as state and federal agencies across North Carolina. NC State University has, on average, 12 scientific divers registered each year. There are strict training, medical and certification requirements to conduct scuba diving sanctioned by the American Association of Underwater Scientists. Larry Brown, Director of Aquatics at NC State, serves as Dive Safety Officer for NCSU's Scientific Diving Program and provides necessary training for underwater scientists.

Plans are underway for the second annual meeting. For more information contact Dr. David Eggleston, 252-222-6301, eggleston@ncsu.edu.

## Marine Science History Exhibit Opens

CMAST and the NCSU Seafood Laboratory are being featured in a new exhibit opening in April at the NC Maritime Museum in Beaufort. The exhibit, titled "Science by the Sea," will take a look at the history of marine science-related research along the Crystal Coast. Other facilities included in the display are NOAA's Center for Coastal Habitat and Fisheries Research in Beaufort, Duke University Marine Laboratory, and the UNC Institute of Marine Sciences.

The youngest member on the list of research facilities is the 10-year-old CMAST, whose multiple departments conduct a variety of research projects in the area. The exhibit showcases a timeframe and the persons involved in getting CMAST built to provide research space to many existing NCSU programs.

Also featured in the exhibit is the work of the Seafood Laboratory, whose long history in Carteret County started in the early 1960s. Work of Mariner's Menu author and Seafood Education Specialist Joyce Taylor and the Nutrition Leaders group will also be highlighted.

The exhibit will be on display from April through November 2010.

#### **NCSU AND CMAST NOTES**



## Woodson Named NCSU Chancellor

Dr. William Randolph "Randy" Woodson, executive vice president for academic affairs and provost at Purdue University, has been

named chancellor of North Carolina State University. Dr. Woodson, the 14th chancellor in NC State University history, will assume his duties on April 5, 2010. University of North Carolina President Erskine Bowles announced the appointment January 8 following approval by the UNC Board of Governors. Woodson succeeds Dr. James Woodward, who has served as interim chancellor since Dr. James L. Oblinger resigned in June 2009.

#### **Green Named IFT Fellow**



Dr. David Green, Professor and Department Extension Leader in Food, Bioprocessing and Nutrition Sciences at NC State University and Director of the Seafood Laboratory at CMAST was named as an IFT Fellow by the

Institute of Food Technologists.

The IFT Fellow designation is a high honor recognizing exemplary professionalism in the field of food science. The honor is bestowed on an IFT member by their peers and is limited to no more than 0.3 percent of the professional members in a given year. Green will be formally recognized at the 2010 IFT Annual Meeting and Food Expo in Chicago, Illinois on July 17-20.

Green received his B.S. degree from Davidson College in 1976, M.S. degree from East Carolina University in 1980 and Ph.D. from NC State University in 1989. He joined the Department of Food, Bioprocessing and Nutrition Sciences faculty in 1986 and served as CMAST director from 1999 to 2006.

#### **Puckett Receives Award**

Brandon Puckett, Ph.D. candidate in Marine, Earth, and Atmospheric Sciences (MEAS) at NC State University's Center for Marine Sciences and Technology (CMAST), received a Student Presentation Award at the 39th annual Benthic Ecology Meeting for his presentation titled: "Several large or several (more) small: designing marine reserve networks for oyster restoration."

Puckett's presentation was co-authored by

his advisor, Dr. David Eggleston (Professor in MEAS and Director of CMAST). Since its beginning in 1972, the Benthic Ecology Meeting has grown to become one of the largest annual meetings of marine ecologists in the world. The 2010 Benthic Ecology Meeting, held in Wilmington, NC from March 10-13, had over 700 attendees and more than 160 student presentations.

#### **CVM Professors Featured**



Drs. Michael Stoskopf and Suzanne Kennedy-Stoskopf, professors of wildlife health at NC State's College of Veterinary Medicine (CVM) and part of the CMAST faculty, were the featured speakers at the NCSU Library's Fabulous Faculty Program on March 3. They presented an overview of their 30 years working together and their impact on the health of wild animals.

The Stoskopf's presentation video is available to view online at http://media.lib.ncsu.edu/libVideo/view/431/

#### **Blickley Earns Doctorate**

Michelle Blickley will receive her Ph.D. in Environment, majoring in toxicology, from Duke University in May. Her research, titled "Toxicological effects of Engineered Nanoparticles, Quantum Dots, in Estuarine Fish," was conducted at CMAST under the direction of co-advisors Dr. Patricia McClellan-Green of NC State University and Dr. Dan Rittschof of the Duke University Marine Laboratory.

Michelle has received a National Research Council Postdoctoral Fellowship from he National Institute of Standards and Technology. She will be moving to Baltimore to work with NIST and the University of Maryland Center of Marine Biotechnology.

#### Averett Heading to Alaska

Tyler Averett, Field Technician in Dr. Jeff Buckel's Biology lab, is leaving CMAST for a six-month contract position in Alaska as a Groundfish Observer, part of the federally-required NOAA Fisheries Monitoring and Analysis program. Averett will train in Anchorage and then be deployed from Dutch Harbor onboard a commercial fishing vessel.