It is amazing how quickly a month can go by. It seems like last week that I saw so many of you at the Long Island Sound Educators Conference. We had a great day at The Maritime Aquarium with many interesting workshops. Thank you to all who organized and participated in this event. Our keynote speaker, Dr. Kevin McBride from the University of Connecticut, shared his research on “The Cultural Ecology and Native History of Long Island Sound.” It was interesting to learn about the different technologies used to identify artifacts from Southern New England’s submerged coastline. I can imagine that it is both challenging and exciting to piece together how Native Americans used the resources from Long Island Sound. Dr. McBride has generously provided a copy of his keynote speech for you to download. You can find it on SENEME’s website.

While a month has gone by fast for me, I know time is relative and I imagine in the Gulf of Mexico this month has been agonizing. I remember mentioning the spill during my opening remarks and commenting on how this is not just a problem on a far off coast. We have had oil spills, although on a smaller scale, in CT and RI. However, I had no idea that, even at the time this newsletter goes to printing, the oil would still be flowing. This human tragedy in both the loss of life and the ecological impact is unfolding every day. The news is full of updates, expert opinion, human interest stories, and photos of wildlife.

As an educator, there are so many teachable moments no matter what subject you teach. Personally, I feel equal parts sad and frustrated that this oil spill occurred. It can be sometimes easier to turn off the TV or click onto another website than look at oil approaching the beautiful salt marshes of the Gulf Coast. However, hiding from this reality does not help my students or my environment. So I will use my remaining time this school year to discuss the Deep Horizon Oil Spill, and I hope to provide my students with some empowerment that these environmental problems do not have to be repeated.

Let’s hope that we all learn from this event, take action to save what we can and prevent future oil spills from occurring. It will be interesting to see how it will all play out. I hope that by the time you read this that the oil stops flowing and the cleanup is in full swing. Have a wonderful summer - may you find time to relax, enjoy nature and learn something new.

Amy Ferland
SENEME President
The Nauplius

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Nauplius Notations

By Donna Dione, Editor

Well, I’ve been able to pull off the Editor gig for a few years now, but I’ve recently learned I have no hope for a future as the staff photographer.

It probably didn’t help that my digital camera was a dinosaur in the digital world. It was finally to the point that I had to wait about 5 minutes between taking each picture. And there was no guarantee that the camera was actually taking a picture even if it made a nice buzzing noise with a fancy flash. Learned that the hard way when the picture I took of Bridgeport Aquaculture students presenting at the LISEC wasn’t on my camera when I got home. Luckily, they were able to email me an even better shot of themselves which you will find later in this issue.

Then it was off to Oceans A La Carte at the end of May, and I was really diligent about double-checking to make sure pictures were being recorded. However, nature intervened (or was it a voodoo curse from Mary Ann Scholl so her picture wouldn’t be in the newsletter), and my camera took a swim that evening as I was participating in a Horseshoe Crab Tagging Training for my job at Bauer Park. I guess if you’re a marine educator, and you have to destroy your camera, that’s the way to go.

Needless to say, it’s pretty obvious, I should cut my losses and relinquish the photography duties to those who actually know what they are doing. So if anyone out there ever takes pictures at a SENEME event, please save me from myself!

SENEME Organizational Members

Mystic Aquarium & Institute for Exploration
Project Oceanology
Soundwaters
URI Office of Marine Programs

Thank you for your support!!

SENEME LIFE MEMBERS
2002 Find Pedersen
2003 Mickey Weiss
2004 Thaxter Tewksbury
2005 Ralph Yulo
2006 Elizabeth Gibbs

MARINE EDUCATOR OF THE YEAR
2005 Lance Arnold
2006 Matt Schardt
2010 SENEME Fall Conference and Annual Meeting  
Saturday, October 16, 2010  
Project Oceanology  
Groton, CT  

Workshops, Field Programs, Silent Auction and more!  

There are openings for Presenters and Exhibitors. Visit the SENEME website, www.SENEME.org, later this summer for the application form.  

Contact Lauren Rader at 860-445-9007 for more information on Presenting or Registration. Contact Diana Payne at diana.payne@uconn.edu if you have an item to donate to the Auction.  

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FROM THE BOARD ROOM....  

Would you like to recognize a fellow SENEME member for their contribution to marine and aquatic science education? Nominations are being accepted for the awards below. Further information can be found at http://www.seneme.org/SENEMEAWARDS.htm.  

SENEME Marine Educator of the Year: For effective and innovative teaching, and/or distinguished performance by either a classroom teacher or professionals who are not classroom teachers. This nomination requires completion of a nomination form and a letter of recommendation from at least one active SENEME member. Recipient receives one-year membership to SENEME and registration to the annual Fall Conference.  

SENEME Life Member: Life membership is the highest recognition the Association offers and is reserved for those individuals who have demonstrated a distinguished career in teaching, research or service in marine education. This nomination requires completion of a nomination form and letters of recommendation from at least three active SENEME members. The Awards Committee will present its recommendation to the SENEME Board for consideration. Upon endorsement by the majority of the Board, the successful nominee shall be declared a Life Member and will receive lifetime membership in SENEME.  

WINNERS OF SENEME SCIENCE FAIR AWARDS  

This spring, SENEME presented awards to students at the Rhode Island and Connecticut State Science Fairs. There were two winners (individuals or teams) from each state with all four receiving a prize of $75, a SENEME T-shirt and a one-year SENEME membership. The Connecticut winners were William S. Dixon of Amity Regional High School who won the Senior Award for his exhibit, “Temperature Tolerance Range for Larval Styela clava” and Dominique S. Pierce & Doyinsade A. Awodele from Park City Prep Charter School who won the Junior Award for their project, “Dissolved Oxygen Affecting Water Quality.” In Rhode Island, the Senior Award went to Nathan Andrews of Bishop Hendricken High School for his project, “Does the Airport’s De-Icing Affect Water Quality?” and Sara Kourtesis of St. Mary’s Academy Bay View won the Junior Award for her exhibit, “Conservation Solution for Commercial Fisheries.”  

(Editor’s Note: Any winners are welcome to send in their pictures for publication in the Fall Issue.)  

Congratulations to all the winners!!
Fascinating Jellyfish

Fall conference keynote speaker Barbara Sullivan, an associate marine scientist at the University of Rhode Island, brought a wealth of information and ideas about the subject of her research – jellyfish. Here are a few facts that she presented about these fascinating animals.

Non-stinging – or comb jellies, Phylum Ctenophora (pronounced teenofo-ra)

- Comb jellies are common in Narragansett Bay and other coastal waters in New England every year during either spring or fall. They often go unnoticed because they are so clear they can be hard to see, and because they do not sting.
- They are found all over the world’s oceans, from the North Pole to the South Pole.
- They swim by beating many little “combs” whose teeth are flexible paddles. These teeth are cilia, the largest cilia in the animal kingdom.
- They are bioluminescent. This means they light up at night (or in the dark) like fireflies giving off a blue-green light if disturbed or touched.
- They do not sting their prey – instead, they use sticky surfaces (much like flypaper) to trap prey. Their prey are mostly copepods (tiny shrimp-like animals).
- They reproduce by laying eggs formed underneath the combs. The same individual is both male and female.
- Most live for less that one year, but some live through the winter.
- They are the food of some fish we like to eat, such as butterfish.

Stinging jellyfish, Phylum Cnideria

- The phylum Cnideria is the group of all animals that have stinging cells (nematocysts) and includes corals, anemones, hydra, etc. The largest jellyfish are in the polar seas, where they can grow to be seven feet in diameter, with 120-foot long tentacles, and they can have as many as 800 tentacles. With about 250 stinging cells per 0.625 square millimeters, this makes a great math problem for counting total number of stingers! The most poisonous jellyfish is the Australian box jelly (a cubomedusa) – responsible for more deaths than sharks.
- Many jellyfish “glow in the dark” (are bioluminescent). No one knows why they do this. There are many hypotheses, but none has yet been proven correct by experiments.
- There are separate male and female jellyfish – unlike comb jellies.
- What is a jellyfish made of? Jello is a really good analogy (polysaccharide + protein fibers) – they really are like sugarless Jello – 96 percent water, plus a little carbon and nitrogen (1 percent). Then add salt – 3 percent!
- Over 150 years ago, scientists debated about whether the polyp stage of the jellyfish life cycle was a plant or an animal. No one knew it became a jellyfish.
- Portuguese men-of-war belong to the phylum Cnideria, but are not typical jellyfish because they are colonies of animals with so many stinging cells they can kill a human. The cells are also larger than those on other jellyfish.

- Sting treatment:
  a) Flush with salt water
  b) Rub with baking soda
  c) Vinegar & meat tenderizer may help
  d) If allergic, carry a bee sting kit
News from NMEA: Looking to the Future
By Lauren Rader, SENEME Chapter Representative to NMEA

Upcoming Events: The NMEA National Conference, *Mountains to the Sea*, will be held in Gatlinburg, TN from July 17 - 23, 2010. Guest lecturers will include Dr. Eugenie Clark and Dr. George Benz, a CT native and UCONN alumni. For more information, visit the conference website: www.nmeaweb.org/gatlinburg2010.

The 2010 National Ocean Sciences Bowl® - Living on the Ocean Planet Video Contest was held earlier this year. Videos from teams across New England were judged against each other and the winning regional video was judged against regional winners from across the country. The Northeast regional winning video was submitted by ConVal Regional High School in Peterborough, NH. Narragansett High School in Rhode Island received a Participation Award. You can see all the videos by going to: http://www.youtube.com/user/OceanLeadership#g/c/1F0AA686AA2B92C7

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ELECTION!!  ELECTION!!

The SENEME Election of Officers will be on October 16, 2010 at the SENEME Annual Meeting to be held at Project Oceanology in Groton, CT. We are seeking nominations of those who are interested in joining the SENEME Board as an officer.

The SENEME Nominating Committee is currently accepting nominations for the offices of President-Elect (3-year term: 1 year as President-Elect, 1 year as President and 1 year as Past President), Recording Secretary (2-year term), Treasurer (2-year term) and Chapter Representative (1-year term).

Nominations must be received no later than August 15, 2010. Send nominations to the SENEME Nominating Committee, c/o Katrina Barrett, Mystic Aquarium & Institute for Exploration, 55 Coogan Blvd., Mystic, CT 06355-1997 or e-mail tbarrett@mysticaquarium.org.

Ballots will be mailed to all members in September. For further information, contact Katrina Barrett via the above e-mail or at 860-572-5955 ext. 205.

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Announcing the
2011 Narragansett Bay Tide Calendar
"Cover Shot" Digital Photo Contest

The Narragansett Bay Research Reserve invites photographers of at least 13 years of age to enter the Narragansett Bay Research Reserve's 2011 Tide Calendar "Cover Shot" Digital Photo Contest. The winning photograph will appear on the cover of our 2011 Bay Tide Calendar.

Submitted photos should show striking images of Narragansett Bay with a focus on its beauty and biodiversity. Images may include landscapes, portraits of wildlife above or below the water, plant life or people interacting with the Bay.

Submissions are due by July 31, 2010.

The photos will be judged and the winner announced by August 27, 2010 and the Top 3 images will be displayed on our website: www.nbnerr.org. Go to: www.nbnerr.org/contest.htm for more information and directions on how to enter your digital photographs in the contest.
LONG ISLAND SOUND EDUCATORS CONFERENCE

Above: Left to right - Jessica Rubin, Gerald Ramos, Rasheeda Woods & Mr. Kirk Shadle from Bridgeport, and the projects they presented at LISEC.

To the left: James Stewart presents at the LISEC

Below: Conference attendees contemplate some marsh metaphors.

Photographs courtesy of Kirk Shadle, Donna Dione, Dominique Pierce, Diana Payne & Andrea Kecskes
**SENEME AT LARGE!**

**Top:** Dominique Pierce of Park City Prep in Bridgeport won a SENEME Award at the CT Science Fair.

**Bottom left:** 2010 Quahog Bowl winning team at Nationals in Petersburg, FL—Will Accetta, Coach Steve Krous, Meaghan Sullivan, Dylan Cahir, Pasha Sadikov, Alexa Choy

**Bottom right:** Lauren Rader and Diana Payne (both far left) lead a sand card activity for SENEME at the NMEA Share-a-thon.
Cranston High School-West Wins 2010 Quahog Bowl and Attends Nationals

By Diana Payne, CT-RI Regional Co-Coordinator, Connecticut Sea Grant

On Saturday, February 6, sixteen teams from Connecticut and Rhode Island participated in the 2010 Quahog Bowl at the University of Connecticut’s Avery Point campus in Groton. The Quahog Bowl is one of 25 regional competitions of the National Ocean Sciences Bowl (NOSB) taking place across the country each February and March. The inaugural NOSB was held in 1998 in conjunction with the International Year of the Ocean. The competition is intended to increase knowledge and awareness of ocean and aquatic systems for high school students, their teachers and parents. The NOSB also strives to raise the visibility and public understanding of the national investment in ocean-related research. The competition is a round-robin/double-elimination format for teams of high school students consisting of four students, one alternate and a coach. The format involves a timed competition of multiple-choice, short-answer and team challenge questions within the broad category of the oceans/water. Questions are drawn from the scientific disciplines (e.g., physics, chemistry, geology, atmospheric science, biology) as well as technology, economics, history and policy as related to ocean/water topics.

Schools participating in the 2010 Quahog Bowl included Bacon Academy, Classical, Cranston East, Ledyard, Narragansett, North Kingstown, Plainville, Rocky Hill (RI), Southington, Staples, and Woodstock Academy. This year, the Quahog Bowl welcomed two new teams - Glastonbury and Norwich Free Academy! Following twelve rounds of exciting competition, Cranston High School West emerged from double elimination ahead of Coginchaug Regional (RD #13) and Waterford High Schools. Prizes were awarded for Sportsmanship (Coginchaug) and performance in the Team Challenge Questions (Ledyard). In addition to the popular post-competition raffle for team members, this year included a raffle for the coaches, as a past Quahog Bowl participant donated several ZeeCraft buzzer systems, similar to those used in the competition. Congratulations to all teams on an outstanding day, and a special thank you to our amazing volunteers, sponsors, and donors!

As a result of their Quahog Bowl victory, Cranston West represented the CT-RI region at the national competition in St. Petersburg, Florida on April 24-25. Following random placement of five teams per division, the top three teams from the 2009 NOSB finals (including Cranston West) were in the same round robin (RR) division. Cranston West went into the RR matches with the right attitude - “it doesn’t matter who we play” and “one question at a time.” Successful in the first two rounds, they had a bye prior to the morning break. They were defeated in the final two RR matches prior to lunch, but made it into double elimination (DE) as the #12 seed. Cranston West won their first match in DE, and I was fortunate enough to be the timekeeper in the competition room. It was the only match Cranston West participated in that I was able to witness, although I kept my head down, focused on the clocks, and did not look at them....and was harassed about THAT for the rest of the weekend! The team lost the next match by 3 points, and their final match went into a tiebreak before they were defeated. Coach Steve Krous and the Cranston West team represented our region well. Please join me in congratulating them on a fine showing at nationals!

In order for a regional or national competition to run smoothly, considerable preparation and support is necessary. More than 100 volunteers are needed to serve as moderators, science judges, rules judges, timekeepers, scorekeepers, and runners. Donations are solicited from many entities and include food services, chocolate quahog pops, pens, pencils, bags, mugs, and monetary support. At the conclusion of the competition, awards are presented, coaches receive gifts, and items are raffled off to participating team members. Donations to help defray the cost of the competition are ALWAYS welcome.

The 2011 CT-RI regional will again be hosted by the Avery Point campus of the University of Connecticut on Saturday, February 5. The event is co-sponsored by Connecticut Sea Grant and Project Oceanology with support from the Consortium for Ocean Leadership and the University of Connecticut-Avery Point. Additional sponsors have included Mystic Aquarium & Institute for Exploration, Mystic Seaport - the Museum of America and the Sea, Williams-Mystic Program, Dominion’s Millstone Power Station, Ocean Classroom Foundation, the University of Rhode Island Office of Marine Programs, West Marine of Mystic, Swooer’s Chocolates, SENEME, Starbucks, and NMEA. To participate as a coach/team, as a volunteer, or contribute in-kind or monetary donations, please contact Diana Payne at diana.payne@uconn.edu.
“How Do We Explore?”

*Okeanos Explorer* Online Teacher Professional Development Series, Offering #3

**Date:** October 11 - 29, 2010

This three-week online professional development offering will introduce participants to the new Education Materials Collection for the NOAA Ship *Okeanos Explorer*, the first Federal ship dedicated to ocean exploration. Entitled “How Do We Explore?,” this offering has been designed to include a keynote address by Captain Joseph Pica, Captain of the *Okeanos Explorer*, and topic introductions by key scientists working in specific areas of ocean exploration. Topics will include searching for anomalies, selecting sites for exploration, communication tools including telepresence technology, mapping techniques, water column study and operating remotely operated vehicles. This course will include inquiry-based lessons for all grade-levels, and facilitated online reflective conversations about how we approach the study of our largely unexplored ocean.

Participants will include formal and informal educators, ocean explorers, scientists, and other interested members of the public. Opportunities to engage with ocean explorers and other participants will be provided. The "How Do We Explore?" Leader's Guide and its associated lessons, a wealth of other supporting resources, and optional graduate credit are also provided.

Scientific presenters will include:

- **CDR Joseph Pica**  
  Commanding Officer, NOAA Ship *Okeanos Explorer*

- **Webb Pinner**, Systems Engineer, *Okeanos Explorer* Program  
  NOAA Office of Ocean Exploration and Research

- **Elizabeth (Meme) Lobecker**  
  Physical Scientist, NOAA *Okeanos Explorer* Program  
  NOAA Office of Ocean Exploration and Research

- **Dave Lavolvo**  
  Founder/owner, Eastern Oceanics  
  Adjunct professor, Institute for Exploration  
  ROV Team Lead, NOAA *Okeanos Explorer*

The workshop is free for all participants and will be available 24 hours a day, 7 days a week. Educators will have the option to receive one graduate credit ($90) or obtain a certificate of completion.

Registration information will be posted on the College of Exploration web site in July 2010 at [www.coexploration.org/oe](http://www.coexploration.org/oe)
Mystic Aquarium & Institute for Exploration

Not Just Another Day at the Beach
Family Conservation Series       July 24, 2010       9:30 am - 12:30 pm
Working with Aquarium staff, you will participate in population and water sampling activities to discover the unique relationships found within Long Island Sound. For more information, visit www.mysticaquarium.org or call 860-572-5955 ext 520.

Mystic Aquarium Summer Camps
What do young explorers, animal and nature lovers, and budding marine biologists have in common? They can all find a summer camp to suit their interests at Mystic Aquarium. Offered June through August, our camps offer hands-on activities, up-close animal encounters, field trips and other fun and educational experiences for children ages 4 to 16. For younger children, the aquarium offers day camps, while older kids have the opportunity to participate in overnight programs. For more information, visit www.mysticaquarium.org or call 860-572-5955 ext 520.

University of Rhode Island

Free Historic South Ferry Walking Tour
Relive the history of a once-thriving village, which became a military outpost, on Narragansett Bay with family and friends, by taking a South Ferry Walking Tour. You are welcome to join the 90-minute interpretive walk on Wednesday, July 21, 2010. The program will start from the Coastal Institute Visitor Center on the URI Narragansett Bay Campus at 10:30 am and will end at 12:00 pm.

Led by volunteers Wayne and Bernice Durfee of Narragansett, the program will guide participants through the historic sites at South Ferry, including the old ferry landing, the WWI military bunkers, and the campus of the URI Graduate School of Oceanography.

A second South Ferry Walking Tour will take place on Wednesday, August 4, 2010 also beginning at 10:30 am and ending at 12:00 pm.

In addition, participants can visit the Coastal Institute Bookstore, which will be open until 2:00 pm during the day of the walk. The South Ferry Walking Tour is open to the public. Pre-registration is not required. For information or directions call the URI Office of Marine Programs at 401-874-6211 or visit our website at: http://omp.gso.uri.edu

Free Family Beachcombing Program
Join University of Rhode Island Marine Outreach Scientists on a summer day at low tide for a two-hour beach exploration experience. We will be exploring the shoreline of Fort Getty, one of Rhode Island's unique coastal beaches. This program gives young people a special chance to have their questions answered about the plants, animals, and minerals found on the beach.

The dates for beachcombing are as follows: Saturday, July 10, 2010 from 11:30 am -1:30 pm and Saturday, August 7, 2010 from 11:00 am - 12:00 pm.

These beachcombing events are free and open to the public.
Pre-registration is required. To register, please call the Office of Marine Programs at 401-874-6211. Groups meet at the Fort Getty beach pavilion, and all children MUST be accompanied by an adult.

For those of you looking for lesson plans and educational materials on oil spills, be sure to check out the Bridge's resources: http://www2.vims.edu/bridge/search/bridge1output_menu.cfm?q=spill.
SENEME MEMBERSHIP APPLICATION

Name: ____________________________________________________________

Affiliation: ________________________________________________________

School/Business Address: _____________________________________________
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                      _____________________________________________
                      City, State, Zip Code

Home Address: _______________________________________________________
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Send SENEME mailings to: (Please Check One): ______ Home Address ______ Work Address

Home Phone: ___________________________   Work Phone: ___________________________

E-mail Address: ______________________________________________________

Are you a member of the SENEME Listserv?  YES___NO ___
   If NO would you like to become a member of the SENEME Listserv?   YES___NO ___
   Would you like to have your SENEME newsletter emailed to you?   YES___NO ___

Membership Category (Please Check One):

_____ Active Member (1 Year $15)
_____ Active Member (2 Years $25)
_____ Active Member (3 Years $35)
_____ Organizational Memberships (Non-Profits Only $100)
_____ Corporate Membership (1 Year $250)

Total Enclosed: ____________
Please return form with checks payable to SENEME.

Mail to: SENEME, c/o Julie P. Ainsworth, 31 Green Springs Dr., Madison, CT  06443
DATES TO REMEMBER

July 19 - 23, 2010 - NMEA 2010, Gatlinburg, TN

October 16, 2010 - SENEME Fall Conference and Annual Meeting, Project Oceanology, Groton, CT

NMEA 2011
“Cape to Cape: In the Hub of Marine Education”
June 29 - July 3, 2011
Northeastern University
Boston, Massachusetts

Has your SENEME Membership Expired? Check your mailing label, and if your membership has expired or soon will, please consider renewing using the form in this newsletter. Thank you!