



The Nauplius

www.seneme.org

Volume XXII

Winter 2011
Number 2

Letter from the President

As I sat down to start writing this letter, not really sure what I was going to write, I did something we all usually do - procrastinate just a bit by checking our email. Little did I know that one email would instantly change everything...Dr. Richard Cooper had passed away.

For those of you that don't know me very well, my love affair with the ocean and marine science started when I was just a small kid, going to the Mystic Aquarium with my family and fishing with my mom. As I got older and entered Junior High School, I applied for a space in Project Oceanology's Summer Marine Studies Program, partly because I thought it sounded fun, but mostly to annoy my older brother, because he was not accepted when he applied. How do you know when your life is about to change and a whole new path has opened up before you? When you go to sleep every night thinking "what a great day I had today" and can't wait to get back doing it again the next.

So, my first real foray into marine science was with Project O, and those of you who do know me well, know that I have never strayed far from this path. Any thoughts I may have had about doing something else with my life vanished when I was a sophomore in high school, when I heard about a new program that was being started with the National Undersea Research Center at UCONN's Avery Point Campus. They called it the High School Aquanaut Program, and I couldn't believe when I read on the flier that they were going to give high school students....KIDS...the opportunity to dive in research submersibles! The next thing I knew, I was on a big blue boat out in Massachusetts Bay and diving down to the bottom of Stellwagen Bank on the *Delta* Submersible. There were so many of us out there that day, I think we might still hold the record for most recorded dives in a day. The visionary behind this opportunity was Dr. Richard Cooper. It was his belief that the wonders of deep-sea ocean exploration could and should be shared with students.

The next year came and the Aquanaut Program was divided into two tracks...one for rookies - diving on the *Delta* and one for us veterans - diving on the *Johnson Sea-Link*. A bit of background information - the *Delta* is the epitome of the Beatles Yellow Submarine. In contrast, the *Johnson Sea Link* is something out of a science fiction film, with an 8' diameter plexiglass sphere forward area and a diver lockout aft. It has suction arms and a holding system for specimens and cameras all over the place. The *R/V Seward Johnson* was like a Mercedes Benz compared to the Ford Escort tender for *Delta*. Again, we were back on Stellwagen Bank, but the view from the scientist seat up front was amazing. I was mesmerized like everyone before me as we descended down through the marine snow.

CONTINUED ON PAGE 3



In this Edition:

Nauplius Notations	2
NMEA 2011	3
Sea Monkeys in your Classroom	4
OKEANOS Explorer.....	5
Nauplius Nostalgia.....	6
Quahog Bowl	7
Bulletin Board/Announcements.....	8-10
Membership Application.....	11
Dates to Remember	12

SENAME Board of Directors & Committee Members 2010-2011

President and Chapter Representative
Lauren Rader, Project Oceanology

President-Elect
Andrea Gingras, URI Office of Marine Programs

Past-President
Amy Ferland, Greenwich High School

Treasurer
Julie Ainsworth, Bauer Park

Membership Secretary
Clive Tucceri, East Hampton Middle School

Recording Secretary
Kelly Matis, Mystic Aquarium & IFE

Members-At-Large
Katrina Barrett, Mystic Aquarium & IFE
Jenna Carlson, Greenwich High School
Lorrie Martin, Coginchaug High School
Diana Payne, Connecticut Sea Grant
Maryann Scholl, URI Office of Marine Programs
Thaxter Tewksbury, Project Oceanology

Newsletter Editor
Donna Dione, Bauer Park

Editorial Assistants
Julie Ainsworth
Katrina Barrett

Webmaster
Jenna Carlson

Development Committee
Chair - Vacant
Ian Gibson
Kathy Howard
Maryann Scholl

Membership & Public Relations Committee
Jenna Carlson, Chair
Joann Tammaro
Linda Livolsi

Nominating Committee
Amy Ferland, Chair
Katrina Barrett

Scholarships & Awards Committee
Lauren Rader & Amy Ferland, Co-Chairs

Nauplius Notations

By Donna Dione, Editor



Okay, so I'm probably one of a rare few who's actually enjoying the fact that we are having a real New England winter. Although, when the kids are home on yet another snow day, or I have to go out and shovel a 500 foot path to find my car at the bottom of the hill, I do sometimes question my sanity.

However, if you are craving some sun, you can take advantage of the tropical opportunities listed in this newsletter, or you can hang out with some fellow SENEME members at NSTA in San Francisco. If you go, do not miss the NMEA Share-a-thon and gather some great teaching ideas.

If California, the Keys or the Gulf aren't quite in the budget, then drink some hot chocolate and hold out a few more months. Before you know it, summer will be here and so will the 2011 NMEA Conference in Boston! If you have never been to a National Conference, I highly recommend taking advantage of this opportunity so close to home. NMEA Conferences are a blast, and a great place to meet marine educators from all over the world. Plus, it'll be fun to see if there's any snow piles left around Boston in July!

SENAME Organizational Members

*Mystic Aquarium & Institute for
Exploration*

Project Oceanology

Save the Bay

URI Office of Marine Programs

Thank you for your support!!

SENAME LIFE MEMBERS

2002 Find Pedersen

2003 Mickey Weiss

2004 Thaxter Tewksbury

2005 Ralph Yulo

2006 Elizabeth Gibbs

2010 Katrina Barrett

MARINE EDUCATOR OF THE YEAR

2005 Lance Arnold

2006 Matt Schardt

2010 Vicky Sawyer

PRESIDENT'S LETTER - CONTINUED FROM PAGE 1

My senior year, I was asked by Dr. Cooper to participate in an actual research cruise. I spent about 12 days aboard the *R/V Seward Johnson* and was able to dive down 1500 feet to the bottom of the 106 mile Dump Site of the New York Bight on the *Johnson Sea-Link*. While at sea, I was responsible for standing a watch with the other crew, I assisted with specimen preparation and data collection, I was taught the rudiments of celestial navigation by the Captain, and I spent my Senior Prom dancing with the entire crew under the red watch lights of the pilothouse.

Although he probably thought of himself as first and foremost a researcher, Dr. Cooper's foresight to open up the deep sea to students was spot on with some of the best in teaching pedagogy....Tell me and I'll forget, Show me and I'll remember, Involve me and I will understand. It is one of the guiding principles that we believe in here at Project Oceanology, at the Mystic Aquarium, at the InnerSpace Center in Rhode Island and many of the other formal and informal education venues within SENEME. Providing access to students and teachers to Be Involved, so that they can understand.

Twenty years later, I have been truly fortunate to be involved with marine science in my life, and it has been the people I have met along the way - my teachers - that have guided me to where I am today. Next to our parents - it is the teachers in our lives that have the biggest influence on us. And that is why what you do, what we do, everyday is so important!



**NMEA 2011:
Cape to Cape: In the Hub of Marine Education
June 29 - July 3, 2011
Northeastern University**

The Conference begins Wednesday, June 29th, with field trips to a variety of cultural and marine science facilities and sites, followed by an evening welcome reception. Thursday starts with the Buddy Breakfast for new and seasoned conference attendees followed by a day of concurrent sessions. Thursday evening everyone will step aboard Boston's Duck Boats for a tour of the city, both on land and in the water, ending outside the New England Aquarium. Grab dinner on your own from the various restaurants found near the Aquarium, including the famous Quincy Market and Faneuil Hall. After dinner join us at the Aquarium for dessert and open access to the exhibits. Friday is a day full of concurrent sessions. In the evening, attendees will be bused to ferries that bring us out to Thompson Island in Boston Harbor for a traditional clambake, jazz, and the best views of Boston Harbor. Saturday is the third and final day of concurrent sessions. Saturday night is the silent and live auction (make sure to bring your checkbooks) and dancing. Sunday join your colleagues for one final breakfast gathering before the conference officially ends.

Make sure you consider extending your option to stay in the Northeastern dorms through the holiday weekend. Enjoy one of the best Independence Day celebrations in the country and be within walking distance or a short T ride of many of the main events!

**Registration is now open! Register by April 15, 2011 for the Early Bird Rate.
Visit: <http://www.massmarineeducators.org/NMEA2011/> for more information.**

CLIMB AND CONNECT WITH SEA MONKEYS IN YOUR CLASSROOM

By Lorrie Martin, Oceanography Teacher, Coginchaug Regional High School

Picture a dozen Senior Oceanography students racing eagerly into your classroom at 7:25 am each morning - does this group “really” include the very same couple of adolescents who were catnapping on their desks as I discussed the Indonesian tsunami that ravaged 13 countries? But NO, I am not dreaming. My students really are crowding the windowsill to feed and check on their tiny individual cultures of brine shrimp (*Artemia* or “Sea Monkeys” as they are commonly known to children who purchase their eggs in toy stores).

Coginchaug High School’s “love affair” with brine shrimp began over a year ago with the arrival of our captive bred yellow Brazilian seahorses (*Hippocampus reidi*). Anxious to supplement the seahorse’s standard food supply of expensive mysid shrimp with a more “affordable” arthropod, we began encouraging individual student projects which included brine shrimp culture. More importantly, we were looking forward to breeding our seahorses, and it is not unusual for the *H. reidi* male to “give birth” to up to 1500 little fry every couple of weeks....now that’s a lot of mouths to feed! And yes, it just so happens that as the fry grow, brine shrimp nauplii and then later “enriched” brine shrimp which have grazed on phytoplankton become the menu items of choice. We desperately needed to become reliable, big-time producers of *Artemia*!

Yes, it is easy to pour the package of Sally’s salt and brine shrimp eggs into a soda bottle hatchery, and within a matter of 48 hours, you have literally 1000’s of barely visible tiny jerking nauplii in your tank. It seems so elementary at first, but then came the subsequent months of questions and science. Why did the “1000’s” always mysteriously trim down to just a “few” in such a short period of time, when the following summer, six lone, forgotten shrimp on the windowsill survived until September without a single feeding? What should we feed them, how much and how often? If these shrimp are really so hard to grow to adulthood, why can I go into most any tropical fish store and purchase hundreds of live ones for \$1.95?

As simple as our project in brine shrimp raising was, rarely have I felt such a part of real life scientific research. Slowly, students and teachers alike would occasionally make “breakthrough discoveries” about our tiny corrals of livestock. At one point, I even invested \$30 and followed detailed instructions on how to construct a fail-proof elaborate hatchery only to have greater success with a soda bottle. Ultimately, our students began answering some of “the questions”. Our first major success came when we began feeding a solution of dry yeast in water (1 gram/100 ml) which we kept refrigerated. The secret was feeding enough to discourage “cannibalism” but not too much so as to foul the tank. Finally, our zoology teacher was maintaining a tank full of shrimp that we could draw upon.

Two months ago, I distributed a test tube with five brine shrimp to each of my thirty Oceanography students. I initially passed out a basic sheet of information, but ultimately left each student to make their own decisions regarding location (windowsill or countertop), aeration or not, container size, frequency of water change and foods. Each class period, I brought out the yeast solution, dry yeast powder, an advertised *Artemia* food which looked like a dry powdered algae and finally a bottle of DT live phytoplankton mix obtained from the tropical fish store. Some students even mixed their own feeding recipes with egg yolk and algae solutions left on the windowsill. I initially placed the shrimp in salt water mixed to a specific gravity of 1.025 as tested with a basic plastic aquarium hydrometer, and always kept a bucket of that water available to all who wished to clean up their shrimps’ living quarters. Each student was issued a JOURNAL listing the days till the end of the semester on which they recorded daily notes and observations (also holiday instructions, as I “shrimp-sat” per student requests during the Thanksgiving and Christmas vacations)

Students “earned” two points for each day they kept their culture alive and “lost” three points when all had died (though I allowed for restocking the first few weeks as students “honed their nurturing skills”). The past couple months with our brine cultures have been punctuated by mating, pregnancies, births, “grandshrimp”, deaths, questions, discoveries, connections, and always more questions. Why are Jeremy’s shrimp reddish, “buff”, active and always “with egg”? Why are Will’s still alive when he refused to feed them? Why did Amy’s die after she changed the water?

What a WONDERFUL activity - inexpensive, and full of observations, actions and consequences. It is entirely appropriate for children or adults of all ages - an opportunity to connect with a tiny creature and its habitat. The cultures of twelve of my thirty students survived the semester - some have even begged to take their brine shrimp home. And yes, my students and I have climbed along with our “sea monkeys” to greater heights of ocean literacy - making clearer connections between our organisms and environmental factors and certainly gaining in appreciation for the art and practice of “science”.

The NOAA Ship *Okeanos Explorer* Education Materials Collection For Grades 5-12

Volume 1: Why Do We Explore?

From the National Oceanic and Atmospheric Administration (NOAA)

Office of Ocean Exploration and Research

Submitted by Susan Haynes, NOAA

Why Explore? To understand, manage and protect the ocean and its resources, NOAA believes it is critical to support a systematic program of ocean exploration, using the best of ocean technology to explore, discover, inform, educate, and motivate. The NOAA Ship *Okeanos Explorer* is a new and valuable asset to help us understand more about the unknown ocean.

An essential component of NOAA's Office of Ocean Exploration and Research mission is to enhance understanding of science, technology, engineering, and mathematics (STEM) content used in exploring the ocean, and build interest in careers that support ocean-related work. To help fulfill this mission, the *Okeanos Explorer* Education Materials Collection was developed to encourage educators and students to become personally involved with the voyages and discoveries of the *Okeanos Explorer*—America's first Federal ship dedicated to Ocean Exploration. NOAA Office of Ocean Exploration and Research has recently introduced Volume 1 of the *Okeanos Explorer* Education Materials Collection: Why Do We Explore? This volume provides educators with a wealth of background information, inquiry and standards-based lessons and additional online resources to guide classroom investigations into four important modern reasons for ocean exploration: Climate Change, Energy, Ocean Health and Human Health. Currently, Why Do We Explore? one-day onsite teacher professional development is being offered around the country at NOAA OER Alliance partner sites. Access to Volume 1 is also available online at [wwwhttp://oceanexplorer.noaa.gov/okeanos/edu/leadersguide/welcome.html](http://oceanexplorer.noaa.gov/okeanos/edu/leadersguide/welcome.html). Why Do We Explore? was also offered as an online course in partnership with the College of Exploration in 2009 and 2010. The full contents of that course can be accessed at www.coexploration.org/oe.

Additionally, NOAA OER has just completed the three week online course for Volume 2: How Do We Explore? focusing on the unique strategies and state-of-the-art technologies used in ocean exploration on board the *Okeanos Explorer* including: searching for anomalies, selecting sites for exploration, telepresence technology, mapping techniques, water column study and operating remotely-operated vehicles. These lessons are all accessible at http://oceanexplorer.noaa.gov/okeanos/edu/lessonplans/lessonplans_hdwe.html and the archived course is available on the College of Exploration Web site.

A listing of all NOAA OER educator professional development can be found at <http://oceanexplorer.noaa.gov/edu/welcome.html>. For more information, contact Susan Haynes, susan.haynes@noaa.gov or Melissa Ryan, melissa.ryan@noaa.gov.



****SENEME MEMBERS – COMING SOON****

CRITTERCAM OPEN HOUSE

MYSTIC AQUARIUM & INSTITUTE FOR EXPLORATION

**MORE DETAILS WILL BE SENT TO MEMBERS WHEN THE EVENT DATE
AND TIME IS CONFIRMED.**

NAUPLIUS NOSTALGIA

This feature resurrects articles from the archives of *"The Nauplius."*
Compiled by Donna Dione, Editor

Reprinted from *The Nauplius*, Fall 1991, Volume IV, Number 1

SOUND NOTES FROM THE WATER COLUMN

By Joseph Hage

A swirl of bubbles enveloped my field of view as if I were immersed in a bottle of champagne. The sound of compressed air echoed hollowly. The emerald green water that surrounded me was filled with Ctenophores and tiny plankton which careened crazily past as the curtain of bubbles thinned. It was as if I was suddenly set into slow motion as the submersible slipped below the surface. The jerking and bobbing endured above changed to a gentle rocking. An omnipresent hum of an electric motor was all that was heard.

I was aboard the submersible DELTA loaded with cameras, tape recorders and excitement. The pilot, Dan, explained some of the functions of the sub as he began to manipulate the controls. We were descending on a large submerged bar of sand located between Cape Ann and the tip of Cape Cod, offshore from Boston Harbor. It is called Stellwagen Bank.

Stellwagen Bank is an important feeding ground for several species of whales and commercial fish. Many tourists charter whale watching vessels to visit the site, and many commercial and recreational fishermen take advantage of its rich fish populations. It is also part of a busy shipping lane and near a heavily impacted harbor. Stellwagen Bank is the site of a proposed marine sanctuary and as a result is under a great deal of scrutiny.

The mother ship SUN COASTER, out of Florida, departed from Gloucester with the DELTA riding piggyback. A courteous and professional crew made our trip an enjoyable one. It was a beautiful August day; hot and sunny. It was a several hour trip from the dock to the dive site, but the members of the Project Oceanology Teacher Program enjoyed the sun.

I had a hard time waiting for when it was time for my dive, but there I was, 120ft. down, skimming across an eerily lit submarine landscape. The part of the transect, which I was observing, was near the crest of the sand bar on the Northwestern tip of Stellwagen Bank. The bottom was relatively featureless, and it was strewn with shell litter, but not much else. There were, however, thousands of sand launces, a fish that is approximately 15cm. long and thin, and burrowed into the soft bottom. As the sub gently scudded across the bottom, these launces would swarm out of their burrows and dart away leaving behind clouds of sediments. It seemed that all this activity attracted several dogfish and they lazily circled the sub, taking the opportunity to feed on the launces. I was able to spy, for a moment, a long bluefish which also fed on the hapless fish. As many may imagine, the dive was over too soon, and I was on my way back up to the surface.

Free Teacher Trips to Pigeon Key Marine Science Center

The Pigeon Key foundation and marine science center operates from its own private 5 acre island in the Florida Keys. Pigeon Key offers all inclusive marine science based environmental education programs and would like to invite you to join us in this 2011 education season. Our education programs turn the island itself into the classroom. All programs are hands on and interactive with students and teachers' immersed in the marine environment.

We offer programs such as: Marine Habitats of the Florida Keys, Fish Identification, Invertebrate lab, shark dissection/lab, squid dissection/lab, Cassiopeia jellyfish stress lab, plankton study, Marine adaptations, conservation angling, conservation town meeting, Pigeon Key history and many others.

All programs include a reef snorkel trip to the third largest barrier reef in the world on the 40 foot "spirit" catamaran in a sanctuary protected area. We also offer mangrove Kayak tours, Scuba diving, Looe Key reef snorkels, and trips to the turtle hospital, Dolphin Research Center, Key West excursions and many others.

This season we are offering all teachers trips for free when booking a student group of 10 or more. Three-day trips start at just \$325.00 per person and include all on island programming, staffing, accommodations, meals, local transportation, and reef snorkel at Sombrero Reef.

Pigeon Key prides itself on personalized service and only hosts one group on island at a time. We will cater to your class/groups specialized marine subject matter when requested. Programs are offered for students ranging from 5th grade - graduate school. For more information, please see our website at pigeonkey.net or contact executive director Kelly McKinnon at Pigeonkey@aol.com or (305) 509-0345.

Cranston High School-West Wins 2011 Quahog Bowl

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

On Saturday, February 5, fifteen teams from Connecticut and Rhode Island participated in the 2011 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 winter. 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 2011 Quahog Bowl included Bacon Academy, Classical, Coginchaug Regional (RD #13), Cranston West, Glastonbury, Ledyard, Narragansett, North Kingstown, Norwich Free Academy, Plainville, Rocky Hill (RI), Southington, Staples, Waterford and Woodstock Academy. Following twelve rounds of exciting competition, Cranston High School West emerged from double elimination ahead of Waterford, Ledyard, and Norwich Free Academy. Prizes were awarded for Sportsmanship (Ledyard) and performance in the Team Challenge Questions (Cranston West). This year, the popular post-competition raffle for team members included an iPad! 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, Coach Steve Krous and the Cranston West team will represent the CT-RI region at the national competition in Galveston, Texas on April 30-May 1. Please join me in wishing them all the best 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 2012 CT-RI regional will again be hosted by the Avery Point campus of the University of Connecticut on Saturday, February 4. The event is co-sponsored by Connecticut Sea Grant and Project Oceanology with support for the Consortium for Ocean Leadership and the University of Connecticut-Avery Point. Additional sponsors have included Dominion's Millstone Power Station, Mystic Aquarium & Institute for Exploration, Mystic Seaport - the Museum of America and the Sea, Williams-Mystic Program, the University of Rhode Island - Office of Marine Programs, The Computer Lab of New London, COSEE Central Coordinating Office, Pizzetta Mystic, West Marine of Mystic, Sweenor's Chocolates, Sweet Leaf Tea, 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.



BULLETIN BOARD

Mystic Aquarium & Institute for Exploration

Educator Enrichment Opportunity

Ocean Inquiry

Thursday, May 12, 2011

9:30 am-12:30 pm

Cost: \$20

World Ocean Day is June 8! Prepare to celebrate this special day and your personal connection to the sea. Learn how to incorporate inquiry and the study of oceans into your curriculum. This workshop is aligned with science frameworks and standards. You'll take home numerous marine resources for immediate use in your classroom.

Horseshoe Crab Watch

Learn more about these living fossils and the role they play in our local ecosystem as we head to the beach to count these animals during the full or new moon Family Horseshoe Crab Watch. **Registration required*

On **May 21, 2011** from 6:30 pm - 9:30 pm at Bluff Point State Park in Groton or **June 11** from 7:00 pm - 10:00 pm at Napatree Point in Westerly, RI, aquarium staff will take you on a stroll to witness this incredible phenomenon. Be prepared to get wet feet and hike a distance!

Cost: \$5 per person

Animal Exploration Series

Ages 6 to 8

Meet a Seal Rescuer

March 12, 9:30 am - 10:30 am

Shark Training

April 2, 9:30 am - 10:30 am

Making Animal Prints

May 21, 9:30 am - 10:30 am

Ages 9 to 11

The Deep - Animals & Exploration

March 12, 11:00 am - noon

Ocean Animal Sketching with Animal Care Expert

April 2, 11:00 am - noon

Meet an Animal Exhibit Builder

May 21, 11:00 am - noon

Classes are offered individually or book all three for an in-depth experience of animal adventures! In this series, participants meet aquarium staff and get an up-close and personal view of their experiences working with fascinating and majestic animals. Most programs also offer the opportunity to peek behind-the-scenes to see the aquarium in action. This is an extremely popular series and is sure to fill up fast, so make your reservation today!

Cost: Sign up for the series and save!

Members: \$10 per class; \$18 for two classes, \$25 for three classes;

Non-members: \$15 per class; \$28 for two classes, \$40 for three classes

For more information and registration on all the above programs, call Reservations at 860-572-5955 ext. 520.

Connecticut Outdoor and Environmental Educators Association

COEEA 2011 Annual Conference

Sustainable Schools & Communities Through Environmental Literacy

Thursday, March 24, 2011

8:30 am - 4:30 pm

Central Connecticut State University, New Britain, CT

Keynote Speaker: Stephen Kellert, Yale School of Forestry & Environmental Studies

Visit <http://www.coeea.org/annualconference.php> for more information and registration.

BULLETIN BOARD

Beneath The Sea's Marine Careers Free Program for High School and College Students

FRIDAY, MARCH 25, 2011, 10:00 am to 5:00 pm
Meadowlands Convention Center, 355 Plaza Drive, Secaucus, NJ 07094

Beneath The Sea's mission is to educate the public about the oceans and the men and women who work in them. Each year, Beneath The Sea conducts a weekend symposium for the interested public presenting a summary of the year's activities in the fields of oceanographic challenge and opportunity. Their Marine Careers Program, a one day free program, for students and their teachers, focuses on educating our young people about the sea and what it means to our life and opens up the world of opportunities for the next generation of men and women who will find their life in the ocean. Join us for a fun-filled, educational and exciting day.

Speakers: We have an array of keynote speakers who will open your eyes to the myriad of careers available in the marine field! You will be inspired by their enthusiasm and their experiences - marine scientists, underwater technology inventors, underwater photographers, marine environmental specialists, and more.

Learn by having fun! Participate in interactive educational activities: Our workshop leaders will guide you through a hands-on simulation to "cap" a deepwater oil well in a simulator, dressing up in a commercial diving rig, and testing your skills in valve assembly blindfolded while being timed! Meet with scholarship judges and scholarship winners who will give you ideas on how to prepare your scholarship applications. And, learn some techniques that you can use in your everyday life to help save the ocean. You will never look at household items, such as, plastic bottles, milk cartons, and aluminum cans in the same way again.

Marine Career Exhibitors: Speak directly to our Marine Careers Exhibitors about marine careers, internships, community activities and academic opportunities. National Oceanic and Atmospheric Administration (NOAA), Kingsborough Community College, Seacamp Association, Barry University and Stony Brook School of Marine and Atmospheric Sciences are just some of our Marine Careers Program exhibitors.

Reserve your school's place at BENEATH THE SEA'S Marine Careers now at www.BeneathTheSea.org. Individual registrations are welcome.

2011 Endangered Species Day Art Contest

The national Endangered Species Day Youth Art contest provides young people with an opportunity to learn about endangered species and express their knowledge and support through artwork. Started in 2006 by the United States Congress, Endangered Species Day recognizes the importance of endangered species and is an occasion to educate the public on how to protect them. The art contest is an integral part of the sixth annual national Endangered Species Day, celebrated on May 20, 2011.

The Endangered Species Day Youth Art Contest is organized by the U.S. Fish and Wildlife Service, the Endangered Species Coalition, the Association of Zoos and Aquariums and the Ogden Museum of Southern Art/ University of New Orleans.

The deadline for entry in the Endangered Species Day Art Contest is March 15, 2011.

The grand prize winner will receive a round-trip flight to Washington, D.C. for him/herself and one guardian to attend a reception in May. Accommodations will also be provided. (Prize is not redeemable for cash.) All other expenses are the responsibility of the winner. In addition, the grand prize winner will receive a gift certificate for art supplies.

The four grade category winners will receive a special plaque and a gift certificate for art supplies. In addition, the winning artists' teachers or youth group leaders will receive gift certificates for classroom art supplies.

All contest entrants will receive a Certificate of Participation (available on Endangered Species Day Website for teachers/youth leaders/parents to download).

Check out www.endangeredspeciesday.org for information on the contest, on events in your area or to receive a tool-kit to host your own Endangered Species Day Event!



BULLETIN BOARD

Narragansett Bay Research Reserve

2011 Narragansett Bay Teachers on the Estuary Workshop

July 25-28, 2011 with a follow-up half day on November 5, 2011

Visit <http://www.nbnerr.org/education.htm> for more information as it becomes available.

Teachers: Bring a Dolphin into your Classroom!

As much as you'd like to bring your students to Dolphin Research Center, sometimes, that just isn't possible. Now our new distance learning program helps bring the dolphins to your classroom!

Thanks to web cam and Internet technology, you and your classroom can watch and listen to live or pre-taped demonstrations and engage in question and answer sessions with experts in the fields of marine mammal care, training, and research.

Different options are available, depending on your interests.

Our Distance Learning programs include:

Option A: 25 minute live or pre-taped demonstration, followed by a live 20 minute Question and Answer session.

Available Demonstrations Include:

- *Dolphin Training*
- *Dolphin husbandry & medical care*
- *Dolphin biology*
- *Dolphin cognition research*
- *Sea Lion training*
- *Sea Lion biology*

Experts Available to Speak with Your Students Include:

- *Marine Mammal Biologist/Education Specialist*
- *Dolphin/Sea Lion Trainer*
- *Research Scientist*

Option B: A 45 minute discussion with a marine mammal biologist on the marine mammal topic of your choice, including career paths

Option C: A 45 minute - 1 hour live or pre-taped webinar on the dolphin, sea lion or manatee topic of your choice.

Distance Learning opportunities are reasonably priced at only \$65 per session. They are offered throughout the year, direct from the Florida Keys to your classroom.

For more information, or to arrange a Distance Learning experience for your class, please contact the Education Department at 305-289-1121, ext. 225, from 9:00 am to 4:00 pm eastern time, or email us at education@dolphins.org.



SENEME MEMBERSHIP APPLICATION

Name: _____

Affiliation: _____

School/Business Address: _____

Street

City, State, Zip Code

Home Address: _____

Street

City, State, Zip Code

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 be a member of the SENEME Newsletter Listserv? 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



The Nauplius is the newsletter of the Southeastern New England Marine Educators Association Inc. (SENEME) and is published three times per year for members of SENEME. Submissions including (but not limited to) articles, activities to share, student projects, pictures of SENEME members in action, recipes, other organization's announcements and Bulletin Board items are welcome for all issues. The opinions expressed by authors published in this newsletter do not necessarily reflect the views of SENEME and all its Board members. SENEME is not responsible for any typographical errors that may occur within this publication. Permission is granted by SENEME for readers to make copies of newsletter items for their own, non-commercial use.

Please send submissions and suggestions to Donna Dione, 146 Essex Street, Deep River, CT 06417;
e-mail: [dmrdione@quixnet.net](mailto:dmrione@quixnet.net). Please type articles in a Word format. If mailing media, all disks and pictures will be returned.
Submission Deadline for the Spring/Summer Issue is May 20, 2011.

SENEME
c/o Project Oceanology
1084 Shennecossett Rd.
Avery Point
Groton, CT 06340



DATES TO REMEMBER

March 10 - 13, 2011 - NSTA Conference, San Francisco, CA

March 17, 2011 - SENEME Board Meeting via Conference Call, 4:30 - 7:00 pm

Spring 2011 - Crittercam Open House, Mystic Aquarium, Mystic, CT, Date/Time - TBA

May 19, 2011 - SENEME Board Meeting, URI Bay Campus, Narragansett, RI, 4:30 - 7:00 pm

June 16, 2011 - SENEME Board Meeting, Project Oceanology, Groton, CT, 4:30 - 7:00 pm

June 29 - July 3, 2011 - NMEA 2011, Northeastern University, Boston, MA

October 15, 2011 - SENEME Fall Conference & Annual Meeting, Project Oceanology, Groton, CT

Please contact President, Lauren Rader, at lrader@oceanology.org for more details about Board Meetings.

***Would you prefer to receive your newsletter via email? If so,
please send a message to the Editor at dmrdione@quixnet.net.
Thank you!***