



*THE
MASTHEAD*

Vol. 31 No. 4 WINTER 2011-2012

Mid-Atlantic Marine Education Association

From the Captain's Quarters

Dear MAMEA members,

Happy Thanksgiving! We kicked off fall with a fantastic annual conference in Williamsburg, and I would like to extend a huge thank you to everyone that participated. Whether you helped with the planning, presented a session or just showed up, your involvement and support was what made it such a success! This year, we tried something new—partnering with the Virginia Environmental Educators, our land-based counterparts—to broaden our perspective and network. The collaboration was well received by both groups and hopefully forged new connections and friendships that will help us strengthen our education efforts.

The conference was attended by 117 educators from Delaware, Maryland, New York, North Carolina, Pennsylvania, Tennessee, Virginia and Washington, DC. The weekend opened with a welcome dinner and presentation by guest speaker Val Kells, a scientific illustrator with a marine specialty. She not only shared her gorgeous artwork with us, but also revealed the challenges, trials and tribulations behind creating her latest book, [A Field Guide to Coastal Fishes](#). Saturday morning, Dr. Tracey Sutton, research scientist and professor at the Virginia Institute of Marine Science, brought deep sea research to us with his outstanding plenary talk on the Census of Marine Life. Then, attendees had their pick of 25 outstanding concurrent sessions ranging from modeling topographic maps to building remotely operated vehicles to developing an informal program toolbox.

Also at the conference, we honored Miriam Sutton, a high school science teacher from Carteret County, NC, and Dr. Carol Hopper Brill, VIMS marine education specialist and former MAMEA president, with the MAMEA Classroom Teacher and Informal Educator awards, respectively. Congratulations to these well-deserving award recipients.

The conference concluded with an immensely successful auction raising \$2,900 for MAMEA's Paul Standish Scholarship fund. Through the Paul Standish Scholarships, MAMEA was proud to provide support for six members to attend this year's conference.

I look forward to a great year ahead. We have more fun and engaging professional development opportunities in store for you with our state mini-conferences including a joint Washington DC – Delaware event in February.

Happy holidays,

Lisa Ayers Lawrence
MAMEA President

The MAMEA Board of Directors meets twice a year. If you are interested in serving on the Board, please visit www.mamea.org/board.html.

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From the Editor

Greetings MAMEA members and welcome to the *Masthead*! This is the second installment of the new online, blog-style *Masthead*. For the online version, please visit <http://mameamasthead.wordpress.com>.

It was great to see so many of you at the fantastic 2011 annual conference. The sessions were informative and engaging, and the networking opportunities were plentiful and fruitful. Congratulations and thank you to Lisa Ayers Lawrence and her entire conference committee! I'm already looking forward to next year's conference!

In this issue, you will find several great articles from our Board and Committee members recapping the conference, the 2011 MAMEA awards, and the 2011-2012 mini-grant recipients—who have some really spectacular projects planned! You can enjoy a slideshow of conference photos. We have also included information on some current marine research taking place around the Mid-Atlantic region, as well as a new data-based classroom activity from Delaware Sea Grant. Be sure to read through all of the State Rep updates, there are some wonderful opportunities coming up in the next few months.

Please feel free to email your comments about this edition of the *Masthead* to me at petrone@udel.edu. Your most-candid feedback is welcomed; after all, this newsletter is for YOU, the members of MAMEA!

Thanks for reading (and commenting) and enjoy *The Masthead*!

- Chris Petrone

The *Masthead* is the official newsletter of the Mid-Atlantic Marine Education Association (MAMEA) and produced quarterly with support from:



MAMEA is one of 17 regional NMEA chapters. To become a member of NMEA, please visit



www.marine-ed.org

Save the Date!

President-elect and MAMEA2012 Conference Chair, Kathy Fuller of the National Aquarium in Baltimore, is working out the details for next year's fall Conference. For now, please *Save the Date!*

- Dates: October 12-14, 2012
- Theme: “Aquatic Conservation Science Through Research and Education”
- Location: Horn Point Laboratory, Cambridge, MD

If you are interested in helping with the conference, please contact Kathy at kfuller@aquaria.org.

Board Nominations now being Sought

by Ruth Gourley, Nominations Committee Chair

Hello MAMEA members,

I hope that as the fall continues that you find yourself still energized by the amazing annual conference we just attended. Whether it was your first MAMEA conference or your 21st, you may be wondering how to get more involved in the Association's important work of supporting our members. Very soon, we will be holding elections for several new board members. The President-elect, Treasurer, Delaware, DC and Virginia State Representatives are up for election next year. There are also many opportunities to get involved in several committees. Awards, scholarship, conference planning and many other committees are looking for new MAMEA members to share expertise, insight and their two cents.

Information about the board members' duties can be found on the MAMEA website under the [board toolkit link](#). In the next Masthead, I'll have some more information about each committee and who to contact if you want to help. If you have any questions, please feel free to contact me. Remember it is never too late to start thinking about next year's elections or how you can take a more active role in MAMEA.

NMEA Update

by Tami Lunsford, NMEA Representative

The 2012 National Marine Educators Association (NMEA) Conference will be held June 24-28 in Anchorage, Alaska. It is being hosted by the Northwest Aquatic & Marine Educators (NAME) and the Alaska Center for Ocean Sciences Education Excellence (COSEE AK). A tentative schedule and poster are available at www.nmeaweb.org, and more information will be available soon. The conference committee will be accepting presentation proposals December 1-February 17. Early bird registration will be January 17-April 14, and regular registration begins April 15. Scholarships and stipends will be available and a special strand on integrating traditional knowledge with marine science education will be offered. Additionally, many great field trips will be available both during and after the conference!

As always, NMEA will have a presence—a mid-year board meeting, a set of concurrent sessions, and a Share-a-Thon—at the National Science Teachers Association conference. This year's conference will be held in Indianapolis, Indiana, March 29-April 1. The NMEA Share-a-Thon and sessions will be at the Westin Indianapolis Hotel on March 29.

Also, NMEA is helping to promote and coordinate the 2012 National Ocean Sciences Bowl (NOSB) and NMEA *Living on the Ocean Planet* video contest! The theme this year is “A Sea of Change: Development and Evolution” and the deadline for video submission is January 20, 2012. You can find more information on the contest, how to submit, prizes, and a flyer online at www.nosb.org/competitions-2/nosb-video-contest/. All high school students are eligible to enter (even if they do not participate in NOSB). Please encourage your students and those of your colleagues to create a video. Questions should be directed to Kathleen Meehan Coop, NOSB Director, at kmeehancoop@oceanleadership.org or 202-448-1232.

For more information on any of these events or anything related to NMEA, please contact Tami Lunsford, MAMEA Representative to NMEA, at tami.lunsford@gmail.com.

Sutton Receives 2011 MAMEA Classroom Educator Award

by Allison Besch, Awards Committee Chair
Photos courtesy of the MAMEA Awards Committee

Miriam Sutton of Croatan High School is this year's MAMEA Classroom Teacher Award winner. The award was announced at the annual conference on October 8, 2011 in Williamsburg, VA. Ms. Sutton, originally from Kinston, NC, is currently a science teacher in Carteret County in North Carolina.

Miriam Sutton received her undergraduate and graduate degrees from East Carolina University in 1979 and 1983, respectively. She worked in private industry through the 80s and early 90s developing and managing worksite health promotion programs. In 1993, she attended the University of North Carolina – Chapel Hill to renew her teaching license and returned to teaching in 1994. Ms. Sutton is a National Board Certified Teacher (NBCT) in Early Adolescence Science. She maintains professional memberships in the National Science Teachers Association (NSTA), the Mid-Atlantic and National Marine Education Association (NMEA), the American Geophysical Union (AGU), and serves on the Education and Public Outreach Committee for the ANDRILL (Antarctic Drilling) Project and the Center for Ocean Sciences Education Excellence's Researcher Educator Exchange Forum (REEF).



Miriam's mission is to bring the changing world of science into her classroom, to engage her students and encourage them to expand their knowledge of science, and to foster an attitude of lifelong learning. Her passion for teaching is fueled by her quest to bring real scientific inquiry, data, and experiences into the classroom. She continually revises her instructional methods to include student-led scientific explorations, virtual learning strategies, inquiry labs, real-time data, and project-based investigations designed to encourage a better understanding of science, technology, engineering, and mathematics. She has completed numerous teacher research programs, including four NOAA Teacher-at-Sea

expeditions. In addition to her MAMEA honors, Miriam has also been recognized as Middle School Science Teacher of the Year by the North Carolina Science Teachers Association. When she isn't in her classroom she can usually be found either in, on, or under the sea she loves so dearly.

Congratulations Miriam!

NMEA2014 Logo Contest

by David Christopher, NMEA2014 Co-chair

The Mid Atlantic Marine Education Association (MAMEA) invites K-12 students to submit a conference logo design for the 2014 NMEA conference in [Annapolis, Maryland](#). Our conference theme will be *Sailing into Marine Education: From the Ocean to the Bay*, emphasizing the Chesapeake Bay area. Wording of the theme can be modified slightly within your design scheme.

The contest is open to all students, K-12. All art becomes the property of MAMEA and may be used on the 2014 conference t-shirt and other promotional items. Art work will not be returned and may be altered.

Contest winners will receive:

- Two tickets to the winner's choice of one of the following aquariums:
 - Virginia Aquarium
 - North Carolina Aquariums (may be used at all locations)
 - National Aquarium, Baltimore
- Official conference t-shirt with the logo
- Logo posted on the [MAMEA website](#)

continued on next page

Hopper Brill Receives 2011 MAMEA Non-Traditional Educator Award

by Allison Besch, Awards Committee Chair

Photos courtesy of the MAMEA Awards Committee

The 2011 MAMEA Non-Traditional Educator Award went to Carol Hopper Brill of the Virginia Institute of Marine Science (VIMS) and Virginia Sea Grant Marine Advisory Program. Dr. Hopper Brill is currently a marine education specialist based out of VIMS (College of William and Mary) in Gloucester Point, VA. She was recently the recipient of the 2010 MAMEA President's Award.



Carol Hopper Brill holds Bachelor's and Master's degrees in zoology from University of California at Davis and a PhD in zoology from University of Hawai'i-Mānoa. She served as Science Education Advisor, and then Director of Education at the University's Waikiki Aquarium from 1982-2003. Her professional interests include interpreting the marine environment for a broad audience, including educators, and promoting science literacy and conservation education. She serves as an advisor and instructor for many VIMS Marine Advisory Program projects including teacher workshops, seminars, and the VIMS GK-12 programs. One of her favorite VIMS activities each year is the Institute's Marine Science Day when she coordinates activities for the Virginia Sea Grant Kids' Marine Science Pavilion. She also co-coordinates and manages the Blue Crab Bowl, an annual regional competition of the National Ocean Sciences Bowl.



Dr. Hopper Brill has been a member of the MAMEA board since 2007. From her first position as Virginia state representative, she went on to serve in the organization's 3-year rotation as President-Elect, President and Past-President from 2008 to 2010. During her tenure, she worked with other Board members to help the organization move forward with updating and clarifying its procedures, standing rules and by-laws. MAMEA President-elect Lisa Lawrence, also of VIMS, said, "(An) informal setting, whether it is an aquarium or out on a beach hike, is where Carol shines. You cannot help but learn when you are around her, she exudes education in a fun, interesting manner. She truly loves what she does and it is readily apparent; she enjoys the education process." Hopper Brill continues her service in MAMEA as the Grants Committee Chair.

NMEA2014 Logo Contest *continued*

All entries are due by January 13, 2012.

The logo must:

- Address the theme: *Sailing into Marine Education: From the Ocean to the Bay*
- Highlight the Annapolis/ Chesapeake Bay region
- Include the year-2014
- Be provided as both a full color and a two color version

***All entries must be original work and may not use any copyrighted materials.**

To enter please submit a hard copy of your design (8.5 X 11) and an electronic copy on a CD saved as a 300 dpi .jpg or .tif file to David Christopher, National Aquarium in Baltimore, 501 E Pratt Street, Baltimore Maryland, 21202, dchristopher@aquaria.org.

Make sure to include contact name, address, phone number and email address of the teacher as well as the name(s) of the artist(s), grade level and school name.

We will announce the winners via the MAMEA website and through email. Winning entries and runner-ups will be featured on the MAMEA website and displayed at the conference.

If you have any questions, please contact: David Christopher, National Aquarium in Baltimore, 501 E Pratt Street, Baltimore Maryland, 21202, dchristopher@aquaria.org

MAMEA Awards Educational Project Grants

by Carol Hopper Brill, Grants Committee Chair

Each year, the MAMEA Educational Project Grant program provides funding to members for marine and aquatic education projects. Two grants of up to \$1,000 are available: One for formal educators in classrooms K-16; and one for informal educators working at a museum, aquarium, zoo, science center, or government agency. The grantees for 2011-12 were announced at MAMEA's annual conference on October 8, 2011 in Williamsburg, VA.

The grant for Classroom Educator was awarded to Judith Gwartney-Green, 7th grade life science teacher at Peasley Middle School in Gloucester County, Virginia.

Ms. Gwartney-Green and her partner teacher, Sherry Rollins, teach life science for all 7th-graders in Peasley Middle School. Their curriculum emphasizes STEM education (science, technology, engineering and math) with marine and aquatic field experiences and classroom laboratory studies. Using aquariums in the classroom, they succeed in bringing the environment indoors where their students can make detailed observations of local aquatic life and collect data over several weeks' time. But, when a tornado destroyed their original school – Page Middle – last spring, among the resources lost were the aquariums that played such a central role in their teaching.



With this MAMEA Educational Project Grant, Gwartney-Green and Rollins will replace the aquariums and support systems they lost and continue to provide hundreds of students with first-hand experiences in multidisciplinary marine science, and a stronger connection to the organisms in their local waters.

Sarah McGuire, Education Coordinator for the Chesapeake Bay National Estuarine Research Reserve-Virginia will serve as Project Advisor. McGuire is MAMEA's Virginia Rep and has worked with Judith and Sherry on both field and aquarium-based studies for several years.

The 2011-12 Informal Education Grant was awarded to Kelly Cox, President and Founder of the Phillips Wharf Environmental Center which is located on Tilghman Island in Maryland.

Ms. Cox is a marine biologist with a long family history on the Island. She and her husband Jerry have a lifetime of experience on the Chesapeake and founded the Phillips Wharf Environmental Center to foster greater awareness and care of the Bay through hands-on learning. The Center offers learning opportunities for youth and adults, provides information so that they can make informed decisions, and strives to inspire stewardship for the Bay. The Center also conducts applied research and data monitoring.



With their MAMEA grant, the Center will be developing a Fisheries Management Program for 6th to 8th-grade students from schools in surrounding counties. They plan to bring the students to the Island for a day and provide first-hand experiences that illustrate the practices of local watermen, study the fish they catch, and the impacts of environmental factors, including water quality, on the Bay and its fisheries.

The day-long program will start with a cruise down the Choptank River and Chesapeake Bay. Among the activities



will be water quality testing and careful data recording. The study of how pound nets work will be a focal point, since this fishing method is such an important tool for local watermen. Students will learn how fish are harvested from these nets through a role-playing "Chesapeake Bay Pound Net Game" that includes constructing a pound net on land. After collecting local fishes using a seine net, students will practice fish identification, learn how to properly handle fish and safely return them to the water. Fish anatomy and the importance of tagging fish for resource management is another proposed activity.



For more information about the Phillips Wharf Environmental Center and its programs, visit their website at <http://www.pwec.org>.

MAMEA Thanks Conference Sponsors

The 2011 Conference Committee would like to thank the following for sponsoring or contributing to this year's conference in Williamsburg:

Conference Sponsors

MAMEA – www.mamea.org

DEQ - www.deq.state.va.us/

NOAA – www.noaa.gov

Virginia Naturally – www.vanaturally.com

CBNERRVA – www.vims.edu/cbnerr/

VIMS Marine Advisory Services – www.vims.edu/adv

Auction Donors

Acorn Naturalists – www.acornnaturalists.com

Be The Bay – www.bethebay.com

Berret's Seafood Restaurant & Taphouse Grill – www.berrets.com

Busch Gardens Williamsburg – www.buschgardens.com

Chesapeake Bay Oyster Company – www.bayoyster.com/

LaMotte Company – www.lamotte.com/

The Mariner's Museum – www.marinersmuseum.org/

Maryland Sea Grant – www.mdsg.umd.edu/

National Aquarium, Baltimore – www.aqua.org/

North Carolina Aquariums – www.ncaquariums.com/

Peace Frogs – www.peacefrogs.com/

The Poddery – www.thepoddery.com/

Richmond Flying Squirrels Baseball – <http://www.minorleaguebaseball.com/index.jsp?sid=t3410>

Steve Spangler Science – www.stevespanglerscience.com

Trader Joe's Williamsburg – www.traderjoes.com

Treefrog Educational & Vernal Pool Association – www.vernalpool.org/treefrog.htm

US Bureau of Ocean Energy Management, Regulation & Enforcement – www.boemre.gov/

VIMS Bookstore

Virginia Aquarium – www.virginiaaquarium.com/

Virginia Dept. of Mines, Minerals & Energy – www.dmme.virginia.gov/

Virginia Living Museum – www.thevlm.org

Watermen's Museum – www.watermens.org/

Wildlife Supply Company – www.wildco.com

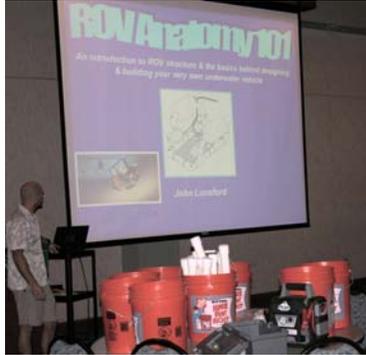
William & Mary Tribe – Men's Basketball – www.tribeathletics.com

Williamsburg Hospitality House - www.williamsburghospouse.com

...and the many MAMEA members who donated items!

MAMEA Conference Photos

Below are just a few snapshots from the annual conference. To view the entire collection, please visit <http://mameamasthead.wordpress.com/2011/11/23/2011-conference-photos/>. All photos by Carol Hopper Brill.



From top left: John Lunsford presents on remotely operated vehicles; Scientific illustrator Val Kells autographs a copy of her newest book; Bill Martin and Megan Ennes at the Buck-a-Book table; Lisa Lawrence (r) and keynote speaker Dr. Tracey Sutton (l); Kathy Fuller at the registration table; A poster from the poster session and Share-a-Thon; Chris Witherspoon presents the Informal Educators Toolbox; Two MAMEA cornhole boards from the live auction; the crowd eagerly listens to the keynote presentation.



NOSB Update

Volunteers Needed!

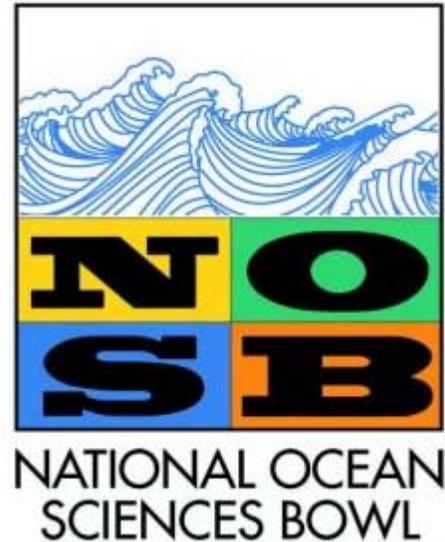
The 2012 National Ocean Sciences Bowl regional competitions will be held on the following dates. Volunteers are always welcome!

[Chesapeake Bay Bowl](#) (serving MD, DC, DE, northern VA, southern PA) will be held at George Mason University on February 4, 2012. Contact: [Staci Lewis](#)

[Blue Crab Bowl](#) (serving most of VA) will be held at Old Dominion University on March 3, 2012. Contact: [Carol Hopper Brill](#)

[Blue Heron Bowl](#) (serving NC) will be held at East Carolina University on March 3, 2012. Contact: [Kay Evans](#)

The 2012 NOSB Finals will be in Baltimore, MD on April 19-22. Individuals interested in volunteering should contact Melissa Brodeur at mbrodeur@oceanleadership.org.



NOSB Finals Weekend

In addition to the regular volunteer positions, we will also be looking for individuals to 1) participate in the career-mentoring event, 2) help with hands-on activities on Saturday afternoon for eliminated teams, and 3) suggestions/contacts for field trip destinations for the students. We have a few field trip ideas in the works, but we need to plan enough trips to accommodate a total of 210 individuals from 9am-2pm on Friday (4/20/2012) and that are within maximum of 1 hour from downtown Baltimore. Ideally, field trip locations are used to working with high school and college students and can accommodate groups of 25-50 individuals.

Video Contest

The *Living on the Ocean Planet* [video contest](#) is on once again!

Any high school student or small team of students can submit a 2-minute video that ties an ocean literacy principle to this year's NOSB theme — *A Sea of Change: Development & Evolution*. The members of the winning team will receive a personal video camera and their video will be posted on the Ocean Today Kiosk in the Sant Ocean Hall in the Smithsonian Institution's National Museum of Natural History. NMEA and many of its chapters are partnering with NOSB again to select regional winning videos and provide prizes. The contest website includes rules, guidelines and the scoring rubric. Students can also download an electronic splash page that should be included in the video.

You can watch last year's winning video at www.nosb.org/competitions-2/nosb-video-contest/2011-video-contest-winners/ (Last year's theme was "Human Responses to Ocean Events")

For more information, please contact Dan Albrecht-Mallinger at (202) 448-1224 or dalbrechtmallinger@oceanleadership.org.

NOSB Webinars

NOSB, in conjunction with IODP-Deep Earth Academy, is happy to announce a special professional development opportunity for middle and high school educators nationwide. All educators are welcome to register, and NOSB coaches and Deep Earth Academy teachers are highly encouraged to participate.

The free online webinar series, beginning in early November and running through December, will focus on NOSB's 2012 competition theme, A Sea of Change: Development and Evolution. The purpose of the series is to provide teachers with the opportunity to enhance their knowledge of topics related to evolution and how society is adapting to changes in the global ocean.

NOSB coaches, please note: The seminar's guest experts will be writing questions for the 2012 NOSB competitions!

Throughout the webinar series, guest experts will cover issues related to a number of the theme's subtopics such as extreme climate events, new insights into plate tectonics and understanding the importance of phylogenetic trees. Each of the presenters will give a one hour live webinar presentation on their current research or topic of interest, followed by a 30 minute Q&A session.

Once you register, you will be emailed instructions describing how to log into the webinar site at the specified time. Everyone that is logged into the site will be able to listen and follow along with the presentation, as well as ask the presenter questions live during the presentation.

In addition to the live interactive portion of the webinars, there will also be asynchronous elements. Each presenter will post related educational resources on the NOSB webpage (www.nosb.org/professional-development/), which will be available to you and your students to explore. Full video of the presentations will also be posted.

Confirmed Presentations:

Please continue to check the web site listed above as additional information and presentations are added.

November 10, 2011, 8:00pm EST – postponed

Dr. Larry Krissek, Ohio State University

Topic: The story of ice ages over the past 2.5 million years

Title: *Reading Earth's Climate History from Ocean Sediments (with an example from Pleistocene Glacials and Interglacials)*

November 21, 2011, 8:00pm EST

Dr. Allen Collins, Smithsonian Institution and Jennifer Collins (M.S.), Deep Earth Academy

Topic: Phylogenetic trees: what are they, how they are used and instructions for incorporating them in your classroom

Title: *Stings, Blooms, Barcodes, and Phylogenetic Trees — The Evolution of Jellyfish*

December 6, 2011, 8:00pm EST

Dr. Brian Huber, Smithsonian Institution

Topic: Planktonic foraminifera and what they can tell us about how Earth's environment has changed during the past 120 million years

Title: *Foraminiferal evidence of dramatic climate and ocean change during the Cretaceous Period*

Additional December webinars TBA

Participating coaches will complete these courses with a much stronger understanding of this year's theme and will be able to better prepare their students for the 2012 NOSB Regional and Finals Competitions.

How you can participate: All NOSB coaches that have registered a team for the 2012 competition season and all DEA teachers will automatically be sent an invitation for the professional development series. Any other teachers interested in participating may email Melissa Brodeur at nosb@oceanleadership.org, first come, first served.

Sea Breeze Data Activity

by Chris Petrone

It's a toasty July day. You've just finished riding some great waves at one of Delaware's award-winning beaches and you're now enjoying an early afternoon snack. All of a sudden you realize that the air temperature has dropped, the humidity seems to be increasing, and the wind is now not only stronger than it was, but now it's coming off the water. So you sit back and enjoy the cool breeze.

Later in the afternoon, just when you are ready to pack up your things and leave this epic beach day behind, you notice that the wind has shifted again, and though it is a little less humid, the temperature has climbed back up, leaving you wishing for another quick swim in the surf.

What in the world is happening? And how could you investigate?

In the newest data-based activity from Delaware Sea Grant, students examine environmental observing system data and a radar loop to identify sea breeze fronts and discuss the implications of coastal development on the important sea breeze. The activity can be used by students in grades 6-12 and can be completed in approximately 45 minutes. The activity includes background information, complete with hyperlinks to additional information, and is aligned to the Delaware Science Standards, National Science Education Standards, and the Ocean Literacy Essential Principles.

The full activity is available at www.deseagrant.org/outreach/education/resources.

Additional Resources

Webinar: "A Framework for Assessing Environmental Literacy" at the National Press Club, Washington, DC, and live via the Internet.

December 1, 2011, 1:30 – 2:30 p.m. Eastern Time **Note the change in start time*

This new framework for assessing environmental literacy was developed with experts from the fields of environmental education, social studies education, and science education, plus related policy and social science fields. The development team will be joined by leaders from large-scale national and international assessments to discuss how to define and assess environmental literacy. The NAAEE spearheaded this project with support from the National Science Foundation (NSF), and is partnering with the National Oceanic and Atmospheric Administration (NOAA) and the National Marine Sanctuary Foundation (NMSF) to release the framework. Details about pre-registration and directions for joining us for this important event will be posted at www.naaee.net/framework.

Estuary Video Gallery

NOAA's National Estuarine Research Reserve Estuary Video Gallery offers a collection of short video clips which can be the next best thing to an actual field trip to an estuary. There are over 150 video clips covering a range of topics. Content is categorized into themes of Estuaries & You, Life in an Estuary, Protect & Restore, Science & Technology, and K-elementary. <http://estuaries.gov/Estuarylive/VideoGallery.aspx>

Mid-Atlantic Marine Research Update

The following are articles from marine research institutes around our region.

[Tying wind power into the grid](#) - The wind power resource off the Atlantic Ocean is huge. But harnessing that power—moving it from the coast to the places where it's needed—is an equally huge challenge. A team led by the **University of Delaware** has received a \$540,000 grant from the Department of Energy to study the effects of adding wind power to the electric grid in the Mid-Atlantic region.

[Unique Barge Enters Research Fleet to Test Ballast Water Treatment Technologies](#) - A unique 155 foot barge, or Mobile Test Platform, has been added to the **University of Maryland Center for Environmental Science** research fleet. This unique barge will be used to test ballast water treatment technologies that would be employed to reduce the risk of introducing invasive species through the maritime shipping industry. The dedication ceremony was led by Congressman Cummings (Maryland's 7th District) and included leadership from the US Maritime Administration, Maryland Port Authority, and UMCES.

[Professor uses technology to connect students with marine life](#) – Want to explore marine life under the sea? Well, there's an app for that. Thanks to a **Duke University** Professor and some tech savvy students. The textbook-like app is free and available on the iPad.

[Students will use futuristic technology to dive into the past](#) - A new National Science Foundation-funded partnership between the **Virginia Institute of Marine Science** (VIMS) and the Watermen's Museum in Yorktown lets schoolchildren use robotic subs to study shipwrecks from Lord Cornwallis' fleet from the 1781 Battle of Yorktown—the last major battle of the American Revolution.

State Rep Reports

DELAWARE

In addition to the fantastic [trip to DC](#) we're planning, there is also the Delaware Association of Environmental Educators (DAEE) conference coming up on Saturday, February 25, 2012. This year's conference will be held at Cape Henlopen State Park in Lewes, DE and will include a keynote address by acclaimed environmental author Tom Horton, as well as many great concurrent sessions. Registration is \$35 and includes a one year membership to DAEE. For more information stay tuned to <http://daeeonline.wordpress.com/>.

MARYLAND

The Mid-Atlantic Marine Education Association and the National Aquarium in Baltimore will be hosting their annual teacher workshop and sleepover on March 16-17, 2012. During this workshop, participants will spend an enriching evening exploring the sights, sounds and behaviors of the Aquarium's inhabitants.

This workshop is open to classroom and home school teachers for grades K-12 as well as informal educators. Cost is \$55 for Mid-Atlantic Marine Educators Association members (MAMEA) and \$65 for non-members. To register contact the National Aquarium at 410-576-3833 or email reserve@aqua.org. Registration deadline is March 2, 2012.

State Rep Reports

DC / DELAWARE



“EXPLORE AMERICA’S AQUATIC TREASURES”

SPONSORED BY THE DE AND DC REGIONS OF MAMEA

You are cordially invited to join us for a day of exploration in Washington, DC!

“Explore America’s Aquatic Treasures”

Sponsored by the DE and DC regions of MAMEA

Saturday, February 4, 2012

11:00 am – 5:00 pm

The exploration begins at 11:00 a.m. as the group meets at the Constitution Avenue entrance to the Museum of Natural History for a visit to the Sant Ocean Hall. After touring the Ocean Hall and getting a light lunch, the exploration moves down the street to the nation’s oldest public aquarium – the National Aquarium. A 2:00 pm shark talk and feeding will be followed by a food and beverage reception, a lecture on sea turtle conservation and legislation, and discussion of lesson plans on sea turtles. Our exploration will end at 5:00 pm

NOTE: Delaware participants will meet at the Park-n-ride lot on the corner of Routes 896 and 4 in Newark at 8:00 am. Transportation to/from DC will be provided! If there is enough interest from participants in southern Delaware, we will provide transportation from there too!

To register for this MAMEA mini-conference, please send your completed registration [form](#) and check for \$20 made out to MAMEA to the address on the form. The registration fee includes a one year MAMEA membership.

This mini-conference is open to ALL educators in the mid-Atlantic region!

Please see the flyer at the end of the Masthead for more information and the registration form!

State Rep Reports

NORTH CAROLINA

Rosanne Fortner Receives International Environmental Award

Rosanne Fortner has received the highest honor from the North American Association for Environmental Education (NAAEE). The Walter E. Jeske Award recognizes outstanding service to NAAEE and leadership within the profession. Fortner became a Visiting Assistant Professor at The Ohio State University (OSU) in 1978. She was a full-time OSU faculty member from 1979 until her retirement in 2005. She has been active in leadership, service, teaching and advising, research, and publishing in EE and related fields. While at the School of Environment and Natural Resources (SENR) at OSU, she served as coordinator of the Ohio Sea Grant Education Program, coordinator of the Earth Systems Education Program, and director of COSEE Great Lakes. One of her strengths has been her ability to move seamlessly between natural resources/ environmental science and education. She taught in both areas and chaired/co-chaired Ph.D. committees for nearly a dozen students in science education, and another half-dozen in natural resources.

In “retirement” at her home on Oak Island, NC, she has taught environmental and marine education courses online for UNC-Wilmington, and is Co-Chair of the Oak Island Beach Preservation Society. In 2010 she prepared a collection of abstracts covering 20 years of research in marine and aquatic education for NOAA. We would like to extend heartfelt congratulations to Rosanne for receiving this prestigious award!

NC Maritime Museum Welcomes Ben Wunderly

The NC Maritime Museum in Beaufort would like to welcome Ben Wunderly to the education department as the Public Programs Coordinator. Ben is responsible for development and delivery of public education to museum visitors of all ages. He assists with school group programs, leads outdoor excursions, and conducts on-site programs. Ben comes to the museum with more than 13 years’ experience with NC State Parks and NC Aquariums and holds a B.S. in Natural Resources from Virginia Tech.

NC Maritime Museum receives grant for technology development

Allison Besch received a grant for \$17,280 from the NC Division of Marine Fisheries’ Coastal Recreational Fishing License program. She is working with Duke University computer science students to develop the museum’s first mobile app that will include a lesson plan for teachers and 5 interactive programs for students. The app will be available on the Apple platform and the project will provide an iPad tablet computer available on loan for teachers and educators free of charge. Educators anticipate this product will be available for loan in Spring 2012.

UNCW Announces new Methods of Teaching Coastal Science Course

The Environmental Studies Department at the University of North Carolina Wilmington is introducing a new course for professional teachers, environmental educators, and graduate students. EVS 592/EDN 595 Methods of Teaching Coastal Science is a 2 credit hour hands-on survey of the fundamental principles and practices in coastal science education. The course offers a variety of local Cape Fear coastal environmental education instruction and field experiences providing skills, curriculum materials, practical classroom applications, and professional development in formal science education and nonformal environmental education. Instruction includes participation in a series of locally coastal-themed, curriculum-oriented workshops that emphasize teaching about marine and estuarine life, coastal stewardship, and personal action in our Cape Fear region. For more information, please contact Dr. Jeffery Hill, UNCW, hillj@uncw.edu, 910-962-3264.

State Rep Reports

VIRGINIA

Wetlands 101 Teacher Workshop

Saturday, December 3, 8:30 am – 4:00 pm and Sunday, December 4, noon – 4 pm

Location: First Landing State Park Trail Center

Cost: \$20

Advanced registration is required. Attendance for the entire duration and both days of the workshop is required to receive certificate and workshop materials.

For more information and to register, contact Kris McKinnon at kris@lynnhaven2007.com or by calling 757-962-5398. Advanced registration is required no later than November 23rd.

Why Do We Explore? Professional Development Workshop

Saturday, January 28, 2012 from 8:30-4 at Nauticus, Norfolk, VA.

All life on Earth relies on the ocean – yet, the ocean is 95 percent unexplored, unknown and unseen by human eyes...Participants will learn how to use inquiry- and standards-based lessons and other online resources that guide classroom inquiries into several important reasons for ocean explorations including Climate Change, Energy, Ocean Health, and Human Health. Registration is required and space is limited. Educators who attend the full day will receive a \$50 stipend. Each participant will receive lesson plans, materials related to activities presented during the workshop, a NOAA Ocean Exploration Certificate of Participation, continental breakfast, and lunch. Registration Deadline is January 13, 2012. To register contact Jennifer Kodolitsch at 757-664-1044 or jennifer.tabor@norfolk.gov.

Free Water Quality Monitoring Kits

Each year, volunteers from around the world will participate in World Water Monitoring Day program. Anyone with an interest in water quality is encouraged to participate. The event centers on testing four key water quality parameters: temperature, dissolved oxygen, pH, and turbidity. The Virginia Department of Environmental Quality is distributing a limited number of water monitoring kits. Each kit can perform up to 50 tests for dissolved oxygen, pH, turbidity, and temperature. Because quantities are limited, please request only the number of kits you are sure that you will use. There is no charge for the water monitoring kits. To order kits, please contact Mr. Stuart Torbeck by e-mail at charles.torbeck@deq.virginia.gov. Please provide your complete mailing address, as well as the number of kits you would like to receive. We encourage participants to register and upload their data to the World Water Monitoring Day website at www.worldwatermonitoringday.org. In 2009, Virginia was the leading state in the country on participation in World Water Monitoring Day.

2012 Environment Virginia Conference: Call for Papers and Registration is Open

We invite submissions from academia, business, government, organizations, students, and others. Make a bigger impact. Share the results of your research and case studies with more than 700 environmental leaders and decision-makers at the Commonwealth's premiere environmental conference, 10-12 April 2012. Submit an abstract online at www.vmi.edu/environmentva now through December 16th.

The deadline for submission is 16 December 2011. Authors of accepted papers must be available to present at the symposium, 10-12 April 2012. Registration is now open for attendees and exhibitors. You can register at www.vmi.edu/Content.aspx?id=10737419909. Early registration ends 9 December 2011.



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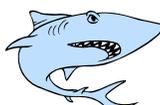
To register for this MAMEA mini-conference, please send the form below and payment of \$20.00 to cover MAMEA membership for one year and some of the expenses. This mini-conference is open to ALL educators in the Mid Atlantic region! **Registration is open until December 21, 2011.** Send registration and fees in time to arrive by the registration deadline to one of the addresses on the form.

QUESTIONS?? CONTACT:

BILL at 202-482-0852 (bsimpkins@aqua.org)

OR

TAMI at 302-668-4183 (tami.lunsford@gmail.com)





“EXPLORE AMERICA’S AQUATIC TREASURES”

SPONSORED BY THE DE AND DC REGIONS OF MAMEA

Saturday, February 4, 2012

11:00 a.m. – 5:00 p.m.

(Delaware participants will depart Newark at 8 am)

Registration is due by December 21, 2011. Please send \$20 (check made payable to MAMEA) and this registration form to either Bill Simpkins or Tami Lunsford at:

WASHINGTON, DC
Bill Simpkins
National Aquarium
14th St and Constitution Ave., NW
Washington, DC 20230

OR

DELAWARE
Tami Lunsford
2 Charles Pointe
Newark, DE 19702

NAME: _____

ADDRESS: _____

PHONE: _____

E-MAIL: _____

CURRENT EMPLOYER AND POSITION: _____

ARE YOU A CURRENT MEMBER OF MAMEA? _____ **YES** _____ **NO**

ARE YOU INTERESTED IN BEING ADDED TO THE MAMEA LISTSERVE? _____ **YES** _____ **NO**

