

THE MASTHEAD

Vol. 31 No. 1 SPRING 2011



Mid-Atlantic Marine Education Association

From the Captain's Quarters

Hopefully, the warm weather that has sprung up in North Carolina will make it into your state very soon.

Congratulations to all of our MAMEA members who competed or helped with the Ocean Sciences Bowls in our region! And for those of you who attended the annual National Science Teacher Association conference in San Francisco, I trust you found some familiar faces at the NMEA Share-a-thon tables. As Spring brings changes to our weather and waters, we hope you are beginning to look forward to a few annual events that are coming up. Registration is now open for the National Marine Education Association conference in Boston Massachusetts. With exciting speakers, sessions and events planned, this year's conference is something not to be missed. To learn more about the conference please go to www.massmarineeducators.org/NMEA2011/

If Boston is a little too far for you to travel, remember that our own annual conference will be on October 7-9, 2011 in Williamsburg, VA. Lisa Lawrence and her conference committee are planning a weekend full of wonderful events. They are looking for more members to be involved, so please contact Lisa, our President-elect and conference chair for more information on how you can be involved (ayers@vims.edu).

I'm excited to read in this edition of our Masthead and hear about the amazing things many of our members are doing and the exciting events and activities focused on the ocean. Several members attended the Coastal America Student Summit this February. Teams of high school students got their first glimpse of how people can help shape environmental policy and make real change regarding our ocean's health. Also this year, National Environmental Education Week is focusing on Ocean Connections. Their site, www.eeweek.org, has several great ocean education resources and events all happening the week before Earth Day. Through their site, I was part of a webinar about the latest information about last year's Gulf Oil Spill. The information I learned will be very helpful in reminding my aquarium visitors that even though the spill is almost a year old, the impacts of the

event will affect our ocean for years to come.

Finally, I want to let you all know about the MAMEA's mid-year board meeting is being held on April 2, 2011. Our Board members will be meeting to discuss Association business. If you have a question or concern you'd like the board to discuss, please contact either your state representative or any other Board member. Our contact information is always on page 2 of *The Masthead*, as well as on the MAMEA website, www.mamea.org.

There is so much more great marine education news in the following pages! Enjoy this issue of the Masthead and I look forward to reading more great news from our members soon!

Happy Spring to all!

A handwritten signature in cursive script that reads "Ruth".

MAMEA Mini-Grant Report: *We Sea Change*

by Megan Ennes

Coastal America is a federal partnership involving many federal organizations, non-governmental organizations, and non-profits that are focusing on coastal issues. Fifteen years ago Coastal America began to incorporate Coastal Ecosystems Learning Centers (CELCS) from across the nation. There are now 23 CELCs including the North Carolina Aquariums. In February of 2011, Coastal America hosted its third Student Summit on the Oceans and Coasts. This year they focused on Ocean Literacy Principle Three: *The ocean is a major influence on weather and climate*. Coastal America invited the 23 CELCs to participate in the summit by creating an action plan to address a local issue associated with the oceans and climate. Nineteen of the CELCs accepted, including the North Carolina Aquarium at Fort Fisher (NCAFF).

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The MAMEA Board of Directors meets twice a year. If you are interested in serving on the Board, please visit <http://www.mamea.org> and click on "Board."

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From the Editor

Greetings once again MAMEA! Well, the cold has returned after a glimpse of spring/summer. Since the last *Masthead*, we've seen amazing video from the undersea earthquake and resultant tsunami in Japan. The tragedy has struck close to home as the damage has severely affected several international members of the National Marine Educators Association, of which MAMEA is a regional chapter. If you are interested in helping our colleagues in Japan, please let me know. Additionally, the disasters have shown us just how important being ocean literate is and knowing how tsunamis are formed, how they travel, and how they can be monitored and forecast.

In this shorter issue of *The Masthead*, you'll read about some great work our MAMEA grant recipients are doing; a member's work on a research cruise; and updates from some of our committee chairs. Thanks so much to those folks that submitted articles and please enjoy this issue!

- Chris Petrone

About the Cover Ship

Each issue of *The Masthead* features a different Mid-Atlantic sailing ship in the cover banner.

Built by the Living Classrooms Foundation in 1985, *Lady Maryland* is a replica Chesapeake Bay pungy schooner, which sailed the Bay in the 1800s. The term "pungy" may originate from the place where some of the first pungies were built, the Pungoteague Creek on VA's Eastern Shore. They were considered fast and were used to carry perishable cargo.

Today, the *Lady Maryland* is used as an educational vessel, conducting programs for children and adults.

Visit the *Lady Maryland* at www.livingclassrooms.org.
Photo credit: Sam Friedman.

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

MAMEA Educator Awards

by Allison Besch

It's never too early to start thinking about MAMEA awards.

Each year, MAMEA presents two awards to educators nominated by their peers. One award honors a formal classroom teacher, K-16. The other acknowledges an educator in an informal setting, such as museum, aquarium, or government agency. Submissions for the 2011 award submissions are due by August 31, 2011. The winners will be announced at the conference in October. Nominate a teacher before the school year ends!

Applications, guidelines, and eligibility requirements are available online at www.mamea.org/awards.html or e-mail allison.besch@ncdcr.gov.

MAMEA Board Nominations Now Being Accepted

by Tami Lunsford

With our watersheds, coastlines and ocean facing such incredible challenges, we need citizens who are ocean and environmentally literate. You can help support educators in Mid-Atlantic states and make a difference! You can also gain a lot by joining the MAMEA Board—great networking, knowledge and skills—and work with regional and national initiatives and some of the movers and shakers in our field.

Nominations are now open for the following positions on the 2011-2012 MAMEA Board:

- President-elect
- Secretary
- State representatives for Delaware, Maryland, and North Carolina

You can find more information on the responsibilities of these positions on the MAMEA website at www.mamea.org/toolkit.html. The elections will be held online in May or June and those who are elected will take office in October.

Please nominate someone (including yourself!) today by emailing the name of the nominee, their contact information, and the position to Tami Lunsford, MAMEA Past-President and Nominations Committee Chair, at tami.lunsford@gmail.com.

NMEA Update

by David Christopher

Registration is now online for the 2011 National Marine Educators Association annual conference. This year's conferences will be held June 29 to July 3 on the campus of Northeastern University in Boston, Massachusetts. Deadline for early registration (and \$50 off!) is April 15. For more information, please visit the conference website at www.massmarineeducators.org/NMEA2011.

If you are looking for financial support to attend the annual conference, NMEA offers a variety of stipend and scholarship programs. For more information on these programs, please visit the NMEA website at www.marine-ed.org/scholarships-stipends.html.

MAMEA, along with the New Jersey Marine Education Association judged the NOSB's *Life on an Ocean Planet* video contest for the Mid-Atlantic region. The 2011 winner for the Mid-Atlantic region is the video *A Fragile Ocean* by Matthew Eisenschmied and Jeanne Stad from the Marine Academy of Technology and Environmental Science in Manahawkin, NJ. You can view the winning video at www.youtube.com/watch?v=FBNDxeJ3Q-U.

Thank you to everyone who helped judge the videos.

NMEA Expanding Audience Stipend

by Tami Lunsford

The NMEA Expanding Audiences Committee has funding again this year to support attendance at the 2011 NMEA conference by individuals from groups underrepresented in science, or those who serve underrepresented or underserved audiences. Individuals may be nominated by any existing NMEA member or they may be self-nominated. We are looking for individuals who have not participated in NMEA before and are interested and involved in marine education. The intent is to support qualified individuals to share their expertise, experiences and perspectives through active participation in NMEA annual conferences and the creation of a product that will benefit the larger marine and aquatic education community. Awardees will receive free registration to the NMEA conference and may also receive some travel support. **Nominations are due by April 1, 2011.** Notifications will be made by April 15, 2011. See www.marine-ed.org/scholarships-stipends.html for more information.

MAMEA Salutes 2011 NOSB® Regional Competition Champions

by Carol Hopper Brill

In February, the Mid-Atlantic hosted three regional competitions of the National Ocean Sciences Bowl (NOSB®). In Maryland/DC, Virginia, and North Carolina, over 200 high school students hit the books to prepare for heated competition that tested their knowledge of marine and aquatic subjects. And, the competition inspires their teachers, too, giving them an opportunity to incorporate more marine science into their curricula, and allowing them to demonstrate the integrated nature of marine sciences.

- The **Chesapeake Bay Bowl**, with headquarters in Washington, DC, was hosted by American University on February 5. This contest draws schools from Maryland, the DC metropolitan area, as well as selected cities in nearby Pennsylvania, Northern Virginia and Delaware. In this year's exciting competition, Coach Nell Hermann led her winning team from State College Area High School (State College, PA) to victory. For information on the Chesapeake Bay Bowl, contact Regional Coordinator Staci Lewis at chesapeakebaybowl@hotmail.com or 202-448-1256.
- Virginia's **Blue Crab Bowl** is coordinated by Marine Advisory staff at the Virginia Institute of Marine Science and colleagues at Old Dominion University's Department of Ocean, Earth & Atmosphere. This year's contest was held on February 26 at the campus of the Virginia Institute of Marine Science. Top honors went to Coach Bill Dunn's winning team from Bishop Sullivan Catholic High School. For a description of the competition and announcement of this year's winners, visit the VIMS website at: www.vims.edu/newsandevents/topstories/bcb_2011.php or contact Regional Coordinator Carol Hopper Brill at chopper@vims.edu, phone 804-684-7735.
- The **Blue Heron Bowl** in North Carolina took place on February 26 at East Carolina University in Greenville, NC. This year's winning team from the North Carolina School for Science and Mathematics (Durham, NC) continued their winning record under the leadership of Coach Leslie Brinson. For more information about the Blue Heron Bowl, please contact Regional Coordinator Dr. Jeffery Alejandro at ALEJANDROJ@ecu.edu or phone 252-328-9197.

MAMEA applauds the hard-working students and their teacher coaches. To acknowledge the effort of coaches new to the competition, MAMEA provides a one-year complementary membership which helps link these teachers to the MAMEA's active community of marine and aquatic educators.

The 2011 NOSB® Finals Competition will be in Galveston, TX at Texas A&M University at Galveston from April 30-May 1, 2011. You can follow your favorite Mid-Atlantic teams on the NOSB® Facebook [page](#).

For more information on NOSB®, news about marine research and policy issues, or the NOSB® Ocean Scholar scholarship (application deadline is April 15, 2011), visit www.nosb.org.



Winners of the 2011 Chesapeake Bay Bowl, State College Area High School, State College, PA.



Winners of the 2011 Blue Crab Bowl, Bishop Sullivan Catholic High School (Virginia Beach, VA).



Winners of the 2011 Blue Heron Bowl, North Carolina School of Science & Mathematics (Durham, NC).

Species Spotlight

Common name:
Skilletfish, oyster clingfish

Scientific name: *Gobiesox strumosus*



Range: *Atlantic*—New Jersey to Gulf of Mexico to Southeast Brazil; Bermuda. *Pacific*—Sonora, Sinaloa and Nayarit, Mexico

Habitat: Typically on oyster reefs or rocky shores, but can also be found over mud flats and eelgrass beds. In warmer months, they are found in water less than 1 meter, however, they can be found to depths of 33 meters, particularly in winter when they move to deeper channels.

Diet: Skilletfish feed mostly on bristle worms and small crustaceans.

Size: 3.75" long (max)

Field identification: Dorsoventrally depressed; Frying pan shaped body that varies in color from pale gray to dark olive-brown, often with a mottled pattern of spots and lines. Underside has a large suction disk. Head is broad and flat with tiny eyes.

Interesting factsoids: Very popular among aquarists. Although similar in shape and coloration, skilletfish are not related to the oyster toadfish (*Opsanus tau*).

Additional Resources

- Lippson and Lippson, [Life in the Chesapeake Bay](#).
- Encyclopedia of Life - [Gobiesox](#)
- Chesapeake Bay Program - [Skilletfish](#)
- Fishbase - [Gobiesox strumosus](#)

MAMEA TechCorner

by Chris Petrone

While attending the NSTA national conference in San Francisco a few weeks ago, I sat in on several sessions about integrating new technologies into the science classroom. I learned about how teachers are using iPod Touches and smart phones to enhance their teaching. These sessions were so popular that I got kicked out of one on using the iPad in the classroom because we had [greatly] exceeded the room's occupancy limit!

So my question to you: Have you started using these mobile technologies in your classroom? If so, how? Drop me a line at petrone@vims.edu and I will include it in the next TechCorner.

MAMEA 2011

MAMEA & Virginia Dept. of Environmental Quality's Office of Environmental Education will host the
Annual Professional Development Institute

October 7-9, 2011

**College of William & Mary
Williamsburg, VA**

Conference Highlights

Friday, Oct. 7

- ❖ Optional field experiences
- ❖ Welcome reception
- ❖ Invited environmental science speaker

Saturday, Oct. 8

- ❖ Invited marine science speaker
- ❖ Concurrent science education sessions
- ❖ MAMEA business meeting & awards
- ❖ Dinner & auction

Sunday, Oct. 9

- ❖ Optional field experiences

Lodging available for the special conference rate of \$77/night at the Williamsburg Hospitality House (757-229-4020).

Call for papers coming in April. For more conference, information visit www.mamea.org.



We Sea Change *continued from front page*

The NCAFF decided to focus on education. I, along with my students from the Isaac Bear Early College High School, chose to create a film focused on the potential impacts of a changing climate on our unique resources. The students titled their project "We Sea Change." I also used this opportunity to fulfill requirements for my Masters degree in environmental studies at the University of North Carolina Wilmington, by creating a high school curriculum to supplement the film. To help us complete our project I applied for, and received, a grant from MAMEA. Funding was used to purchase a camera that the students used to film and document their project. The students have been keeping a blog which includes many of their pictures and thoughts on the project. You can visit our blog at www.capefearstudentsummit.blogspot.com. They have also kept a wiki about their project at www.capefearstudentsummit.wikispaces.com.



The NC delegation and the National Aquarium of Baltimore's delegation at the AZA reception with Jack Hanna. *Courtesy of Megan Ennes.*

student delegations selected to give live interviews on the Jason Project's website. You can see the Aquarium's interview here: www.jason.org/public/careplay1.aspx. On Thursday most groups were able to meet some of their Congressmen and share their passion for their projects. It was an amazing trip over all. If you would like to learn more about Coastal America check out their website at: www.coastalamerica.gov.

All are welcome to join us on September 28, 2011 at 6:30 p.m., at the NCAFF, for the premiere of our film. For more information on the premiere, please contact megan.ennes@ncaquariums.com.

From drawing board to reality

by Carol Hopper Brill

Launch your best educational project ideas!

You just read about Megan Ennes' MAMEA grant-funded project. Do you have a great idea for an educational project that engages students or educators? Need some funding? A MAMEA mini-grant may be just what you need to get your project off the ground! Get a proposal for the next round of MAMEA Educational Project grants! To be eligible, applicants must be current MAMEA members with at least one year's membership. Find further information about the grant application process on the MAMEA website: www.mamea.org/minigrant.html.



The NC delegation in front of the U.S. capital building. From left: Megan Ennes, Jessica Lama, Keela Sweeney, Evan Lucas, Dustin Chambers, and Bryan Bishop. *Courtesy of Megan Ennes.*

On Monday, February 14, 2011, the student delegations traveled to Washington D.C. to present their projects. The students

met Jim Toomey, writer of the Sherman's Lagoon comic strip. On Tuesday they learned about projects other student groups were working on. The student-presentations were webcast on the Ocean Portal website. You can find an archived version of our presentation at: www.ustream.tv/recorded/12710861. Look for our students at 2:11:15. Tuesday evening, the students met Jean Michel Cousteau and heard him speak. On Wednesday, NCAFF was one of eight

NAAEE in MAMEA's backyard

by Elizabeth Burke

The Environmental Educators of North Carolina (EENC) and the North American Association for Environmental Education (NAAEE) invite you to attend the upcoming conference, "Rooted in Time, Branching to the Future." We know that you'll just be catching your breath after the MAMEA conference, so we are dangling a little nugget in hopes of enticing you to join us in Raleigh October 12 -15, 2011.

In addition to the onsite conference workshops and sessions, EENC is planning several mobile workshops to highlight North Carolina's unique ecosystems. One of particular interest to MAMEA members, is an overnight coastal trip (October 11-12, 2011), "EE Lessons in Water Quality Monitoring and Marine Ecosystems." Highlights include the Cherry Point Ferry and FerryMon project. The Ferry Monitoring program, a partnership of UNC, Duke University, NC-DENR and the North Carolina Department of Transportation, is a ferry-based monitoring system of surface water quality in North Carolina. After a ferry ride, participants will head back to the UNC-Morehead City lab for wrap up of FerryMon. The day will end with a visit to the Duke Marine Lab. We'll overnight at the Duke University Marine Lab in Beaufort. Wednesday morning participants will board a skiff that will take them to Carrot Island and the Rachael Carson NC National Estuarine Research Reserve. We'll depart in time to be in Raleigh by 4:00 pm. This trip is 50% wheelchair accessible.

All conference mobile workshops will include lesson plans which address the national education standards.

On a separate note, for those of you interested in submitting posters to the conference, or in bringing films to the film festival, the deadline is April 1, 2011.

For more information on the conference, please visit www.eenc.org.

For questions about helping at the conference, contact Renee Strnad at volunteer2011@eenc.org.



NAAEE 40TH ANNUAL CONFERENCE
Raleigh-Durham, North Carolina • October 12-15, 2011

MAMEAn Goes to Sea

MAMEA's sole member from Tennessee and classroom teacher at Soddy Daisy High School, David Wehunt, is currently at sea aboard the Research Vessel *Knorr*, cruising the North Atlantic. David is participating in the NSF-funded study, "Formation, Growth and Separation of the Northwest Corner Eddy" study taking place between February 27 and April 1, 2011. He is one of only two teachers aboard for the expedition.

The Northwest Corner is just below Greenland at about 50 degree North latitude, and here David will be assisting scientists from the University of Rhode Island who are researching the formation and evolution of eddies formed as the North Atlantic Current turns eastward. The cruise is conducting high-resolution hydrographic surveys, including Doppler current profiling and Conductivity, Temperature, Depth (CTD) sampling. The data will be used to validate a conceptual model of eddy formation.

For more information on the research cruise and David's blog entries, where he discusses some pretty serious weather they've encountered, please visit www.gso.uri.edu/formation-growth-and-separation-northwest-corner-nwc-eddy-part-1.

MAMEA Congratulates the Beachchair Scientist on their 200th post

The *Beachchair Scientist*, an ocean sciences education blog recently published their 200th post. Covering all things marine, the site offers blog visitors a wealth of information and resources to use with their students all broken into 33 categories.

Contributors to the *Beachchair Scientist* include: MAMEA member Ann McElhatton, who is the Outreach Coordinator with the Atlantic Coastal Cooperative Statistics Program; Dr. J.G. McCully, a retired medical doctor and author of [Beyond the Moon: A Conversational Common Sense Guide to Understanding the Tides](#); and Jim Wharton, Director of the Center for School and Public Programs at Mote Marine Laboratory and Aquarium in Florida.

Visit the *Beachchair Scientist* today at beachchairscientist.wordpress.com. Have a question for the bloggers? You can reach them at info@beachchairscientist.com.

State Rep Reports

VIRGINIA

Check out the upcoming workshops and events in Virginia!

MWEE Capacity Building Workshop at the Virginia Institute of Marine Science

Saturday, April 9, 2011

Secondary teachers are invited to apply for a one-day professional development and capacity building workshop to learn how to conduct their own Meaningful Watershed Educational Experiences (MWEE) for students at their schools. Activities will include how to plan a MWEE, science SOLs to cover; site selection; pre- and post-trip activities; safety and organization; appropriate equipment; introduction to the Chesapeake Bay flora and fauna; and environmentally responsible field practices. Applications were due March 25, 2011. Teachers will be selected by lottery. For more information, contact Sarah McGuire at mcguire@vims.edu or 804-684-7878. The workshop is sponsored by NOAA Chesapeake Bay Office, the Virginia Resource Use Education Council, the Mid-Atlantic Marine Educators Association, the Chesapeake Bay National Estuarine Research Reserve in Virginia, and VIMS Marine Advisory Program.

VIMS Marine Science Day

May 21, 2011

VIMS' annual open house is a fun-filled event for the whole family. Join us in Gloucester Point on Saturday, May 21 for exhibits, children's activities, seining on the York River, lab tours, seafood cooking demonstrations, mini-lectures, and much more. Parking and all activities are free. The event is rain or shine. Visit www.vims.edu/public/msd/index.php for more information.

VIMS Chesapeake Bay Academy: Virginia Coastal Ecosystems Field Course for Teachers

July 10-14, 2011

Virginia middle and high school science teachers are invited to apply for one of six Chesapeake Bay Academies offered this summer by the Virginia Resource-Use Education Council (VRUEC). Virginia Sea Grant and VIMS educators will be hosting one of the Chesapeake Bay Academies, which will take place at the VIMS Eastern Shore Lab in Wachapreague, VA. The focus of the residential field course is preparing teachers to successfully integrate coastal and ocean science content into their existing curricula, while building confidence and skills in conducting Meaningful Watershed Educational Experiences (MWEEs) with their students. For more information on all six 2011 Chesapeake Bay Academies, please visit: www.vanaturally.com/bayacademy.html.

DELAWARE

Horseshoe crab breeding season is right around the corner! Come visit the Delaware beaches and see this amazing biological phenomenon for yourself. One of the best ways to experience the horseshoe crabs is to participate in a Green Eggs and Sand workshop. The upcoming workshops are April 15-17 in Georgia, May 13-15 in Cape May, NJ, and June 3-5 in New York. You can find more information at www.tydb.org/greeneggs_sandworkshops.php.

*Reader's Review

So what did you think of this issue of *The Masthead*? Please [submit](#) your comments!

If you did not get your program announcement or lesson plan in this issue of *The Masthead*, be sure to [submit today](#) for the next issue (due out in late May/early June). In the meantime, stay tuned to the MAMEA website and [Facebook page](#) for the latest news, information, and networking opportunities from the *greatest marine education association in the Mid-Atlantic!*

