From the Captain’s Quarters

Greetings from the land of snow and ice! It is hard to believe that this is the Mid-Atlantic region with the crazy winter we have had. Several MAMEA-related professional development opportunities had to be canceled this winter due to weather and/or low enrollment. We know that times are tough and we hope that all of you are able to dig yourselves out of the snow and stay sane.

To emphasize the future and the seasons to come, I want to focus this message on upcoming opportunities. First, you can stay warm overnight in the National Aquarium, Baltimore venue, at the Maryland Mini-Conference on March 12-13 (www.mamea.org/conf.html). Next, the NMEA share-a-thon at the National Science Teachers Association (NSTA) conference will be warm and cozy on Thursday, March 18, in Philadelphia, PA. MAMEA will have a booth at the event and there are always fabulous resources and presentations that day. Please try to join us there. For more information, contact our NMEA representative, David Christopher at dchristopher@aqua.org.

Also, NMEA is currently accepting presentation proposals, registrations, and awards nominations for the 2010 NMEA Conference: From the Mountains to the Sea, in Gatlinburg, Tennessee, July 18-23. Scholarships are available to NMEA members. And, this year, there may be additional funding for the Expanding Audiences Stipend. So, if you have a colleague who is interested in getting more involved in ocean and aquatic education and who is from, or serves a group that is underrepresented in science, please nominate him or her for the Expanding Audiences Stipend. The NMEA awards are prestigious recognition for folks involved in marine and aquatic education—there are three awards, two of which are only available to NMEA members. You can find more information on the conference, the scholarships and stipends, and the awards at www.nmeaweb.org/gatlinburg2010.

Finally, MAMEA will be hosting its own annual conference in warm, sunny Carolina Beach, North Carolina, on October 1-3. The conference will be held at a hotel right on the beach where we can sit on the sand or sit inside and watch the waves roll in. It sounds dreamy right now with 2+ feet of snow outside here in Delaware! Stay tuned to the MAMEA website for more information on the 2010 conference.

Cheers!
Tami Lunsford, MAMEA President

The Continuing Adventures of JoAnne & Terri
by Terri Kirby Hathaway and JoAnne Powell

Well, JoAnne and Terri are at it again. The travelling duo attended the inaugural International Beachcombing Conference in Annapolis, MD, and then searched for beach glass along the shores of Lake Erie while attending the 4th Annual Sea Glass Festival in Erie, PA!
From the Editor
Hey MAMEA! I hope you are enjoying the Winter 2010 Masthead, perhaps all snuggled in next to a toasty fire! In this shorter issue, you will find all sorts of great information: professional development opportunities; tales from great travel; tips for using technology in the classroom; information on several new marine science resources; and even some preliminary information on the 2010 MAMEA conference. It’s going to be a busy spring with the NSTA conference in Philadelphia in mid-March and several smaller conferences and meetings coming up in the mid-Atlantic. Several of our members will be exhibiting at the NMEA Share-a-thon at NSTA, so if you are in attendance, please stop by and see us Thursday morning. For now, please enjoy The Masthead and continue to stay warm; spring’s right around the corner...hopefully. Thanks for reading!
- Chris Petrone

About the Cover Ship
Each issue of The Masthead features a different Mid-Atlantic sailing ship in the cover banner. This issue’s ship is the Ada Mae.

The skipjack Ada Mae was built in 1915 in Rose Bay, NC by Captain Ralph Hodges. With shallow drafts, skipjacks were used primarily to dredge for oysters and female blue crabs. Now, these distinctive boats are becoming more and more rare throughout the mid-Atlantic. The Ada Mae is the only NC-built skipjack still on the water. Today, it serves a different purpose as the centerpiece of education programs conducted by Carolina Coastal Classrooms, Inc. in New Bern, NC.

Visit the Ada Mae at carolinacoastalclassrooms.com. Photo courtesy of Carolina Coastal Classrooms, Inc.

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
We Want You!
by Carol Hopper Brill

Are you motivated, energetic and creative?
Do you want to help make a difference in marine education?

Well, we want you… To join the MAMEA Board and get in on the action! Or, maybe you know someone who has enthusiasm, energy and would make a good Board member? MAMEA is seeking nominees for the 2011 Board.

Nominations are now open for: MAMEA President Elect, Treasurer, DC Representative and VA Representative. For a summary of Board officer duties, see the outlines on the MAMEA website at: www.mamea.org/board.html

We need to finalize our slate of candidates by May and conduct our first electronic election by June 2010. New officers for 2011 will be announced at the NMEA Conference in July, and then take office at the MAMEA annual Conference in October 2010.

Why Serve on the MAMEA Board or a MAMEA Committee?
With all the challenges our watersheds, coastlines and ocean are facing, education is more important than ever before – for students and for the public at large. As a MAMEA Board or Committee member, you can help support both classroom and informal educators in Mid-Atlantic states. Through Board and Committee involvement, you not only contribute to MAMEA, but also gain knowledge and skills as you work within a Chapter of the National Marine Educators Association. These networking opportunities bring you in contact with regional and national initiatives in marine education, and some of the movers and shakers in our field. It’s a great learning and professional development opportunity.

Board Member Testimonials -
Here’s Why They Serve
Here’s how some of our current Board members got involved and what participation has meant to them:

Amy Sauls, North Carolina Rep & a Past President:
Teacher, Jones Senior High School
“Being on the MAMEA Board provides me ongoing opportunities to connect and network with local marine educators. And, Board activity gives me an excuse to communicate more often with friends that I may not see in person as often as I would like. The MAMEA Board also gives me the chance to help promote local and regional programs and hopefully make connections to draw in other interested potential members.”

Tami Lunsford, Current President & a past DE Representative:
Biology Adjunct Professor, U. of Delaware Assoc. of Arts Program & MATE Center Internship Coordinator
“I became a member of the MAMEA Board because I love the people in marine education. Everyone on the Board is so passionate and dedicated to their own work. And, they are dedicated to improving the organization so that we can help other educators and those we educate.

I also joined to help make more connections professionally. Teaching can be an isolating profession and being a part of the MAMEA board helps me stay connected on a regional and national level.”

Kathy Fuller, Secretary & a past Maryland Rep:
Youth Programs Coordinator, Education Department, National Aquarium-Baltimore
“I became involved in the Board when I volunteered to run a field trip for MAMEA’s 2000 regional conference. When I arrived to pick up the field trippers, they said ‘We need a new Maryland Representative since the old one moved out of the region.’ Tag… You’re it. I’ve been on the Board ever since. I enjoy working with a dedicated group of educators who are always coming up with fun and educational ways to enrich the lives of educators in the region.”

David Christopher, a Past President & Secretary:
Outreach Education Manager, National Aquarium-Baltimore
“I joined the board because I saw the benefit of organizations such as MAMEA and felt that I wanted to contribute to the overall community. I also appreciate how participation on the MAMEA Board has put me in touch with a variety of organizations at the local, regional and national levels.”
NMEA Update
by David Christopher

The National Marine Education Association will be hosting a Whale of a Share-a-thon on March 18, 2010, at the national NSTA conference in Philadelphia, Pennsylvania. During the Share-a-thon, marine education groups from around the country will be on hand to answer questions and give out science activities, lessons, and information regarding education opportunities. If you are attending the NSTA conference please stop by the MAMEA table at the Share-a-thon and say hello. If you would like to have anything handed out at the Share-a-thon, please contact David Christopher. The Share-a-thon will be held in the Liberty Room of the Sheraton Philadelphia City Hotel from 8:00 am-9:00 am. The Share-a-thon will be followed by a series of marine education related sessions. Anyone wishing to attend the Share-a-thon must be registered for the NSTA conference.

Registration is now open for the 2010 National Marine Education Association's annual conference. This year's conference will be held in Gatlinburg, Tennessee on July 18-23, 2010. Deadline for early registration is April 1, 2010. This year NMEA is offering two methods of financial assistance to attend the conference. The first is a scholarship open to all NMEA Members. The deadline for this Scholarship is April 1, 2010. NMEA is also offering an Expanding Audience Stipend for those who represent and/or educate underrepresented minorities. The deadline to apply for the Expanding Audience Stipend is March 12, 2010. For more information on visit the conference website at www.nmeaweb.org/gatlinburg2010.

Ocean City in January? No sweat...
by Chris Petrone

Most MAMEAns will rarely pass up a trip to the beach, even with forecasted temperatures below zero (°C!) and heavy snow. The ocean air does something that only marine educators, and to a lesser extent, their significant others, understand. That, combined with the opportunity to educate families about the ocean, watersheds and the creatures that live below the water’s surface, make an annual trek to Ocean City, Maryland an event we look forward to year after year.

On January 30, 2010, educators from the New Jersey, Delaware, Maryland and Virginia Sea Grant programs; National Aquarium (Baltimore venue); Under the Sea; Oyster Recovery Partnership; and U.S. Fish and Wildlife Service teamed up to present the 12th Annual Junior Watermen’s Program at the 36th Annual East Coast Commercial Fishermen’s and Aquaculture Trade Expo. With over 6 inches of snow on the streets of the seemingly abandoned city, almost 250 adults and 80 children braved the weather to attend.

This year’s program included exhibits on Remotely Operated Vehicles, watershed restoration, fish scales, marine chemistry, Chesapeake Bay critters and featured another fantastic presentation from former MAMEA President Andrew Wilson and his company Under the Sea.

Headed by Maryland Sea Grant Educator and MAMEA Treasurer Jackie Takacs the annual event always receives tremendous accolades from participants and was the recipient of a 2008 Mid-Atlantic Sea Grant award for outstanding regional collaboration. MAMEAns Adam Frederick, David Christopher, Chris Petrone, Vicki Clark, Lisa Ayers Lawrence and Carol Hopper Brill are perennial exhibitors, with the first three typically found hassling Jackie Takacs as much as possible.

If you are interested in presenting an exhibit next year, please contact Jackie at takacs@mdsg.umd.edu. If you are interested in attending this event, it is typically held on the fourth Saturday in January each year.

*MAMEA Conference Announcement*

When: 1-3 October, 2010
Where: Courtyard at Marriott, Carolina Beach, NC
Call for Presentations: August 1-September 10

Please plan to join us for a fun-filled, informative, and inspiring weekend of professional development and camaraderie.

If you are interested in helping with the event or for more information, please contact MAMEA President-elect Ruth Gourley, at ruth.gourley@ncaquariums.com.

Conference scholarships are available! More details coming soon. Stay tuned! www.mamea.org/conf.html

Don’t miss it!
The Little Nature Show:  
**A new on-line video resource for environmental educators**

by Carol Hopper Brill

Filmmakers Michael Male and Judy Fieth of Blue Earth Films are well known for their work documenting the coastal habitats and wildlife of the Mid-Atlantic Region. Our favorite is their video “Lifestyles of the Wet and Muddy” done for National Geographic. As great as this film is, it is also not readily available!

Fieth and Male want their work to be more accessible to educators. In their plenary presentation at the 2008 MAMEA Conference, they described one of their pet projects, a labor of love and—at that time—in its early conceptual stage. They dreamed of a series of web-based mini-movies that would deliver their great footage of Mid-Atlantic coastal ecosystems and wildlife to teachers, kids and curious nature lovers using the web. They want to inspire awareness of the nature all around us and promote observational science in our every day lives.

Their concept, *A Little Nature Show*, is now a reality! A simple website presents their concept and provides a link to their video episodes at littlenatureshow.org. Alternatively, there is a link to the videos on YouTube.

The first episode introduces the ecology and identification of some common backyard birds. Featuring the snow storms of this February, there is also a succinct introduction to the difference between weather and climate, something that is all too often confused by popular media. The segment finishes with some amazing behavioral observations of the cryptic shorebird, the woodcock.

The second episode continues the conversation about big snow, little birds, and global warming.

Segment Three is going to be the first of their “Stories of Submerged Objects.” Male and Feith paddle and wade out into their local tidal creek to investigate a couple of sticks that they know are loaded with big barnacles. They’ll conduct a simple experiment by submerging a fresh object or two, then come back to check them in future episodes. They see this simple activity as a great jumping off point for looking at tides, seasons, larval invertebrates, oysters, food chains...and so much more.

By Segment 4, they will be getting down and dirty on the mudflats. In a string of explorations called “The Mud Files,” they will look at all the wildlife that depend

MAMEA TechCorner

by Dawn Sherwood

As both formal and informal educators, we are always looking for ways to grab someone's attention. In the classroom, these are those wonderful “bellringers” that many teachers are expected to always have up their sleeve. When you can incorporate technology, it makes most administrators even happier and sometimes even impresses the students. One idea is to use podcasts.

In a recent Scuttlebutt email, *Podcast for Life*, was discussed. Here are a couple of ideas for using podcasts:

1. Do a KWL chart and then listen to the podcast. Have a discussion following the podcast.
2. Ask students for their opinions about the organism prior to listening the podcast. Then discuss how the podcast might have changed their opinion and why.

About the *Podcast of Life*

Introduce your students to marine biology and biodiversity through the *Podcast of Life* and witness science in action through lively, you-are-there stories from the front lines of ocean science. You will be able to listen to the podcast on the website or download it on iTunes. A new podcast is added every two weeks. This series of 13 podcasts, hosted by Ari Daniel Shapiro, is brought to you by the *Encyclopedia of Life*, Smithsonian's National Museum of Natural History, Atlantic Public Media and a consortium of marine education network partners.

The newest *Podcast of Life* focuses on the great white shark (*Carcharodon carcharias*). In this episode, students question shark researcher Greg Skomal about this charismatic predator at the top of the ocean food chain.

How do you use technology in your teaching? We want to know! Email petrone@vims.edu.
Species Spotlight

Common group name: Plumed worm

Scientific name: Diopatra cuprea

Range: Coastal areas from Massachusetts to Florida and the Gulf of Mexico

Habitat: Protected mud and sand flats mixed with shell debris and gravel from low-tide line to depths up to 90m. Live in leathery tubes that they create from mucus, shell particles and other debris.

Size: Average size is 30 cm in length and 1 cm in width.

Diet: Active predator, which can bite when handled. Use tentacles and cirri to find food; and eat smaller creatures such as larval fish. They capture prey from the entrance of their tunnel.

Field identification: Very difficult to observe in natural surroundings as they retreat into their tubes at the slightest disturbance. They also retreat to the bottom of their tube when tides go out. The ornate above-ground portion of their tube, typically camouflaged with sand and shell pieces, identifies their presence. The tube can be dug up to collect the worm, but this skill belongs only to the seasoned worm digger! When out of their tube, plumed worms can resemble Christmas trees because of their bushy gills, or “plumes.”

Interesting factoid: They are able to regenerate lost tissue.

Conservation status: Common throughout their range, but are threatened by increased erosion and coastal sediment transportation.

Additional Resources
- University of Michigan Museum of Zoology Animal Diversity Web
- Lippson and Lippson, Life in the Chesapeake Bay

MAMEA Grant Program
by Carol Hopper Brill

Do you have a great idea for an education project, but no money to put it into action?!

Each year, MAMEA supports its members’ innovative marine and aquatic education projects through the Educational Project Grant Program. Two grants (up to $1,000 each) are available annually, one for formal educators (classrooms, K-16) and one for informal educators (museum, aquarium, zoo, science center, government agency staff).

To be eligible for a MAMEA Educational Project grant, applicants must be current MAMEA members with at least one year’s membership. Grant applications are due by September 15, 2010 and Awardees are announced at the annual conference in October.

For more information, please visit www.mamea.org/minigrant.html.

NOAA Teacher Training
by Jennifer Aiken

The National Aquarium, Baltimore venue is pleased to offer the Learning Ocean Science through Ocean Exploration, Part I of II teacher workshop on Saturday, April 17, 2010, from 8:00 am to 4:00 pm at the Aquarium.

The workshop is FREE and open to any science teacher in grades 6-12. Participants will receive the Learning Ocean Science through Ocean Exploration curriculum book with CD-ROM, Certificate of Participation, and Aquarium admission. Continental breakfast and lunch will be served.

This is a two-part workshop. An optional follow-up session will be held on October 23, 2010. Participants who attend both sessions will receive a $100 travel stipend as well as be eligible for two MSDE CEU credits.

To register for the workshop, please call (410) 576-3833 or email reserve@aqua.org. The registration deadline is April 2, 2010.

This training is being offered in many other locations, including Tennessee, Virginia and South Carolina. Please visit http://oceanexplorer.noaa.gov/edu/development/onsite_development.html for more information.
The North American Sea Glass Association (NASGA) began their annual sea glass festivals in 2006 in Santa Cruz, CA. After two festivals in Santa Cruz, the group decided to share the wealth and move over to the east coast with the 3rd festival in Lewes, DE.

The 4th Annual Sea Glass Festival took place October 17 and 18, in the Bayfront Convention Center in Erie, PA. We know that you all are thinking (as we were), “Why in the world would they have a sea glass festival in Erie, PA?” Who knew that the shores of the Great Lakes are wonderful places to find sea glass, or more appropriately, beach glass? We soon found out!

The weather in Erie was not very welcoming when we arrived. It was overcast and drizzly, and eight inches of snow had fallen the day before in State College, PA – not too far away. Luckily, we had packed for cold weather. We were amazed at the amount of beach glass we found in just an hour of searching! We found blue, brown, green, and clear, along with a few pottery shards. We were officially excited!

The Festival began on Saturday morning – we got over to the Convention Center and were surprised at the admission line that had already formed! Inside the exhibit space, over 40 booths offered all kinds of sea glass items for sale. In addition to jewelry of all shapes and sizes, there were key chains, sun catchers, mobiles, t-shirts, stained glass panels, note cards, photographs, and tiaras! We were overwhelmed by the merchandise and the crowds!

Lectures were scheduled during both days of the Festival—from Richard LaMotte speaking on “Sea Glass Identification” and Celia Pearson sharing thoughts about being “A Passionate Collector,” to Mary Beth Beuke, the president of NASGA, sharing her “Around the World Adventures in Sea Glass” and Jerry Skrypzak, an Erie photographer and historian, telling stories about “The Changing Waters of Lake Erie.”

We were able to search for sea glass several times along the beaches of Presque Isle State Park, whose beaches are composed of coarse sand and flat “river rocks” mixed with zebra mussel shells and small glass shards. Our mantra for the weekend was scan, stoop, scrape, select, stand, step . . . over and over again!

On Sunday, we ran into a couple of ladies from the Jersey Shore who shared insider information with us about a collecting site near an old dump. We immediately hopped into the rental car to search for this site where we picked up a number of cobalt blue pieces, along with a various shades of green, a couple of reds, and one orange piece!

We thoroughly enjoyed exploring Presque Island State Park, the Tom Ridge Environmental Center, and Erie, PA. And, over 5,000 people enjoyed the 4th Annual Sea Glass Festival with us. Mark your calendars for October 9-10, 2010 for the 5th Annual Sea Glass Festival in Hyannis, MA! Check out www.seaglassassociation.org for more details!

continued on next page
In early November, we attended the inaugural International Beachcombing Conference in Annapolis, MD, hosted by the Society for Ocean Sciences. A small, but sturdy group of about 35 people were there for the first gathering of beachcombing enthusiasts – we met at the Chesapeake Bay Foundation’s LEED-certified offices.

A few vendors were there selling their wares: jewelry, photos, books, stained glass, and other crafts. During the first day of the event, guest speakers talked on everything from global warming to fossils, beach rocks and stones to sea glass. The second day was filled with field trips and workshops that attendees chose in advance.

We both chose the morning field trip beachcombing along the shores of the Chesapeake Bay. Beach glass, shells, and trash were among the treasures we gathered. In the afternoon, JoAnne traveled to collect Miocene fossils from the shores of Calvert Cliffs, while Terri enjoyed making oyster shell flowers and a seashell topiary ball in her beach craft workshop.

The group discussed the formation of an international group of beachcombing enthusiasts – one of the attendees stepped up and volunteered to help organize this new consortium. So, be on the lookout for more information about the International Beachcombers Association, or whatever it will be called. No dates have been set for the next Beachcombing Conference, but you can check out www.beachcombingconference.com for details from the 2009 gathering.

Watch for future adventures as JoAnne and Terri plan to attend the 23rd annual Beachcomber’s Fun Fair in Ocean Shores, WA in March!
Masthead Resource Library

- **New resource: Bay Back Pack**
  Find some creative ways to integrate the Chesapeake Bay and environmental issues into your classroom lessons. Search through the Bay Backpack's books, multimedia, curriculum guides, individual lesson plans and online data sources about the subjects you are teaching in class. [www.baybackpack.com/index.cfm?page=app.home](http://www.baybackpack.com/index.cfm?page=app.home)

- **New Climate Change Short Course (DVD and Online)**
  From the USDA Forest Service, this new short course, "Adapting to Climate Change: A Short Course for Land Managers," is available as a DVD or online. The self-paced course provides an up-to-date synthesis of scientific and technical information and can help resource managers and decisionmakers plan for future climate-driven uncertainties. [http://www.fs.fed.us/ccrc/](http://www.fs.fed.us/ccrc/)

- **Pearson Tropical Biology Scholarship**
  High school biology teachers can apply for a scholarship for the summer of 2010 to join in research and exploration of tropical biology concepts with the Organization for Tropical Studies in Costa Rica. Submit an essay on how this experience would change the way you teach biology. The deadline for entry is March 1, 2010. [http://www.phschool.com/tropicalbiology/](http://www.phschool.com/tropicalbiology/)

- **Joides Resolution Teacher at Sea**
  The Joides Resolution offers this special call for educators, artists, writers, and science communication professionals to apply for limited positions on the Integrated Ocean Drilling Program's Expedition 327, Juan de Fuca Hydrology, sailing July 5-September 4, 2010. If selected, educators have the opportunity to learn shipboard science alongside the expedition's science party and translate their learning experiences for students, families and the general public through creation of blogs, videos, social networking sites, live video conferencing from the ship, and classroom activities. The deadline for application is March 10, 2010. [http://joidesresolution.org/node/453](http://joidesresolution.org/node/453)

- **Information Exchange for Marine Educators**
  This monthly e-newsletter, supported by the NOAA Office of Education, is intended to improve the availability of education information to Marine Protected Area practitioners and the public, encourage exchange of information and programs, and promote collaboration. It includes information about marine education programs and activities, professional development opportunities, and funding sources. It also includes a section for educators to post requests for information. The email provides a brief overview of each program along with a website or contact information for more information. [http://mpa.gov/helpful_resources/education_training.html#infoexchange](http://mpa.gov/helpful_resources/education_training.html#infoexchange)

- **NOAA Climate Services Portal**
  NOAA has launched the NOAA Climate Services Portal prototype. The portal offers climate data and services, articles and information, education resources, and tools for engagement and decision-making. ClimateWatch Magazine is designed for the public user, hosting stories and images for a broad audience. Data & Services targets advanced users with easy access to data and the data library, how to utilize climate data, and information on partners. Understanding Climate provides numerous climate resources, including research publications, fact sheets, presentations, and a calendar of climate-related events. Education is designed to target educators with student activity resources, interactive tools, lesson plans, and opportunities for professional development. [www.climate.gov/](http://www.climate.gov/)

- **Squids4Kids**
  Bring a jumbo Humboldt squid into class and engage students of any age in this hands-on activity. Humboldt squid provide an outstanding teaching platform for discussing climate change, ecology, anatomy, physiology, fisheries science, and more. Squids4Kids supplies frozen specimens of Humboldt squid for use in educational activities at any level and the package includes illustrated background material and dissection guides. Check out the program and resources on the website, [http://gilly.stanford.edu/outreach.html](http://gilly.stanford.edu/outreach.html)
State Rep Reports

NORTH CAROLINA

The North Carolina Maritime Museum, Beaufort
The Junior Sailing Program uses the fun of sailing to teach seamanship, navigation, boating safety, and sailing techniques for beginning to advanced sailors. Classes include two-week sessions, one-week sessions, and Regatta week. Summer Science School for Children investigates the coastal environment and NC maritime history. Class topics include pirates, boat models, seashore life, nature photography, fishing, and nautical archaeology. Contact the museum for brochures and applications. (June – August)

The new exhibit, “Science by the Sea,” highlights the achievements of our local marine science research community. Visitors will discover the fields of oceanography, marine mammal biology, marine fisheries, and ecology, and get to know the individuals that make the labs successful. The exhibit features local landmarks dedicated to marine research and a glimpse into a working laboratory. (April 10 – November 14). Families will explore the exciting new exhibit during “Mad Science!” Family Day, with hands-on marine science experiments & activities. The event is free, group reservations are required. (Saturday, April 17, 2-4 pm)

A new program, “Merry” Time for Tots uses museum artifacts to introduce preschoolers to the nautical world. Children ages 2-5 and their caregivers discover hands-on activities and stories in a setting that only a museum can offer. Choose a session on Boats & Boaters, Fish & Fishing, or Ocean Animals... or attend all three! The programs are free, reservations are required. (Tuesdays, Mar. 23, Apr. 13, May 4, 9-10 am)

Learn how to sail as a family aboard traditional sailing skiffs. Family Sailing Lessons are by reservation only, and prices vary by number of people and number of hours on the water. Instruction for groups of 2-6 people, for 2-6 hours. Cost varies. Call 252-728-2762 for details and reservations.

To make program reservations, or to find out more about educational programs offered at the Maritime Museum, visit www.ncmaritimemuseum.org or call 252-728-7317.

North Carolina Coastal Reserve & National Estuarine Research Reserve
Coastal Explorations Workshop - March 15, 2010, 8:30 am-3:30 pm, Pivers Island, Beaufort, NC
Participants will be introduced to facts and concepts about estuaries, the National Estuarine Research Reserve System, the NC coast, and current estuarine research. Field-based explorations and activities conducted on the Rachel Carson Reserve will be introduced so participants can integrate them into their learning environment.

Oyster Reefs: An Edible Essential Habitat Teacher Workshop - April 2010, Three locations!
Oyster reefs are a unique and essential habitat providing multiple services in the marine environment, such as water filtration and providing habitats for many economically important fish. In addition to this, they also are a valuable fishery themselves. Oyster reefs serve as model ecosystems to teach students about: water quality; essential habitats; basic ecological concepts; and how people alter ecosystems.

For the full NCCR/NERR workshop calendar, please visit www.nccoastalreserve.net/Resources/Calendar75.aspx.

*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 spring issue (due out in May). In the meantime, stay tuned to the MAMEA website and MAMEA Facebook group for the latest news, information, and networking opportunities from the greatest marine education association in the Mid-Atlantic!
Interested in COSIA?

Communicating Ocean Sciences to Informal Audiences (COSIA) is an informal science education course that was developed by educators at Lawrence Hall of Science with NSF funding. The COSIA course provides undergraduate and graduate students with the skills and experience to more effectively engage general audiences with ocean science topics. During the semester, students discuss learning theory and how it applies to informal settings, explore instructional strategies geared toward informal environments, and design their own activities for use at an aquarium or science center.

The Virginia Aquarium and Hampton University have been offering the course to HU students since 2006 and will be taking on a new role in the project - recruiting universities and informal science centers interested in joining the partnership and offering the course. If you want to learn more about the COSIA course and how to implement it at your facility, please join us for an informational open house at the Virginia Aquarium in Fall 2010. Staff from interested universities and informal science institutions should contact Karen Burns at 757-385-0272 or kpburns@VirginiaAquarium.com for additional information.

LTER Mini-Symposium - Virginia

The 9th Annual LTER (Long-Term Ecological Research) Mini-symposium, Ecosystem Services in a Changing World: Perspectives from Long-Term Ecological Research, will be held March 4, 2010 in Arlington, Virginia. http://lno.lternet.edu/

Summer 2010 Chesapeake Bay Academies

The Virginia Resource-Use Education Council (VRUEC), in cooperation with several state, federal, and private agencies, will conduct four Chesapeake Bay Academies this summer. The week-long experiences vary depending on the location, but all are summer learning experiences for middle and high school science teachers and are designed to closely support the implementation of the Science Standards of Learning. The Academies will provide detailed training, field experiences, print materials, and hands-on resources supporting the science standards content and skills. Special emphasis is being given to provide instructional resources that will support the science standards related to watersheds and the Chesapeake Bay in sixth-grade science, Life Science, Earth Science, and Biology. Instruction will also integrate classroom and field teaching demonstrating effective meaningful field investigations. See the VA Naturally Website for more details and registration information at www.vanaturally.com/bayacademy.html

• Chesapeake Coastal Academy
  June 21 - 25, 2010
  St. Margaret’s School, Tappahannock, VA
• Virginia Coastal Ecosystems Field Course
  June 27 - July 1, 2010
  Virginia Institute of Marine Science-Eastern Shore Lab, Wachapreague, VA
• Wildlife in the Bay
  July 12 – 16, 2010
  Chickahominy Wildlife Management Area, Charles City, VA
• From the Mountains to the Ocean
  August 9 – 13, 2010
  The State Arboretum of Virginia, Boyce, VA

VRUEC Environmental Education Award – Seeking Nominees

The Virginia Resource-Use Education Council is looking for nominees for their annual Environmental Education Award. This award recognizes an outstanding Virginian who has made major contributions to promoting public knowledge and understanding of natural resources in the Commonwealth. This award is given to a person who has demonstrated state and/or regional leadership in fostering working relationships and programs that benefit the educators and students of Virginia. Recipient may not receive the award more than once. Nominee must be a resident of Virginia. You can request a nomination form from VRUEC Award Committee Chair, Suzie Gilley.