Dear MAMEA Members,

Happy summer! With summer in full swing, things are getting busy for our MAMEA members. Teachers have finished out their school year and are looking forward to summer break and looking for opportunities to refresh their marine science knowledge. Our in formal educators are heading into their busy season of camps, professional development offerings, and outdoor experiences.

Many of our state reps are offering mini-conferences this summer, be sure to keep an eye out for these opportunities to take advantage of. In addition, many of our members will travel to Long Beach, CA for the National Marine Educators Association’s annual conference from July 15-20. Make sure to check out the sessions that our MAMEA members are presenting at the NMEA conference.

With all of the opportunities happening this summer- workshops, mini-conferences, and the NMEA conference, there is sure to be something for everyone to stay involved with marine science this summer. Enjoy the beautiful weather and summertime vibes. Hope to see everyone at one of our summer events!

Best,
Lauren
SAVE THE DATE!

MAMEA 2018 Annual Conference
Renaissance Hotel Portsmouth-Norfolk
November 9-11, 2018  Portsmouth, Virginia

Get ready for a weekend of networking, professional development, and fun! Friday night’s festivities will be held at Nauticus and can be accessed by water taxi from the hotel. Mark your calendars for the following conference related dates: Call for proposals will run from July 30th until September 14th, 2018. Early Bird Registration will open August 1st and close on October 5th. More information will be posted on the MAMEA website, Facebook and social media. Hotel reservations can be made by calling 1-888-839-1775. Be sure to let them know you are with the MAMEA conference to get the group rate!
You asked and we listened... Get ready to show your pride with our full line of MAMEA gear!

From polished and professional to fun and funky, we’ve got you covered! Choose from t-shirts, sweatshirts, water bottles, baby gifts, dog bandanas, lapel pins, neckties and more! All available in Zazzle’s full spectrum of sizes, colors, and styles. And, best of all, 10% of every purchase goes directly to support MAMEA!

https://tinyurl.com/MAMEAgear
2018 Mid-Year Board Meeting Update

Lauren Albright  
MAMEA President

In late March, the Board held a productive mid-year meeting in Lake Anna, Virginia with a lengthy agenda. This year’s Association initiatives include continued work on our strategic plan that was created in 2017, the addition of our new Expanding Audiences Scholarship and increasing our social media presence as a way to keep in contact with our membership.

We also got an update from President-Elect Carrie Carlin on the 2018 annual conference to be held November 9-11 in Portsmouth, Virginia. Be sure to keep an eye out for call for presenters, award nominations, and scholarship opportunities as the summer continues. The conference is shaping up to an event you won’t want to miss!

Your Amazon Purchases Can Help Support MAMEA!

Did you know that your everyday Amazon purchases can help support MAMEA? When customers shop on AmazonSmile, the AmazonSmile Foundation donates 0.5% of the price of eligible purchases to the charitable organization(s) selected by customers. To have your purchases support MAMEA, simply visit smile.amazon.com and select “mid-atlantic marine education assn”

As always, we appreciate your support!
Educator Awards - Call for Nominations

Rachel Riesbeck Clark
Awards Chair

Nominate an outstanding educator!

MAMEA sponsors TWO annual awards to recognize outstanding marine educators in our region:

• One award honors a formal classroom teacher, K-16, primary through college;
• The other acknowledges an educator in an informal setting, such as a museum, aquarium, zoo, science center staff or employees with government agencies.

Eligibility Criteria
Nominees should be individuals who have:

• Been a MAMEA member for at least one year
• Demonstrate a commitment to marine education
• Excel as educators
• Develop and use innovative marine education materials
• Share information with colleagues
• Promote marine education professionally

To see past recipients and to nominate an outstanding educator, check out the Awards page on www.mamea.org. Nominations will be accepted through September 15, 2018. Winners will be announced at the MAMEA 2018 Annual Conference in Portsmouth, VA.

MAMEA Conference Scholarship Applications

Sarah McGuire Nuss
Scholarship Chair

Each year, MAMEA awards up to five Paul Standish scholarships to MAMEA members who are interested in attending the MAMEA conference. The scholarship covers up to $300 of expenses directly related to participation in the conference. Conference scholarships are given as reimbursements after attending the conference.

This year, we are excited to announce the «NEW» Expanding Audiences conference scholarship. This scholarship will support individuals new to MAMEA in an effort to increase the diversity of our membership. This may include diversity within race, ethnicity, gender, marine/fresh, formal/informal, early/late career, and entry level to executive level. The intent is to support qualified individuals to share their expertise, experiences, and perspectives through active participation in the MAMEA annual conference, and through continued participation within the organization. The scholarship will cover up to $400 of conference expenses. Start thinking of someone you may want to nominate for this scholarship!

Please check the website for more information at http://www.mamea.org/scholarship.html. Scholarships will open in late summer, and will be due September 1st. If you have any questions about the application process, please contact Sarah Nuss at mcguire@vims.edu.
MAMEA Well-Represented at NMEA 2018!

Kathy Fuller & Carol Hopper-Brill
NMEA Rep & MAMEA Secretary

MAMEA members always turn out in large numbers for the annual NMEA conference and this year is no different! We look forward to seeing many of you at the various meetings, sessions, and social events that are scheduled throughout the week. And, of course, the MAMEA Chapter Lunch Meeting on Wednesday, July 18th!

Want to support your fellow MAMEA members? Attend one of the sessions listed below!

TUESDAY, JULY 17th

11:00 am, Royal Salon (Promenade Deck, midship)
Fish Guts, Microplastics, Earthquakes, and Eels: Translating Graduate-Level Science Research for K-12 Students
Presenters: Sarah Nuss, Chesapeake Bay National Estuarine Research Reserve; Lisa Lawrence, VA Institute of Marine Science/VA Sea Grant, Kristen Sharpe, Chesapeake Bay National Estuarine Research Reserve, and Celia Cackowski, VA Institute of Marine Science/VA Sea Grant

Description: What can fish guts reveal about blue crab populations? How do parasites affect eels? Can plastic-hitching bacteria affect human health? How can seafloor sediments allow us to track changes in climate? When graduate students translate their research into hands-on STEM activities for science classrooms, students gain insight into how scientists design and conduct experiments while scientists hone their communication skills. This session from the VA Scientists & Educators Alliance shares inventive activities with real-world connections.

11:00 am, Board Room (Promenade Deck, midship)
Creating workforce ready students that develop transferable, interactive software designed to encourage free-choice learning
Presenter: Maggie Pletta, Delaware National Estuarine Research Reserve

Description: A case study of working with local university to students and the National Estuarine Research Reserve System to produce usable educational computer games for environmental education. Key content topics include technology, community outreach, workforce development, funding opportunities, National Estuarine Research Reserves.

3:40 pm, Board Room (Promenade Deck, midship)
Murals as Models: Integrating art into climate education while supporting three-dimensional learning
Presenters: Chris Petrone, Delaware Sea Grant, University of Delaware & Melissa Rogers, Smithsonian Science Education Center

Description: Do you want to integrate more art into your curricula, or align to Next Generation Science Standards? Murals are an engaging addition to any science unit. Developing models in small groups, students practice critical thinking, collaboration, communication, and creativity. This session will explore Earth’s climate system, how it is changing, impacts and solutions. CAUTION: Creative juices may flow.
3:40 pm, Victoria Room (Promenade Deck, midship)
**Man vs. Wild: Lessons on the Ocean and Human Impacts**
Presenter: Dawn Sherwood, Highland Springs High School

Description: Engage in thought-provoking, multi-disciplinary activities to trace human population changes and impacts on the ocean over the past two centuries. Through interactive media, simulations, role-playing, and labs, students will be able to explore issues ranging from overfishing and acidification to pollution and threats to marine biodiversity. Receive lesson plans in a digital format.

**WEDNESDAY, JULY 18th**

10:00 am, Britannia Salon (M-Deck, stern)
**Bridge DATA Activity: Sea Level Trends**
Presenter: Celia Cackowski, VA Institute of Marine Science/VA Sea Grant

Description: Designed to help educators introduce one facet of global climate change, this activity guides participants through accessing real scientific data and using it to compare long-term changes in sea level from different coastal locations around the United States.

3:40 pm, Royal Salon (Promenade Deck, midship)
**MWEE in the City: Collaborating with Urban Schools in the Development of a Meaningful Watershed Education Experience**
Presenter: Marcie Orenstein & David Christopher, National Aquarium

Description: Last year the National Aquarium partnered with Baltimore City Schools to create a hands-on, NGSS-aligned, inquiry-based program for Baltimore City middle school students entirely in an urban setting. We will share our program development methods, how to engage local partners and our future plans. We will provide program troubleshooting techniques and ways to form unique partnerships with an urban school district and local universities.

**THURSDAY, JULY 19th**

2:00 pm, Royal Theater Classroom (D-Deck, stern)
**Sleeping with the fishes: Overnight activities to engage all audiences**
Presenter: Rachel Clark, Virginia Aquarium & Marine Science Center

Description: Learn how to turn science topics into a fun learning opportunity for scouts, families and adults. The session will share overnight program activities that help make connections to conserving resources, protecting animals and habitats, and investigating local environments.

2:00 pm, Victoria Room (Promenade Deck, midship)
**What Do Satellites SEA?**
Presenter: Pat Harcourt, MADE CLEAR/University of Maryland Center for Environmental Science

Description: You can use beautiful satellite images and data to teach about your local coastal system. Try out activities that integrate math, climate change, and technology into lessons about the ocean and coast.
Delaware Rep Report
Christopher Petrone
Delaware State Representative

Summer 2018
University of Delaware Hugh R. Sharp Campus Tours & Ocean Currents Lecture Series
Where: University of Delaware Hugh R. Sharp Marine Studies Campus, Lewes, DE

Beach visitors and coastal residents alike can learn about ocean research with a tour of our campus in Lewes. The University’s College of Earth, Ocean, and Environment (CEOE) offers free tours from June through August to give an inside look at marine science in action.

Also, on select Thursdays in May-August, CEOE offers lectures given by faculty and graduate student researchers. Topics range from zooplankton to sharks to water quality.

http://www.ceoe.udel.edu/community

August 1, 2018
Marine Debris for Makers educator workshop
Where: University of Delaware Hugh R. Sharp Marine Studies Campus, Lewes, DE

Through interactive scientist presentations and hands-on activities, participants will learn about human impact, specifically marine debris and microplastics. This workshop will be grounded in Problem-Based Learning and includes a late-morning beach cleanup at the amazing Cape Henlopen State Park. The collected debris will serve as the means for our post-lunch activities, including data analysis and introduction to maker spaces, where we will use the debris to address a crafting/engineering challenge. Lunch will be provided. Delaware teachers will receive six clock hours toward recertification.

For more information, contact Chris Petrone (petrone@udel.edu)
Cost: $10
**National Aquarium Summer Professional Development Courses**
Go to http://aqua.org/Connect/Teacher-Programs/teacher-workshops for more information and to register for courses available throughout the summer.

**Chesapeake Bay Foundation Chesapeake Classrooms Summer Courses**
Go to www.cbf.org/ccsummer for more information and to register for courses available throughout the summer. MSDE credits available upon completion of coursework.

**Sunset Boat Tour at Patuxent River Park in Upper Marlboro, MD**
Board a pontoon boat for a quiet, sunset cruise on the picturesque Patuxent River. Meet at the Park Visitor Center. Program open to all ages. Fee: $7. Offered Saturdays, 6:30-8:00pm, July 21 and August 4. Call 301-627-6074 to register.

**Dive Deeper: Youth Water Educators Summit in Harrisburg, PA**
Thursday, September 20, 8:15am-3:30pm

The Dive Deeper Summit is a multi-state environmental education summit spotlighting innovative teaching about water. This biennial conference is for anyone who teaches youth about water or anyone interested in educational tools and resources for teaching about water. It will be an all-day event with hands-on workshops, networking lunch, and amazing guest speakers. Register by September 13 at http://www.event.com/events/dive-deeper-youth-water-educators-summit/event-summary-87af5c860c4448b9ef5f97348ecbc7e.aspx?i=4aab140a-5c3a-4faf-a31b-f7b5eb81f046.

**EAT, DRINK AND LEARN SERIES at Irvine Nature Center in Owings Mills, MD**
Join Irvine Nature Center for our continued series of fun, educational opportunities for the 21+ crowd! Share a specialty drink with friends, eat a delightful dinner, and listen to an engaging program. The program costs $45 for Nature Center members and $55 for non-members. Season passes are also available. The topics for this year’s presentations are as follows...

September 20, 2018 | Chesapeake Bay and Tanqueray  
November 15, 2018 | Forest Troubles and Drinks with Bubbles  
January 17, 2019 | Mountains to the Bay with Cabernet  
February 21, 2019 | Water Woes and Bordeaux  
March 21, 2019 | Fantastic Fox and Scotch on the Rocks  
April 18, 2019 | White Swans and Sauvignons  
May 16, 2019 | Tribal Tales and Local Ales

Visit https://www.explorenature.org/public-programs/eat-drink-learn-series/ for more information or call Tara Lilley at 443-738-9211.
Mini-Event Update
Save the Date for the annual Virginia MAMEA Mini Event, occurring from 9 AM - 3 PM on Wednesday, August 1!

This summer, we will be focusing on critically important submerged aquatic vegetation (SAV), also known as seagrass. The trip will have both an on-shore and off-shore option, and attendees may join in for the full day of investigations or stay for only the first half of the day.

Join your state representative and fellow MAMEA members as you hear from a scientist at the Virginia Institute of Marine Science (VIMS) about the importance of seagrass in the Chesapeake Bay, participate in seagrass-related educational activities, and eat lunch in the visitors' center aquarium on campus.

The off-shore group will then take a trip out to Goodwin Island, one of the Chesapeake Bay National Estuarine Research Reserve (CBNERR)’s reserve sites. On the island, attendees will learn about the scientific process of performing vegetative surveys in the salt marsh. Off-shore, our seagrass specialist Erin will be joining us on a snorkeling exploration of the seagrass beds around the island!

Draft Agenda:
9:00 – 10:00 – Intro to Seagrasses by a VIMS scientist
10:00 – 11:00 – Seagrass-related educational activities
11:00 – 12:00 – Lunch in VIMS Visitors Center Aquarium
12:00 – 12:30 – Boat ride out to Goodwin Island
12:30 – 2:00 – Snorkeling in Seagrass with CBNERR scientist
2:00 – 2:30 – Travel back to VIMS
2:30 – 3:00 – Wrap up and depart

The off-shore portion will be restricted to 14 attendees, while the on-shore portion will be restricted to an additional 16 attendees. First registered, first served!

Cost of registration will be:
- $20 for half-day registration
  (on-shore portion and lunch only)
- $30 for full-day registration
  (includes both on- and off-shore portions, and lunch)

Registration costs will include a one-year MAMEA membership.
Resource Highlights

**Virginia Water Educators Directory**
This directory was assembled to strengthen and build the network of highly-trained educators throughout Virginia who support formal classroom teachers conducting successful Meaningful Watershed Educational Experiences (MWEES) at the elementary, middle, and high school levels. This online directory is the work of the Virginia Department of Environmental Quality and the Virginia Water Resources Research Center.

To search for a water educator near you, visit http://www.vwrrc.vt.edu/virginia-water-educators-directory/.

Upcoming Events

**VIMS After Hours Lecture Series**
This monthly series of public lectures by scientists from VIMS and elsewhere explores hot issues facing the Chesapeake Bay and the ocean. Reservations to this free public lecture series are required due to limited space. Please register online (see individual lectures) or call 804-684-7061 for further information.

Not able to make it in person? Visit our registration pages to sign up to watch online!
All After Hours lectures begin at 7 pm in McHugh Auditorium in Watermen's Hall on the VIMS campus in Gloucester Point. View directions and a campus map.

**VIMS Summer Public Tours**
Get a behind-the-scenes look at the daily activities at a top-notch marine science research center! Reserve space on a public tour to learn more about the Virginia Institute of Marine Science. These 1.5 hour guided walking tours are most interesting for adults and older children (9 and up welcome). All include a guided tour of the VIMS’ Visitors Center; a visit to a laboratory; and the Nunnally Ichthyology Collection, Oyster Hatchery, or Teaching Marsh. No charge. All tours occur from 10:30 AM – 12:00 PM. Space is limited and reservations must be made at least two days in advance. The 2018 tour schedule and registration links can be found online at: http://www.vims.edu/public/publictours/index.php. For assistance, call (804) 684-7061.

**“Prepare-A-thon”**
Science Museum of Virginia
Saturday, August 25, during Museum hours

Celebrate preparedness during PrepareAthon, a free festival that teaches the community how to be more resilient when disaster strikes! Uncover life-saving information to protect your family during an emergency and learn more about resiliency. Local experts will discuss the impacts of climate change on human health, the environment and the Chesapeake Bay. Explore resiliency-themed climate change activities in the Museum, including NOAA Science on a Sphere® demonstrations, hands-on experiments in Eco Lab and beyond.

How can you be ready when a disaster strikes? Use our Resiliency Checklist to learn about preparedness and to uncover life-saving information. PrepareAthon is hosted by Science Museum of Virginia under award # NA15SEC0080009 from the Environmental Literacy Grant (ELG) program of the National Oceanic and Atmospheric Administration (NOAA), US Department of Commerce. Statements, findings, conclusions, and recommendations are those of the Museum and do not necessarily reflect views of NOAA or US Department of Commerce.
JOIN US FOR A DISCOVERY Lab!

Discovery Labs are provided each month by the Chesapeake Bay National Estuarine Research Reserve (CBNERR). These labs provide fun, family-friendly opportunities to learn about the Chesapeake Bay and our local environment. Each lab focuses on a different topic and includes exhibits, demonstrations, and hands-on activities for kids and adults. Labs also include a short presentation by a topic expert.

2018 SPRING/SUMMER SCHEDULE

APRIL 17: BE A BAY BUDDY!

Come help us celebrate the 48th Anniversary of Earth Day at this special-themed Discovery Lab where we will be teaching new ways to live a more Bay-friendly lifestyle. At the lab, you will learn about the ways in which humans are affecting the Bay from student members of the VIMS Green Team. We will have eco-friendly activities, crafts, and information to share!

JUNE 12: COLLECTIONS

This lab will include collections of all kinds to observe – from plants, to insects, fishes, and mammals! We will also highlight the tools and methods that scientists use in collecting specimens. Dr. Eric Hilton of VIMS will join us to explain how scientists all over the world are using the VIMS Fish Collection in their studies!

AUGUST 21: FEEDING FRENZY

In this lab, we will investigate the variety of ways that animals in the Bay find and eat their food and how their mouths and teeth are best adapted for the job. Participants will also have the opportunity to hear from VIMS graduate student Kate Bemis, who calls herself a “fish dentist,” about how she is studying the teeth of the Mola mola (ocean sunfish).

CBNERR Discovery Labs take place from 6:00-8:00 PM at the Virginia Institute of Marine Science (VIMS) in Gloucester Point, Virginia. The speaker presentation occurs from 6:30-7:00 PM. While the labs are free, registration is required due to limited space.

Register at: http://www.vims.edu/cbnerr/education/public_programs/index.php
North Carolina Rep Report

Andy Gould
North Carolina State Representative

Mini Conference Report

On May 19, 2018, educators from around the region gathered at the NC Regional Mini Conference, hosted at the UNC Coastal Studies Institute in Wanchese, NC. Fourteen formal and informal educators came together to learn about the research and educational efforts being done at the Coastal Studies Institute, and to network with other marine educators. Activities included investigating properties of waves using a large wave tank, engineering devices that could be used to extract energy from moving water in the ocean, and developing plans for a sustainable coastal community. Participants also toured the Institute, learning about the research conducted there are observing the equipment used in these projects. It was a great day of learning, sharing, and connecting with fellow marine educators. Many thanks go to the Coastal Studies institute for hosting the event, and to Dave Sybert for leading the day!

Participants test their ocean energy devices to see who can create the most energy from wave movement.

Showing off their sustainably designed coastal communities.
Upcoming NC Events:

NC Aquarium at Fort Fisher: BAJA ISLAND ECOLOGY EDUCATOR PROGRAM

Attention Teachers and Informal Educators!
Immerse yourself in the rich marine, island, and mainland ecosystems of Baja California, Mexico from July 29- Aug. 7, 2019. Connect with nature to energize your learning for the school year ahead and delve into resources to connect your students with the ocean. Both formal and informal educators are welcome.
Explore Bahia de los Angeles in the San Felipe Desert from both the water and land. Snorkel the turquoise waters, rich with sea life. Swim with whale sharks and sea lions in the Sea of Cortez. Discover the UNESCO designated World Heritage Site as a priority conservation area and its extraordinary diversity of marine life. Conservation is a key component of this trip and participants will be engaged with a conservation project in the field.

Dates: July 29-August 7, 2019
Cost: $1,995 + airfare to San Diego (Travel to San Diego not included)
Required travel insurance not included.
$250 non-refundable deposit to hold a spot.

Contact: Gail Lemiec at 910-772-0546 or gail.lemiec@ncaquariums.com for questions about the trip.

ENVIRONMENTAL EDUCATORS OF NORTH CAROLINA ANNUAL CONFERENCE

SEPTEMBER 27 - SEPTEMBER 29, 2018
Doubletree by Hilton
Atlantic Beach, NC

Join us for the 2018 Environmental Educators of North Carolina conference at the Doubletree by Hilton in Atlantic Beach, NC from Thursday, September 27th to Saturday, September 29th. Enjoy the conference full of professional development, networking, learning, and field experiences that will help you expand your knowledge of EE and resources in NC and beyond. Consider bringing your family and spending Saturday afternoon and Sunday at the beach!
http://www.eenc.org/conference
2018/2019 Grant Cycle

Carol Hopper Brill  
Grants Committee Chair

Planning ahead for the 2018/19 school year?  
Have a great idea for an educational project next year?  
Need funding??

A MAMEA grant may be just what you need! You can get your next educational project off the drawing board and into reality, engaging students or fellow educators. Get into the upcoming cycle of MAMEA Educational Project grants – proposals are due September 15!

Two grants, for 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). Projects must focus on marine or aquatic topics.

To be eligible, applicants must be current MAMEA members with at least one year’s membership. To be competitive, projects should meet the program structure described on the MAMEA Grants page at www.mamea.org/minigrant.html. Successful proposals use the funding for assets (equipment, etc.) or programming that will generate active instruction and promote participation by learners. Reviewers favor proposals that offer clear learning objectives and means of evaluation, and can report outcomes, best practices or lessons learned from the project. To read about projects that have received MAMEA support in the past, see www.mamea.org/pastgrants.html.

Reporting requirements include: a progress report to the Committee in March; final report with financial accounting in November; and either a Masthead article or MAMEA Conference presentation about the project to share results with membership.

Visit the Grants page on the MAMEA website for the grant application form, as well as important details about the application process and grantee responsibilities. Or, contact the Grants Committee Chair, Carol Hopper Brill at chopper@vims.edu. Proposals are accepted throughout the year, but the deadline for the 2018/19 cycle is September 15, 2018. Grant awards will be announced at the MAMEA Fall Conference in November. The funding period is 12 months, from November 1 to October 31.