FALL 2020 VOL. 40 ISSUE 3

MASTHEAD

Quarterly Newsletter of the Mid-Atlantic Marine Education Association

IN THIS ISSUE

From the Captain's Quarters

After a summer like no other, we're entering a new school year that looks far different than usual. We're all facing a lot of uncertainty in this changing landscape, but continue to adapt to these changing times. Educators are a resilient bunch.

As we noted over the summer, we have made a few changes to our schedule this fall. We're still aiming on gathering in Solomons Island, Maryland, for our annual conference - but will do so next year. So mark your calendars now for #MAMEA21 - in November 2021!

This fall we're shifting our conference online. We're all too aware of Zoom fatigue, so we are pulling together short, engaging 90-minute sessions that we'll hold over several days rather than doing a traditional full day conference. Each session will include short demos of educational tools, a professional development component, and a virtual speaker or panel. We're finalizing the sessions and speakers now and are focusing on topics that are at the forefront of this challenging time: environmental justice, diversity, and inclusion, and teaching and engaging others from afar.

Please plan on joining us next month for this virtual version of #MAMEA20 - we'll be hosting the sessions live October 27-29 at 5 p.m. and will have fun social events at the close of each day for anyone who wants to hang out for some informal activities and networking. All sessions will be recorded and availble to registrants afterward, so no worries if you have a conflict on a particular day! We'll also be hosting a virtual 5K "get outside" challenge in the days leading up to it, as well as an online auction - stay tuned for more details!

Again, a huge "thank you!" for all you do, especially in light of the unprecedented year that has been 2020. Stay safe & I'm looking forward to seeing you all virtually next month!

Lisa Tossey
MAMEA President

Save the Date!

Our annual conference

#MAMEA20

is going virtual!

MAMEA

OCTOBER 27-29, 5-7 PM

90 MINUTES OF ENGAGING ONLINE MINI-SESSIONS,
SPEAKERS, AND PANELS FOLLOWED BY FUN SOCIAL EVENTS

Get updates at mamea.org

CONFERENCE | AUCTION | 5K GET OUTDOORS CHALLENGE

2020 MAMEA Conference Scholarships Update

Lillie Reiter
Scholarship Committee Chair

Due to the conference going virtual, MAMEA will not offer any scholarships this year. The scholarship process will resume again 2021. If you're interested in further information, please see our website.

National Marine Educators Association (NMEA) Updates

Sarah Nuss
NMEA Representative

AS A RESULT OF THE COVID-19 PANDEMIC, THE NMEA 2020 ANNUAL CONFERENCE HAS BEEN POSTPONED UNTIL JULY 12-16, 2021.

Stay tuned for more information about the conference. There will be a survey coming out from conference planners in November to determine the wants and needs for an in-person versus a virtual conference.

NMEA did host a 2020 Virtual Member Event, which aimed to bring together the NMEA family for a moment of learning, reflection, and celebration. On July 27 th , we gathered to learn more about bringing field-based science into a digital learning environment, how to reinvent your professional life, and how NMEA as an organization is moving forward with efforts such as diversity, equity, and inclusion. We also took time to conduct our business meeting, which included celebrating the work of NMEA members through awards. Our very own Kathy Fuller was awarded the President's Award (along with Sean Russell), an award based on outstanding contributions to NMEA and/or marine education, for her work on the NMEA Student Engagement Committee.

CONGRATULATIONS KATHY!!!

Delaware Chapter

Tami Lunsford
Delaware State Representative

Maryland Chapter

Lauren Fauth
Maryland State Representative

National Aquarium
Plan a Field Trip

For fall 2020, a virtual visit to the Aquarium is your students' passport to a world of wonder! We offer age-appropriate online experiences for students in grades pre-K through 12 that correspond with Next Generation Science Standards and ignite a life-long love for science and conservation. Virtual experiences also include pre and post program materials to help you make the most of your online program. In-building field trips are not currently being offered. Visit https://aqua.org/education to learn about the opportunities available.

Irvine Nature Center
Irvine Nature Center has moved its Eat, Drink, Learn Series to a virtual setting. Even though we can't be together in person, we can still have some fun eating, drinking and learning from home, right? Join us via Zoom for four presentations on everything from river otters to climate change. Of course, we won't forget to send you suggested cocktails to enjoy before each program. And door prizes will still be included. Join us for these fun-filled evenings starting soon.

PRICING: $70 per family for entire series; $20 per individual program
Visit https://www.explorenature.org/classes-camps-programs/adults/eat-drink-learn-speaker-series/ to register and see upcoming topics!

Chesapeake Bay Foundation
The Chesapeake Bay Foundation is offering a live and local learning program designed to provide students the opportunity to discover our unique species, ecosystems and examine the most pressing environmental challenges of the watershed.
https://www.cbf.org/join-us/education-program/chesapeake-bay-foundation-online-watershed-learning.html?utm_medium=social&utm_source=facebook.com

Virginia Chapter

Cathy Roberts
Virginia State Representative

Shenandoah National Park
Live Ranger-led virtual curriculum-based science programs based on specific grade-level in-park field trip lesson plans. Offered September 14 through November 20, 2020, Monday through Friday. Reservations required.
Email: shen_education@nps.gov (email us)
Phone: 540-999-3500, ext. 3489

2nd Grade | Virtual Habitats of Shenandoah National Park
Grade Levels: Lower Elementary: Pre-Kindergarten through Second Grade
Subject(s): Science
A habitat is a specific place where plants and animals live. A complete habitat must provide the basic needs, both living and nonliving, for the survival of its inhabitants. Shenandoah National Park offers the opportunity for students to join us as we discover and virtually explore nature as they expand concepts and knowledge learned in the classroom. 60 minutes.

2nd-5th Grade | Virtual Explore Your World
Grade Levels: Upper Elementary: Third Grade through Fifth Grade
Subject(s): Science
There are a multitude of different ways that animals experience the world around them. Humans utilize many of the same tools to explore our world around us but do we always pay attention to all of them? Join us as we explore the different ways to experience the world around us. 30 minutes.

2nd-8th Grade | Virtual Explore Your Park
Grade Levels: Upper Elementary: Third Grade through Fifth Grade
Subject(s): Social Studies
The National Park Service is over 100 years old and still going. Shenandoah National Park is over 80 years old. Each of them have a history and future to explore and discover. Join a Park Ranger as we virtually explore the National Park Service and Shenandoah National Park. This virtual field trip is recommended for second through eighth grade. 30 minutes.

3rd Grade | Virtual Adaptations for Survival
Grade Levels: Upper Elementary: Third Grade through Fifth Grade
Subject(s): Science
Living things use adaptations to respond to life needs for survival. These adaptations may be behavioral or physical in nature. Students will virtually investigate adaptations of plants and animals living in Shenandoah National Park using observation, discovery, and participation skills. 60 minutes.

4th Grade | Virtual Ecosystems: The World-Wide Web of Life
Grade Levels: Upper
Elementary: Third Grade through Fifth Grade
Subject(s): Science
The world is composed of many natural ecosystems in which plants and animals interact with one another and the nonliving environment. Through this field trip, students will virtually explore the natural communities found in Shenandoah National Park and make comparisons between natural and human communities. 60 minutes.

5th Grade | Virtual Geology: Our Rockin' Earth
Grade Levels: Upper
Elementary: Third Grade through Fifth Grade
Subject(s): Science
The Earth is constantly changing and evolving. These changes occur through natural processes such as plate tectonics, weathering, and erosion, while other changes are caused by human actions. Through this virtual field trip, students will virtually study Earth’s dynamic geologic makeup and rock cycle, understand the forces and processes that created Shenandoah National Park's geology, and develop an appreciation for the importance of geology in people’s lives. 60 minutes.

6th Grade | Virtual Shenandoah Watersheds
Grade Levels: Middle
School: Sixth Grade through Eighth Grade
Subject(s): Science
Shenandoah National Park lies at the headwaters for three of Virginia's watersheds. Through virtual exploration and observation of a mountain stream, students will connect local water sources with larger watersheds and better understand the dynamics of stream life and the extensive impacts of water management and usage. 60 minutes.

6th-8th Grade | Virtual Shenandoah Salamander: Climate Change Casualty or Survivor?
Grade Levels: Middle
School: Sixth Grade through Eighth Grade
Subject(s): Science
The Shenandoah salamander is an endangered species found only on a few rocky slopes within Shenandoah National Park. Its survival is being threatened by changing climate and habitat competition from the more common red-backed salamander. Students will virtually explore and research to determine how climate change and habitat competition could be impacting the survival of the Shenandoah salamander. 60 minutes.

9th-12th Grade | Virtual Exploring Earth Science: The Shenandoah Salamander and Climate Change
Grade Levels: High
School: Ninth Grade through Twelfth Grade
Subject(s): Science
The Shenandoah salamander is an endangered species found only on a few rocky slopes within Shenandoah National Park. Its survival is being threatened by changing climate and habitat competition. Students will virtually explore and research to determine how climate change and habitat competition could be impacting the survival of the Shenandoah salamander. Students will collaborate and present potential survival plans for the species. Two 60 minute sessions.

K-1st Grade | Virtual Wildlife Detective
Grade Levels: Lower Elementary: Pre-Kindergarten through Second Grade
Subject(s): Science
Help rangers solve the mystery of the missing berries while virtually exploring Shenandoah National Park! Use your senses to find clues, meet some of the animals that live here, and learn all about the importance of Shenandoah and all National Parks. 30 minutes.

2020 Virginia Water Monitoring Council Virtual Conference
DEQ is a partner in the 2020 Virginia Water Monitoring Council virtual conference, which is taking place Sept 21-22, from 9:30-11:30 a.m.
Focusing on facilitating communication among water monitoring programs in the Commonwealth, this year's conference features a great lineup of keynote speakers and presentations, so be sure to join us! To register and learn more, click here: https://vwmc.vwrrc.vt.edu/conferences/.

Virginia Association of Science Teachers Conference: Learning Together Virtually
VAST is pleased to be able to continue providing quality professional development through our online virtual Professional Development Institute (PDI)! The 2020 VAST PDI will focus on the theme: "Science Content, Courses, and Career Pathways".
November 12-14, 2020
https://vast.wildapricot.org/pdi.

Mariners Museum: Virtual Lecture
Date: September 24
Time: 7:00 PM - 8:00 PM
A Furious Sky: The Five-Hundred-Year History of America's Hurricanes
Presented by best-selling author Eric Jay Dolin. Register on line.
https://www.marinersmuseum.org/event/evening-lecture-a-furious-sky/

Changing of the Guard at VIMS Marine Advisory Program

Dr. Carol Hopper Brill says "aloha" after 15 years as a VIMS educator, 40 in the field

Madeleine Jepsen
Virginia Sea Grant

Whether she's exploring a mudflat with teachers or pointing out the surprising detail of microscopic sand, marine education specialist Carol Hopper-Brill says showing the wonders of nature has been a highlight of her career.

"It's fun to see their joy in discovering something," said Hopper-Brill, a Virginia Sea Grant extension specialist. "If I were to sum up what the things that have meant the most to me in my career, it's been when I've been able to help someone have a sense of wonder about something."

Hopper-Brill retired at the end of June after spending 15 years on the Marine Advisory Program's education team at the Virginia Institute of Marine Science (VIMS) . She joined the education team part-time in 2005 to work on the Bridge ocean education website, and soon took on a full-time role to lead programs and events geared toward marine science educators.

Hopper-Brill coordinated the Blue Crab Bowl, a statewide ocean science knowledge competition that brings together roughly 200 high schoolers, coaches, and volunteers each year. She also assisted with the GK-12 program, where graduate science students went to classrooms to teach lessons based on their research, as well as the VA SEA program, a scientist and educators alliance that translates graduate research into classroom activities.

"Carol is a consummate educator and a consummate biologist, and so her desire to share knowledge is never-ending," said Celia Cackowski, a marine education specialist with VIMS MAP. "Every moment you spend with her, you're learning something."

Hopper-Brill also coordinated the marine education activities in the pavilion for VIMS Marine Science Day each year, along with many other educational demos for outreach events. Hopper-Brill has designed countless hands-on activities to bring marine science to life for educators, students, and the public. One activity mimics how scallops "see" their surroundings, where the kids put on a set of goggles with beads to show a scallop's perspective.

"Who thinks about that? Carol does. She came up with this idea, she engineered the design, and the kids loved it," said Christopher Petrone, a former MAP education specialist who worked with Hopper-Brill. "I have rarely seen an exhibit or an activity or demo she has run that people didn't appreciate and learn something from."

One of Hopper-Brill's favorite activities has been the sand labs that show the wide variety of sands through the lens of the microscope. The activity points out some of the differences—like the colorful confetti of tiny sea creature skeletons, or deep red grains made of garnet—and discusses the environments that form these sands.

She has used sand demonstrations several years during the summer teacher's workshops held at the VIMS Eastern Shore Lab in Wachapreague. The four-day "Teachers on the Estuary" workshop gives teachers an opportunity to explore seaside habitats like the barrier islands and mud flats, as well as bayside habitats like eelgrass beds and marshes.

"When you get them out there and they're mucking about and digging up worms, and doing all those things, it just becomes such a real experience for them" Hopper-Brill said.

Apart from her creative and informative demonstrations, Hopper-Brill is also known among colleagues for her attention to detail and organization. Whether organizing a regional event or answering a middle-schooler's email about marine science, Hopper-Brill addressed any task with thoughtfulness and care.

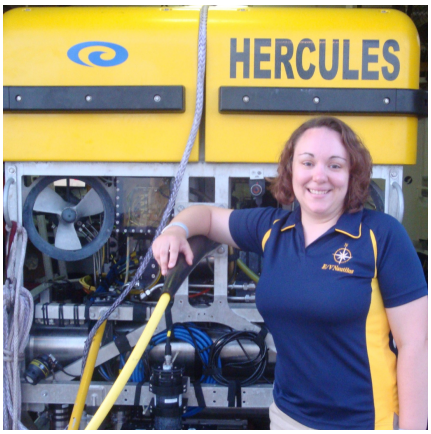
"She gets requests from teachers needing resources, or just any member of the community asking questions about marine science stuff," said Lisa Lawrence, MAP marine education team leader. "She handles all of that."

In recognition of all her work, Hopper-Brill was named the Mid-Atlantic Marine Education Association 's Informal Educator Award in 2011 and was recognized last year at VIMS for her role as an ambassador to the general public. She also served in multiple leadership roles for MAMEA over the course of her career. Hopper-Brill began her career as a marine educator at the Waikiki Aquarium in Hawai'i, when she joined their education team while completing her Ph.D. in marine zoology at the University of Hawai'i-Manoa.

"I just really found that I enjoyed trying to translate science into experiences or language or learning tools that other people could use," Hopper-Brill said. "Trying to talk to a grandparent and a 3- or 4-year-old kid at the same time about a science topic taught me a lot about how people are learners."

During retirement, Hopper-Brill has plans to spend more spare time on projects like gardening and sorting through the 400-plus samples in her sand collection. She also plans to volunteer as a marine educator.

"I don't know that she grasps the number of teachers and informal educators that she's helped over the course of her career—it's a tremendous number," Petrone said. "I can't even fathom how many people have been impacted by her."



VIMS Education Team Welcomes Bethany Smith to Their Ranks
Celia Cackowski
VIMS/Virginia Sea Grant

How do you fill big shoes? The education team at VIMS recently asked themselves that question when faced with the daunting task of filling Dr. Carol Hopper Brill's vacancy. We knew we needed a team member with a strong marine science background and a solid interest in education, but we also wanted to find a candidate that brought a unique skill set to the table: long-term experience as a classroom teacher. Thankfully, an outstanding candidate materialized.

Bethany Smith earned a Bachelors in Marine Biology and Environmental Geology with honors from Rider University and a Master's in Marine Science from VIMS/College of William & Mary. She has taught 10-12th grade dual-enrollment marine and environmental science for the Chesapeake Bay Governor's School (GBGS) at Warsaw since 2009 and also served as the school's Blue Crab Bowl coach for many years before stepping up to become CBGS's Lead Teacher in 2017. In addition to her role at CBGS, Bethany is a long-time oceanography professor at Rappahannock Community College and has co-coordinated the Marine Science Legacy Program of the Urbanna Oyster Festival for many years.

No stranger to field work, Bethany previously worked for VIMS and the Virginia Marine Resources Commission. She has gone to sea as a technician aboard the RV Delaware II and the RV Oceanus , and as an Ocean Exploration Trust Science Communications Fellow aboard the EV Nautilus.

In her new role at VIMS, Bethany will serve as the Blue Crab Bowl Co-Regional Coordinator and will work alongside the rest of the education team on projects including: VA SEA, VA TIDES, our Wachapreague field course, and more. Please join us in welcoming Bethany to our team!

North Carolina Chapter

Brittany Pace
North Carolina State Representative

Museums and Aquariums Reopen

North Carolina has moved into Phase 2.5 allowing museums and aquariums to reopen at 50% capacity. The NC Aquariums (at Fort Fisher, Pine Knoll Shores, and Roanoke Island) will open to the public Monday, September 14. Admission tickets will be sold online only, with tickets designated for specific hours of the day.

Virtual PD Opportunities

The North Carolina Aquarium at Fort Fisher in partnership with the NC Wildlife Resources Commission will host several professional development opportunities for educators this fall. These include:
October 10, 2020, 9:00-11:00 am WILD Bats, Free of Charge
November 14, 2020, 9:00-11:00 Project Wild Aquatic, $25 per participant.
Visit the Aquariums Website at www.ncaquariums.com/fort-fisher, or contact Gail Lemiec at gail.lemiec@ncaquariums.com for more information.

COVID-19 Educator Support Database & Virtual K-12 Outreach Programs

Check out the N.C. Office of Environmental Education and Public Affairs resource database. Under "Resource Type" select "COVID-19 Education Support", press enter or tap the orange search button. We have also recently added "Virtual K-12 Outreach Programs" (live speakers or live virtual field trips for specific classes or educational groups) and "Online K-12 Videos and Lessons" as resource type search options. There are also specific Aquakids episodes highlighting the NC Division of Marine Fisheries, Rachel Carson Reserve, Karen Beasley Sea Turtle Hospital, and NOAA Lab in Beaufort

Coastal Conservation Organization Giving Back During COVID

The Ocean Friendly Establishments (OFE) are a group of businesses and restaurants committed to reducing single use plastics and other ocean friendly actions in their daily operations. The group is hosted by the Plastic Ocean Project of Wilmington, NC and The North Carolina Aquariums, and is led by regional volunteer boards. Many of the businesses certified as Ocean Friendly Establishments have been hit hard by COVID 19, having to close their doors at least temporarily and restructure their business models for safety purposes. OFE wanted to support these businesses, particularly in their desire to continue to protect our oceans, so they applied for and have received a sustainability Grant from the North Carolina Aquarium Society. These funds will be used to provide mini grants to Ocean Friendly Establishments, allowing them to purchase compostable products or take other measures to keep their businesses ocean friendly during these difficult times.
Applications for interested businesses will open in October. To stay informed about how these grants will help our coastal businesses stay ocean friendly, follow OFE on Facebook or Instagram.

UNCW MarineQuest Virtual Opportunities

Who says you can't teach an old Sea Dawg new tricks? Although MarineQuest is turning 41, we want educators to know we are here to provide you and your students with immersive marine science field trip experiences virtually in your classroom and/or your student's homes. Our extensive curriculum is based on state and national education standards, including Ocean Literacy Principles, and highlight the different fields of study that make up marine science. To ensure your students will have the opportunity to engage in hands-on learning, MarineQuest can ship educational STEM kits with the materials necessary to carry out experiments. Student will also engage with professional marine scientists as they explore the wonders of the marine world. To discover more about virtual MarineQuest opportunities and upcoming teacher professional development workshops, please contact Harris Muhlstein, the MarineQuest School Programs Coordinator, at muhlsteinh@uncw.edu, (910)962-3795, or visit our website at https://uncw.edu/marinequest/.

Turtle Trash Collectors Program

During the 2020-2021 school year, UNCW MarineQuest is offering FREE Virtual Turtle Trash Collectors programs funded by the NOAA Marine Debris Program! This program educates youth about the impacts of marine debris and encourages behavior changes to reduce the generation of marine debris in the future.

During our hour-long virtual program students will:

· Participate in a simulated sea turtle necropsy
· Learn how trash can get to the ocean
· See how trash in the ocean can impact sea turtles
· AND learn how we can all help stop marine debris!

Students will also have a chance to become a Turtle Trash Collector and earn our digital turtle badges by collecting trash outside with the help of an adult. Families can do these cleanups together to help us save the ocean while social distancing. This badging program is open to anyone, and you can sign up here! We will also introduce our Citizen Science Project that your group can participate in at the end of our program.
To request a Virtual Turtle Trash Collectors program, please complete our program request form at https://uncwyouthprograms.wufoo.com/forms/2tc-virtual-school-program-request/ or contact program coordinator Laura Sirak-Schaeffer at SirakSchaefferL@uncw.edu or 910-833-0867.

Educator Awards – Call for Nominations!

Rachel Clark
Awards Committee Chair

MAMEA sponsors TWO annual awards to recognize outstanding efforts by 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 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 30, 2020. Winners will be announced at the MAMEA 2020 Annual Conference happening virtually.

STAY SAFE OUT THERE!