Spring 2023

Volume 43, Issue I



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Board Members and Committee Chairs



Captain's Quarters Emily Boyd, MAMEA President

Dear MAMEA Members,

I hope you all had a wonderful winter and are ready for the warm Spring season! In Maryland, we've been experiencing "weather whiplash", with temps in the 70s one day and in the 40s the next. However, I can feel that Spring is just around the corner. Personally, I am looking forward to getting back to our outdoor education programming and enjoying the sunshine, fresh air, and green landscapes with our students again!

As the new season approaches, be sure to take advantage of all the upcoming opportunities that MAMEA has to offer. In this issue, you will see announcements for MAMEA awards and grants, which are great opportunities to recognize fellow marine educators and earn funding for your projects to evolve from dreams into realities. Be sure to keep an eye out for information about the MAMEA Annual Conference, taking place in Solomon's Island, MD, as well as other upcoming events such as the annual NMEA conference and state mini-conferences happening in the upcoming months. These are a great way to connect with colleagues and to introduce new members to the MAMEA family in your state.

The Board will be gathering in person for the first time in years for our mid-year meeting on March 18 th! We are looking forward to reviewing the newest edition of the MAMEA Strategic Action Plan, sharing updates, and developing innovative ideas for MAMEA in the upcoming year. Thank you to all MAMEA members who shared comments on the draft version of the Strategic Plan—the Board values and appreciates your insights as we undertake this important work. I would also like to recognize our newest Board members and committee chairs: Lolita Kiorpes (President-Elect), Mindy Quinn (MD Rep), Kristen Sharpe (VA Rep), Amy Sauls (Member At-Large), Erika Young (Scholarship Chair), and Ruth Gourley (Auction Co-Chair).

If you would like to learn more about Board activities, are interested in serving on a committee, or serving in a Board position, please feel free to reach out to me at <u>eboyd@aqua.org</u>.

Happy Spring, Emily Boyd, MAMEA President



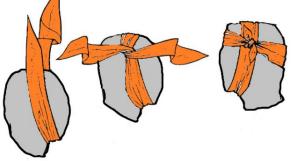
As you are preparing for your programs, please consider this addition to your First Aid Kit: **The Triangular Bandage**

I carry at least three in my own kit as it is a most versatile bandage. I highly recommend 100% cotton as lesser materials tend to rip during use.

In addition to being used as a dressing to absorb blood, The Triangular Bandage has many uses:

- Head Bandage
- Shoulder Bandage
- Arm Sling
- Hip Bandage
- Foot Bandage
- Folded into a Cravat:
- Jaw Bandage
- Neck Bandage (must figure 8 through the underarm)
- General Bandage on a limb
- Joint Wrap (elbow, knee, ankle)
- Splint Ties
- Tourniquet (with a stick or other windlass)

Simply search "triangular bandage uses" to see images of the above. Below is an example for a dislocated or broken jaw:



You can also make your own Triangular Bandages out of suitable cloth. Just cut out a 40"X40"X56" triangle.

Chuck Fuller

Call for MAMEA Board Nominations - Open through April 30 Evan Beatty, Past President

Nominate a MAMEA Member today, including yourself, for the 2023 MAMEA Board Elections. MAMEA is now accepting nominations for the 2023 MAMEA Board Elections. The positions up for election this year are:

- President-Elect
- Treasurer
- Delaware Representative
- Virginia Representative
- At-Large Representative

Position descriptions and responsibilities are available on the MAMEA website, and elected members will take office at our Annual Conference in November 2023. All nominees must be current MAMEA members in good standing, and State Representatives must live and/or work in the State they represent. Please send nominations to Evan Beatty at ebeatty@hershey.kl2.pa.us by April 30 2022.

Save the Date: MAMEA 2023 Annual Conference is Scheduled for November 3–5 on Solomons Island, MD

Lolita Kiorpes, President-Elect

The 2023 MAMEA Annual Conference is scheduled for November 3-5, 2023. The conference will be on Solomons Island Maryland.



The conference hotel is the Hilton Garden Inn, 13100 Dowell Rd, Dowell, MD 20629. 410-326-0303. Room reservations are currently open through October. The Group Code is MAM. Use <u>this</u> link to book.

If anyone is interested in working on the conference committee, please contact Lolita at <u>lkiorpes569@gmail.com</u>.

I would like to meet up during a bi-weekly zoom meeting. Let me know so I can get a schedule set-up. Thank you! *Lolita* 2



VA SEA Spring Lesson Plan Log: Highlighting Hands-On, Research Based Marine Science Activities for K-12 Classrooms

Bethany Smith, Marine Education Specialist (bsmith@vims.edu) Virginia Institute of Marine Science – Marine Advisory Program



Graduate students in the Virginia Scientists & amp; Educators Alliance (VA SEA) program (a program facilitated by educators at the Virginia Institute of Marine Science and Chesapeake Bay National Estuarine Research Reserve in Virginia) have created over 50 unique, hands-on lesson plans geared towards middle and high school audiences. These lesson plans provide real-world connections to classroom learning across a variety of science disciplines, and are easily scalable to meet the needs of your unique classroom. In this spring edition of the VA SEA Lesson Plan Log, we highlight three lessons that are sure to get your students' problem-solving skills blooming.

Zoop Soup (and Poop!)

In this activity, designed by VIMS graduate (and MAMEA VA Representative) Kristen Sharpe, your students will learn about the ecological and global importance of zooplankton and their fecal pellets in the ocean carbon cycle. Students will use a fecal pellet dichotomous key to identify source species from simulated fecal pellet samples, and will hypothesize which ocean each sediment trap sample was collected from. This unique activity also includes weighing and graphing practice as well as the generation of analysis and conclusion statements. Kristen's lesson plan most closely aligns with middle school life science as well as high school biology,

oceanography and environmental science standards.

Selectively Breeding Hard Clams

In this activity, designed by VIMS graduate Leslie Speight Youtsey, your students will explore the biological concepts of genotypes and inheritance through a case study of hard clam breeding. In this activity, students are challenged to cross parent clams to produce offspring with the desired traits of color, growth and disease resistance. Through the creation of several Punnett Squares, students are able to successfully predict offspring phenotypes, and determine which parent crosses would be the most desirable for different hard clam aquaculture situations. Leslie's lesson plan most closely addresses high school biology and AP biology standards.

The Seagrass is Greener on the Other Side

In this activity, designed by VIMS student Lauren Alvaro, your students will explore the abundance of several different epifauna species in a seagrass meadow. After data collection, students will hypothesize about how seagrass density affects epifauna species abundance and diversity. The concept of a biodiversity index is also introduced as student calculate a Simpson's Diversity Index based on the characteristics of their given sample. Lauren's lesson plan most closely addresses high school biology and environmental science standards.

Have you used any of the VA SEA resources in your classroom? Is there a specific topic / SOL you could really use a lesson for? Our team would love to hear from you! For complete lesson plans, including a background PowerPoint, student/teacher handouts and answer keys, please visit the VA SEA lesson plan collection at www.vims.edu/vasea. Want to check out this year's cohort of II AWESOME lesson plans? The 2023 VA SEA Lesson Plan Expo is scheduled to be in-person at VIMS on April 20, 2023. Register to attend here: https://www.surveymonkey.com/r/vasea23expo. Can't attend in-person? New lesson plans will be posted to the VA SEA website on expo day.



WHY SHARKS MATTER

A Deep Dive with the World's Most Misunderstood Predator



Why Sharks Matter: A Deep Dive with the World's Most Misunderstood Predator

By David Shiffman (2022, Johns Hopkins University Press)

Dr. David Shiffman (@WhySharksMatter on Facebook, Twitter, and Instagram) has come out with an excellent read on sharks focusing on reasons we need to conserve them and basic information on marine conservation efforts.

Interesting, as well as entertaining, this new book spends its first three chapters on why sharks are so amazing and why we should not fear sharks. Next Dr. Shiffman jumps into an explanation of the numerous threats to shark populations and then takes a deep dive into conservation efforts and policy, which I found enlightening! I have heard of most of the practices he mentioned, but I really didn't understand the details of how they work (or don't work) until after reading this book.

Dr. Shiffman's final chapters involve introducing the reader to various scientists involved in shark research and protection, as well as NGOs (non-governmental organizations) that work on shark conservation. He also spends some time sharing how we can separate fact from fiction, truth from lies, and how NOT to share misinformation with others – because there is a ton of misinformation out there! The author uses relevant (and sometimes irreverent) quotes at the start of each chapter and before many sections; and he intersperses "fun facts" throughout the book, making for a good read! This book is great for students, classroom teachers, informal educators, folks interested in anything aquatic, including those who want to "save the sharks".

My biggest complaint about this book (and this is personal) is that Dr. Shiffman mentions that he attended Duke University with its marine lab on the North Carolina Outer Banks. As an Outer Banks resident for over 35 years, I know that the Duke University Marine Lab is in Beaufort, along the beautiful Crystal Coast – not on what most consider the "Outer Banks". I'm sure there will be some who disagree with me (including Wikipedia), but as I said, this is personal. This book is an easy read, filled with wonderful information about sharks and their conservation. Enjoy – and learn! Please let me know if you read any of the books that I suggest in this column. I would like to know what you read and what you think of it!

Terri Kirby-Hathaway terrikhnc@gmail.com

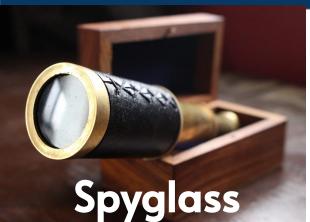
Contribute to Community Science City Nature Challenge: April 28-May I, 2023



Are you ready for the City Nature Challenge? Community Scientists from around the world will participate in a 4-day bioblitz, attempting to log and identify as many individuals and species as possible.

MAMEA Members, your students, and your program participant/visitors can participate by making observations and helping others identify species in observations. All observations and identifications are reported through iNaturalist. As a special note: fish and other marine species have been drastically underreported in the past. If you live along the coast, you are encouraged to report what you find. Shells and other beachcombing finds are counted as evidence of wildlife!

Looking forward to another great year of sharing the natural world with our communities and learning more about the biodiversity around us all! Please visit <u>https://www.citynaturechallenge.org/</u> for more details from host organizations in your area, but you are also welcome to participate as an individual. 4



Focus On: **MAMEA Region's National Board Certified Teachers -Carrie Carlin, Atlee High School** & **Dawn Sherwood, Highland Springs High School**



National Board Certification is the most respected professional certification available in education and provides numerous benefits to teachers, students and schools. It was designed to develop, retain and recognize accomplished teachers and to generate ongoing improvement in schools nationwide. Several of our MAMEA members are currently or working on this certification, so we thought we could spotlight a few of our MAMEA Past Presidents who recently accomplished this level of certification.

Carrie Carlin teaches Oceanography and Advanced Placement Environmental Science at Atlee High School outside Richmond, VA. Carrie decided to complete the National Board process to be a role model for her students, to show them to continuously learn new skills and to be a better teacher for them.

Dawn Sherwood teaches Advanced Placement Environmental Science and Dual-Enrollment College Biology 101/102 at Highland Springs High School outside Richmond, VA. Dawn decided to complete the National Board process after another science teacher was completing it and said it made him reflect on what he was doing and why. After teaching for 18 years, Dawn believes she can always improve, so she decided to do this. The 4% raise that the County gives was also an incentive.

Carrie and Dawn shared a little about the certification process. Both agreed that this is not the easiest thing to complete during a pandemic. Hopefully no one else will have that challenge moving forward. Carrie adds, "The process is very rigorous. It is comprised of 4 components: I test and 3 written components. You have to have to map out units from beginning to end, show how you differentiate the material for all learners, videotape lessons, and the majority of your time you are reflecting upon your teaching practices. It took me 2 years to complete the process." Dawn adds, "It made me reflect on my teaching, which was very helpful. However, going into pandemic while working on component 4 and not being able to redo anything with students. It takes a lot of time! I spent every Sunday at the library (until world closed) for 4 hours writing. I tried to do it ONE year and missed it by I point…checked scores at midnight and then cried and was miserable the rest of the night!"

Finally, Dawn and Carrie were asked, "What advice would you give to someone else who may be considering starting the process?"

Dawn responded, "Take 2 years, at least, and be prepared for a lot of writing. We are good teachers, but when we try to tell someone else what we are doing and how we are doing it, it is hard. If you have an ESL student or collaborative class USE THEM!!! It is easier to show differentiation which is why I missed it by I point initially."

Carrie responded, "I would say that anyone can complete this process if they are willing to put in the work. Be prepared to receive a lot of constructive criticism on your papers, with lots of red marks to go along with them. They are only doing it to help you."

For more information on National Board Certification click here.



Dawn Sherwood (left) and Carrie Carlin (right) at a NBCT Recognition 5

In Memoriam: Dr. William R. Hall Jr.

David Christopher, MAMEA Archives Committee Chair

It is not often that the Archives Committee posts an article to the Masthead, but I felt moved to by a recent event. On October 6, 2022, Dr. Bill Hall, retired Education Specialist for Delaware Sea Grant, passed away at the age of 79. I met Bill at my first MAMEA conference in 2001, which was held in Lewes, Delaware. I can't say I knew Bill well, but at every MAMEA or NMEA conference I inventively found myself sitting with Bill in the



hallway or at dinner, often with his wife Penney laughing and talking. I looked forward to those moments; he always seemed to be genuinely interested in talking with me and learning about whatever I had been working on since last we talked.

William R. Hall Jr. was born in Ridley Park, Pennsylvania to Edna K. Hall and William R. Hall. In 1966, Bill graduated from Bloomsburg State College with a Bachelors of Science. He would go on to get a Masters in Science from the University of the Pacific and a Doctorate in Educational Leadership from the University of Delaware. In 1976, Bill became the very first education specialist for Delaware Sea Grant where he stayed for over 30 years.

In his position at Delaware Sea Grant, he conducted countless trainings and teacher workshops and created educational resources that are still in use today. He served on the Board of Delaware Teachers of Science and Science Olympiad and mentored new teachers. Tami Lunsford, current MAMEA Delaware Rep and high school science teacher, had this to say "Bill was a force for marine education in Delaware for decades. When I first moved here, he welcomed me, introduced me to many key players, and was always willing to help me find resources for my students."

Bill was also one of the founders and early leaders of MAMEA. MAMEA, then known as the Mid-Atlantic Marine Educators Association, held it first conference on September 22 and 23, 1978 at Hotel Chamberlain in Monroe, Virginia. It was during this conference that Bill Hall was elected to be the very first Delaware State Rep for the organization. He served as the state rep until 1983 when he became the president of MAMEA. While a state rep, he hosted the third MAMEA annual conference in 1980 at the Virden Center on the University of Delaware, Lewes Campus. The conference included concurrent sessions, tours of campus and a cookout. Bill served as president of MAMEA in 1983-84 and then went on to be the MAMEA NMEA Rep in 1984-85. Bill would return to the role of Delaware State Rep in 1988 and 1989. During this time, he held joint mini-conferences between MAMEA and the Delaware Teachers of Science, the state NSTA chapter.

Bill retired from Delaware Sea Grant in 2007. Even in retirement, he still supported education and environmental science in Delaware including being a judge for the Sussex County Science Fair and helping with the annual horseshoe crab survey. After he retired, I lost track of Bill for a couple of years. In 2019, I moved to Delaware to take a position with Delaware Sea Grant. I now sit in the position that he created and defined for over 30 years. Not long after moving to Delaware, I was asked to judge the Sussex County Science Fair. There I ran into Bill. He walked right up to me, congratulated me on getting the job and then proceeded to regale me with stories of his recent hunting exploits. It was as if no time had ever passed.

Bill passed away on October 6, 2022. Bill will be greatly missed by the science education community in Delaware. Tonyea Mead, Science Associate for the Delaware Department of Education, worked with Bill over the years, first as a teacher attending his workshops and later as a colleague on the board of the Delaware Teachers of Science, "Bill could really bring teachers together not just to learn but also to form a community". Bill is survived by his wife Penney and his two sons, William and Wyatt.

I wanted to end this article with Bill's own words. These are taken from the Captains Quarters column of the Masthead circa 1983, while Bill was serving as MAMEA President. In the column Bill mentions all the issues facing science education and ends the column will these words, "Students are inquisitive about the sea and its mysteries. The possibilities abound for all subjects and grade levels ... Marine Education is a key that we as educators may use to turn students on to the future."

As I mentioned in the beginning, it is not often that the Archives Committee posts an article, and maybe that needs to change. If you know of anyone that has been active in MAMEA that is retiring, moving jobs, or just someone you feel is doing something interesting please let me know at <u>dmchrist@udel.edu</u>. I would love to feature them. Let's not wait until they are gone to honor them.

To learn more about Dr. Bill Hall read the University of Delaware In Memoriam.

National Marine Educators Association (NMEA) Updates

Tami Lunsford, MAMEA Chapter Representative to NMEA

NMEA at NSTA

NMEA is hosting several sessions at the NSTA National Conference on Science Education in Atlanta, GA, March 22-25. If you are attending the NSTA National Conference, be sure to check out the NMEA sessions which include several MAMEA member presenters.



Thursday, March 23

9:45 AM - 10:45 AM

- Equity and Belonging in Marine Sciences and Education with Rae Quadara (The University of Southern Mississippi Marine Education Center) and Janice Williams (Pinnacle Education Services/NMEA) Location: Georgia World Congress Center B303
- The Wonderous World of Whales, In Your Classroom! with Sandra Ryack-Bell (Wade Institute for Science Education) and Allison Pagliaro (Wade Institute for Science Education) Location: Georgia World Congress Center A303

1:00 PM - 2:00 PM

 Explore Ocean Science and NGSS with NMEA and UN Ocean Decade Resources with David Christopher (Delaware Sea Grant)

Location: Georgia World Congress Center - B303

Friday, March 24

8:00 AM - 9:00 AM

• Developing Student Environmental Voice through STEM Activities with Meghan Marrero (Mercy College, Dobbs Ferry Campus), Johanna Vasquez (Trinity Elementary School), Terri Agravat (Trinity Elementary School) Location: Georgia World Congress Center - A411/412b

2:40 PM - 3:40 PM

 Environmental Literacy In Teacher Education through University and Sea Grant Collaborations (ELITE Collaborations) with Amy Green (University of Maryland, College Park), J. Adam Frederick (Maryland Sea Grant: College Park, MD), Angela Stoltz (Asst. Clinical Faculty) Location: Georgia World Congress Center - A411/412b

Saturday, March 25

8:00 AM - 8:30 AM

- Becoming an All-Atlantic Blue School with Meghan Marrero (Mercy College, Dobbs Ferry Campus) Location: Georgia World Congress Center - B306
- Project SEA: Science Education & Action with Lauren Madden (The College of New Jersey) Location: Georgia World Congress Center - B310

8:00 AM - 10:00 AM

• Meet Me in the Middle Share-a-thon with members of the National Marine Educators Association Location: Georgia World Congress Center - B206

9:30 AM - 10:00 AM

- Experiential Learning: Marine Science Field Studies with Molly Dushay (High School Science Teacher) Location: Georgia World Congress Center - A313
- Unsung Heroes in Science with Tami Lunsford (Newark High Charter School) Location: Georgia World Congress Center - A410

10:20 AM - 11:20 AM

• Inspiring Marine Protection and Careers for Teens (Speed Sharing: Secondary STEM) with Sonia Ahrabi (New York Aquarium)

Location: Georgia World Congress Center - B301

1:20 PM - 2:20 PM

• A Classroom Course in Community Resilience: A Scientific Problem-Based Approach to Understanding Climate Change with Samantha Capers (USM Marine Education Center) Location: Georgia World Congress Center - B404

Other NMEA News

- NMEA has a new editor for our peer-reviewed journal, **Current** Zach Greenburg. The journal team is always looking for submissions and reviewers, so contact Tami <u>Tami.lunsford@gmail.com</u> or Meg Marrero mmarrero3@mercy.edu if you want more information. Zach will also be at the National Conference in July if you want to meet him and discuss options to get involved.
- NMEA received approval to move forward with the U.N. Ocean Decade action to raise ocean awareness through ocean literacy. More information will be coming soon on this.
- The NMEA 2024 conference will be held at Boston University in late June 2024. More information to come at NMEA 2023.

NMEA 2023 Important Dates

o Saturday, July 22 Sea Grant Meeting o Sunday, July 23 NMEA board meeting/Conference Kick-off o Monday, July 24 – Sessions/Keynote/Chapter Meetings/Event o Tuesday, July 25 – Sessions/Student Conference/Poster Session/Stegner Lecture/Auction Event o Wednesday, July 26 – Sessions/Awards lunch/Ticketed event o Thursday, July 27 – Field Trips



NMEA 2023 Strait to Sound: Gathering at the Salish Sea July 23-27, 2023

The 2023 National Marine Educators Association conference will be held in Bellingham, Washington, from July 23-27. The 2023 NMEA conference will be both in-person and virtual. Most sessions are in-person, and there will be one room of hybrid sessions. Sessions are offered in the following formats: posters, 15 minute lightning sessions, 45 minutes, or 90 minutes. Session proposals closed last month and notifications are coming soon. Registration is expected to open April 1st. Tami (our NMEA Chapter Representative) will be gathering items for a MAMEA basket and other donations are welcome for the conference auction. See the <u>NMEA website</u> for more information as details are released in the coming months.

MAMEA's New Action Plan Chris Petrone, MAMEA Action Plan Committee Chair

Every five years, MAMEA develops a new strategic plan, or Action Plan. Led by MAMEA Action Plan Committee Chair, Chris Petrone, in 2017 and again in 2022, MAMEA underwent a rigorous process to ensure those who had an interest in MAMEA—both members and other interested parties—were able to provide input. In July 2022, the MAMEA membership, Board, and participants of the MAMEA email discussion list were asked to complete an anonymous survey about the recent past (the last five years) and future of the organization. Response rate was low, approximately 10% of invitees, however, those that did respond provided very useful information. The results of this survey are available to those that are interested. The survey data helped inform a draft 2023-2027 MAMEA Action Plan. Interestingly, the priorities and measures of success that were identified in the survey responses did not diverge much from the existing 2018-2022 Action Plan. In late October 2022, the MAMEA Board was asked to review a draft Action Plan and provide feedback. Those comments and edits were integrated into a second draft, which was presented to the participants at the 2022 MAMEA Annual Conference in Pine Knoll Shores, North Carolina. Participants were asked to review and provide feedback, which would eventually be integrated into a third draft. This third draft was sent to the entire membership in February 2023 for review; no edits or suggestions were provided. Therefore, MAMEA has a final 2023-2027 Action Plan that is ready to guide the organization over the next five years. ALL members are encouraged to thoughtfully read the (short) Action Plan—which can be found on the MAMEA website on the **Board Toolkit page**—digest it, and commit to helping the organization enact the plan and be an even stronger force for marine and aquatic education! If you are interested in serving on the Action Plan Committee, please reach out to Chris at petrone@udel.edu.

Regional Updates

DELAWARE UPDATE Tami Lunsford, DE Representative

Delaware Museum of Natural Science

The World of Discovery series has returned to the Delaware Museum of Nature and Science. The series kicked off in early March, and the next talk will be given by A.R. Siders on Wednesday, April 12, on Building the Future: Climate Change Adaptation Visions, and by David Christopher on Wednesday, May 10, with a focus on Ocean Literacy. Registration is encouraged but not required. Keep an eye on the <u>Delaware Museum of Nature</u> and <u>Science website</u> for more as the dates near!

Delaware Sea Grant and the University of Delaware College of Earth, Ocean and Environment

A teacher professional development workshop focusing on polar science is scheduled on June I and 2, 2023 at the University of Delaware, Lewes Campus. The workshop will begin at noon on June I and will conclude by 4:00pm on June 2. Lunch and dinner will be provided on June I. Breakfast and lunch will be provided on June 2. Housing will be provided on the evening of June I for those wishing to stay overnight.

In this workshop teachers will

- Learn how scientists conduct polar research
- Interact face-to-face with professional polar scientists.
- Learn how to infuse the process of science into the classroom with real world polar data
- Learn how to provide students with the opportunity to conduct research and present data
- · Learn how to use polar science to meet standards including NGSS, Common Core Math & ELA

This workshop is open to any middle or high school teachers in Delaware or Maryland. Teachers will receive a \$300 to \$400 stipend for participation in the professional development. Space is limited. To register, go to <u>https://tinyurl.com/swarm2023</u>. Registration deadline is May 12, 2023.

MARYLAND/DC UPDATE

Mindy Quinn, MD/DC Representative

National Aquarium

NOAA Ocean Exploration: Cold Seeps and Chemosynthetic Communities for Educators of Grades 6-12 Saturday, April 29, 2023, I:00-5:00pm

Join a NOAA Ocean Exploration facilitator at the National Aquarium for a half-day, in-person professional development workshop. Together we'll explore the wonder of cold seeps—investigating what cold seeps are, how and where they form, and how they support biologically diverse communities in the absence of sunlight.

This half-day workshop includes a brief introduction to the geology and biology of cold seeps; demonstrations of middle and high school student investigations; reflection and discussion with peer educators; and a guided tour of the free, online educational resources available from NOAA Ocean Exploration and the Deep Ocean Education Project.

Registration is required and space is limited. A \$20 fee will be collected at time of registration, which will be reimbursed following attendance at the workshop. Registered educators will receive a collection of classroom-ready resources, a NOAA Ocean Exploration certificate of participation and a \$75 stipend.

To register, please contact our reservation specialists at reserve@aqua.org or 410-576-3833. Registration deadline is April 22, 2023. 9





UNIVERSITY OF DELAWARE

EARTH, OCEAN &

ENVIRONMENT



Delaware Museum of Nature & Science

Volume 43, Issue I

Regional Updates

Meadowside Nature Center

Growing Up WILD Educator Workshop Location: Meadowside Nature Center, Rockville MD Date: Friday, March 31, 9 am - 12 pm

Growing Up WILD (GUW) is an early childhood education program that builds on children's sense of wonder about nature and invites them to explore wildlife and the world around them. Join this half day educator training workshop with Sarah Witcher from Maryland DNR and go home with hands on experience and a new curriculum book to guide your young learners. Childcare providers may be eligible to receive elective curriculum credit for attending a Growing Up WILD workshop.

Registration link - participants will need to create a free activemontgomery account to register.

Wetlands Institute (Not in MD, but this workshop is sponsored by MD DNR and others)

2023 Green Eggs and Sand Workshop Location: The Wetlands Institute, Stone Harbor, NJ

Date: June 3-4, 2023

Green Eggs and Sand is a curriculum (developed by Maryland DNR, Delaware Fish & Wildlife and New Jersey Fish & Wildlife) centers around the horseshoe crab for formal and non-formal educators to use in the classroom, at nature centers, or as camp activities. This workshop covers the biology of the horseshoe crab, their relationship to shorebirds, their importance to humans, and how the species is managed. Participants also get to

run through several of the activities found in the Green Eggs and Sand curriculum, as well as visit a beach during peak horseshoe crab spawning.

Fee: \$50, includes meals and workshop materials. For more information including how to apply please view the following document.

Maryland Association of Environmental and Outdoor Educators (MAEOE)

Self-Paced, Recorded Webinar Series: Using the Outdoors as a Classroom

Over the past couple of years, due to COVID-19, the CDC has shared guidance on being outdoors as a way to help us live a more healthy life at home and at school. In response to this guidance, MAEOE has created this FREE* series for any educator who'd like to learn more about taking learning outside and using the outdoors as a classroom.

Each I.5-hour session is interactive and collaborative and you'll leave with resources and tools that you can integrate into your planning. Click the link for each training to view recordings, presentation, and other resources used during the training.

- **Best Practices** 1.
- 2. Taking Learning Outside
- 3. **Evaluating the School Grounds**
- Integrating MWEEs & Planning for Learning Outdoors 4.
- Planning and Implementation 5.

*This training series was funded by a grant from CBT.

MWEE 101 a Self-Paced, Recorded Webinar

This course is made up of three lessons: Why MWEEs, What Makes a MWEE, and Planning and Evaluating MWEEs. These lessons will introduce you to the MWEE, explore what MWEEs can look like, highlight the MWEE's components, and introduce the tools that support the development and implementation of MWEEs. More information can be found <u>here</u>. (There is also a MWEE 201 Self-Paced, Recorded Webinar.)









Regional Updates

NORTH CAROLINA UPDATE

Andy Gould, NC Representative

Leland Parks, Recreation & Cultural Resources Green Swamp Preserve Nature Hike Green Swamp Preserve, Supply, NC Saturday, May 13, 2023 9 AM to 11 AM



Explore the Green Swamp Preserve with the Nature Conservancy and learn about the flora and fauna that inhabit this expansive and diverse swamp ecosystem. All levels. Click <u>here</u> for the event link. Admission: \$10 (16+) \$5 (under 16, with registered adult) Event Phone: 910-385-9891



North Carolina Aquarium at Fort Fisher Coastal Conservation: Sea Turtle Ecological Edventure Kure Beach, NC July 31 – August 3, 2023

Explore the habitats that sea turtles use on the North Carolina coast. Join beach patrols to monitor turtle nests, participate in community science data collection, and help monitor coastal habitats. Explore sea turtle anatomy through a necropsy demonstration. Learn about Aquarium conservation projects with sea turtles and participate in hands-on activities. Return home with new experiences and field research skills to share with your classroom or organization. Earn continuing education credits while renewing your own love of learning! *Activity Level:* Moderate to rigorous. Activities include, but are not limited to hiking on uneven terrain and in the sand, walking through behind-the-scenes areas in the Aquarium, and helping excavate sea turtle nests. This course includes late nights and early mornings.

Cost: \$250; Cost of course includes lodging, meals, entrance fees, activities and equipment, instruction and related materials, and transportation. Participants are responsible for their own transportation to and from the Fort Fisher Recreation Area.

For additional workshop information, click here or contact Gail Lemiec at <u>gail.lemiec@ncaquariums.com</u>. For assistance with registration please contact the registrar at 910-772-0542.

VIRGINIA UPDATE

Kristen Sharpe, VA Representative



Virginia Living Museum

The Virginia Living Museum has a plethora of event offerings for the public and members alike! Please visit the <u>Virginia Living Museum events page</u> to learn more!

Virginia Aquarium and Marine Science Center

Visit the <u>Virginia Aquarium page</u> for information on upcoming featured events as well as offerings for schools and teachers!



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Regional Updates



Nauticus

Visit the Nauticus <u>calendar of events</u> for information on upcoming featured events!

Virginia Institute of Marine Science (VIMS)

A Scientist Walks into a Bar: Graduate Student Edition, Thursday, April 6, 7:00 – 8:30 PM Gloucester Brewing Company, 6778 Main St, Gloucester, VA 23061

WILLIAM& MARY VIRGINIA INSTITUTE OF MARINE SCIENCE SCHOOL OF MARINE SCIENCE

Three VIMS graduate students give 5-minute fast-talks on the important research they are conducting. Talks will take place every 20 minutes. Drop in, interact with the students, and enter to win door prizes and discounts. Students will have posters of their research and be available to talk with you between presentations. Speakers and titles will be posted closer to event date. This event is free, open to the public, and registration is not required.

A Scientist Walks into a Distillery!, Wednesday, April 12, 2023; 6:00 – 8:00 PM Copper Fox Distillery, 901 Capitol Landing Rd, Williamsburg, VA 23185

Jim Gartland, Associate Research Scientist and Doctoral Candidate at the Virginia Institute of Marine Science will present on the Virginia Shark Monitoring and Assessment Program, the longest-running fishery-independent study of shark populations in the world! Started in 1973 as the VIMS Shark Survey, this longline survey brought global attention to significant declines in shark populations due to overfishing and led to the first U.S. management plan for sharks in 1993. As fishing regulations help shark populations rebound in U.S. waters, data from shark research programs at VIMS continue to inform stock assessments and fishery management plans at federal and state levels. VIMS outreach staff will be on site with door prizes, displays, jaws and preserved shark specimens, and more!

21st Annual Marine Science Day!

Saturday, June 10, 2023; 10:00 AM - 3:00 PM

VIMS' annual open house will be occurring on campus once again on June 10, 2023! Every year, VIMS opens its campus to the public, providing hands-on experiences in marine science and education for all ages! We will have educational displays, opportunities to collect live animals in the York River, tours of our labs and facilities, family-friendly crafts and experiments, and seafood cooking demonstrations! This event is provided completely free of charge. Check the <u>VIMS website</u> for more information on the event, including a link to register!

Speakers Bureau

Interested in having a marine scientist meet with your students in your classroom or virtually? Planning a public lecture where you'd like a research perspective? VIMS scientists are available to speak to your club, business, community organization, school, or other venue. The topics offered are as diverse as VIMS' research! For a list of curated speakers and presentations, as well as to request a speaker, visit our <u>Speakers Bureau</u> page.

Group Tours

Guided tours of VIMS are offered to private groups, by request and availability, throughout the year! If you have ever been curious as to what's happening in our labs and facilities, requesting a group tour is a great opportunity to learn more about our research as well as connect with our marine scientists! You can view tour offerings and more information, and request a tour, using our <u>Group Tours page</u>.

Regional Updates

Chesapeake Bay National Estuarine Research Reserve in Virginia

Discovery Lab Series

These free, family-friendly programs are provided each month by the <u>Chesapeake Bay National Estuarine</u> <u>Research Reserve (CBNERR-VA)</u> at VIMS. Designed with elementary-aged youth and their parents in mind, each lab focuses on a different topic related to the Chesapeake Bay and our local environment and includes exhibits, demonstrations, and hands-on activities as well as a short presentation by a VIMS scientist. Join us on Wednesday, April 19 from 6-8 PM for a lab focused on Horseshoe Crabs, featuring MAMEA member Anna Caputo as guest speaker! Register <u>here</u>!

Resource Boxes

Resource boxes are complete lesson plans including materials required that are available for teachers to check out and use in the classroom (<u>see flyer here</u>). Boxes are available free of cost, but require pick up and drop off at VIMS. <u>For more information about each individual box</u>.



VA SEA lessons have been downloaded by educators in 149 nations...come see what all the buzz is about!

Lessons & Lagers

2023 VA SEA Lesson Plan Expo

Thursday, April 20, 2023 from 5-8PM Open House Style VIMS, Gloucester Point, Virginia

The Virginia Scientists & Educators Alliance (VA SEA) is a network of graduate students, teachers, and informal educators created with the intention of translating real-world scientific research into high-quality lesson plans. This year's cohort will be introducing 10 new classroom activities bringing our collection to 64 lesson plans!

- FREE!
- Live demos of new lessons by the graduate students creators
- Dinner provided (pizza and salad)
- Local craft brews donated by Virginia Beer Company
- Raffle prizes, educational resources, stickers, and more!
- Network with other science educators

To register please visit surveymonkey.com/r/vasea23expo or scan the QR code from your phone













Virtual Field Trip

For those not near the coast, educators from CBNERR have created a <u>virtual field</u> <u>trip</u> to our site in Gloucester Point, VA where students can see how we typically sample the biodiversity in the shallow water environment using large nets! The field trip will also showcase our habitat cage activity, examining oyster reefs as habitats for a variety of animals and plants.

Teacher Critter Collection and Professional Development Workshops

o Semi-annual Critter Collection: Saturday, April 1st

o Teachers on the Estuary (TOTE) workshop: Tuesday, June 20th — Thursday, June 22nd

Please contact <u>Sarah Nuss</u>, Education Coordinator, at <u>mcguire@vims.edu</u> for more information about upcoming trainings, and to be included on the teachers list-serve for future opportunities.



Member Benefits

MAMEA Members receive the following benefits:

-MASTHEAD quarterly newsletter

-Professional Development

-Annual conference and mini events hosted in each of our states

-Funding

-Scholarships to the annual conference

- -Grants for up to \$1,000 for marine-related classroom projects
- -Recognition

-Awards are given to members, honoring exemplary service as a Classroom Teacher or Informal Educator

-NMEA membership discount

More information and deadlines are available on the MAMEA website <u>www.mamea.org</u>.

MAMEA Board Members

Emily Boyd, President Lolita Kiorpes, President-Elect Evan Beatty, Past President David Christopher, Secretary Jackie Takacs, Treasurer Tami Lunsford, Delaware Representative Mindy Quinn, Maryland/DC Representative Kristen Sharpe, Virginia Representative Andy Gould, North Carolina Representative Amy Sauls, Member-at-Large Kathy Fuller, Member-at-Large

The MAMEA Board meets twice a year. More information and contact details can be found here.



MAMEA Committee Chairs

Chris Petrone, Action Plan

David Christopher, Archives

Ruth Gourley, Auction

Rachel Riesbeck, Awards

Jackie Takacs, Conference Advisory

Chris Petrone/Lisa Lawrence, Finance

Dawn Sherwood, Grants

Kathy Fuller, MASTHEAD

Evan Beatty, Mentoring

Tami Lunsford, NMEA Representative

Evan Beatty, Nominating

Erika Young, Scholarship

Lauren Fauth/Evan Beatty, Social Media

David Christopher, Standing Rules

Lisa Lawrence, Webkeeper



Photo (Kathy Fuller)