From the Captain’s Quarters

Happy Summer MAMEA!

I hope you are enjoying the warming weather, I know I am! Teachers (like me) are so excited to be finishing up for the year and Informal educators are getting ready for the busy summer season.

We have had a cold, but productive winter/spring! Virginia, North Carolina, and Washington, D.C. have all had their mini conferences and Maryland and Delaware are coming up in June. Please take advantage of the fabulous opportunities that our states offer!! The Board has also been busy. We met March 21st in person and via the phone for our Spring Mid-Year Meeting.

Voting is occurring right now so please exercise your right to vote! Voting will close on June 17th so please vote soon – you should have sent an email with a unique link by Lisa Ayers. The 2015/16 officers will be announced at the MAMEA Chapter meeting during the NMEA Conference in Newport, RI on June 30th. New Board members for 2015/16 will take office at the annual MAMEA Business Meeting on November 7th, during the 2015 MAMEA annual Conference taking place in Wilmington, NC this year.

Registration is open for NMEA Conference in Newport, RI from June 28th to July 2nd and if you have never been, they are a wonderful experience. Along with the national conference, our fabulous MAMEA annual conference will be coming up in November in Wilmington, NC so please put it on your calendar and think about presenting! I hope everyone has a wonderful, relaxing, exciting, and productive summer!

Regards,

Dawn Sherwood
MAMEA President
State Chapter Updates

Delaware

Bay to Bay: A multidisciplinary watershed investigation across the Delmarva Peninsula
Six days of intensive field work, activities, and watershed, ecosystem, and social science content; all meals; overnight lodging in Easton, MD and Lewes, DE; 40 clock hours; and classroom resources
WHO: Delaware and Maryland Eastern Shore 7th and 8th grade science teachers, but other grade levels are encouraged to apply
WHERE: A transect across Delmarva—Poplar Island, MD to Cape Henlopen, DE
WHEN: Sunday, July 12th – Friday, July 17th
COST: Free
For more information, please contact Chris Petrone at petrone@udel.edu or visit http://www.deseagrant.org/baytobay. (Max. 16 participants)

Sunny and Windy: A Forecast for Greener Energy Education
Content, resources, and hands-on learning about alternative energy, in the shadow of UD’s 2-megawatt wind turbine. Participants will learn from alternative energy scientists, build model wind turbines, explore solar arrays, and experiment with DIY solar ovens. Clock hours will be awarded.
WHO: Delaware and Maryland teachers and informal educators
WHERE: Friday, July 31st
WHEN: University of Delaware Hugh R. Sharp Campus, Lewes, DE
COST: Free
For more information, please contact Chris Petrone at petrone@udel.edu or visit www.deseagrant.org/education-opportunities for more information. (Max. 15 participants)

A Day in Lewes I: Exploring Science in the First Town
Ninety minutes at each of the three science-partner sites, participating in hands-on activities and collecting classroom resources. Descriptions of what each site can offer your students on a field trip will be included,

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## Educator Workshops

**July 13-16, 2015**

**Durham, NC**

<table>
<thead>
<tr>
<th>Time: 9a.m. - 3:30p.m. Mon., Tues. &amp; Thurs.</th>
<th>Time: 8:30a.m.-12:30p.m. Wednesday only</th>
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<tr>
<td><strong>Location:</strong> Durham County– Bahama Volunteer Fire Department</td>
<td><strong>Location:</strong> Eno River State Park (Wednesday only)</td>
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**Cost:** $20 per workshop or $50 for all 3 workshops. Cost includes curriculum books and snacks. 

*Make checks payable to Durham SWCD*

**Credits:** Criteria I for NCEE Certification Program &/or CEU hours available for each workshop

**Registration Deadline:** July 6, 2015

Contact the Durham Soil and Water Conservation District to register 919-560-0558, lmarochak@dconc.gov or [http://dconc.gov/swcd](http://dconc.gov/swcd)

### July 13– Monday

**Project Learning Tree**

Project Learning Tree (PLT) is an interdisciplinary environmental education program designed for educators of ANY background. The hands-on activities facilitate the exploration of topics including communication, economics, energy and fuels, geology, government, history, recycling, transportation, watersheds, wildlife, and much more! Participants will learn about the materials through direct engagement in the PLT activities throughout the workshop. The PLT Activity Guides are provided free of charge from the North Carolina Forestry Association.

### July 14– Tuesday

**Project WET**

July 15– Wednesday (1/2 day)

**Project WET**

Learn to facilitate awareness, appreciation, knowledge, and stewardship of North Carolina’s water resources through Project WET 2.0. This newly updated guide includes Action Education, Reading Corner, and new activities. The focus of this workshop will be on activities that align with Common Core Science standards for grades 3-8. Wednesday is optional; we will focus on collecting and identifying aquatic macroinvertebrates and testing water quality. Attend Tuesday only for 6 hours of credit or both days for 10 hours.

*Must have at least 10 Durham educators. All remaining seats will be filled on a first come basis*

### July 16– Thursday

**Project Food, Land & People**

A collection of 55 lesson plans pre-K through 12th grade lesson plans for use in either a formal or non-formal setting. The book has background information for teacher preparation, activities and student pages, and sources of material. Lessons focus on subjects related to Food, Land and People.
MAMEA Board Elections 2015/16: Be Sure to Vote by June 17th

The election of MAMEA’s Board members for 2015/16 is underway! We encourage all MAMEA members to exercise their right to vote. Be sure to submit your ballot by the June 17th deadline. For all members with a functional email address, MAMEA elections are conducted electronically. You should have received your electronic ballot in an email on May 18. Members without functional email received a paper ballot. Both ballots allow for write-in candidates.

The 2015/16 election seeks to fill the following positions:

- **President-Elect Candidates** (*serves a 3 year cycle as President-Elect, President and Past-President*): Lauren Albright and Chris Petrone
- **Secretary Candidates** (*2 year term*): Carol Hopper Brill and Allie Toomey
- **Maryland State Representative Candidates** (*2 year term*): Maria Madero
- **North Carolina State Representative Candidates** (*2 year term*): Patrick Curley, Jenny Fuller, and Jessica Kochman

To review the candidate profiles, please visit [http://www.mamea.org/docs/2015MAMEABoardCandidates.pdf](http://www.mamea.org/docs/2015MAMEABoardCandidates.pdf).

Then, please vote using the unique ballot that was emailed to you. If you have misplaced your email ballot or if you have questions about the election process, please contact Membership Committee Chair Lisa Lawrence at ayers@vims.edu.

Voting will close on June 17th and both electronic and paper ballots will be tallied as prescribed by MAMEA By-Laws and Standing Rules. Election results will be announced during the MAMEA Chapter meeting on June 30th at the annual NMEA Conference in Rockport, RI.

New Board members for 2015/16 will take office at the annual MAMEA Business Meeting on November 7th during the 2015 MAMEA annual Conference taking place in Wilmington, NC.
State Chapter Updates

as well as content focused on specific Delaware curriculum units. Transportation between sites, lunch, and seven clock hours are provided.

WHO: Delaware teachers and school administrators
WHERE: Lewes, DE
WHEN: Tuesday, August 11th
COST: $15 ($25 for both days)
For more information, please contact Chris Petrone at petrone@udel.edu or visit http://bit.ly/leweseducationcoalition for more information.

A Day in Lewes II: Exploring History in the First Town
Ninety minutes at each of the four history-partner sites, participating in hands-on activities and collecting classroom resources. Descriptions of what each site can offer your students on a field trip will be included, as well as content focused on specific Delaware curriculum units. Transportation between sites, lunch, and eight clock hours are provided.

WHO: Delaware teachers and school administrators
WHERE: Lewes, DE
WHEN: Wednesday, August 12th
COST: $15 ($25 for both days)
For more information, please visit http://bit.ly/leweseducationcoalition or contact Chris Petrone at petrone@udel.edu.

Teachers on the Estuary (TOTE): Coastal Ecosystems
In partnership with the Delaware National Estuarine Research Reserve, join us for an exciting, hands-on, in the field, 3-day workshop focused on the mid-Atlantic’s coastal ecosystems including: freshwater and saltwater wetlands, shallow bays, and barrier islands. Field studies, classroom activities and scientific presentations will make this a workshop you won’t want to miss! Space is limited! Workshop runs from 8:30 AM to 4:00 PM each day.

Participants will:
• increase their confidence with habitat-based science content
• increase their knowledge of the ecological issues facing our mid- Atlantic coastal ecosystems
• increase their confidence in teaching about coastal ecosystems using local real world science and research
• discover a variety of resources for use in their classrooms
• receive $150 stipends, lunch each day, 21 CECs, and high quality materials to facilitate their teaching

WHO: Formal and informal educators
WHERE: Jacques Cousteau National Estuarine Research Reserve, Tuckerton, NJ
WHEN: August 13th - 15th
COST: Refundable $40 registration fee to hold space. Overnight lodging is available for a small fee.
For more information, please visit http://events.r20.constantcontact.com/register/event?oeidk=a07ea j17ilp114b6acc&llr=tczov8&c, or contact Melanie Reding at reding@marine.rutgers.edu.

MADE CLEAR Climate Change Field Activities Workshop
Participants will learn about and field-test four climate science-based field activities. Topics include marsh migration, species observation and migration, and school-based alternative energies.

WHO: Delaware and Maryland teachers and informal educators
WHERE: Adkins Arboretum, Ridgely, MD
WHEN: Friday, August 14th
COST: Free (stipend available)
For more information, please contact Chris Petrone at petrone@udel.edu.

39th Annual Coast Day
Coast Day highlights how UD scientists, staff, and students are improving understanding of ocean environments and serving coastal communities. Coast Day attendees can interact with researchers, tour ships, try hands-on activities, and attend presentations on a range of topics. Family-friendly activities include an event-wide treasure hunt for answers to questions about the environment and Coast Day exhibits. Children can meet sea-dwelling animals such as horseshoe crabs and dogfish sharks at the critter touch tanks. Everyone can enjoy live music, vendor displays, and seafood favorites showcased by local chefs at the Crab Cake Cook-Off and the Seafood Chowder Challenge.

WHERE: University of Delaware Hugh R. Sharp
State Chapter Updates
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Campus, Lewes, DE
WHEN: Sunday, October 5th
COST: Free
For more information, please visit http://www.decoastday.org.

Maryland

Funding for Maryland Marine Education
The Department of Natural Resources is looking to increase the amount of funding in environmental and marine education in Maryland to improve student environmental literacy. They have posted the grant application online! For more information, please visit http://news.maryland.gov/dnr/2015/04/09/environmental-literacy-grants-available/ and http://dnr2.maryland.gov/Education/Pages/streamed.aspx.

Coming Soon: Coral Reef Education Portal!
The Khaled bin Sultan Living Oceans Foundation is thrilled to announce the launch of their Coral Reef Education Portal. The portal will host the Foundation’s coral reef ecology curriculum, which includes a multimedia package of teaching and learning tools. This curriculum has been developed in accordance with the Next Generation Science Standards (NGSS) and Ocean Literacy Essential Principles. This innovative course will engage and excite students while learning about coral reefs. The curriculum was created for high school students, but can be used in a variety of classroom settings. The education portal will launch by the start of the academic school year. For more information, please visit www.livingoceansfoundation.org.

National Aquarium Teacher Workshops
The National Aquarium in Baltimore, MD offers several professional development opportunities for educators, including day-long teacher workshops! These workshops are fun and engaging and you will leave with plenty of activities for your classes! For more information, please visit http://www.aqua.org/learn/teacher-programs/teacher-workshops.

The mini-conference will be held at the Patuxent River Park in Upper Marlboro, MD. The program begins with a presentation on the fish hawk, or osprey with staff naturalist/biologist Greg Kearns of Patuxent River Park. Then Greg will take us out on the water for approximately two hours. Our boat will stop at several osprey nests where 6-8 week-old chicks will be collected, banded, and released back to their nest. Each banded chick will need to be weighed and its band number recorded for research purposes. Meet at the Park on June 20th at 7:00 AM. The option to bring your own lunch and walk the nature talks at the park following the Osprey Banding Program will also be available.

Registration deadline is June 12th by 5:00 PM
Please register at http://www.mamea.org/mdmini.html (Space is limited to 23 spots so please register as soon as you can to ensure a spot on the boat.)

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On April 18th, 12 MAMEA-ites enjoyed a fun behind scenes visit at the National Zoo. We learned about maintenance on the Amazon Trail, saw the coral research/spawning area, and checked out the food choices and health check-ups for the seals and sea lions.
We are very pleased to announce that registration is now open for the 2015 National Marine Educators Association (NMEA) Conference. This year’s conference will be held in historic downtown Newport, RI from June 29th to July 2nd. The conference will offer sessions and plenaries that include speakers from around New England and beyond. Participants will have the opportunity to register for an impressive variety of field trips that include kayaking, scuba diving, boat trips and more! NMEA 2015 is proudly being hosted by the Southeastern New England Marine Educators (SENEME).

District of Columbia

Celebrate World Ocean Day with not one, but two days of celebration at the Smithsonian National Museum of Natural History, June 7th and June 8th.

Meet experts and explore ocean science. Make “trashy jewelry” and learn how to reduce marine debris. Try your hand at light photography. Watch Honu by the Sea, a family-friendly underwater musical, and take your picture with the performers. See a selection of ocean films and talk with those involved. Meet cartoonist Jim Toomey and watch him create his marine comic strip, Sherman's Lagoon. Watch jellies feed. Collaborators include Smithsonian field stations, NOAA, the National Aquarium, NASA, National Park Service, NOVA, the Environmental Protection Agency, United Nations Environment Programme and many others.

For the full schedule and list of participants, please visit http://ocean.si.edu/world-ocean-day-2015-smithsonian-national-museum-natural-history.

Virginia

"Pathways to the Abyss" video is a virtual trip to the Atlantic Canyons

The Bureau of Ocean Energy Management (BOEM) announces the availability of a new video, Pathways to the Abyss, showcasing the deepwater marine habitats of two mid-Atlantic Canyons located 100 miles offshore Virginia and Maryland. The film is the product of a five-year study sponsored by the National Oceanographic Partnership Program (NOPP) and funded by BOEM, the U.S. Geological Survey (USGS) and the National Oceanic and Atmospheric Administration (NOAA). It includes interviews with scientists from universities, research institutions, the private sector and the federal government who participated in research cruises to the Norfolk and Baltimore Canyons from 2011 to 2013.

For more information, please visit http://www.boem.gov/Atlantic-Canyons-Pathways-to-the-Abyss/ or contact Barbara Wallace at barbara.wallace@boem.gov.

North Carolina

Project Learning Tree K-8 Workshop

Project Learning Tree (PLT) is an interdisciplinary environmental education program designed for educators of any background. The hands-on activities facilitate the exploration of topics including communication, economics, energy and fuels, geology, government, history, recycling, transportation, watersheds, wildlife, and much more!

WHERE: Holmes Educational State Forest in Hendersonville, NC

WHEN: Friday, June 12th, 9:00 AM - 4:00 PM

REGISTER: Please contact Keith Bamberger at keith.bamberger@ncdenr.gov by June 9th

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State Chapter Updates

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Paul Standish Conference Scholarships

Each year Paul Standish Scholarships are available to MAMEA members interested in attending the MAMEA Annual Conference but are in need of financial assistance. These Scholarships cover up to $300 of expenses directly related to participation in the conference and will be issued as a reimbursement after the conference upon submission of valid receipts.

Applicants must have at least six months of membership in MAMEA prior to application or must have attended a MAMEA-sponsored state event by the time of application. Members may not receive a Paul Standish Scholarship in consecutive years.

For additional information, please contact Jaclyn Beck at jnm8661@gmail.com or visit http://www.mamea.org/scholarship.html.

To apply, submit an application form and a letter of justification, describing the need for the scholarship and explaining how the conference will benefit you and your students. The application deadline is August 19th. Send your application by email to jnm8661@gmail.com or mail to Jaclyn Beck, Scholarship Committee Chair, VIMS, P.O. Box 1346, Gloucester Point, VA 02306.

Need funding for next year’s educational project? Plan ahead for the 2015/16 school year!

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 15th!

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. To read about projects that have received MAMEA support in the past, see www.mamea.org/pastgrants.html.

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 2015/16 cycle is September 15th. Grant awards will be announced November 7th at the MAMEA Fall Conference in Wilmington, NC. The funding period is 12 months, from November 1st to October 31st.
Help MAMEA Recognize Its Stellar Marine Educators!

August 31st Deadline for Award Submissions

It’s not too early to nominate a deserving educator for the 2015 MAMEA award! Each year, MAMEA presents two awards to educators nominated by their peers. One award honors a formal classroom teacher (grades K-16).

The other acknowledges an educator in an informal setting (e.g., museum, aquarium, or employees with government agencies).

Submissions for the 2015 awards are due by August 31st. The winners will be announced at the MAMEA conference in November. Applications, guidelines, and eligibility requirements are available online at www.mamea.org/awards.html.

Review profiles of past award recipients at www.mamea.org/docs/MAMEA_AwardWinnerProfiles.pdf.

For more information please contact Carrie Bateman, MAMEA Awards Committee Chair, at CBateman@hanover.k12.va.us.

DON'T MISS THE DEADLINE!

August 19th: Applications for the 2015 conference scholarship

August 31st: Submissions for the 2015 formal and non-formal educator awards

September 15th: Grant proposals for 2015/2016

State Chapter Updates

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Project Wild

Project WILD workshops are for adults interested in teaching young people about wildlife. Participants receive the Project WILD K-12 educator guide along with materials specifically about North Carolina wildlife.

WHERE: 1900 Selwyn Ave, Charlotte, NC 28274
For more information, please call 704.601.5083
WHEN: Wednesday, June 24th, 9:00 AM - 4:00 PM

Educator Workshops- PLT, Project Wet, ELP

The hands-on activities facilitate the exploration of topics including communication, economics, energy and fuels, geology, government, history, recycling, transportation, watersheds, wildlife, and much more! Learn to facilitate awareness, appreciation, knowledge, and stewardship of North Carolina’s water resources through Project WET 2.0. The focus of this workshop will be on activities that align with Common Core Science standards for grades 3-8.

A collection of 55 lesson plans pre-K through 12th grade lesson plans for use in either a formal or non-formal setting.

WHEN: July 13th - 16th
WHERE: Durham County– Bahama Volunteer Fire Department and Eno River State Park
For more information, please call 919.560.0558 or email lmarochak@dconc.gov.

Growing Up Wild Exploration Series

Growing up Wild 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.

WHERE: Clark Park Nature Center, 631 Sherman Drive, Fayetteville, NC 28301
WHEN: Frst Tuesday of every month starts in July
For more information, please call 910.433.1579.

EENC Annual Conference

Please join like-minded educators for the 2015 Environmental Educators of North Carolina (EENC) Conference in Columbia, NC from September 25th to 27th. For more information, please visit http://www.eenc.org/.
2015 National Ocean Science Bowl in the Mid-Atlantic

More than 200 marine science students participated in the Mid-Atlantic’s three regional competitions of the 18th annual National Ocean Sciences Bowl (NOSB®) earlier this year. With the guidance of their teacher coaches, teams spent weeks building content knowledge in diverse marine sciences. NOSB offers teachers an opportunity to incorporate more marine science into their curricula, and allows them to demonstrate the integrated nature of marine sciences. Students can explore ocean subjects and demonstrate their command of wide-ranging subjects in head-to-head competition with other teens.

Congratulations to our Mid-Atlantic Competitors!

This year, the Chesapeake Bay Bowl was held on February 7, sponsored by George Mason University. Held at the Johnson Center on the GMU campus in Fairfax, VA, the contest drew schools from Delaware, Maryland, the DC metropolitan area, as well as selected cities in nearby Pennsylvania and Northern Virginia. This year, the team from Thomas Jefferson High School for Science and Technology in Alexandria, VA, took first place. TJ’s long-time Coach Lisa Wu has been responsible for the school’s string of victories. Lower Dauphin High School from Hummelstown, PA, took second place this year. In third place was Montgomery Blair High School from Silver Spring, MD. State College Area School District High School from State College, PA placed fourth and the Sportsmanship award went to Newark Charter High School from Newark, DE. For more details on the CBB 2015 competition, contact Regional Coordinator Richard Friesner at rfriesne@gmu.edu, visit the website at www.chesapeakebaybowl.org/ and check out the Chesapeake Bay Bowl’s Facebook page at www.facebook.com/ChesapeakeBayBowl.

Virginia’s Blue Crab Bowl is coordinated by Marine Advisory Services at the Virginia Institute of Marine Science and Old Dominion University’s Department of Ocean, Earth & Atmosphere. Thanks to major support from both partner institutions, the 2015 contest was held on February 6th and 7th at the Virginia Institute of Marine Science campus in Gloucester Point, VA. The field of 16 teams represented 10 Virginia high schools. For a record eighth year in a row, the team from Bishop Sullivan Catholic High School in Virginia Beach, VA, took first place, coached by science teachers Bill Dunn and Carol Stapanowich. In second place was a combined team from Chesapeake Bay Governor’s School-Glenns and Warsaw campuses. Seton School, from Manassas, took third place; and Broadwater Academy’s Team B placed fourth. For a description of the competition and announcement of this year’s winners, visit the Blue Crab Bowl website at http://web.vims.edu/adv/bcb/index.html. For more information on the Blue Crab Bowl Regional Coordinators, please contact Carol Hopper Brill at chopper@vims.edu or call 804.684.7735 and Victoria Hill who can be reached at vhill@odu.edu or 757.683.4911.
North Carolina’s Blue Heron Bowl was held on February 7 at the University of North Carolina at Chapel Hill, in Chapel Hill, NC. Hosts for the Bowl were the Marine Science Department at UNC-CH and the Institute of Marine Sciences in Morehead City. This year, the first place team was from the North Carolina School of Science and Math in Durham, NC. Collaborating Coaches David Green and Christine Muth credited their students with the initiative to form a team and prepare for competition. In second place was Raleigh Charter High School from Raleigh, NC; Walter Williams High from Burlington, NC, placed third. For additional information on the competition, please contact Regional Coordinator Janelle Fleming at janelle.fleming@gmail.com or visit the Blue Heron Bowl website at https://sites.google.com/site/blueheronbowl/. Photos of the eleven 2015 teams can be found at the Blue Heron Bowl Facebook page at www.facebook.com/pages/Blue-Heron-Bowl/142146289175250.

MAMEA Recognizes New Coaches and Top Coaches of Mid-Atlantic NOSB Competitions

MAMEA is pleased to recognize the coaches who prepare students for participation in the Mid-Atlantic regional NOSB competitions. To acknowledge the effort of teachers new to the competition, MAMEA awards a one-year membership which helps link these teachers to MAMEA’s active community of marine and aquatic educators and provides complementary registration to MAMEA’s Fall Conference.

Blue Crab Bowl
- Brock Snyder, Patrick Henry High School, Ashland, VA
- Lisa Sumrak, Isle of Wight Academy, Isle of Wight, VA
- John von Reyn, Seton School, Manassas

Blue Heron Bowl
- Cordell Thorson, Millbrook High School, Raleigh, NC

Chesapeake Bay Bowl
- Sheila Abruzzo, State College Area High School, State College, PA
- Shawn Stickler, Thomas Jefferson High School for Science & Technology, Alexandria, VA

And, congratulate the Top Coaches from our three Mid-Atlantic Bowls: We look forward to seeing them at the MAMEA Fall Conference, this year in Wilmington, NC from Nov. 6-8.
- Blue Crab Bowl: Bill Dunn, Bishop Sullivan Catholic High School, Virginia Beach, VA
- Blue Heron Bowl: David Green, North Carolina School of Science & Math, Durham, NC
- Chesapeake Bay Bowl: Lisa Wu, Thomas Jefferson High School for Science & Technology, Alexandria, VA

For more information about the National Ocean Sciences Bowl, as well as great up-to-the-minute news about marine research and policy issues, visit the NOSB website at www.nosb.org or the NOSB Facebook page at www.facebook.com/nosb.org.
Chincoteague Bay Field Station Hosts Sea S.T.A.R. Stewards

Internship for Accomack County Teens

Seven students from high schools across Accomack County have been selected to participate in Chincoteague Bay Field Station’s (CBFS) brand new Sea S.T.A.R. Stewards Program this summer. This internship is a coastal education and leadership internship program for local 9th and 10th graders. Students will spend time this summer working in environmental education programs at CBFS while researching and learning about our local watershed.

This year’s Sea S.T.A.R. Stewards include Trenton Clark, Noah Jester, Kristen McCollum from Chincoteague High School, Lyssa Annis, Kara Beth Pruitt, and Jayde Thompson from Arcadia High School, and Brittane’ Patterson from Zion Academy of America. The students attended an orientation at CBFS this past weekend with their parents. Lyssa Annis notes that she is especially excited about being, “around and in the water and mud… I’ve always loved those things!” The students bring with them local perspectives of the Shore, including Noah who realizes, “I have lived on the Chincoteague Bay all of my life so this internship is a great opportunity to learn more about all of the things I have taken for granted every day.”

The Sea S.T.A.R. Stewards Program is funded by a generous grant from Toyota TogetherGreen and Audubon. Watershed education embodies the Toyota TogetherGreen goals of improving water supplies and quality for the protection of biodiversity. The Eastern Shore contains 70% of the Virginia’s tidal wetlands. The watershed is vital habitat to threatened species, including Delmarva fox squirrel, diamondback terrapins, and piping plovers, as well as a source of natural resources essential to watermen, farmers, and local businesses. During this internship students will become more knowledgeable about their role in the watershed, and will participate in meaningful work to preserve it. For more information about the Sea S.T.A.R. Stewards Program or to get involved with Chincoteague Bay Field Station, visit www.cbfieldstation.org.
Blue Heron Bowl Winner: *North Carolina School of Science and Math*
Collaborating Coach David Green said that the NCSSM team has been self-actualizing since the beginning. He and co-collaborator Christine Muth served as sponsors for the team, but the students themselves were self-coached when it came to preparations for the competition. Team members included (left to right): Collaborating Coach David Green, Jonathan Gay, Team Captain Chase Yuan, Pranav Arrepu, Katherine Yang, and Justin Zhang. At far right is a BHB official. Not pictured is Collaborating Coach Christine Muth.

Blue Crab Bowl Winner: *Bishop Sullivan Catholic High School*
Students from Bishop Sullivan Catholic High School’s Team A took First Place in the Blue Crab Bowl for the eighth year in a row. Coached by science teacher Bill Dunn (far left, back), team members include (left to right): Team Captain Patrick West (junior); Gerry Fernandez (freshman); Iggy Liberto (sophomore); Dominic Gentlesk (freshman); and Ryan Remias (junior). Not pictured is Assistant Coach Dr. Carol Stapanowich. Photo by Jacklyn Cravey, Virginia Sea Grant Photo Intern.

Chesapeake Bay Bowl Winner: *Thomas Jefferson High School for Science and Technology*
Science teacher Lisa Wu (far left) has a long record as a winning Chesapeake Bay Bowl coach and she led her team to victory again this year. Members of her top-placing team include (left to right): Christopher Chen; Rachel Zoll; Jared Niremberg; Comfort Sampong; and John Christopher Panagides.
Prestigious Award Furthers Efforts of Local Environmental Leader

Toyota and the National Audubon Society announced that a Toyota TogetherGreen Fellowship award will be given to a Accomack County based environmental educator. After a competitive nationwide selection process, Parker McMullen Bushman will receive an award to initiate a project that will improve watershed health through education, job training and conservation projects.

Toyota TogetherGreen, a conservation initiative of the National Audubon Society and Toyota, selects high-potential local leaders annually to receive a $10,000 grant. The Toyota TogetherGreen Fellowship Program invests in emerging conservationists from all backgrounds, providing them with resources, visibility, and a growing peer network to help them lead communities nationwide to a healthier environmental future. With the funds, fellows conduct community projects to engage diverse audiences in habitat, water or energy conservation.

Parker, the Adult and Family Education Coordinator for the Chincoteague Bay Field Station plans to use her fellowship to launch a project that will focus on empowering teachers, students and individuals of the communities of the Eastern Shore to be stewards of coastal waterways. The Coastal Watershed Alliance will improve watershed health through education, teacher professional development, and conservation job training for local students.

“Toyota TogetherGreen Fellows help people engage with nature. They look like America: diverse, passionate, and patriotic,” said Audubon President and CEO David Yarnold “They are environmental heroes and we’re pleased to give them a chance to invent the future.”

Audubon and Toyota founded Toyota TogetherGreen in 2008 to foster and invest in conservation pioneers and ideas that impact the environment on a national scale. Now in its seventh year, the program has invested $25.4 million in community-based conservation, engaging more than 455,000 people in 300 cities and all 50 states.

To date, 260 environmental leaders from across the country have been awarded Toyota TogetherGreen fellowships. These leaders have engaged nearly 150,000 people in a diversity of conservation projects across the country from New York to Fargo to Tucson. A complete list of 2014 Toyota TogetherGreen Fellows and details about their conservation projects can be found at www.togethergreen.org.

One Great Place! 5 Exciting Summer Camps! 10 fun-filled weeks!

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<td>NAUTICUS EXPLORER SUMMER CAMP (ages 5-9)</td>
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<td>Learn the basics of sailing</td>
<td>Explore the world of science. Forecast the weather, build an ROV and more! $225 members, $245, nonmembers</td>
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<td>$195 (1-week session)</td>
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<tr>
<td>SAILQUEST (ages 12-15)</td>
<td>NAUTICUS EXPLORER SUMMER CAMP (ages 5-12)</td>
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<td>$195 (1-week session)</td>
<td>2-weeks of camp available</td>
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<tr>
<td>SAIL VOYAGERS (ages 10-15)</td>
<td>Two weeks of camp available</td>
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<tr>
<td>Learn advanced sailing skills</td>
<td>Call (757) 634-1041 or email <a href="mailto:rebecca.fill@norfolk.gov">rebecca.fill@norfolk.gov</a> to register. Registration deadline: Friday, July 3.</td>
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<tr>
<td>$295 (2-week session)</td>
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<td>Eight weeks of camp available.</td>
<td>Visit <a href="http://www.sailnauticus.org">www.sailnauticus.org</a> for dates, more information or to sign up!</td>
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<td>Visit <a href="http://www.sailnauticus.org">www.sailnauticus.org</a> for dates, more information or to sign up!</td>
<td>(757) 634-4242</td>
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World Oceans Day is June 8th... What are YOUR ocean questions?!

In honor of World Oceans Day, the Consortium for Ocean Leadership and its members want to hear from you during our live Twitter event!

- What science questions do you have about the ocean?
- Do you want to learn more about a specific marine organism?
- Are you wondering how the ocean helps regulate climate or contributes to severe weather events? Have you observed changes in your local beaches that you’d like explained?

On June 8th from 1:00 PM to 5:00 PM (EST) an array of ocean experts from across the field will be available live via Twitter to answer your questions.

All you have to do is add #MyOceanQ after your question, and one of the available experts will tweet you an answer.

This is your time to learn more about the massive body of water that covers an astonishing 71% of the Earth’s surface!

Attending Ocean Experts:
- Nick Record, Bigelow Laboratory for Ocean Sciences
- Patrick Flanagan, Rutgers University
- Virginia Schutte, Leibniz Center for Tropical Marine Ecology
- Jessica Carillim, University of Massachusetts, Boston
- Alexis Rudd, Hawai‘i Institute of Marine Biology
- David Shiffman, University of Miami
- Isabel Romero, University of South Florida

If you have questions about the live World Oceans Day Twitter event, please contact kkracke@oceanleadership.org.

Glen Echo Park Aquarium

In early 2015, Andrew Wilson of Under the Sea worked to transform an existing building at Glen Echo Park in Glen Echo, MD into the Glen Echo Park Aquarium (GEPA), a Chesapeake Bay Learning Center. He is partnering with the College of Exploration with the goal of using the site to educate the public about the local watershed and how people impact it. This partnership includes several other local groups as well as invited local citizens who are volunteering to make this a true community project. The site, which formerly housed the Discovery Creek Nature Center, is still in the exciting development phases, but plans to house Chesapeake Bay animals as well as river creatures. The outdoor area will teach best practices for watershed protection, and will have a tree house transformed to a pirate ship to focus on fishing stewardship. GEPA plans for a grand opening in September 2015 and is located at 7300 MacArthur Blvd., Glen Echo, MD 20812. For more information, please visit http://gepaquarium.org/.
**Amazing Teaching Resources**

**NSTA Classroom Resources**
NSTA assembled a team of educators to identify and review resources such as lesson plans, video simulations, science kits, and more, that support the Next Generation Science Standards and the Framework for K-12 Science Education (Framework and science standards). Check back often, as new resources will be added daily.

http://ngss.nsta.org/Classroom-Resources.aspx

**Clif Bar Family Foundation’s Small Grants**
The Clif Bar Family Foundation Small Grants are awarded to projects that protect earth's beauty and bounty; increase opportunities for outdoor activity; and more. The quarterly deadlines for applications are August 15, November 15, May 15, and February 15 each year.

http://clifbarfamilyfoundation.org/Grants-Programs

**Collection of Ocean Acidification Educational Resources**
The Suquamish Tribe and partners offer this curated collection of free resources on ocean acidification for K-12 educators. The links include lesson plans correlated to components of the NGSS, along with links to supplemental materials such as multi-media, journal articles, and more. The website also offers an Ask an Expert submission form.

http://www.oacurriculumcollection.org/

**Disaster Preparedness Prep Rally Toolkit**
Save the Children offers a Prep Rally Youth Service Toolkit to help users host a Prep Rally - an event that educates children and families about emergency preparedness. Help make sure that your community is prepared for the summer season of hurricanes, wildfires, floods, and tornadoes.


**DIY Lake Science App**
DIY Lake Science is a free app for iPhones and iPads that allows families and educators to investigate lakes and other freshwater ecosystems at home, at school, or anywhere. It offers outdoor and indoor hands-on activities, videos, and more. Each activity includes material lists, step-by-step instructions, and detailed explanations.

http://www.lawrencehallofscience.org/do_science_now/diy_lake_science

**Early Warning and Environmental Monitoring Program**
The Early Warning and Environmental Monitoring program encompasses a broad spectrum of scientific endeavors operating at national, regional, and international scales. Project activities support investigations in the areas of climate change, natural resource management, environmental change detection, food security monitoring, water resource assessments, and hazard identification/mitigation. FEWS NET is a Famine Early Warning Systems Network that uses climate data, satellite imagery, and local knowledge to prevent famine. Other projects monitor drought, hydrographic information, and more.


**Fish Behavior**
Nature, the International Weekly Journal of Science, offers the online news article, Animal behaviour: inside the cunning, caring, and greedy minds of fish. The article discusses behaviors that show how fish cooperate, cheat, and punish.


**Green Machines**
This video from NASA introduces phytoplankton - the base of the marine food web, the source of half of the oxygen on Earth, and an important remover of CO2 from the atmosphere. The video reviews how satellites are used to monitor phytoplankton and how warming waters and acidification negatively affect phytoplankton.

http://cleanet.org/resources/43137.html
Green Schoolyards America
Green Schoolyards America supports the green schoolyard movement. Their mission is to enable communities across the United States to enrich their school grounds and use them to improve children’s well-being, learning, and play while promoting community engagement and contributing to the ecological health and resilience of cities. Download the free activity guide, check out the publications, and more.
http://www.greenschoolyardsamerica.org/

Hands On the Land
Hands on the Land is a national network of field classrooms and agency resources to connect students, teachers, families, and volunteers with public lands and waterways. FWS has recently doubled the number of Hands on the Land sites, now with 15 sites in seven FWS regions. Check out the educator resources, monitoring, and more.
http://www.handsontheland.org/

Historical USGS Maps
The USGS offers this new online map viewer, allowing visitors to search and browse the USGS collection of historical topographic maps. The maps, over 178,000 of them, date back to 1880, and cover the entire country. Visitors can type or zoom in on a particular place, limit a search to maps of a particular scale or from a particular range of dates, and download them in a variety of formats.
http://ngmdb.usgs.gov/maps/Topoview/

JASON National Educators Conference
The JASON National Conference from June 25th to 27th in Ashburn, VA, provides an opportunity to obtain resources and develop skills for bringing Science, Technology, Engineering, and Mathematics education to your teachers and students. In addition to the hands-on workshops, targeted breakout sessions, and networking opportunities, this year JASON is offering an “Adventure Track” which will provide hands-on experiences for educators.

Mazda Foundation Grants
The Mazda Foundation awards grants to programs promoting education and literacy, environmental conservation, cross-cultural understanding, social welfare, and scientific research. The deadline for application is July 1st.
http://www.mazdafoundation.org/Grant_Guidelines.html

NAMEPA
The North American Marine Environment Protection Association (NAMEPA) is a marine industry-led initiative that operates as a voluntary, non-profit, and nongovernmental organization committed to preserving the marine environment. The organization is comprised of marine industry professionals and works to educate seafarers, port communities, and others about the need and strategies for protecting the marine environment. Check out the upcoming sponsored events, educational materials, and more.
http://www.namepa.net/

National Geographic: The Ocean
This section of the National Geographic website is dedicated to the ocean. As expected from National Geographic, it hosts incredible videos and photos of underwater worlds, as well as articles and exposés of various issues. Categories include Ocean Life, Protecting the Ocean, and more.
http://ocean.nationalgeographic.com/ocean/
Nature’s Fury: The Science of Natural Disasters
The American Museum of Natural History offers the website, *Nature’s Fury: The Science of Natural Disasters*, to support the exhibition of the same name. Sections include Earthquakes and Tsunamis, Tornadoes, and more, with background information and multi-media. The Additional Resources page features links to disaster agencies.

NGSS: Teaching in Action
NSTA offers a series of eight free videos showing what it looks like to teach the science and engineering practices called for in the Framework and science standards. The videos, with accompanying lesson plans, highlight the major shifts in science instruction, explore the new role of the teacher, and demonstrate new instructional strategies in the high school classroom.
http://ngss.nsta.org/ngss-videos.aspx

NGSS: Web Seminars - Online
NSTA offers this free Next Generation Science Standards Web Seminar series for educators teaching grades K-5. The summer series includes Constructing explanations from evidence, Making meaning through discourse, and Planning a coherent storyline.

NSTA New Science Teacher Academy Fellowships
NSTA fellowships offer middle and high school teachers in their second through fifth years of teaching a year-long immersion in a host of science-related activities and professional development opportunities. The deadline for application is August 15th.
http://www.nsta.org/academy/

Ocean Classrooms
The Ocean Classrooms website offers a free Ocean Literacy online course along with a portal for live ocean data from around the globe. Sign up for a free 30-day trial to check out the online course, Marine Science 101, a semester-long high school course.
https://oceanclassrooms.com/learningmarine-science-101

Sustainability in Everyday Life - Online
This free, online course from Chalmers University of Technology starting June 8th, offers information and skills required to make sustainable choices. The course is organized into five key themes: chemicals, globalization, climate change, food, and energy. These five themes represent challenges that people face day-to-day managing choices relating to sustainability.
https://www.edx.org/course/sustainability-everyday-life-chalmersx-chm002x

Trash Talk Activities Webinar
Watch the archived Trash Talk Activities webinar as a marine debris educational specialist demonstrates four easy, hands-on games you can play with a group of kids to get them thinking about how trash in the ocean impacts dolphins, turtles, and birds. The downloadable materials include many additional resources.
http://oceantoday.noaa.gov/trashtalk_webinar/welcome.html

Turning Learners Into Leaders – Online
Register for this free online course from the Jane Goodall Institute from June 29th to August 2nd. Using the Roots & Shoots program model, the course will teach participants how to identify and implement a local service-learning campaign. Through the program, young people map their community to identify specific challenges their neighborhoods face. From there, they prioritize the problems, develop a plan for solutions, and take action. Check out the Roots & Shoots website; the projects can be filtered by focus areas including air, water, wildlife, and more.
https://jgionlineeducation.appspot.com/MOOC2015/preview
https://www.rootsandshoots.org/

Young Birder of the Year Contest
The American Birding Association sponsors the Young Birder of the Year, an annual contest for youth ages 10-18. Submissions are due by October 15th, but youth must register by June 15th.
http://youngbirders.aba.org/young-birder-of-the-year-contest