Dear MAMEANs,

Welcome to Spring, finally. Many of us (in MD especially) were wondering if winter and spring had reversed themselves this year. I want to thank all those involved in our mid-year Board meeting (March 24th) for making it a successful day with lots of ideas shared and positive reports about mini-conferences! Extra kudos go to our host and current Treasurer, Jackie Takacs, for opening her family lake house in Lake Anna, VA, for the meeting. The Board agreed a return trip would be necessary in the future.

There are many items to report, but I will focus on a few that relate to our Action Plan developed a few years ago. Over the past few years, we have made progress on turning some Action Plan ideas into initiatives within our Standing Rules. For example, we now offer two Grants (up to $500 each) and I have asked a few members to serve on a Grants Committee with Barry Fox serving as Chair. Another initiative is to make the Masthead issues “work” more for us by looking at the frequency and dates they are distributed. We will be adopting a schedule that produces three Mastheads per year (August, January, and April) to coincide more with our professional development schedule that starts with our Annual Conference. In addition, we will compile addresses from our professional development activities and produce a direct mailing document to serve as a conference announcement. Hopefully, this will help us meet one of our Action Plan objectives - to increase membership.

Another new initiative is the expansion of the Paul Standish Scholarship program to offer more scholarships to benefit more members. Keep your eye on the website for more information. All in all, progress in MAMEA is moving along and new Board members and State Reps are doing an excellent job keeping up the communication.

Current President-Elect David Christopher gave us an update on the Annual Conference plans in Baltimore, October 19-21, and I think this will be an excellent opportunity to expand our membership and make some new partnerships. Here are some reminders for us:

• Once conference registration is available, please register as soon as possible. Also pass the word on to others to put the date on their calendar.
• Add MAMEA announcements about the annual conference to other literature that you produce for other workshops, etc.
• Make an effort of attract new classroom teachers to MAMEA so we can keep our connection with formal education a priority.

Lastly, if you are interested in getting more involved in MAMEA, please contact any of the Board members or Committee chairs. We’ll be glad to let you know how you can help. Ultimately, getting new members involved will make this organization grow.

All the best,
Adam

MAMEA Membership
Remind your coworkers and friends to renew their membership or join as a new member.

Non-renewals 2006: 145
Active Members: 195
• New: 106
• Renewals: 81
• Lifetime: 8
State Breakdown:
65 Maryland
50 North Carolina
49 Virginia
9 Pennsylvania
8 Delaware
4 DC
2 New York
1 South Carolina, Georgia, Tennessee, New Jersey, Indiana, Connecticut, Wisconsin, other

Mark Your Calendars!
2007 MAMEA Annual Conference is October 19-21 in Baltimore, MD.

Call for presentations starts early summer with registration starting in late summer.

Check www.mamea.org for more information.
The annual MAMEA Conference will be held in exciting downtown Baltimore, MD, at the National Aquarium and the Columbus Center. Join us as we explore Paths to Ocean Literacy and highlight ways to bring ocean literacy and awareness of the aquatic environment to people in your community.

On Friday night, the conference will kick off with a keynote speaker and reception at the Columbus Center. Breakout sessions and another keynote speaker will occur on Saturday at the Aquarium. Back by popular demand, the annual dinner auction will be on Saturday night. Then, enjoy some of the sights and sounds of Baltimore on Sunday with various Inner Harbor field trips.

Stay tuned to www.mamea.org for more.

Call for MAMEA Award Nominations

Get a head start and submit MAMEA Award nominations for either a classroom teacher or a non-traditional educator. All the details are at www.vims.edu/mamea, and the nominations can be done on-line. It's easy and our great educators should be receiving the recognition they deserve.

The deadline is not till August, but now is a "quiet" time before the rush of spring and the diversions of summer.

Scholarships

Scholarships are awarded annually to six MAMEA members interested in attending the MAMEA Annual Conference but who are in need of financial assistance. One scholarship each year is designated for applicants from each respective member state (DE, MD, NC, VA) or district (DC). One scholarship will remain available to any member who fits the scholarship criteria that would like to apply.

Scholarships will cover the full cost of the conference registration fee. Any remaining funds from the maximum $200 scholarship will be paid to the awardee as reimbursement for approved conference expenses. Valid receipts for additional expenses must be provided to, and approved by, the MAMEA Treasurer before reimbursement is issued.

To apply, submit an application form (available on-line at www.mamea.org) and a letter of application justifying the need for the scholarship and explaining how the conference will benefit you and your students.

Application deadline is September 21. Send your application to:
Amy Sauls
135 Duke Marine Lab Road
Beaufort, NC 28516 or amy.sauls@ncmail.net

For additional information, contact: Amy Sauls at amy.sauls@ncmail.net

Paul Standish Scholarship

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National Aquarium in Baltimore

Offers a variety of programs including special tours, sleepovers, and other events. Go to www.aqua.org to check the calendar of events for upcoming programs.
We all come across new Web sites that provide excellent learning opportunities. As educators, we often share these with our colleagues.

It’s easy to get involved in the BRIDGE review network by becoming a TROLL (Teacher Reviewer of On-Line Learning). Go to these Web sites to see the Bridge’s Top Picks and nominate a site.

- Bridge TROLL Review Criteria: http://www.bridge/indexrevisinstr.html
- Site Nomination Form: http://www.marine-ed.org/bridge/index_nomination.html

If you have questions about the NOAA–Bridge project, please contact web keeper Lisa Ayers Lawrence, ayers@vims.edu.

## Resources for Educators

### Polar Bibliography

### State Resources List
The Environmental Literacy Council is developing state resource lists of local environmental education centers, parks, museums and resource agencies. Send them information about training opportunities, environmental education centers, and sources of information for your local community or check out your state. [http://www.enviroliteracy.org/category.php?id=15](http://www.enviroliteracy.org/category.php?id=15)

### Anatomy of Sea Turtles
The manual provides background information, reference photos of normal anatomy, and diagrams. Species identification, standard dissection techniques, standard measurements, and basic anatomy are covered with a diverse audience in mind.

### English

### Spanish

### Global Climate Change
Global Climate Change, from the Exploratorium website, offers a window into the world of scientific research on climate change. [http://www.exploratorium.edu/climate/index.html](http://www.exploratorium.edu/climate/index.html)

### Environmental Education Master’s Series - Maryland
The College of Notre Dame of Maryland and Environmental Concern, Inc. are collaborating to support the development of highly qualified science teachers in Maryland with an environmental education master’s series focusing on wetlands education. The 2007/8 series will be held in Anne Arundel County in Maryland.

### Marine Education Resource Kits
The Woods Hole Oceanographic Institution is offering eight different intermediate classroom book sets on ocean science, along with teacher’s classroom resources. [http://www.whoi.edu/seagrant/whatsnew/turnstone.html](http://www.whoi.edu/seagrant/whatsnew/turnstone.html)

### Wetlands on Wheels
Environmental Concern Inc. offers its new Mobile Classroom. The classroom travels to Eastern Shore schools in Maryland, Delaware, and Virginia. [http://www.wetland.org/edu_wheels.htm](http://www.wetland.org/edu_wheels.htm)

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MAMEA Educational Project Grant Program

Purpose:
The MAMEA Educational Project Grant Program provides funding to classroom teachers and other educators for marine and aquatic educational projects.

Eligibility:
Any MAMEA member in good standing may submit one proposal per year.

Program Structure:
- There are two ways to apply. First, read the following overview of the grant program. Then, you can apply using the on-line application or print out a hardcopy form, complete and submit via postal mail.
- Grants of up to $500 each will be awarded annually for formal educators (classrooms, K-16) and/or for non-formal educators (museum, aquarium, zoo, science center, government agency staff).
- Projects must focus on marine or aquatic topics. Applicants are encouraged to plan innovative projects that conform to grant guidelines outlined below.
- Cost sharing (match, in-kind, cooperative funding) is encouraged.
- Institutional indirect, overhead costs or personal compensation (other than honoraria) will not be funded.
- Up to 80% of the total amount of the grant may be available to the grantee at the beginning of the grant period. The remaining 20% is issued subject to Board acceptance of the final report.
- Payment will be made to an institution, agency or organization with an established fiscal officer.
- Original material produced should be in the public domain and prominently display credit to MAMEA.
- Proposals must clearly describe plans for ownership and continuing management, distribution, and post-grant use of products and equipment purchased through the grant. After the grant period, the grantee may continue to produce and distribute project products at cost.
- Project staff should include an advisor and receive input from knowledgeable professional educators (and/or scientists) other than the applicant.
- The funding period is one year from the award date in October, through September of the following year.
- Grant application deadline is September 21. The application form, instructions and complete guidelines are available at: http://www.vims.edu/adv/mamea/minigrant.html.

Evaluations of Proposals:
The Grants Committee consists of 3 individuals appointed by the President with staggered 3-year terms. The Grants Committee makes decisions on proposals, notifies awardees as soon as possible, and announces recipients of awards at the fall conference. Applications are evaluated using the guidelines as presented in the Grant Application.

Obligations of Grantee:
- Applications must include all requested information in the sequence indicated on the application form. The application (excluding letters and optional materials) should not exceed three pages.
- Grantees will submit a final report to the Treasurer of MAMEA within 90 days of the end of the funding period.

For additional information, visit the MAMEA Web site or contact: MAMEA Grants Committee Chair, Barry Fox, Box 9081, Virginia State University, Petersburg, VA 23806. (804-524-5848) (Fax: 804-524-5057), E-mail: bfox@vsu.edu

The Masthead is the official newsletter of the Mid-Atlantic Marine Educators Association (MAMEA) and produced quarterly. The Association is an affiliate of the National Marine Educators Association and dedicated to the advancement of marine and freshwater education curricula, programs, and events that foster effective instruction, learning and environmental stewardship. Annual dues are $10.00. For membership application, go to www.mamea.org.
The Blue Crab Bowl, the Virginia Regional competition of the National Ocean Sciences Bowl, celebrated its milestone tenth year on Saturday, February 24, 2007, at the Virginia Institute of Marine Science. Sixteen teams, representing fourteen high schools, participated. Coming from across the Commonwealth, the teams included both “veteran” and new competitors.

The team from Chesapeake Bay Governor’s School -Warsaw took first place. Coached by Angela Gauthier, they emerged as the first competitors to rack up three first place wins in the Bowl’s history. Had the second place team from Grafton High, coached by Jane Dodge Brown, edged out CBGS in the final seconds of the last round, they also would have become three-time winners. Taking third place was Bishop Sullivan Catholic High, coached by Bill Dunn. Fourth place went to Chesapeake Bay Governor’s School -Glenns under coach Sherry Pettyjohn.

Ecological Forecast Workshop
The Cooperative Oxford Lab (COL) and NOAA Chesapeake Bay Office (NCBO) have begun a joint education training initiative and will host its first workshop on June 4th that will address integrating components of the Summer Ecological Forecast into environmental education.

Topics pertaining to the Bay’s health that will include: dissolved oxygen, harmful algal blooms and changes in aquatic grass distribution.

To register for the workshop email: ectraining@noaa.gov. If you have any questions you may contact Shelby Laubhan at 410-267-5722.

Virginia Naturally just announced the Classroom Grant Recipients for 2007. Over 50 awards were distributed with funding amounts ranging from $250 to $1,000. Two Virginia MAMEA members were among the successful candidates: John Chubb of Broadwater Academy and Jim Beam of Chesapeake Bay Governor’s School. We look forward to hearing about our colleagues’ projects!

2007 Blue Crab Bowl Winning Team
Chesapeake Bay Governor’s School
Warsaw Campus
Coach - Angela Gauthier

Luke Bessler, Lancaster HS
Anna Pillow, Rappahannock HS
Jonathan Lee, Essex HS
Ben Berghuis, Rappahannock HS
Andrew Harbin, Rappahannock HS (not pictured here)

A list of all 2007 competitors and more information on the Blue Crab Bowl is available on the website, www.vims.edu/ bcb. Check out the history of the Bowl in an archive document that recounts the teams and winners from 1998 to 2006. CBGS-Warsaw will represent Virginia at the national finals to be held April 28-30 at Stony Brook University on Long Island.

Virginia Naturally offers news of environmental education related grants, training opportunities, conferences and more at www.vanaturally.com/ decnews06.html

Bad News For the Bay
Underwater grasses in the Chesapeake Bay declined by twenty-five percent last year, likely because of weather, according to a survey released by a federal-state monitoring group. The Chesapeake Bay Program’s aerial surveys last year showed the underwater vegetation covered 59,090 acres in the bay, down from 72,263 acres in 2005. Grass coverage last year was the worst since 1989.

Bay Journal - http://www.bayjournal.com/
Resources for Students

NOAA Careers
NOAA Careers is a new recruitment website designed to showcase NOAA career opportunities and all that NOAA has to offer. The website showcases a variety of career fields and allows a search for current vacancies by location or nation-wide. In addition, the website offers links to student opportunities. [http://www.careers.noaa.gov/index.html](http://www.careers.noaa.gov/index.html)

Magic Porthole
Horizon International has created a way for young people to experience coral reefs through the Magic Porthole™ experience. The Magic Porthole takes visitors into the world of coral reefs with videos, photographs, reef creatures who will be guides, games to enjoy while making discoveries about the lives of boxing crabs, and more. These include a memory game, a Special Environment Achievement contest, news, and more. [http://www.magicporthole.org/](http://www.magicporthole.org/)

Maryland
Chesapeake Teacher Research Fellowship, June 18 - Aug. 3
This summer research fellowship ($4500 stipend) is an excellent opportunity for middle/high school teachers to participate with four University of Maryland research centers. Information is at: [http://www.esep.umces.edu/index.php?area_id=3](http://www.esep.umces.edu/index.php?area_id=3) or contact: Adam Frederick, frederic@msg.umd.edu or Jackie Takacs, takacs@cbl.umces.edu.

North Carolina
North Carolina National Estuarine Research Reserve: EstuaryLive in the Carolinas was held on May 9-11th. Watch the webpage [www.estuarylive.org](http://www.estuarylive.org). There were sessions about rip currents, SAV, estuaries, barrier island geology, and other topics to help celebrate 200 years of NOAA.

Delaware
The University of Delaware College of Marine and Earth Studies will offer guided tours of its Hugh R. Sharp Campus in Lewes. Requests should be made at least one week in advance by calling the College at (302) 645-4346 or by e-mailing Rita Baty at rbaty@udel.edu. In addition, they have a lecture series throughout the summer (May-September) open to the public. You can find lecture topics at [www.ocean.udel.edu](http://www.ocean.udel.edu).

Horseshoe Crab Survey
If you want to learn about horseshoe crabs and their mating, and see the largest horseshoe crab population in the world, you can help with the census in May and June. You can find information on census dates and registration information [http://www.ocean.udel.edu/mas/bhall/hsccensus/index.html](http://www.ocean.udel.edu/mas/bhall/hsccensus/index.html).

Virginia

Ocean Observing Workshop for Mid-Atlantic Teachers: Virginia Sea Grant is planning a workshop for grade 9-12 science teachers within the Chesapeake Bay watershed. This opportunity will focus on the Bay and its associated ocean observing systems. This workshop is tentatively scheduled for June 26-29, 2007, and is contingent upon funding. For more information, contact Chris Petrone at petrone@vims.edu.

Chesapeake Bay Interpretive Buoy System
The NOAA Chesapeake Bay Interpretive Buoy System is a sensor-to-user information delivery system focused on the Chesapeake Bay and its surrounding estuarine environment. The project promotes awareness of the bay's condition and supports stewardship efforts of educators, trail users, government, and civic organizations dedicated to the preservation of the bay and its natural environment. “Talking buoys” will serve as interpretive guide posts, linking trail visitors—whether they be right next to the buoy in a kayak or at home on their computer—with information about the buoy location and nearby history and culture via cell phone or Internet-accessible devices. The website provides real-time environmental data, educational tools, and interpretive information; additional educational materials will be available in the future. [http://www.buoybay.org/site/public/](http://www.buoybay.org/site/public/)

News from the Crew...
Opportunities for Educators

Chesapeake Bay National Estuarine Research Reserve in Virginia

The Chesapeake Bay National Estuarine Research Reserve in Virginia is offering two free summer teacher workshops: Chesapeake Studies: Estuaries in the Classroom on June 19-20; and Water Quality on August 7-8. For more information, contact Jes Russo, Marine Education Specialist at jrusso@vims.edu or 804-684-7877.

CBNNERRVA is also offering summer camps for youngsters this year! Kayaking, nature walks, bay crafts and more. Check it out on their website: http://www.vims.edu/cbnerr/ or direct any questions to Education Coordinator Sarah McGuire at mcguire@vims.edu.

NOAA’s Monitor National Marine Sanctuary & The Mariners’ Museum

The Mariners’ Museum, in conjunction with NOAA, is offering 2 summer sessions for families, especially benefitting teachers. Teachers will be able to earn certification points while learning and having fun with their children. The first session, from July 16-19, focuses on the USS Monitor. The second session, July 30-August 2, highlights Sea Legends such as pirates, shipwrecks, sea creatures, and lighthouses. Both courses run from 9:30 a.m. to Noon. Teachers and their families can sign up for single courses or for entire sessions. Call Beth Kovach at 757-591-7751 or email bkovach@marinersmuseum.org for more information.

NOAA’s Education Center, Exhibits and Programs at Nauticus

Teachers can pick up free educational materials on the topics of Chesapeake Bay watersheds, weather and oceanography at NOAA’s Education Resource Center, located on the 3rd floor of Nauticus in Norfolk. The Center is usually open 7 days a week and admission to Nauticus is free for teachers.

A major new NOAA-funded exhibit is coming to Nauticus in Spring 2007! Secrets of the Deep interprets NOAA’s National Marine Sanctuary System and includes a replica of a deep diving submersible visiting the wreck site of the MONITOR, the Civil War ironclad ship. The dedication event for this exhibit occurred on May 21, 2007.

During the week of July 9-13, NOAA and Nauticus are co-sponsoring a weeklong summer science camp for kids, 9-12 years old, that traces how the Chesapeake Bay has changed in the last 400 years. Campers will follow in the footsteps of Captain John Smith, visiting Jamestown Settlement and exploring the amazing life of the Bay on a kayaking trip. They examine artifacts from the USS Monitor shipwreck, build and operate ROVs, dissect crabs and oysters, conduct water quality analyses, and navigate on a NOAA survey vessel.

For more information on NOAA resources and programs at Nauticus, contact Andrew Larkin at andrew.w.larkin@noaa.gov or phone 757-627-3823 ext. 36.

Fort Fisher Teacher Workshops – North Carolina

The North Carolina Aquarium at Fort Fisher, located between the Cape Fear River and the Atlantic Ocean, offers opportunities for the public to encounter and experience aquatic life through exhibits, programs, and special events. In addition to daily programming for the general public and school groups, the aquarium offers professional development workshops for classroom teachers and informal educators. The following workshops will be offered July 16-20, 2007.

-MAURY Project, July 16
-Aquariums Teacher Workshop, July 17
-Project WET, July 18
-Aquatic WILD, July 19
-Land of a Thousand Nests, July 20

http://web.eenorthcarolina.org/org/info.aspx?st=43746.0.0.37430

Resources for Students

ReefRanger

Reef Ranger is an educational game that immerses the player in the complex world of coral reef management. The effects of coral reefs of human activities in the mountains all the way to the open ocean are simulated. The game illustrates how one entity in the ecosystem can have a large effect on the health of another. The game is meant to instill to players an understanding of the complexities of human-environment interactions, the ecological processes in the management of coral reefs and watersheds, and complex environmental management strategies. Please feel free to download the near-final program and offer feedback for improvement.

http://www.ncomiami.org/reefranger/index.htm
Did you know that your MAMEA membership entitles you to grants, scholarships, and invitations to annual events and mini-conferences?

Please go to www.mamea.org/board for the complete listing of contact information of Committee Chairs.