THE MASTHEAD



Winter, 2001-02

FROM THE CAPTAIN'S QUARTERS

It was a personal pleasure to host the 2001 MAMEA conference in Delaware last year. Sixty-seven members attended and all four states in our region (MD, DE, VA, NC), the District of Columbia, and Tennessee were represented. In addition, ten guests joined our social events.

Our concurrent sessions were wonderful and plentiful – eighteen to be exact. To me, these workshops are at the heart of conferencing, and it was truly gratifying to see the presenters in action. Twenty-one of our participating members represented either a middle or high school. The Chesapeake Bay Program's new education website "ChesSIE" group met for the first time at our conference, and the website is now available to us at <www.bayeducation.net>.

We raised \$1,600 at our silent and live auctions, thanks to all who cleaned out their closets and raised the bids. Our first-ever logo fashion show was a big hit and promises to be a future fundraising activity. Many of you who stayed at our conference headquarters witnessed the Thursday evening Board meeting at the Beacon Motel. Past-President Beth Broadhurst chaired the meeting with 100% of the Board present, somewhat of a record.

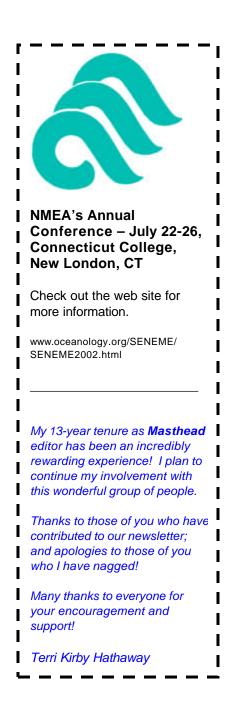
Having rehearsed the events for the following two days, the Board then discussed the upcoming year and how we want to devote our time. It was unanimous that planning the 2003 NMEA conference would be a priority objective. The 2003 NMEA planning committee met in Manteo, NC shortly after this summer's conference in Victoria, BC and had a second meeting in the fall. A timeline is being established as I write this report, and the committee plans to meet again in March to agree on what those of us who will be attending the 2002 NMEA Conference in New London, CT should say to promote the 2003 conference in Wilmington, NC.

Our *Masthead* editor since 1988, Terri Kirby Hathaway, announced her retirement from the position at the Thursday evening board meeting. An editor devotes many hours of volunteer time to make each issue special -- many thanks, Terri, for an extraordinary job. You were my mentor and inspiration to write for the *Masthead*. We will not be able to replace you and will miss you in this important role. This issue of our newsletter is Terri's final one. It is being funded by a grant from Virginia's Middle Peninsula Planning District Commission. Future issues of the *Masthead* are in need of funding - something for member organizations to consider. If you are interested, contact Beth Broadhurst.

In conclusion, I hope the experience you gained in Lewes, Delaware last fall has opened some doors for you. Take advantage of the network MAMEA offers. Participate in our mini-conferences this spring. Stay tuned. Delaware is offering a Shorebird/Horseshoe Crab Connection mini-conference on May 18, and Virginia is planning a full-day Natural Hazards conference. Take the time to experience the commitment of others to this great organization and build on the relationships you made last year.

Have a fun and productive 2002!

Carol McCormack MAMEA President



Dragon Run SAMP - What's That?

Land use planning? GIS? SAMP? What in the world is that stuff?

What's a SAMP? A Special Area Management Plan, or SAMP, is a collaborative planning process to produce enforceable policies to protect coastal resources. At the Middle Peninsula Planning District Commission in Saluda, Virginia, watershed and land use planners are facilitating the development of a SAMP for the Dragon Run Watershed, which will use tools, like the Dragon Run Geographic Information System (GIS) that was presented at the 2001 MAMEA Conference, to help local governments and private landowners to determine how best to protect their watershed. I know...you must be saying, "But I still don't get what SAMP means!" Okay, a little background information might be helpful...

Background

Virginia is divided into 22 regional land use planning districts, each encompassing counties, cities, and towns. Resources from each local government in the planning district are pooled together and used to support regional planning efforts relating to transportation, housing, environment, and economic development. The Middle Peninsula Planning District Commission comprises six counties and three towns between the York and Rappahannock Rivers along the western shore of the Chesapeake Bay. The Dragon Run is a pristine, coastal river that bisects the Middle Peninsula before broadening into the estuarine Piankatank River, which empties into the Chesapeake Bay.

The Dragon Run Watershed encompasses 140 square miles of Essex, Gloucester, King and Queen, and Middlesex Counties (Figure 1) in a landscape dominated by forests and farms. The 40-mile brackish and freshwater stream is bordered by expansive non-tidal and tidal cypress swamp and is ranked second in ecological significance among 232 areas in a Smithsonian Institute study of the Chesapeake Bay region.

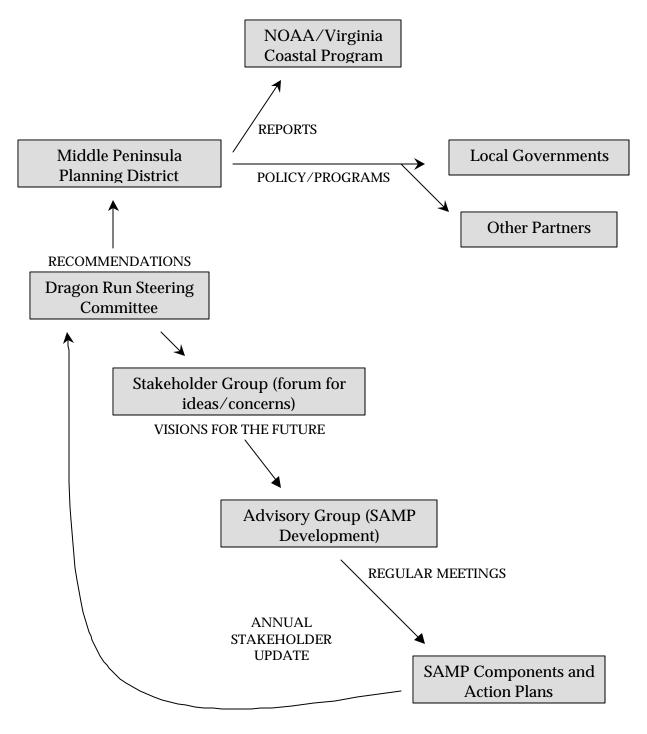


Figure 1. The Dragon Run Watershed covers portions of Essex, Gloucester, King and Queen, and Middlesex Counties in the Middle Peninsula Planning District in coastal Virginia.

Largely undeveloped, this natural treasure is a prime location for outdoor enthusiasts - hunting, fishing, and paddling are popular forms of recreation on the Dragon Run. The watershed maintains its primitive character because large tracts of land are managed by relatively few landowners, whose family heritage extends back as far as the 1600's. With population growth rates for some counties in the watershed exceeding state and national averages, however, many local residents are concerned about "loving the Dragon to death." As development pressure has grown, so has concern for maintaining the watershed's character and integrity.

When a farm, split into twenty 5-acre parcels, was sold overnight through an advertisement in the New York Times, local concern for the watershed galvanized into the formation of the Dragon Run Steering Committee in 1987 as a committee of the Middle Peninsula Planning District Commission (MPPDC). The Steering Committee considers growth and land use issues in the watershed with

representatives from each of the four counties. Recently, the Steering Committee recommended that the MPPDC seek funding for the development of a Special Area Management Plan (SAMP) for the Dragon Run. Funded by the National Oceanic and Atmospheric Administration (NOAA) through the Virginia Coastal Management Program, the SAMP is an ambitious 5-year project undertaken by the MPPDC that is intended to protect significant coastal resources when all levels of government are committed to a collaborative planning process to produce enforceable policies (Figure 2). Ultimately, the goal is for each county government to consider and adopt some policies to improve the protection of the Dragon Run Watershed.



RECOMMENDATION

Figure 2. Organizational and action chart for the Dragon Run SAMP project.

SAMP Activities and Issues

To accomplish its goal, the SAMP must address the ways in which people live and the tools that they use to manage their land by incorporating as many perspectives for the watershed as possible. Therefore, the MPPDC, through the SAMP Director, has kicked off the project by convening a series of planning forums to elicit visions of the watershed from key stakeholders in the Dragon Run. What do they want their communities to look like in 5, 10, 20, 50, 100 years? What issues are of concern to them? Why? When key issues have been identified, an Advisory Group composed of a representative subset of the stakeholders will work with the SAMP Director to develop the actual SAMP components. An annual stakeholders informational meeting will offer the general public an update on the progress of the Advisory Group and provide stakeholders a chance to comment. The Advisory Group will recommend goals and objectives and will develop possible strategies to achieve them (Figure 2). Initially, a Memorandum of Agreement (MOA) will represent the commitment by each government and stakeholder group to the goals and objectives for managing the Dragon Run Watershed that are recommended by the Advisory Group.

The Advisory Group will develop possible strategies to achieve the goals and objectives in the MOA. Strategies may include modifying existing or developing new zoning ordinances in local governments, developing new or adapting existing best management practices (BMP's) for forestry, farming, or suburban/urban development, or improving tools to establish conservation easements. With the facilitation of the SAMP Director, the Advisory Group will address these issues and make recommendations to the Dragon Run Steering Committee. The Dragon Run Steering Committee will recommend them to the Middle Peninsula Planning District Commission. In turn, the Commission may pass resolutions supporting the adoption of the planning tools by each of the four county governments (Figure 2). Ultimately, it will be up to each county to adopt the tools that it feels are appropriate. It will also be up to the private businesses and landowners to adopt BMP's. The signed MOA will ensure that the local governments and private interests adopt tools that are consistent with the SAMP's goals and objectives.

In addition, there are many other SAMP activities that will be pursued. The first milestone reached was the completion of a Geographic Information System (GIS) Management Framework that houses all of the available geographic data for the watershed, such as watershed and county boundaries, threatened and endangered species, aerial photography, roads, wetlands, and zoning. This powerful planning tool, which was presented at the MAMEA meeting in Lewes, Delaware in Fall 2001, can analyze data to address issues in the SAMP. The GIS Framework can also produce maps illustrating the data to stakeholders in an easy-to-grasp visual format.

Another activity will be the development of a digital and textual resource library to assist the Advisory Group, local governments, and stakeholders with the development of tools that they may choose to implement to achieve the goals and objectives of the SAMP. The resource library will consist of digital and paper documents, such as watershed history, sample zoning ordinances, information about conservation easements, and best management practices used in Virginia and other states, that will be available through the Dragon Run SAMP web site and/or at the MPPDC offices. In addition, an innovative technical assistance program will review and support grant development for any organization in the watershed and will monitor development proposals within the watershed for consistency with Dragon Run SAMP goals and objectives. The SAMP Director will coordinate watershed activities and serve as a voice for stakeholder concerns.

The SAMP will also develop a voluntary program for best management practices (BMP's) for farming, forestry, and/or suburban development. BMP's aim to reduce the environmental impact of familiar activities within the watershed. For example, forestry operations may use selective or small patch harvesting to maintain wildlife habitat and minimize ground disturbance. With the development of a "Dragon Run friendly" certification program, industry operators may advertise their participation in the voluntary program and their commitment to the community vision for the watershed.

What's a Watershed?

A watershed is an area of land that drains to a particular body of water. Within the watershed, the ways in which people live and the tools that they use to manage their land affects water quality and natural resources. Education will play a key role in the SAMP process, permeating almost every activity. The first education task will be to identify those who do not grasp the watershed concept – the idea that activities upstream and on upland areas affect the dynamics of the stream itself (e.g. water quality and quantity, fish and wildlife habitat). With assistance, these groups and individuals will be able to think about the Dragon Run in a watershed context so that they may understand the SAMP concepts. Another challenge will be to establish relationships with local media as a means of disseminating information about the SAMP. Furthermore, newsletters, brochures, and the Internet may be used as vehicles for SAMP education. For example, county administrators, local planning directors, and Boards of Supervisors must understand these issues, since they will consider changes to local ordinances. Other public outreach and education activities may include: K-12 education, workshops on specific watershed topics, and a Dragon Run coastal festival.

Sustainable Communities

The SAMP approach effectively captures the idea of sustainable communities. Often, in rural communities, there is a struggle to balance economic development with the preservation of the

community's character and integrity. For instance, corridors of forestland, long taken for granted, may suddenly be sold, cleared, and replaced with strip shopping centers. This landscape change can be shocking for local residents, but it is frequently rationalized by the immediate revenues created by the development. Yet, this phenomenon may be repeated so that the rural landscape – once attractive to the community's residents - is forever altered. Another unintended consequence of this process is that it places a great strain on public services and infrastructure – roads, schools, prisons, water and sewer systems - that must respond to the increased demand for their services. The SAMP is designed to bring all of these ideas to the table early in the development process so that these changes may be anticipated and directed. With proper planning, community development may be positive and complementary to the character and integrity of the communities, preserving the type of communities that residents envision in their future. Other sustainable communities concepts include stormwater runoff retention, improved wastewater treatment, and green space preservation.

The Special Area Management Plan process provides a unique opportunity to educate citizens about how the ways in which they live impact the watershed in which they live. By the time this 5-year project is completed, many people who live in the communities in the Dragon Run will understand how a watershed works and how they can play a role in planning for the kinds of communities of which they dream. The SAMP is a superb tool for integrating and coordinating activities that lead to a watershed vision.

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AROUND THE ASSOCIATION

DELAWARE

DELAWARE MAMEA MINI-CONFERENCE 2002 Discover the Shorebird/Horseshoe Crab Connection 9:30 am- 4:30 pm; May 18

Delaware Aquatic Resource Education Center, Route 9, 4876 Hay Point Landing Road, Smyrna

Travel by van (or carpool) to the best sites, learn more about the horseshoe crab natural history and the marine ecosystem, discuss advocacy efforts to protect the horseshoe crab population, find out how to involve your class or group in a tagging/survey project, and take home related activities, resources, and lesson plans. Pre-registration required. If you want credit, contact the Delaware Teacher Center; otherwise call Karen Travers, Delaware Nature Society, (302) 239-2334, ext. 15. (This workshop is one of a three-part study of Delaware ecosystems. Ask Karen for more details.)

Green Eggs and Sand

Looking to infuse a global biodiversity and current real-life resource management challenge into your middle or secondary student class? Join scientists, resource managers, and fellow educators at the Aquatic Resources Education Center's rustic Mallard Lodge on Delaware Bay for one of three available Horseshoe Crab & Shorebird Education workshops: March 15-16, May 10-12, or June 24-26. Learn about the resource management issues, participate in scientific surveys, and receive training and resources from teachers experienced in these learning modules.

For further information, contact: Gary Kreamer, Delaware Aquatic Resources Education, at (302) 653-2882; <gkreamer@state.de.us>; Cindy Grove, Maryland Aquatic Resources Education, at (410) 260-8716; <cgrove@dnr.state.md.us>; or Sue Canale, New Jersey Aquatic Resources Education, at (609) 748-2031; <scanale@dep.state.nj.us>. Register by January 31, 2002.

"Make a Splash" with Project Wet

Journey into Water Education and Fun at Fort Delaware State Park. Save September 20 to join other Delaware teachers and their students in grades four through seven in a creative interactive series of activities designed around solving the problems of water shortages and pollution during the year 1864 on Pea Patch Island. At this historic setting, investigate the problems that beset the military managers of this large POW facility, and the modern problems and issues associated with the management of water resources.

Pre-registration required for this National Project Water Education Day activity. For reservations contact Nancy Rolli, (302) 739-4506, Delaware Department of Natural Resources and Environmental Control. Space is limited; call early. Also see "Make A Splash" student activity page at <www.projectwet.org>.

6th Annual Delaware Estuary Teachers Education Institute

The classroom and field experiences focus on a variety of resource issues and the interactions between human actions and Estuary ecosystems. Accommodations and meals are

complimentary for the July 8th - 12th Institute. Teachers from Delaware receive a \$250 stipend and inservice credits for attending. For more information call the Partnership for the Delaware Estuary, (800) 445-4935.

Delaware River Sojourn

On Saturday June 8th canoe the Brandywine River in Delaware or sign up for a longer stint of the sojourn which begins in New York on June 1st. For more information call the Partnership for the Delaware Estuary, (800) 445-4935.

A Science Potpourri

Weekend "rookie" workshops are open to all teachers with less than 5 years experience and who are from any school district within Delaware. Workshops focus on the basics of teaching science, utilizing technology in the classroom, and managing the classroom. The secondary teacher workshop is January 11-13 and elementary teacher workshop is February 22-24. There will also be 3-hour workshops in March and April, exact dates and topics to be scheduled. The April workshop will probably focus on man's impact on the environment. Contact Bill Hall, (302) 645-4253, for more details.

Aquatic Summer Programs for Academically Talented Students

The Delaware Nature Society in conjunction with the Delaware Department of Education offers summer science enrichment for gifted Delaware students. June 24-28 students entering 6th grade explore plants and animals of freshwater streams, ponds, and marshes and the interrelationships within aquatic ecosystems in *Freshwater Aquatic Biology*. Study watersheds by canoe, dissect fish, and explore the microscopic world of streams and ponds. Students entering 7th grade explore the habitats and discover the plants and animals of the Delaware Bay Estuary while learning about their interrelationships, ecological significance, and management from July 8-12 in *Estuarine Ecology*. Handson exploration of the beach, bay, and estuary fill the days along with activities like kayaking in a marsh and dissecting a squid.

Assateague Island/Chincoteague Getaway Weekend for Adults – March 22-24

With the Delaware Nature Society explore beaches and wetlands on this barrier island, home of the famous Chincoteague wild ponies. View wildlife and migrating shore and woodland birds, survey the abundant marine life, learn about endangered species and their management at the refuge, visit Wallop's Island NASA Visitor Center, and stop en route at the Pocomoke State Park cypress swamp. Fee (\$210 for members, \$230 for nonmembers) includes doubleoccupancy lodging at the lovely Refuge Inn on Chincoteague Island, entrance fees, a wine and cheese party, two days of breakfast and lunch, van transportation from Ashland or Abbotts Mill Nature Centers, and leadership. Dinners are Dutch-treat at seafood restaurants. Call (302) 239-2334 for details; registration deadline is February 15.

Available Resources

The Partnership for the Delaware Estuary has storm drain marking supplies available for groups interested in marking

storm drains. The "YO!!! No Dumping ! Drains to River" stencils alert citizens to the hazards of stormwater runoff pollution. Supplies also include education tip cards to be distributed to residential and commercial areas near the drains that are being marked. The Partnership also has "Exploring the St. Jones Watershed" ecotourism brochures available. The brochure identifies natural areas, recreational resources, and locally owned and operated accommodations and eateries. For more information call the Partnership for the Delaware Estuary, (800) 445-4935.

- Linda Stapleford

DISTRICT OF COLUMBIA

No information submitted.

- Carol Sovine

MARYLAND

MAMEA Maryland Mini-conference 2002

Teacher Overnight: Workshops and Sleepover NAIB Friday March 15, 2002, 7:00 pm to Saturday March 16, 2002, 9:00 am

This year's MAMEA Maryland mini-conference will be hosted by the Conservation Education Department of the National Aquarium in Baltimore. Classroom, home school teachers, and informal educators are invited to spend an evening exploring the sights, sounds and behavior of the Aquarium's inhabitants. Attend hands-on workshops that provide animal and habitat information for you to use in the classroom, and take a Behind-the-Scenes tour viewing the galleries after closing. After a night's rest, observe early morning behavior of animals and staff in the upland rainforest. Teaching materials, snacks, beverages, and breakfast are provided. You bring the sleeping bag and overnight gear. Register by calling (410) 659-4272, or e-mail <jharber@aqua.org>. Registration fee: \$35.00.

National Aquarium in Baltimore

Chesapeake Bay Teacher Open House Friday, January 25, 2002, 5:00-7:00pm Come to the National Aquarium in Baltimore anytime between 5:00 and 7:00 pm on January 25th for an Open House featuring resource materials and classroom activities that focus on the Chesapeake Bay. Teachers will be able to tour the building until it closes at 9:30 pm. Teachers are admitted free; family members pay only \$5 each. To register call (410) 576-8236 or e-mail <mshaum@aqua.org>; leave your name, phone number and the grade you teach.

National Ocean Sciences Bowl

Chesapeake Bay Bowl -- Saturday, February 23, 2002 In cooperation with the Consortium for Oceanographic Research and Education, the National Aquarium in Baltimore would like to announce the fourth annual Chesapeake Bay Bowl, the regional competition of the National Ocean Sciences Bowl. This competition will be held on February 23, 2002 at Goucher College in Baltimore, MD.

Top students from Maryland, Delaware, Southern Pennsylvania, and Washington, DC will test their knowledge in chemistry, geology, physics, and biology during several rapidfire question and answer sessions. The winning team will receive an all-expenses paid trip to Providence, Rhode Island, to compete in the National Ocean Sciences Bowl in April. Spectators are welcome during the later rounds of competition.

If you are interested in volunteering at the Chesapeake Bay Bowl, please contact Julie Petrella at (410) 576-8820 or <jpetrella@aqua.org>.

Susquehanna Flats Environmental Center of Havre de Grace Maritime Museum, Inc. Magpie Concert and Kid's Day at the Museum

Saturday, March 2, 2002

The well known musical duo Magpie returns to Havre de Grace to perform on behalf of the Museum's Susquehanna Flats Environmental Center on Saturday, March 2, at 8:00 pm. Tickets are \$15.00 (10% discount for Havre de Grace Maritime Museum members) and may be purchased by phone – (410) 939-4800 -- or mail. The performance will be held at the newly opened Museum at 100 Lafayette Street in Havre De Grace, MD (one block uphill from the lighthouse).

A daytime kids' environmental music show will highlight our first "Kids' Day at the Museum," which will feature a range of children's environmental and maritime activities. Also performing will be Chesapeake storyteller Janie Meneely. Kids' Day activities will run from noon to 5:00 pm.

For more info call (410) 939-4800 or (410) 275-8091, or e-mail <info@susflats.org>- We also invite you to call or e-mail about volunteering for the Museum's developing environmental and historical programs. Sign up for our announcements list at <susflats-announce-subscribe@yahoogroups.com>.

"A Lesson From the Chesapeake Bay" CD-ROM Available Helpful Interpretations of Data Sources for High School Teachers

Dr. Wayne Bell, Director of the Center for the Environment and Society at Washington College, recently presented an environmental education paper, co-authored by Erin Fowler and Andrew Stein, entitled: "Coastal Seas as a Context for Science Teaching: A Lesson from the Chesapeake Bay."

Dr. Bell has compiled these resources, with real data on temperature, salinity, and dissolved oxygen profiles obtained by teachers, into a PowerPoint presentation that provides a virtual on-line tour of such web sites as the Chesapeake Bay Water Quality Monitoring Program, the ScanFish research project, and more. The presentation is available on CD-ROM (PC only). It includes helpful interpretations of the data sources for use by teachers in light of the Maryland's High School Core Learning Goals. A limited number of these CDs are available on request (one per user).

Please e-mail your request to Dr. Bell at

<wayne.bell@washcoll.edu>. Provide your name, the school where you teach, grade level(s) and subject(s), and a mailing address to which the CD can be sent. This offer, which represents a work in progress, is good until current supplies are exhausted.

- Kathy Siegfried

NORTH CAROLINA

NC Maritime Museum

The museum commemorates Black History Month in February with a photographic exhibit of daily life and work in the fisheries industry in Beaufort's African American community. Related lectures offer insight on the maritime heritage of slavery and the archaeology of slave ships.

Collectors Day on February 23 offers an opportunity to interact with community members while they display personal collections ranging from seashells and fossils to models.

A repository of artifacts from the *Queen Anne's Revenge* shipwreck believed to be Blackbeard's flagship opens in March. A new model of the ship's likeness is on display.

The annual Wooden Boat Show features demonstrations, races and activities on the Beaufort waterfront on May 4. The boating program provides classes in boatbuilding, adult sailing and traditional boat handling and sea kayaking.

View the current calendar of events and education services on line at <www.ah.dcr.state.nc.us/sections/maritime> or <www.ncmm-friends.org>.

For more information, contact the Museum at <maritime@ncmail.net>; telephone (252) 728-7317; fax (252) 728-2108.

Canoe and Kayak Trails

The Crystal Coast Canoe and Kayak Club <www.ccckc.org> has published a map of kayak trails in Western Carteret and Onslow Counties, with a focus on the White Oak River. The map is free from The Carteret County Tourism Development Bureau, 3409 Arendell Street (Visitors Center), Morehead City, NC 28557; (252) 726.8148.

E-mail your request to: <vacation@sunnync.com> or to <www.ccckc.org>

White Oak River

The NC Coastal Federation is facilitating the work of several area organizations as they work to have portions of the White Oak River declared Scenic and Recreational under the Wild and Scenic designation program. The upper areas of the White Oak from Route 17 south contain amazing biodiversity along with trees which bower the stream and small rapids. From the put-in to Haywood landing or the town of Stella is almost completely unspoiled.

Croatan National Forest

The Croatan Forest has submitted a plan to develop a Salt Water Adventure Trail which nearly circumvents the forest. Beginning in Bryces Creek near New Bern, the trail will continue in the Neuse beyond Cherry Point and go south through the Harlow Canal to Morehead City. Beaufort and the North Carolina Aquarium at Pine Knoll Shores are possible stops before entering the White Oak River at Swansboro and going north to Haywood Landing, an easy access off State Rout 58.

Much of the infrastructure already exists and the project gives an opportunity to showcase recreational and educational opportunities in a coordinated fashion.

For more information contact Lauren Hillman, 141 East Fisher Avenue, New Bern, NC 28560.

NC Aquariums

The NC Aquarium at Fort Fisher is scheduled to reopen to the public on Friday, March 22 – mark your calendars now! The 25,000 square foot Cape Fear Conservatory is their showcase exhibit featuring a waterfall, carnivorous plants, alligators and turtles, and black water swamp plants and animals. The salt water highlight is the Cape Fear Shoals exhibit, a 235,000-

gallon open ocean tank with multi-level viewing areas. Visit the Fort Fisher facility this summer!

The NC Aquarium at Pine Knoll Shores is still open for business. Stop by for a visit if you're in the Morehead City/Beaufort area.

The NC Aquarium on Roanoke Island is enjoying its second year of expansion. The spring school group scheduling is going strong, so if you're interested in visiting during April or May, call now – (252) 473-3494, ext. 232. The new Seafood Series was a huge hit this fall/winter. After an introduction to and natural history information about specific seafood(s), an area chef cooked up a dish or two for the participants to sample. Chef Wes Stepp of Kelly's Outer Banks Restaurant featured *Baked Rockfish with Crabmeat Fromage served with Shrimp Pasta Alfredo and Parmesan Crisps* – sounds delicious, doesn't it!

NC National Estuarine Research Reserve

Look for Estuary Live to be online again this spring May 20-22. This interactive Internet field trip is a great way to take a trip to the estuary if you are unable to access estuaries from your school, or if you want to supplement your curriculum. The web page should be updated soon with the new schedule and updated registration pages. Meanwhile, watch a previous trip to see how it works. Check out <www.estuarylive.org> for more details.

CALL, the Coastal Aquatic Lending Library, is always available from the North Carolina National Estuarine Research Reserve. If you need estuary or coastal resources - books, videos, or curriculum, contact us to borrow them.

Polluted Runoff workshop will be held for teachers June 17-21. This workshop will be based on a field study of a local river that impacts local estuaries. There is a limited amount of space, so contact the Education office for details.

The Reserve website is updated on a regular basis with new lesson plans/activities for teachers to use. You can also find site information and posters and other items available about North Carolina's estuaries. Call or e-mail for information.

If you are visiting North Carolina's coastal area, check out the 9 sites (and growing) of the North Carolina National Estuarine Research Reserve/North Carolina Coastal Reserve program. You can find site information, including maps, at the Reserve web site <www.ncnerr.org>. These areas are designated for education and research but are also open to the public. Some sites have trail guides; some have only trails; the Currituck site has a new boardwalk! Contact the Education office for visit suggestions and guidelines.

Contact information: NC NERRS, PO Box 1040, Beaufort, NC 28516; (252) 354-5410.

- Amy Sauls

VIRGINIA

Blue Crab Bowl

Old Dominion University (ODU) and the Virginia Institute of Marine Science (VIMS) will host the fifth annual Blue Crab Bowl at ODU's campus on Saturday, February 23, 2002. Twenty high school teams from across the state will compete in this game-show format marine science academic competition. The winners will receive an all-expense paid trip to the National Ocean Sciences Bowl in Providence, Rhode Island April 26-29, 2002 where they will compete against the winners of the other 21 regional competitions. For more information, contact Susan Haynes at <shaynes@vims.edu> or visit the Blue Crab Bowl webpage at <www.vims.edu/adv/bcb/>.

Traveling Outreach Program

Under the Sea is now accepting spring program reservations for schools in VA, MD, DC, and WV. Learn about the amazing creatures found below the waves with Under the Sea. Using live animals, specially trained educators lead your students on a journey under the sea without even leaving your school! Founded in 1995, Under the Sea visits over 200 schools annually, educating others about the conservation of the ocean and its inhabitants. All programs incorporate national and state curriculum standards and have complementing pre-trip and post trip materials. Also check out our new excursion packages. For information, visit <www.touchthesea.org> or call (800) 986-3732.

Summer Marine Science Graduate Course for Teachers

Once again, VIMS School of Marine Science faculty and marine education specialists will team up to offer a one-week residential summer course for middle and high school science teachers. This 2 credit graduate level course will focus on fisheries science and will include field, lab and classroom activities. The class will be held July 8-12, 2002 at the VIMS Wachapreague lab on Virginia's Eastern Shore. Tuition and fees will be covered, pending grant notification. For more information, contact Susan Haynes at <shaynes@vims.edu> or Vicki Clark at <vclark@vims.edu>.

Virginia MAMEA Mini-Workshop

The Virginia Sea Grant Marine Advisory Program will host a one-day MAMEA mini-workshop for K-12 teachers in late June 2002. The workshop will be held at the Virginia Institute of Marine Science, and the topic is yet to be determined. To add your name to the information mailing list, contact Lisa Lawrence at <a href="mailto: or (804) 684-7608.

- Lisa Ayers Lawrence

SCUTTLEBUTT

MAMEA 2001 Conference Wrap-up

Lewes, Delaware was a great place to spend an October weekend, attending sessions, communing with nature, and networking with fellow marine educators. Lewes and the Children's Beach House were the hosts of the 1992 MAMEA conference. Those of us who attended the '92 conference were amazed at how the Beach House has changed – Lewes looked much the same!

A silent auction at the Children's Beach House on Friday night caused vigorous bidding wars while attendees enjoyed wine and cheese and 1st annual Logo Fashion Show. After concurrent sessions full of information and activities, participants convened at the Lamp Post Restaurant to enjoy a nice dinner. Auctioneer Vicki Clark, adorned with her bright pink sea creature wig, described special live auction items and helped empty some pockets for MAMEA! Thanks to Beth Jewell, Vicki Clark, Terri Kirby Hathaway, and others who helped put together the auctions and raise money for our organization.

Congratulations to our newly elected officers: Beth Jewell, President-elect; Andrew Wilson, Treasurer; Amy Sauls, North Carolina Representative; and Kathy Siegfried, Maryland Representative. Linda Stapleford was appointed to serve out the Delaware Representative's term which expires in 2002. Barry Fox was appointed chair of the Grants Committee. Special congratulations to Jane Butler, teacher at Grafton High School in Yorktown, VA, who received the coveted Outstanding Classroom Teacher award. Way to go Jane – keep up the good work!

CHESSIE -- <www.bayeducation.net>

CHESSIE lives! No, not the fabled sea creature, but an online resource center of current K-12 Chesapeake Bay science education materials. CHESSIE, which stands for Chesapeake Science on the Internet for Educators, was launched on November 30, 2001 to provide educators with access to quality Bay-related education resources, online data, and professional development opportunities. The website also serves as a venue for researchers, resource managers, and other Bay stakeholders to share information and connect with K-12 classrooms. Adam Frederick, a Maryland Sea Grant marine education specialist, noted that "CHESSIE will certainly be a useful tool for us all in effectively communicating and establishing a role and identity within the watershed." So, if you're looking for a restoration project in your area, a field trip destination, real-time data, or fun facts about the Bay, be sure to check out CHESSIE at <www.bayeducation.net>.

CHESSIE is supported by the EPA Chesapeake Bay Program and is maintained by the VIMS Virginia Sea Grant Marine Advisory Program. For more information about CHESSIE, please contact Susanna Musick at <sxmusi@vims.edu>.

NEW MARINE EXHIBIT AND VOLUNTEER OPPORTUNITY

Extreme Deep: Mission to the Abyss

What do we really know about what lies at the bottom of the ocean? Now you can actively participate in an adventure

to the bottom of the sea and a world you never knew existed. *Extreme Deep*, offers an in-depth look at the mysteries of the deep-undersea world. Visitors will simulate the actions of oceanographers and scientists at nearly 20 interactive displays highlighting newly-discovered life forms, underwater volcanoes, thermal vents and shipwrecks. This traveling exhibit created by BBH Exhibits in collaboration with the Woods Hole Oceanographic Institution will be at the Academy of Natural Sciences in February through May.

Enter a replica of the deep-sea submersible *Alvin* and plunge 3 miles to explore the mysterious ocean depths. Manipulate a replica of a robotic arm to collect ocean floor samples. Visit the Jellyfish Room, explore the Juan du Fuca Ridge, and "swim with the fishes." Learn about the dangers of water pressure in deep-sea dives, pilot your own sub, understand the geologic theory of plate tectonics, and examine actual deep-sea specimens.

Volunteers are also wanted to dive deeper into this new exhibit. Learn more about the deep-sea, gain new insights in deep-ocean research, and share your newly developed expertise with visitors. Training provided beginning on January 27th. Contact Lois Kuter, (215) 299-1029, <kuter@acnatsci.org> for more information.

Hurray for the MAMEA Mini-Grant program! These mini-grants are available to all MAMEA members in good standing. Applications are accepted year round with a deadline of March 1. For more information, contact Barry Fox, Box 9081, Petersburg, VA 23806; (804) 524-5848;

bfox@vsu.edu>.

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The Paul Standish Scholarship is awarded annually to one member of the Mid-Atlantic Marine Education Association interested in attending the regional conference but in need of financial assistance. The scholarship fund reduces the cost of the conference by waiving the fee for a full registration package. To apply, complete this form and submit it along with a letter of application to the MAMEA Grants Committee Chair, Carol McCormack. The letter of application should support the reason for requesting this scholarship and should explain how attending the conference will benefit you and your students (or other audiences). Applicants must be active members of MAMEA for at least one year. This scholarship was initiated in 1998 in memory of Paul Standish, a dedicated educator from Williamsburg, VA, who served as VA State Representative and MAMEA Treasurer for many years. Paul valued participating in our regional conferences, a time he used to help as Treasurer, to exchange ideas among his colleagues, and to enjoy the camaraderie of friends.

Last Name	First Name	Middle Initial
Street Address	City	State Zip Code
Organization		
Home Phone Work Phone		
Email Address	Fax	
Send form and application letter Barry Fox, Box 9081, Petersburg	· ASAP to: , VA 23806; (804) 524-5848; <bfox@vsu.edu>.</bfox@vsu.edu>	



YOU MUST BE A MARINE EDUCATOR

if you can teach a full semester of marine taxonomy course using only the contents of your jewelry box instead of a textbook.

if the tarpon has accompanied you on your honeymoon.

if you chat about carrageenan to the person in the grocery store with ice cream in their cart.

if you think whelk eggs are beautiful and use them as decorations on your Christmas tree.

- if you have 100+ pairs of fish earrings.
- if you know that sand is different on every beach.
- if you know what a mermaid's purse is.
- if you will feed squid to a walrus and then let it give you a big kiss.
- if you have a closet full of marine life clothes.
- if nobody will carpool with you because your vehicle is a rusted-out bomb with an inch of sand on the floor and there is an aroma of dead horseshoe crabs and decaying sea lettuce.

if most of your furniture is made from various seafood traps.

- if your friends and neighbors won't go to the beach with you anymore because you always want to teach 'em stuff and show 'em things.
- if you remove all of the back seats in your vehicle so you can carry beach "stuff."
- If you wear a crab on your head and your friends don't notice.
- if you carry a bucket with you on every beach walk, stopping to show others what you have found.
- if your choice of cologne is "Ebbing Tide" by L'Estuaire.
- if you exhibit marine life with a description of each animal on the front of their tank, along with a recipe.
- if you take ratty old seine nets and incorporate them into your home (or car) décor.
- if you never throw away old running/tennis shoes, realizing their future value in the marsh.
- if you will eat anything salty and slimy if someone says it tastes good with beer!

These thoughts were gathered from attendees of the Mid-Atlantic Marine Educators Association's annual fall conference held in Baltimore, MD in October 2000. Additional ideas can be submitted to the new Masthead editor!

Keep an eye on the MAMEA web site <www.mamea.org> for late-breaking information and current updates between Masthead issues.

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FALL MAMEA CONFERENCE

VIRGINIA INSTITUTE OF MARINE SCIENCES

GLOUCESTER POINT, VA

OCTOBER 4-5, 2002!

NC Aquarium on Roanoke Island PO Box 967 Manteo, NC 27954