Captain's Corner

I am honored to serve as your SCMEA president for the coming year. It is a privilege to represent such a talented and dedicated group of educators. Let me first say thank you to our outgoing president, Sarah Mitchell. Or perhaps I should complain, because I am likely to be remembered as “that other guy who was president after Sarah.” She has truly been a wonderful role model. Many of us in SCMEA have long known that Sarah routinely does the work of 10 people, but that realization has reached the national level in the last year. Sarah recently moved to the Washington, DC area, where she is the project director for the new National Marine Learning Center. We are fortunate to have a friend of such integrity and national standing.

This fall's annual SCMEA conference in Myrtle Beach was a great success. Wendy Allen, founding member and first president of SCMEA, pointed out that this year's conference marks the 10th anniversary of our organization. Happy anniversary, SCMEA! As usual, the conference kept us busy jumping from presentations to workshops to social events and meals. We had two presentations on over-fishing problems off our coast, and we hope to continue to focus on this issue as a theme for educators throughout the coming year. It was wonderful to renew friendships, meet new members, and make plans for the future. I considered it a personal victory just to make it through all the meals without spilling food on myself before addressing the group. The annual SCMEA auction raised a record amount of money (approximately $3000!), and the bluegrass party was great fun for the diehards at the end of the evening. I would like to offer a special word of thanks to Ann Wilson and Myrtle Beach State Park for providing such a beautiful setting for our cookout Friday evening, and to Tricia Weissman and Ripley's Aquarium for Sunday's breakfast and aquarium tour. Thank you also to Phil and Valerie Astwood, Carmelina Livingston, Arla Jessen, Mark Madden, Leslie Sautter, Julie Cliff, Al Segars, Bruce Lampright, Denise Zacherl, Collette Dryden, Wendy Allen, Paula Keener-Chavis, Elaine McClure, Diane Bell, Fran Crist, Fred James, Lynn Corliss, and Amy Whitaker. The conference ran smoothly because of your efforts. Naturally, I still take credit for the perfect weather and the fact that a sand tiger shark attacked and ate a blacktip shark in the Ripley's aquarium tank right as our educators were going through. Other than that, it was all you!

Congratulations to Julie Cliff, who was awarded the Marine Science Educator of the Year Award. Julie is a past president of SCMEA and has been one of the founders of marine science education in this state for many years. Well done, Julie, for a much deserved award! Cindy Renkas bid farewell to the group as she sets off in a new direction with the International School system. Cindy, a past president of SCMEA and both a South Carolina and a National Marine Science Educator of the Year, was recognized for her years of outstanding service. The SCMEA Classroom Educator award was renamed the "Renkas Award" in honor of Cindy and her children Brock and Jenna, who have also been steadfast SCMEA members. Also, congratulations to our new officers and board members: Carmelina Livingston (president-elect), Ken Alfieri (secretary), Holly Campbell (board member) and Carey Santos (board member).

Overall, the conference evaluations were very positive. One participant wrote that the workshops were the best they had ever attended at a SCMEA conference. On the other hand, one participant thought the quality was less than previous years. We can't please everyone, but we promise to keep trying. I am concerned that the number of conference participants was slightly less this year. It is easy to take comfort in the same familiar faces, but I hope each of you will encourage your colleagues and interested co-workers to join SCMEA and attend future conferences.

Speaking of future conferences, this is an exciting year for our organization. SCMEA is hosting the National Marine Educators Association (NMEA) Conference in Charleston this summer (August 6-11). I hope you will all take advantage of this unique opportunity to attend the national conference in our own backyard. We are offering several awards for educators to help cover the cost of registration. You can read more about the details and the conference announcement within. Because we are hosting the national conference in August, we will not have the fall SCMEA conference next year. Instead, we are considering a spring conference in 2000. Stay tuned for more details.

And finally, SCMEA resources are now even more accessible via the new SCMEA website (http://www.coastal.edu/science/scmea/), which includes links to useful marine education sites, a link to the NMEA 99 Conference web page, and a new resource directory for South Carolina marine educators. See the article within to learn more about these web resources.

Have a happy 1999! May it be filled with wet feet (a good thing for a marine educator), wide smiles, and wishes granted!

Rob Young
SCMEA President
Cousteau Marine Science Educator of the Year - Julie Cliff

Mt. Pleasant Wando High School teacher Julie Cliff has been named "Outstanding Marine Science Educator of the Year" by the S.C. Marine Educators Association. Cliff, a SCMEA past-president and long-time leader in the field of marine education, uses innovative, inquiry-based models in teaching students and teachers. Her workshops have motivated many teachers statewide to include marine conservation themes in their teaching.

Her marine science instruction occurs not only in the classroom but in "real world experiences." She utilizes a tremendous network of marine scientists, naturalists, and educators to provide hands-on instruction through diving excursions, kayak trips, research vessel cruises and other field trips. The value of these experiences is obvious since several of Julie’s students have gone on to become marine scientists, eco-tour operators, and teachers who are active in all parts of the state. Congratulations Julie!

SC Aquarium Update

The South Carolina Aquarium is scheduled to open in early 2000, when it will welcome up to one million visitors each year. The Aquarium's construction is presently more than 2/3 complete; most of the concrete has been poured, and soon the acrylic tanks will begin to be installed. The Aquarium will be home to 10,000 species of plants and animals, which represents one of the most diverse collections in the country. During this countdown to opening, Aquarium volunteers and educators are already canvassing the state, delivering their Turtle Talks programs. To date, they have delivered them to more than 4,500 South Carolina school children. Work continues on expanding the reach of the Turtle Talks program statewide. 1999 will be the start of the Aquarium's membership drive. For more information, please call (843) 720-1990.

SCMEA Bulletin Board

SCMEA Board Meeting
Please join us for our next SCMEA Board meeting on Saturday, January 30th at Cypress Gardens. We plan to meet from 10:00 until 2:00 and lunch will be provided. Make a day of it - come early and stay late to enjoy the park! Contact Rob Young (843) 349-2277 to attend.

Reminder!
The deadline for the Spring issue of SeaScripts is March 15. Please send all newsletter contributions to Arla Jensen jessena@cofc.edu.

Artwork
All artwork by Anna Macedo.

Travel Awards
The SCMEA Board has restructured the travel awards for the upcoming year because SCMEA is hosting the NMEA 99 conference in Charleston. There will be no travel awards given. Instead, SCMEA will make three NMEA 99 Registration Awards. Please see the application enclosed for requirements and apply now!

Classroom Awards
In honor and appreciation of long-standing marine educator Cindy Renkas and her children, Brock and Jenna, the SCMEA Board has chosen to rename the classroom awards to the Renkas Marine Education Grants. Please see the application enclosed for more information.
Commercial Applications From The Oyster Shell
By Jill C. Yarnall, SC Sea Grant Consortium

Most beachcombers pass over the lumpy, bumpy oyster shell in favor of more beautiful shells, but nearly two decades ago, South Carolina Sea Grant researcher and Clemson University biologist A.P. "Hap" Wheeler stopped and picked up one of the homely bivalves.

Wheeler was curious about how the oyster controls the formation of its shell. He knew that oyster shells are composed of minerals and protein; what he didn't know was that the protein controls the growth of the shell's mineral. Scientist believed that adding oyster protein to a mineral forming solution would speed up the rate of mineral scale formation. But when Wheeler and co-researcher Steve Sikes, a biologist at the University of South Alabama, added a protein compound extracted from oyster shells to a mineral forming solution, the protein actually slowed the growth of the shell's mineral.

Once the discovery was made, Wheeler said, "It wasn't any time before we were on the road trying to sell the potential of a new biodegradable water treatment technology." Mineral scale buildup is a big problem for offshore drilling and mining operations, boilers, and cooling towers. Mineral scale buildup on industrial cooling mechanisms renders them useless. Until now, removing the scale involved shutting down production and removing the scale in an expensive, time-consuming process.

Wheeler and Sikes joined Larry Koskan, a corporate researcher, to perfect an inexpensive heat process called thermal synthesis to produce industrial quantities of the oyster protein analog polyaspartic acid. The protein analog retains all the properties of the oyster protein, including its biodegradability. Today, oil companies are experimenting with the technology to reduce mineralization at offshore well sites.

Wheeler and coworkers suggested another commercial application for the protein chain. Detergent formulas use compounds with negatively charged molecules to attract dirt and mineral particles, suspending them in the water and preventing them from landing back on clothes or dishes. Because polyaspartic acid is negatively charged, it can perform the same function while being biodegradable. The protein probably will not be added to name brand detergents for a number of years due to research, product testing, and market analysis.

Another commercial application for the biodegradable analog has recently been discovered: helping plants absorb nutrients from the soil. Applying smaller polyaspartates to the soil enhance nutrient uptake, meaning increased yields and less maturation time in cash crops. Farmers can use less fertilizer and reduce runoff, thus protecting water quality while saving money. Donlar Corporation is actively marketing the analog as an agricultural supplement and producing commercial quantities using the thermal process developed by Wheeler, Sikes, and Koskan.

National Ocean Sciences Bowl

The University of South Carolina, under the leadership of the Marine Science Program and The Belle W. Baruch Institute for Marine Biology and Coastal Research, is proud to host its second Regional Ocean Sciences Bowl on February 13, 1999, at its Columbia campus. Sixteen high school teams from South Carolina and Georgia will compete for the opportunity to represent our region in the National Ocean Sciences Bowl, scheduled for April 10-12, 1999 in Washington D.C. Last year's competition was very successful, and our regional winners placed second in the 1998 national competition.

This national competition is organized by the Consortium for Oceanographic Research and Education (CORE), along with its member institutions, the National Marine Educators Association (NMEA), and the National Science Teachers Association, and sponsored by the Chief of Naval Research, Oceanographer of the Navy, National Science Foundation, National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration. Patterned on the National Science Bowl, the NOSB was inaugurated in 1998 to provide a forum for students who excel in math and science to receive national recognition for their diligence and talent while broadening their awareness and understanding of the oceans.

Students will answer multiple-choice or short-answer questions within the broad category of the oceans. Questions will be drawn from the scientific and technical disciplines used in studying the oceans (physics, chemistry, geology, atmospheric science, biology, etc.) as well as from topics on the contributions of the oceans to national and international economics, history and culture.

For more information or to assist with the event, please visit the Ocean Science Bowl website http://marine-science.sc.edu/bowl/ or contact Teresa Donelan at (803) 777-3923.
Marine Happenings

Bahamas Trip
Would you like sail to the Bahamas during spring break, April 3-10? This is a course for all educators to the Alethra Islands. Cost for the tropical marine course and trip will be about $525, plus travel to Nassau. If interested, contact Carmelina Livingston at (843) 849-2815 or email (clvlin@awod.com).

Wetlands Study Center Workshop
A free workshop will be provided on Saturday, March 20 from 8:30 until 4:00 to familiarize educators with the newly opened Wetland Wonders Nature Study Center at Alberta Long Lake in downtown Charleston. Participation is limited to 15 educators and a teacher's guide will be given. Please contact

Kathie Livingston at the City of
Charleston Dept. of Recreation to
register for this workshop (843) 965-4002.

Safety-Kleen Corporation
A free environmental education program which discusses reducing, reusing and recycling household hazardous wastes, and the methods of hazardous waste disposal. Programs scheduled as needed for K - 12 audiences. Please contact

Marlynn Capo (803) 933-4800 for
more information.

Job Opening
Elementary science teacher position (certified elementary
and/or science) available
beginning with 1999 - 2000
school year. Small independent
school, downtown Charleston.
Send resume to: Betty Disher,
Headmistress
Mason Preparatory School,
56 Halsey Blvd., Charleston, SC
29401 (843) 723-0664.

Ocean Talk
The Naval Meteorology and
Oceanography Command has
published an excellent
oceanography resource, Ocean
Talk, covering such topics as
waves, tides, salinity and seafloor
bathymetry. A sister publication
on meteorology is also available.
These booklets are free (even
classroom sets) by contacting
Robin Irby at (228) 688-3891 or
irby@cnmoc.navy.mil. The text
(but not figures) are available on
the web
www.cnmoc.navy.mil.

Special Recognition to the Renkas Family

This speech was given by Mark Madden at the South Carolina Marine Educators Association 1998 state conference preceding a special award given to Cindy Renkas by the SCMEA membership.

This person takes advantage of every opportunity that arises to work on conferences, committees, boards, advisory groups, workshops, panels, and teams of all kinds. She maintains a schedule that makes most of us who consider ourselves busy feel like we are standing still. This, however, does not make her a great teacher.

This person knows a little about practically every matter of flora and fauna that swims, flaps, crawls, slithers, runs, or otherwise makes its way around this part of the world. Some of them she knows a lot about. She can talk to you at length in graphic detail about personal experiences with leeches. She can tell you what it takes to lovingly care for hissing cockroaches. While this may make her a little strange, it isn't the characteristic that makes her a great teacher.

What does make her a great teacher is her understanding and application of a basic truth in teaching. This basic truth was alluded to in a somewhat rhetorical question by Soloman Ibn-Gabirol who asked "Of what avail is an open eye, if the heart is blind". She is forever having her students sift through algae for pond invertebrates, hunt for fossils in the mud, launch missiles, rear fruitflies to feed to something or other, trek through the Amazon, dissect computers, release bats, or hammer nails with frozen bananas. Through it all she never forgets that she is teaching children, not science. There are lessons about professionalism as much as about protista. There are lessons about attitude as well as altitude. She teaches them to be good people who know about science, not just scientists who know information. This is why she is a great teacher. Who says so? The NSTA said so when they recently gave her one of only 40 Toyota Tapestry/NSTA grants awarded in the nation. The National Marine Educators Association said so when they voted her the best marine educator in the nation last year. All of us - the people who have had the privilege and the honor and the good fortune to work with her - say so. Most importantly, the thousands of children and adults who were blessed enough to have her teach them to see with their hearts as well as their eyes say so.

Some of you may not know that Cindy Renkas is leaving us very soon to live in another part of the world. Her daughter, Jenna, is going with her, but Brock is staying here in the states. Many of us have watched Jenna and Brock grow up. They may have been put on the SCMEA membership list at birth for all I know because it seems that they have always been here. They are her pride and joy and proof positive that children can do extraordinary things as long as...

(continued on page 7)
CALL FOR PRESENTATIONS

NATIONAL MARINE EDUCATORS ASSOCIATION

1999 CONFERENCE

Exploring Our Coastal Heritage:
A Voyage Through Cultures, Lands, and Seas

August 6–11, 1999
Charleston, South Carolina

Although we welcome a broad range of sessions, we encourage sessions addressing the Conference Theme, “Exploring Our Coastal Heritage: A Voyage Through Cultures, Lands, and Seas.” Please type all information as you wish it to appear in the Conference Program.

Please provide information for the lead presenter or contact person.

Name ____________________________________________________________

Position _________________________________________________________

School/Institution ________________________________________________

Address _________________________________________________________

City ___________________________ State _____ Zip __________

Phone ___________________________ (Work) ___________________________ (Home)

E-mail Address __________________________________________________

Session Title _____________________________________________________

Type of Session (See Session Descriptions)

☐ Hands-on Workshop
  ___45 min.  ___90 min.

☐ Demonstration
  ___45 min.  ___90 min.

☐ Presentation
  ___20 min.  ___45 min.  ___90 min.

☐ Special 3- or 6-hour Workshop

☐ Poster Session

☐ Other _________________________________________________________

Intended Audience (Check all that apply)

☐ Elementary School Teachers

☐ Secondary School Teachers

☐ College Faculty

☐ Agency Personnel

☐ Informal Educators

☐ General

☐ Other _____________________________
Equipment Required (Check all that apply)  How many participants can you accommodate?
☐ Overhead Projector  □ 15–30
☐ Slide Projector  □ 30–50
☐ VCR/Monitor  □ 50–200
☐ Easel w/ Flip Chart
☐ Running Water
☐ Outdoor Space
☐ Other __________________________

Contributing Presenters (Please list all presenters of the proposed session and the affiliation of each.)
Presenter #1: __________________________
Affiliation: __________________________
Presenter #2: __________________________
Affiliation: __________________________
Presenter #3: __________________________
Affiliation: __________________________
(Please attach an additional sheet of paper if more than three presenters are participating.)

Abstract
On an attached sheet, please describe your session in 80 words or less as you would like it to appear in the Conference Program.

RETURN 3 COPIES THIS PROPOSAL BY MARCH 15, 1999 TO:
Dr. Leslie Saughter, Dept. of Geology, College of Charleston, Charleston, SC 29424 USA
Telephone: (843) 953-5586; E-mail: sautterl@cofc.edu

SESSION DESCRIPTIONS
Hands-on Workshop. A 45- or 90-minute presentation that provides everyone in the audience with a hands-on experience, including materials. Classroom-style setup.

Demonstration. A 45- or 90-minute demonstration of apparatus, a series of experiments, or a scientific phenomenon allowing for only limited participation by the audience. Classroom-style setup.

Presentation. A 20-, 45-, or 90-minute talk that may or may not be accompanied by slides. Classroom or theater style setup.

Special Workshop. A 3- or 6-hour hands-on session in which participants gain experience with innovative instructional materials. Special Workshops are scheduled concurrently with field trips on Sunday, August 8th.

Poster Session. A 3' x 6' display of a single topic (e.g., curricula, special program, research, etc.). Presenters will be available to discuss their poster with others.
South Carolina Marine Educators Association  
NMEA 1999 Registration Award

Application Due: April 15, 1999 - Notification: May 15, 1999  
Funds Available: Upon Receipt of Attendance

Name_________________________________ Occupation______________________________

Home Address______________________________________________________________

Work Address______________________________________________________________

Home Phone_________________________ Work Phone______________________________

Reference___________________________________________________________

Address______________________________________________________________

Home Phone_________________________ Work Phone______________________________

Applications will be judged solely on the information provided on this form. Please type or print neatly in the spaces provided only. Applications received after the deadline will not be eligible.

1. Are you currently a member of SCMEA? Please note membership is a condition of the award.  
Yes____ No____

2. Are you a member of the National Marine Educators Association (NMEA)?  
Yes____ No____

3. Have you ever attended a NMEA national conference? Please note that first time attendance of a NMEA national conference is a condition of the award.  
Yes____ No____

4. Are you planning on presenting a paper or workshop at the 1999 NMEA conference? If so, please describe.

5. Briefly describe your professional role as it pertains to marine/aquatic education.

6. Please briefly describe your reasons for wanting to attend the NMEA conference this year.

Statement of Responsibility: I declare that I have never attended a NMEA national conference. I agree to submit a copy of my registration receipt and other pertinent documents as proof of attendance. I understand that my receipt of the award is dependent upon my submittal of proof of attendance. I agree to attend the majority of the sessions and official conference events. As a condition of the award, I will write an article for the SCMEA newsletter and/or make a presentation at the next SCMEA conference describing my experiences and sharing information acquired at the NMEA conference.

Signature____________________________________ Date____________________________

Please sign and return, by April 15, 1999 to: SCMEA Awards Committee, c/o Mark Madden, 295 Dewees Inlet Drive, Dewees Island, SC, 29451-9416.
South Carolina Marine Educators Association
Renkas Marine Education Grants

Application Due: April 15, 1999 - Notification: May 15, 1999
Maximum Award: $250 - Funds Available: July 1999

Name_________________________ Occupation_________________________
Home Address_____________________________________________________
Work Address_____________________________________________________
Home Phone__________________ Work Phone_________________________

Reference________________________ Address_________________________
Home Phone__________________ Work Phone_________________________

Applications will be judged solely on the information provided on this form. Please type or print
neatly in the spaces provided only. Applications received after the deadline will not be eligible.

1. Are you currently a member of SCMEA? Please note membership is a condition of the award.
   Yes___ No___

2. Are you a member of the National Marine Educators Association (NMEA)?
   Yes___ No___

3. Briefly describe your professional role as it pertains to marine/aquatic education.

4. Briefly describe the goals, methods, and time frame for your project and how SCMEA funds
can assist your project.

5. Who is the target audience for your project?

6. How will you evaluate the success of your project?

Statement of Responsibility: The information is accurate to the best of my knowledge. As a
condition of the grant, I agree to write an article describing the project for the benefit of other
educators (the article will be published in SeaScripts). I agree to inform the Scholarship
Committee in writing of any major changes in my project in a timely fashion. I also agree to use
the funds as described and will make every effort to acknowledge SCMEA in any publicity
directly related to the project.

Signature_________________________________________ Date______________

Please sign and return, by April 15, 1999 to: SCMEA Awards Committee, c/o Mark Madden,
295 Dewees Inlet Drive, Dewees Island, SC, 29451-9416.
SCMEA Web Resources
by Rob Young, Coastal Carolina University

Do you have a love/hate relationship with the web? If you're like me, you love the convenience when you know where to go, but you hate getting caught on endless tangents when you're not sure where to look. Do you wish that someone would just compile a list of the best sites and give it to you? Well, that's exactly what we've done! The new SCMEA web site is the one site you'll need for marine education. In addition to general information about SCMEA and information about upcoming conferences (check out the NMEA 99 Conference Site), the site features an index of useful marine education and marine science links designed specifically for South Carolina teachers. The sites are listed in an organized format, often accompanied by a short description. Some of the sites are huge, so we have included links to the most relevant pages within each site for marine educators. I encourage you to browse through all the links, but if you only have time for one site, be sure to check out "The Bridge." This site, sponsored by NMEA and Sea Grant, is an enormous yet extremely well-organized and user friendly site dedicated to marine education. You'll find pages and pages of lesson plans and classroom activities, resources for teachers, career development opportunities, general marine science information, and more. As one educator remarked at the fall conference, The Bridge "is like Christmas for marine science teachers." Another important link is your local Math and Science Hub. Again, this site includes pages of on-line lesson plans, as well as important contacts and a calendar of events for South Carolina math and science teachers.

In addition to the links page, the SCMEA web site has one other feature of particular interest to teachers: the new "South Carolina Teacher's Resource Directory for Expertise in Marine and Atmospheric Science." This is a directory of experts on various marine science topics in South Carolina. You can search the directory on line by topic, name, organization, or county. Would you like to talk to an expert about marine geology? Just type in "marine geology" and hit search. Would you like to find someone located nearby? Just narrow your search to a specific county. The directory includes information about whether an expert is willing to come speak to your class or work with volunteers. All teachers want to bring the real world into their classroom. This directory makes it easier. The directory was introduced in October and is just beginning to fill up with experts.

South Carolina Sea Grant Consortium has agreed to help promote the directory among marine science researchers and educators in the state. Please be patient as the directory continues to grow over the next year.

Remember, you only need to know one site to find all this information, so be sure to bookmark it today!
http://www.coastal.edu/science/scmea/

Have You Seen The Pike?

Strange sightings have been noted around South Carolina in the last few months. A great Northern Pike has been seen taking in the sights and sounds of the Lowcountry and beyond. It seems as if Pike, the mascot of the National Marine Educators Association, has come to visit for the year. Pike normally likes to see what scientific activities each state has to offer. To that objective, Pike has enjoyed the SCMEA conference, bird watching at Baruch Marine Labs, and trawling the Charleston Harbor on the Anita.

This year however, Pike has decided to have a little fun too. He has taken in the tourist spots in the Lowcountry, and done some shopping on King Street. He has visited several of the colleges and universities.

Since Pike's visit was sponsored by chapters up and down the east coast, Pike has decided to do a little traveling. Since arriving in SC, Pike has come a Jimmy Buffet fan, so he participated in the Parrothead convention in Key West. While there, he took part in the world's longest conga line! Pike's social calendar is quite full, but he does have a few openings. If you have an activity that you think the Pike would like, please contact a member of the board and arrangements can be made. Rumor has it, he's becoming a Clemson fan!!
Green Teacher

Mark Madden, 1997 SCMEA Educator of the Year, was recently contacted by Green Teacher, the world's best-selling environmental education magazine. They asked him to author a special pull-out section for teachers which will appear in the Spring 1999 issue. It will feature original activities to teach children K-12 about ocean science. One year (4 issue) subscriptions cost $22. Sample copies cost $6. You may contact Green Teacher at (416) 960-1244 or email greentea@web.net for more information.

An Island Journey in Ecological Diversity

by Carol Longshore, Pomaria-Garmany School

Celebration continues in 1998 for “The International Year of the Ocean.” I have found that my fourth-grade students in Newberry County are very much interested in ocean ecology. Families in the Midland community of Pomaria often take summer vacations “to the beach.” For those students who have not experienced the beach, I bring ocean experiences to them through a unit called Secrets in the Sand. All fourth-grade students from Pomaria-Garmany School travel to Charleston in the spring as they take part in seining ocean critters and other beach activities on Folly Island.

Much of my information about ocean ecology and the programs offered to young people have come through SCMEA. At the 1997 Savannah Conference, Julie Cliff began the list of educators who would be interested in attending the 22nd Annual Marine Educators conference in Puerto Rico. I put my name on the list, never realizing that my dream would come true for attending a national conference with the aid of a travel scholarship from SCMEA.

On August 3rd at the Charleston airport, Evelyn Neal, a middle-school science teacher from Newberry County, and I met up with about twenty other SCMEA members to begin our island adventure in Puerto Rico. And what an adventure it was! On the airplane, I chatted with Mark Madden, an easy-going and friendly expert on all sorts of interesting ocean lore and Carmelina Livingston, and enthusiastic advocate for hands-on science teaching. Upon arriving in a familiar, humid climate, and settling in the plush resort of Wyndham Palmas del Mar in Humacao, just southeast of San Juan, I quickly found out that Puerto Rico offered a variety of experiences. Over the next seven days I explored the ecological and cultural diversity of Puerto Rico, from the Spanish colonial city of San Juan to the quiet off-shore island of Isaco with its coral beaches and snorkeling opportunities.

I toured El Yunque, the only tropical rain forest the US National Parks System, and learned about the four different zones of the forest. Two hundred and forty different species of tropical trees, flowers, and wildlife identify such zones, including the native coqui, a tiny tree frog. Las Cabezas and San Juan Nature Reserve made the mangrove forest accessible to educational groups through the establishment of boardwalks. When we weren’t walking, we rode open-air vans through the forest and kept our eyes peeled for iguanas.

The Field trips were exciting and informative, but allow me to shift gears and touch base on the REAL reason I attended the conference - the educational workshops. Over one hundred concurrent sessions were presented over three days at the Palmas Academy. I had an opportunity to learn what educators from different places are doing to improve their students’ knowledge of the oceans.

I have already integrated Denise Ponce and Diane Rippley’s presentation on adaptation, “How to Dress and Alligator,” into my science curriculum. Susan Rolon, docent coordinator from the New York Aquarium, presented activities which build a positive effect on the individual’s self-concept and in turn have a domino effect as groups learn to work together, make decisions, and take responsibility for their own learning. We are proud of Margaret Olsen, our very own sister marine educator from Georgia, as she presented her creative student-research project, “Marine Story Books.” Three plenary sessions by island experts on Caribbean diversity were held each of the three mornings. On Thursday evening, the infamous NMEA Auction was held and many bargains were to be had. SCMEA paid how much to host Pike this year??

As with all good things, the trip to Puerto Rico was too long anticipated and too soon over. On Delta flight 470 to Charleston, some SCMEA members chatted quietly with each other about his/her respective experiences, while others sneaked one last glimpse at the sandy shorelines of other Caribbean islands through the airplane’s window. It appeared that our plane dipped its wing in final salute, and we heard Carmelina’s tiny and wistful voice: “Good-bye Puerto Rico, we love you!”
...Renkas Family

(continued from page 4) they are given extraordinary things to do. Brock and Jenna, we will always remember your contributions to SCMEA - those smiling faces that greeted us at the many registration tables you both have "manned" over the years, the pride we felt when Brock was the youngest person to ever present a session, and the inspiration we all felt while watching you both grow into the intelligent and thoughtful people you are today.

While we will miss Cindy as a friend and feel her loss as a dynamic part of this organization, we know that there are other people that don't yet know Cindy like we do. There are other people who have the experience of a lifetime waiting for them when they meet up with this teacher who likes to wonder and explore and laugh and smile while she is teaching them that an open eye is to no avail at all, if the heart is blind.

Following the presentation of the award binoculars, Brock and Jenna Renkas were called to join Cindy. It was announced that the SCMEA Classroom Grant Awards, which assist teachers with improving their classrooms through marine education projects, were being renamed the Renkas awards in honor of the Renkas family's strong role in SCMEA.

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### Become a Member of the South Carolina Marine Educators Association

Join a group of dedicated teachers, naturalists, scientists and others interested in studying and teaching about the world of water, both fresh and salt. SCMEA provides a communication network for members to share information and ideas through newsletters and an annual statewide conference. Membership dues are $10.00 a year and include three newsletters, a discount on the registration fee for the annual conference, and an opportunity to interact with some of the most dynamic educators in the state!

Name: ____________________________ Place of Employment: ____________________________

Address: ____________________________ Street or PO Box: ____________________________ City: ____________ State: ____________ Zip: ____________

Home Number: ____________ Work Number: ____________ Email: ____________________________

____ One year - $10 ______ Three years - $25 ______ Five years - $40

Please send completed form with payment (make checks payable to SCMEA) to:
Phil Astwood, Treasurer, SCMEA, Center for Science Education, University of South Carolina, Columbia, SC 29208.

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### Join the National Marine Educators Association

Begin to network with educators around the country sharing a common love and concern for our water world. Membership benefits include a subscription to *Current: The Journal of Marine Education*, the newsletter, NMEA News; and registration discounts for some of the best annual conferences you will ever attend!

Name: ____________________________ Occupation: ____________________________

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