Captain's Corner

The thoughts that I'd like to discuss in this issue are not exactly typical of most Captain's Corner entries. They are, however, of concern to me and, I suspect, to most of you as well. These thoughts revolve around the matter of Time and trying to "focus the eyeglass."

How many times in the recent past have you complained that you have too much to do? In those times, how often have you received the proper sympathy you know you deserve? Do your colleagues say, "You poor thing, you ARE overworked!?" Or, instead is their response more akin to, "You think you've got too much to do, I've got to, ...?" Some even create an air of competition! We are all far too over-committed -- at work, at home, even socially (those of us who have managed to somehow maintain a social life!). We have such great aspirations and intentions that we divide our time into minute segments in order to do everything! The time devoted to any one endeavor then becomes insignificant and progress becomes nearly immeasurable. Lack of progress toward attaining goals -- or toward crossing off items on those massive to-do lists -- may result in frustration (it certainly does with me!) and discouragement. Often I find that my projects are not fully completed because I have not performed some follow-up task or assessment.

This is no way to live and, without question, is no way to be productive and feel a sense of worth and accomplishment. We've all been told to "learn to say no" when asked to commit to yet one more endeavor. But HOW can one do that when every opportunity for involvement sounds interesting, potentially exciting, and fulfilling? I do NOT have the answer! In marine science education we each contribute to broadening and developing the minds of many students (young and not-so-young). The satisfaction received when a student suddenly understands a complex concept is all we need not only to continue our work, but to seek more work. To watch a student ignite with excitement is all I need to "say yes"!

...perhaps, our students will learn from observing us closely and focus better themselves.

The SCMEA Board is filled with some of the most outstanding, dedicated science educators in existence. Some of the Board were founders of SCMEA in 1988 and have been integrally involved all these years. Many of them are absolutely committed to the max. Knowing that our Board Members are but an excellent representation of our membership, I ask that each of you assess your current commitments in marine science education. What are your strengths and where can you focus your efforts? Can the quantity of your efforts be tailored to improve the quality of selected efforts? With such focus, would you be able share your work with the membership? If each of us were to contribute one "something" -- whether that something is an activity, an article for SeaScripts, a program idea -- imagine the potential! Yes, I'm trying to lighten the load of the Board -- this is where I feel a strong potential for burn-out. The Board will, of course, do

(continued on page 2)
everything in its power to assist you. I also ask that you consider being on the
Board in the future - to make that your focus for a couple of years.

You are probably laughing. I've just written about being over-committed, then I
request your help! This is a matter of quality over quantity and I hope that you
understand my "drift." I welcome your comments and ideas. I wish my spare
hours were more numerous, because there are SO many things I'd like to do as
both President and member of SCMEA. Perhaps, with the passing of Time
everything will be accomplished, but with each accomplishment many new ideas
are born. An endless blooming of active marine science!

Cheers,

Leslie Sautter, President

SCMEA Announcements!

Mark Your Calendar
Inform other educators of your projects and/or organization.
Members are welcomed to contribute articles, art, work,
announcements, students' work, etc. Please note: If you miss the
deadline your material will not be included!

Deadlines for contributions:
Fall Issue June 15
Winter Issue November 15
Spring Issue March 15

Please send all newsletter contributions to:
Elizabeth King
SeaScripts Editor
Baruch Marine Field Lab
PO Box 1630
Georgetown, SC 29442

NMEA Conference Course
Unfortunately, due to schedule
conflicts, the announced graduate
credit course/ East Coast bus tour
en route to the NMEA Conference
will NOT occur.

Last Call for Photos
If you wish to be included in the
SCMEA Members Photo Directory,
send your passport-sized picture to
Fred James (see Board list for his
address) by June 15.

Travel Awards Available!
Three awards of $100 each are
available to support SCMEA
members to attend the fall SCMEA
Annual Conference. All educators
are encouraged to apply.
Applications must be received by
July 31, 1996. Recipients will be
notified by August 18th. See
enclosed application form for
details.

Looking for Resources...
... to be included in SeaScripts. If
you receive publications with
interesting, pertinent lists of
resources such as books, videos,
posters, etc., please copy and send
to the editor for inclusion in this
newsletter. Thank you!

More Awards and Grants!
SCMEA offers three awards of
$250 each to be used for a marine
education project. Funds are also
available to assist attendance at
the NMEA Conference to be held
in New Hampshire this August. So
find the application forms in this
issue and send one in!
SCMEA Member Awarded Grant

Cindy Renkas is one of this year’s Toyota Tapestry awardees. A partnership of Toyota Motor Sales, USA, Inc. and the National Science Teachers Association, the Toyota Tapestry program offers $10,000 grants to K-12 science teachers for innovative projects which enhance science education in the school and/or school districts. Grants are awarded in two categories: environmental education and physical science application. One thousand thirty-eight applications were received this year; forty were selected for funding.

Cindy and team members Mark Madden (Environmental Programs Coordinator for Dewees Island) and Connie Leverett (Science Specialist with the Charleston Math and Science Hub) will use the grant funds to develop an environmental study site at Alberta Long Lake in downtown Charleston. Draining from Charleston Harbor, this site is a tidal saltwater lake which is quite accessible for wetlands and marine science study. In partnership with private businesses and the City of Charleston Parks Department, a 40-foot floating dock will be built for student biotic and abiotic sampling. In addition, a quarter-mile marked nature trail along the lake’s edge will be built. The project team will write an interpretive booklet to accompany the nature trail and dock activities. Twice yearly teacher training sessions will be provided to familiarize any interested teachers, youth group leaders, and other educators with the educational potential of the site. Pre- and post-visit activities and sampling equipment will be available for anyone using the site.

NMEA Conference Great Experience

by Elaine McClure, Ph.D.
Fifth Grade Teacher, C.C. Pinckney Elementary

If it's spring, it must be whale watching time! At least that's what the students at Pinckney Elementary School at Ft. Jackson look forward to. Constructing and inflating a life sized model of a Blue Whale culminates our Ocean Unit each spring, an idea I got at the SCMEA meeting at the Penn Center several years ago. Since that time I have continued to expand my unit each year with new ideas and activities that I receive from every SCMEA conference. This past summer I received the annual scholarship to attend the NMEA conference to be held in San Diego, California. This opportunity to share ideas with other educators from around the globe was just as fantastic as I had hoped it would be. From Wendy Weir's Coral Forest workshop (I couldn't believe her brother is one of the Grateful Dead!) to having dinner with the Banana Slug Band, this conference gave me more information and instruction than you can imagine. I may have to increase to a year long study. With thirty or more concurrent sessions to choose from each afternoon in addition to morning symposia, field trips, and nightly excursions to such places as the Stephen Birch Aquarium, Sea World of San Diego, and the Chula Vista Nature Center there were opportunities for every area of interest. In addition I found the experience of meeting and sharing with others from all walks of life and every viewpoint concerning our world to be amazing. Many people are working to keep this planet in good shape for our future generations. It was inspiring to listen to their messages. This summer plans are nearly complete for the 1996 Marine Educators Conference to be held in New Hampshire. I urge all of you to make every effort to become a part of this experience. Three years later it will be here in South Carolina. We need the experiences of many people to prepare for this conference. What better way to get it than watching the way others are doing. Please plan to attend.

From Whaling to Watching

Sarah Mitchell, Education Coordinator
Gray's Reef National Marine Sanctuary

Whales ... for many the earth's most magnificent animals; certainly the largest and unquestionably majestic creatures. Gray's Reef National Marine Sanctuary has produced a handbook featuring the northern right whale, From Whaling to Watching, which was co-authored by Stellwagen National Marine Sanctuary. It explores the life history of the most endangered whale, and our history with the whale from exploitation to conservation.

In addition to comprehensive background information on the right whale, this handbook is appropriate for classroom use. The teaching activities have been developed to compliment ongoing whale research. This handbook provides a way to bring current scientific research into your classroom in a lively and engaging manner.

The overwhelming number of requests for this publication has led to a second printing, only weeks after the first release. As a benefit of your membership in SCMEA, you will receive a copy of the handbook compliments of Gray's Reef National Marine Sanctuary.

We hope you enjoy From Whaling to Watching as much as we enjoyed producing it.
Positive impacts such as recycled building projects and environmental building techniques are demonstrated. **Contact:** Mark Madden, PO Box 361, Dewees Island, SC 29451-2662.

**Explorer Fleet:**

**Charleston Harbor Adventure**
Explore the salt marshes surrounding Charleston Harbor. A marine biologist guides hands-on activities aboard the boat. Adventure includes a beach walk, fishing, and interactive discussion. Daily, June 1 - September 30, schools groups and families are welcome. **Contact:** Reservations Staff at City Marina, 17 Lockwood Dr., Charleston, SC 29401.

**Laidlaw Environmental Services:**

*Earth Academy* is a free, public service designed to supplement environmental education for grades K-12, as well as adult and civic groups. Lessons range from practicing the 3R’s to reducing hazardous chemicals in the home. **Contact:** Amy Abrams, PO Box 210799, Columbia, SC 29221.

**Old Santee Canal State Park:**

KIDS FISHING FRENZY V
Saturday, June 1, 1996, 8:00 am - noon (rain or shine), for children 12 and under accompanied by an adult. Share the joy of fishing with a young person in the historic Biggs Creek Swamp. Bring a cane pole, bait and bag lunch. No registration required. **Contact:** Lee Lowder, 900 Stony Landing Rd., Moncks Corner, SC 29461, (803) 899-5200.

**Roper Mountain Science Center:**

*Science P.L.U.S. Institute* is offered this summer (1996) to educators teaching grades 1-8 (dates depend on grade level). Hands-on science instruction for elementary and middle school teachers. Credit available. An abundance of materials and supplies included free! **Contact:** Linda Pendergrass, Science P.L.U.S. Institute, 504 Roper Mountain Rd., Greenville, SC 29615.
South Carolina Marine Educators Association
Travel Assistance to NMEA Conference
Maximum Award: up to $500
Application Due: June 12, 1996
Notification: June 23, 1996
Funds Available: Upon receipt of proof of attendance

Name: ________________________ Occupation: ________________________

Home Address: ____________________________________________

Work Place and Address: ______________________________________

Work Phone: ________________________ Home Phone: ________________________

1. Are you currently a member of the South Carolina Marine Educators Association? (Please note that membership is a condition of the grant.)
   Yes _____ No _____

2. Are you a member of the National Marine Educators Association (NMEA)?
   Yes _____ No _____

3. Briefly define your professional role as it relates to marine/aquatic education.

4. Have you attended any marine education workshops, courses, conferences, etc., before? If so, please list a representative sample. (Indicate if you made presentations and topics.)

5. Are you planning to present a paper of workshop at the NMEA Conference? If so, please describe.

6. Please briefly describe your reasons for wanting to attend the NMEA Conference.

Statement of Responsibility:
I am very interested in attending the NMEA Conference and agree to submit a copy of my registration receipt and proof of attendance. I understand that my receipt of the award is dependent upon my submittal of the proof of attendance. As a condition of the grant, I will write an article for the SCMEA newsletter and/or make a presentation at the SCMEA conference describing my experiences and sharing information acquired at the NMEA Conference.

Signature ________________________ Date ________________________

Please sign and return, by June 12, 1996, to:
SCMEA Scholarship Committee; c/o Carole McAfee;
West Pelzer Primary School, 10 Stewart Street, West Pelzer, SC 29669
SC Wildlife Federation:  
"Federation Afield" - SCWF Field Trips  
June 15 - Foothills Trail Hike; September 28 - Landsford Candie hike/canoes. Easy to moderate hikes are guided by naturalists from SCWF. Pre-registration required. Free to members, $25 for non-members.  
Contact: Carolyn Reynolds or Trish Jerman 715 Woodrow St., Columbia, SC 29205. (803)771-4417.

USC - Spartanburg:  
"Teaching Environmental Education" - SETE 755. June 10-July 3, 1996, M-Th 8:30-11:30 am; Friday 7 am-7 pm field trips, PreK-12 educators. This is a 3-semester hour graduate course for educators focusing on environmental education leadership using programs such as Project WILD, Aquatic WILD, PLT, DHEC, etc. Required field trips are held on Friday. There is a $50 materials and resources fee. Contact: Dr. Ed Donovan, USC- Spartanburg, 800 University Way, Spartanburg, SC 29303, (803)599-2574.

US Department of Energy:  
"Teaching Radiation, Energy and Technology," July 22-26, 1996, 8:30 am - 4:30 pm, 6-12th grade science-related teachers. The purpose of this course is to provide interested teachers with up-to-date information, materials, and hands-on techniques for teaching nuclear science and technology. The program will include a wide range of topics including energy basics, history of the nuclear industry, waste management, atoms and radiation, and alternative sources of energy. Participants will receive $100 in materials and a $250 stipend for completion of the 5-day program. Registration deadline is May 31, 1996. Contact: Wanda Thielen (803) 648-6851 ext. 3313

Compiled with assistance from the Staff of the South Carolina Aquarium.

Dr. Sylvia Earle Highlight of NMEA Conference

In 1979, Dr. Sylvia Earle broke all records by diving untethered 1,250 feet into the depths of the ocean. Throughout her career as a leading marine biologist and deep-sea explorer, Earle has logged over 6000 hours underwater. Although less than half of the ocean has been explored, Dr. Earle has seen much of it. When she says "Our future is in jeopardy because the ocean is in jeopardy," she knows what she's talking about. As the keynote speaker at the 20th annual National Marine Educators Association (NMEA) conference Making Connections: Global Lessons from the Gulf of Maine, Dr. Earle will address the critical condition of our oceans and offer a blueprint for change. The conference will be held August 1-5, 1996 at the University of New Hampshire in Durham.

Dr. Earle was the first woman to serve as chief scientist of the National Oceanic and Atmospheric Administration; has led more than 50 scientific expeditions including the first, all-woman team of aquanauts conducting research in an underwater habitat for two weeks; was a pioneer in developing technology for deep-sea underwater research; and has written numerous publications and books. In 1995, Dr. Earle received the prestigious Bradford Washburn Award at the Boston Museum of Science for her outstanding contributions toward public understanding and appreciation of science and the vital role it plays in our lives.

In her most recent book, Sea Change--A Message of the Oceans, Dr. Earle makes an impassioned plea for a "sea change" in our attitudes about our oceans. She points out that overfishing, pollution, oil spills, plastic marine debris, and sewage sludge are all threatening the marine ecosystem's health. However, according to Dr. Earle, "We can still heal our oceans ... but we must move quickly." Using the Gulf of Maine and its watershed as a workshop, NMEA conference participants will explore how education, research, and advocacy are creating solutions in the Gulf and throughout the global ocean.

Other highlights of the week-long conference Making Connections: Global Lessons from the Gulf of Maine include an evening at the New England Aquarium in Boston; a watershed day at Merrowvista Education Center in the Ossipee Mountains; field trips to over 15 sites; a fisheries forum involving resource managers, industry representatives, scientists, fishing community members, and economists; and over 100 workshops featuring cutting-edge methods and research, as well as proven programs and processes, addressing current marine and aquatic issues.

Conference participants will also enjoy a dinner cruise of Lake Winnipesaukee aboard the M/S Mt. Washington, sample a traditional Downeast lobster bake, and end the week with an inspiring concert by the entertaining folk group Schooner Fare.

The conference is sponsored by the Gulf of Maine Marine Education Association (GOMMEA), NMEA, the Maine/New Hampshire Sea Grant College Program, University of New Hampshire Cooperative Extension, and the Gulf of Maine Council on the Marine Environment. For more information or to receive a registration brochure, call Sharon Meeker or Jeanne Meggison at (603) 749-1565 or write them at: NMEA 1996, Kingman Farm, University of New Hampshire, Durham, NH 03824-3512.
Since I am taking 52 people to the Galapagos in May, I thought I would share with you some of the unique characteristics of the flora and fauna. I will begin with birds since they are the most dominant and interesting aspect of the Islands. The birds are so unafraid that one could walk up and touch them; this, however, is prohibited by park regulations. "Booby" translates to "clown" in Spanish. The name reflects the awkwardness these animals show in taking off and the strange manner in which they allow people to walk right up to them! Boobies often ride on boat bows for startled flying fish to glide through the air. Birds dive on these "trapped fish" and thus we have coined the term "booby trap!"

Most birds incubate their eggs in special featherless pouches richly supplied with warmth from a network of blood vessels. Boobies accomplish their brooding by wrapping their "hot" webbed feet around the eggs! These are the only web-footed birds with webs between four toes instead of three. Adult birds fish by making spectacular dives into the ocean. The fish is not spared during the downward plunge; however, it is attacked on the return trip to the surface! Blue-footed boobies often plunge in unison into the abyss. Literature suggests that one individual may signal others to dive by whistling. One bird was observed diving into 2 feet of water from some 50 feet in the air. You must learn that trick on the first dive or you are selected out of existence! Three species of boobies-blue-footed, masked, and red-footed-live on the Islands and fill various niches by occupying different nesting areas and feeding at different distances from land. The particular niche determines the number of offspring that can be supported.

The blue-footed booby is so named because of his bright blue feet. The male bird attracts the female with several activities. "Sky pointing" is courting behavior in which the male raises his beak and tail skyward and simultaneously opens his wings. At the same time he "whistles" at the female who answers by "honking." He will often fly into the air and wave his "beautiful" blue feet at his potential mate. As a last gesture he will drop a twig at the female's feet. If she picks it up, it is like a wedding ring and the pair will be "bird and man" forever after! Blue-footed boobies live in dense colonies. Nests consist of a few twigs placed on the ground. This symbolic nest building probably reflects behavior of ancestors who produced more elaborate nests. It is thought that "false" nest building is a pair-bonding activity that helps ensure the couple remain together long enough to raise their offspring. Blue-foots fish close to shore and typically lay two eggs. Without far to travel for food, parents are able to support two chicks and both often live to maturity.

Last April I saw blue-feet with three chicks instead of the usual two, indicating a real bonanza in food and appropriate environmental conditions. For the first time I noticed hawks sitting on rocks next to the shore while on other trips I had only seen them in the highlands. This suggested to me that some chicks would either be stolen from the nest or abandoned by the mother. Since babies are born five days apart the older, stronger chick can force a younger sibling out of the guano ring. Once beyond the white feces ring produced by the mother, the ousted chick is abandoned and usually dies. Immediately the Galapagos mocking bird wanders over and begins pecking at the deserted chick. Also, it is not unusual to see a hawk or frigate bird fly off with a rejected chick.

Masked boobies live on the Islands' rocky shores and lay eggs among the rocks. They fish midway between blue and red-feet. This species lays two eggs about 5 days apart but the older chick always ejects the second from the nest where it dies. Producing two eggs represents an insurance policy. If one chick dies early in life the other is left. Since masked boobies fish far from land it is very difficult to get enough food for the survival of both chicks. "Sibling murder" is carried out regardless of whether food is scarce or abundant. On the other hand, blue-footed booby chicks fight only when there is scarcity of food and then the youngest is ejected from the nest.

Red-footed boobies are found only on the peripheral islands in the Galapagos. They are the only species of boobies that nest in low shrubs, often salt bush. It is odd to see a web-footed bird perched on a tree limb. Females build nests using materials gathered by the male. Because red-footed boobies fish a tremendous distance from the nest site, this species lays only one egg. It might be 60 hours before either parent can get back to the nest with food. Sometimes offspring are abandoned. The birds could never support more than one chick with the fishing grounds so far away.
DO YOU KNOW A TERRIFIC TEACHER ... OR AN EXCELLENT EDUCATOR ... OR AN INNOVATIVE INSTRUCTOR?

If you do, then nominate that person for SCMEA's Educator of the Year Award! We are looking for educators who are doing exciting things in the field of marine/aquatic education. Any educator working with pre-schoolers through university level students is eligible. Teachers in traditional school settings, as well as "informal educators" working in museums, nature centers and other educational settings may be nominated. Nominees for this award need not be marine science, or even full time science, teachers. Anyone who teaches about marine or aquatic environments at some point during the year is eligible. (Current SCMEA Board members are ineligible for this award. Current Board members are listed on page 2 of this newsletter.)

The dynamic person chosen as our 1996-97 Educator of the Year will be given a $250 cash award, to be spent at the discretion of the recipient, and a five-year membership to SCMEA. The winner's name will be announced on October 5 at our annual conference business meeting. A plaque will be presented by SCMEA's past-president at the South Carolina Science Council annual convention in November.

The recipient of the Educator of the Year award will be required to write an article for our Spring newsletter introducing himself/herself to our membership and telling us something about his or her winning teaching style!

This is a great opportunity to recognize that educator whose energy, innovativeness and dedication have been directed toward increasing awareness and understanding of marine and aquatic environments. A nomination form is included in this issue. Fill it out for your favorite deserving educator! All nomination forms must be postmarked by September 15, 1996. Send all nominations to "Marine Educator of the Year", c/o Carole McAfee, West Pelzer Primary School, 10 Stewart St., West Pelzer, SC 29689.

Become a Member of the South Carolina Marine Educators Association

and 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: __________________________________________ Place of Employment: ____________________________
Street or PO Box City State Zip

Home Telephone Number Work Telephone Number

___ One year - $10 ___ Three years - $25 ___ Five years - $40

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

Join the National Marine Educators Association

and 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: ____________________________
Address: __________________________________________ Place of Employment: ____________________________
(Street or PO Box) City State Zip

Individual Memberships

___ Student - $15 ___ Active, 1 year - $25 ___ Active, 2 years - $48 ___ Active, 3 years - $68

Please make check payable to NMEA and mail to: National Marine Educators Association
PO Box 51215, Pacific Grove, CA 93950

SCMEA SPRING '96
1996 SCMEA CONFERENCE
"The Underwater World"
October 4 - 6, 1996

Make plans to join us at the next annual conference of the South Carolina Marine Educators Association on Fripp Island, just south of Beaufort, SC. Fripp is a private resort island with pristine Pritchards Island to the south and Hunting Island State Park to the north.

This year's theme will have a distinct biological flare, emphasizing the "underwater creatures of the marine environment." There will even be an opportunity to experience SCUBA diving in a pool just to see what it feels like to be an underwater organism!

More detailed information will be included in the Fall Issue of SeaScripts.

If you are interested in volunteering on a conference committee, please contact Fred James at 1-800-476-7272
(or write Biology Department, Presbyterian College, South Broad Street, Clinton, SC 29325.

SEE YOU THERE!

SCMEA
C/o Center for Science Education
University of South Carolina
Columbia, SC 29208
Call for Presentations and Exhibits
South Carolina Marine Educators Association's Annual Conference
"The Underwater World"

October 4-6, 1996
Fripp Island Resort

Please type or print legibly and return this form by June 30 to:
Leslie Sautter, Department of Geology, College of Charleston, Charleston, SC 29424
Phone: (803) 953-5586; Fax: (803) 953-5446

**PRESENTER(s) and/or EXHIBITOR(s)**

Name (lead Presenter):

Place of Employment/Title:

Address: (check if home ___)

City, State, Zip:

Work Phone: __________________ Home Phone:

Additional Presenters:

**SESSION and EXHIBIT INFORMATION** (does not have to relate directly to the theme)

Title: ____________________________

Type of Session or Exhibit:

___ 45 minute "hands-on" workshop

___ 45 minute information session (i.e., presentation of a program or project)

___ 75 minute workshop (note: These must be very "hands-on" workshops.

There are spaces for only 8 of the longer workshops.)

___ field trip (several hours)

___ exhibit (on display Friday and Saturday)

Intended Audience (check as many as apply):

  elementary ___ secondary ___ college ___ general public ___ other _______

Maximum Number of Participants: ______________________

Equipment Needed (very important!):

___ erasable easel

___ slide projector

___ overhead projector

___ table(s) # _______

___ VCR and monitor

___ other: __________________

Brief Description of Proposed Session or Exhibit

**Presenters:** On the back of this page, please describe your session in 25 words or less.
This description will be used in the conference brochure. Often the attendance of a session is
determined by its "advertising", so "sell" your program with a creative or enticing description!

**Exhibitors:** On the back of this page, please provide a 1- or 2-sentence description of what will
be displayed.

THANK YOU!!