

CONFERENCE AGENDA

Friday, April 8

- 9:00 - 11:00 SCMEA Board meeting - **Alston Room**
11:30 - 4:00 Field Trips
4:00 - 7:00 Registration - **Tara Lobby**
5:30 - 6:00 "Welcome New Friends" reception for first-timers and new members - **Alston Room**
5:30 - 6:30 Wine & Cheese Reception, Posters, Exhibits - **Tara Lobby**
6:30 - 7:30 Keynote: Mary Edna Fraser, textile artist, "A Celebration of Barrier Islands" - **Tara Theater**
7:30 - until Dinner - **Tara Ballroom**.

Saturday, April 9

- Breakfast on your own
7:30 - 8:30 Coffee, snacks
8:00 - 4:00 Registration - **Tara Lobby**
8:00 - 4:00 Exhibits and Posters - **Tara Lobby**
8:15 - 9:00 Concurrent Sessions in **Conference Center** meeting rooms
9:10 - 11:00 Plenary Session - **Tara Auditorium**
11:15 - 12:00 Concurrent Sessions in **Conference Center** meeting rooms
12:00 - 2:00 Lunch/Business Meeting - **Tara Ballroom**
2:00 - 4:15 Concurrent Sessions in **Conference Center** and **Litchfield Beach**
5:00 - 5:30 Marine Meringue - **Tara Lobby**
6:00 - 7:30 Luau Dinner and Silent Auction – **Tara Ballroom**
7:30 - 8:30 Auction – **Tara Ballroom**
9:00 - 12:00 Live Music – **Tara Ballroom**

Sunday, April 10

- 8:00 - 9:00 Coffee and snacks
8:00 - 10:00 Exhibits and Posters - **Tara Lobby**
8:30 - 10:45 Concurrent Sessions in **Conference Center** meeting rooms
11:00 - 12:30 Brunch/Awards/Auction Card Finalists - **Tara Ballroom**

SPONSORS

The Members of SCMEA
Belle W. Baruch Institute for Marine & Coastal Sciences
(University of South Carolina)
Alligator Adventure
Captain Dick's
Huntington Beach State Park
Myrtle Beach State Park
Ripley's Aquarium
Brookgreen Gardens
South Carolina Sea Grant Consortium
University of South Carolina's Center for Science Education
Southeast Center for Ocean Sciences Education Excellence
(SE-COSEE)

SESSIONS SCHEDULE

(E=Elementary, M=Middle, S=Secondary, C=College,
G=General, Adm = Administrators, A=All)

Saturday, April 9

SESSION I: CONCURRENT SESSION: 8:15 - 9:00

- **Salt Marshes: Pristine and Impacted (A) – Alston**
Eric Koepfler, Coastal Carolina University; Sam Lake; Jessica Anderson
We will illustrate the usefulness of an online fieldtrip where specific habitat details are discussed and shown. We will begin the field trip with reference to an aerial image showing geographic location, discuss the physical and geological setting, show plant community, and then zoom in on individual plants and animals from the habitat. Determining the extent of ecosystem habitats (i.e. mudflats in a salt marsh) is a common task of ecologists. We will demonstrate this process using computer based and a simpler paper and scissors approach. The manner in which organisms are distributed over space and time will be shown using an interactive webpage where the numbers and types of organisms appear as hotspots when the cursor scrolls over the page. This activity then is combined with accessing a database, selecting a subset of samples and determining means and standard deviations. Anthropogenic impacts upon salt marshes will be demonstrated by a series of aerial images from the Grand Strand region of South Carolina.
- **People, Resources and the Environment (E, M) - Francis Marion A - Denise Zacherl, Westview Elementary School**
This interdisciplinary hands-on workshop will introduce elementary and middle school students to concepts of carrying capacity, human geography and environmental stewardship. The workshop will include memorable games and simulations, and free materials.

- **The Crab That Played With the Sea (E, G) - Francis Marion B**
Denise C. Trufan, Indian Land Elementary/Middle School
Connect art and literature with science. Find out about "The Crab That Played With the Sea", make a puppet, and talk about the needs of marine animals.

- **Discover Carolina at Your Coastal Parks! (E, M, Adm)**
Francis Marion C - Elaine Freeman, South Carolina State Parks; Amanda Howard
Imagine . . . classrooms without walls . . . blue skies for bulletin boards . . . wildlife instead of windows . . . field studies about the coast – at the coast!

SESSION II: PLENARY SESSION: 9:10 - 11:00

- **Current Marine Research Roundtable (A) - Tara Theater (20-minute presentations)**
Paula Keener-Chavis, NOAA Office of Ocean Exploration: Moderator
*Adam Herbert, College of Charleston: Home Range and Nest Use of the Rice Rat, *Oryzomys palustris*, in a Tidal Marsh*
Bill Eiser, South Carolina DHEC-OCRM: Beach Erosion and Beachfront Management in SC

Doug Williams, University of South Carolina: Opportunities for Marine Education in the Arctic

Heidi Atwood, South Carolina DNR: Waddell Mariculture Center: Marine Research in Coastal South Carolina
Bob Feller, University of South Carolina: The Perfect Match: Research and South Carolina Science Standards

This plenary session will consist of short presentations by several local marine scientists. Each presentation will be followed by a short question period. A longer discussion will follow at the end of all presentations. This will be an exchange of ideas between teachers and researchers, and is intended to be a two-way communication.

SESSION III: CONCURRENT SESSION: 11:15 - 12:00

- **Mussel Madness: Using Marine Invertebrates to Explore Ecology and Genetics (E,M) – Alston**
Brice Gill and Crystal Welch, TIDE, Marine Science Program, University of South Carolina
Learn about the experiences of Columbia area teachers who worked in a USC laboratory through the Rising Tide project. They will discuss the ecology of rocky intertidal organisms, including a simple and safe marine organism dissection.

- **Online Resources for Virtual At-Sea Experiences (A)**
Francis Marion A - Rachel McEvers, Project Oceanica, Department of Geology, College of Charleston
Project Oceanica has found an exciting "niche" as a liaison between educators and scientists before, during and after an oceanographic mission. Learn more about this concept and see how these resources can be used as a virtual "at sea" experience.

- **The Charleston NOAA Marine Mammal Program (A)**
Francis Marion B
Jessie Stenftenagel, NOAA/NOS
An inside look at ongoing research projects involving population structure, behavior and life history of the wild Atlantic bottlenose dolphin.

- **Clearing up Common Misconceptions About the Common Seawhip, *Leptogorgia virgulata* (A) - Francis Marion C**
Jacqueline Shapo, College of Charleston and NOAA/NOS/CCEHBR
Come learn about the biology, ecology, chemical defense and immune response of an amazing soft coral, *Leptogorgia virgulata*. Teaching aids available for classroom application.

SESSION IV: CONCURRENT SESSION: 2:00 - 3:15 (2:00 - 4:00 for Litchfield Beach field sessions)

- **Shell and Sand Candle Making Workshop (2:00 - 3:15) (E, G) – Francis Marion A - Sara J. Marhenke, Charleston County PRC, Caw Caw Interpretive Center**
Illuminate your world with your own 'art-sea' creations. Learn several techniques for making candles from treasures of the sea, and how to do it safely with kids.

- ➔ **Teachings From a Tidepool (2:00 - 3:15) (E, M) - Francis Marion B** - *Colette Dryden, Richland County School District 1; Jim Fenner*
Teach the tidepool without getting your feet wet! Participate in hands-on activities with live tidepool organisms. Handouts included. Drawing for prizes to include tidepool kit.

- ➔ **“The Secret Lives of Seashells” Beachcombing Walk (2:00 - 4:00) (A) - Litchfield Beach (meet in Francis Marion C)** - *Mike Walker, Huntington Beach State Park*
Join us for a walk on Litchfield Beach in search of those mysterious mollusks. Learn more about the secret lives of the seashells of South Carolina’s coast, including how they protect themselves, how they find food and how they reproduce.

- ➔ **Beach Centers: An Interactive Field Experience for the Young and Young-At-Heart (2:00 - 4:00) (A) - Litchfield Beach (meet in Francis Marion D) - Carmelina Livingston, South Carolina Aquarium; Bruce Lampright**
Do you teach young children or “young at heart” adults? Come for some fun in the sun and learn how the beach can be a powerful learning tool for marine science and the arts. Beach Centers is an activity from the COASTeam-SC Aquarium Aquatic Workshops and is geared for young children but can be easily adapted to the older folks. We will sieve sand, sculpt sea structures, explore shells and dune plants, patrol for beach yuckies, eye-spy ships and end the day with a full sensory beachcombing hunt!

SESSION V: CONCURRENT SESSION: 3:30 - 4:15

- ➔ **Using GIS to Study Barrier Island Systems (S) – Alston** - *Elizabeth Gehrman, Coastal Carolina University; Chris Weeks; Eric Wright; Robert Young*
Participants will use web-based GIS software to examine historical barrier island change and to investigate geologic development of North Island, South Carolina.
- ➔ **The AGE of Ocean Exploration (M, S) - Francis Marion A** - *Cindy Renkas, NOAA Office of Ocean Exploration*
Get an overview of NOAA’s very popular Ocean Explorer (OE) website containing resources almost as vast as the oceans it is based upon! Learn how to use Ocean AGE (Another Generation of Explorers) to inspire your students and connect them to ocean scientists through video profiles, missions logs, live web chats and more. Take home OE materials, including free CD-ROMs!
- ➔ **Sea Shells Have a Life (E, M, G) - Francis Marion B** - *Sarah McGuire, COASTeam Program*
Explore adaptations by creating your own mollusk! Also, come and learn about our exciting new COASTeam opportunities for middle school teachers this summer.

Sunday, April 10

SESSION VI: CONCURRENT SESSION: 8:30 - 9:45

- ➔ **Catch the SEACOOS Wave (A) - Alston** - *Margaret Olsen, Southeast Center for Ocean Sciences Education Excellence (SECOSEE); Lundie Spence; Elizabeth Rogers*

The SouthEast Center for Ocean Sciences Excellence presents “Catch The SEACOOS Wave”. Come see how to involve your students in a new interactive on-line wave poster (a collaboration between SECOSEE and NC, SC, GA, and FL scientists). Each participant will receive an awesome “making waves” poster and take part in several hands-on wave activities, ideal for classroom use. Also find out how you can become involved in some exciting upcoming offerings from SECOSEE. This is one session you don’t want to miss!

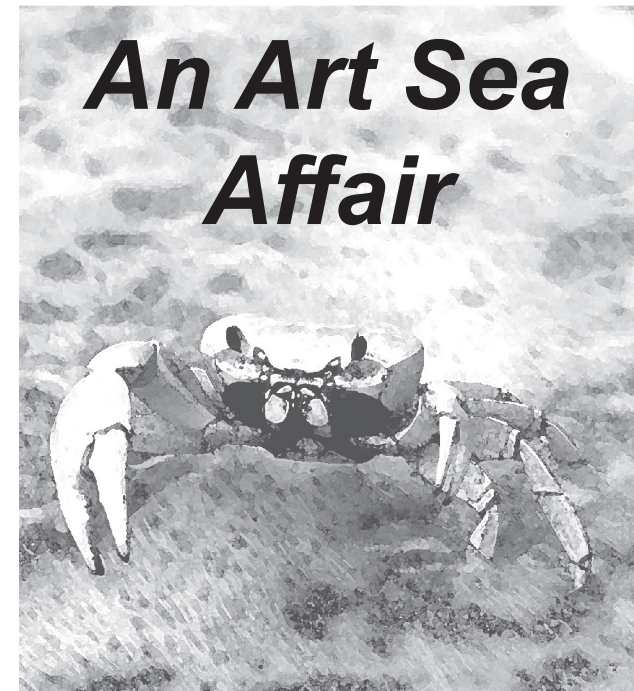
- ➔ **Plankton Wars! (M, S) - Francis Marion A - Wendy Wicke, Southeast Phytoplankton Monitoring Network; Julie Cahill**
Discover the world of phytoplankton and their unique adaptations by creating a new species. Participants will compete to see which of their creations is most adept to live in the photic zone!
- ➔ **Earth as Art (M) – Francis Marion B - Jody Tinsley, SC MAPS Project**
Aerial photographs and satellite images of the coastline provide unique perspectives of natural and land-use patterns that are truly artistic in their own right.
- ➔ **Exploring Plate Tectonics - A Hands-On Approach (M, S, C) - Francis Marion C - Leslie Sautter, Project Oceanica, Department of Geology, College of Charleston**
Using models, maps and puzzles, explore plate tectonics the fun way. We’ll cover continental drift, seafloor spreading and “play” with the 3-D plate puzzle.

SESSION VII: CONCURRENT SESSION: 10:00 - 10:45

- ➔ **Using Natural and Social Systems Thinking to Improve Learning (A) – Alston** - *Edward H. Falco, SC State Department of Education*
This informative and hands-on session uses “systems thinking” strategies to enhance instruction effectiveness and audience understanding by building connections, showing relevance, and integrating content.
- ➔ **The Science of SAPELO (E, M, S, C, Adm) - Francis Marion A** - *Theresa Pinilla, Stockbridge Middle School*
Our students’ view of science is influenced by our own. The SAPELO Project offers teachers the opportunity to work alongside researchers at UGA’s Marine Institute.
- ➔ **Spend a Week At A Beautiful Audubon Nature Preserve On An Island In Maine While Earning CEUs or Other Credits (A) - Francis Marion B - Steve Berkowitz, Coastal Carolina University**
A description of the Audubon Camp on Hog Island, Maine, and their summer Educators’ Workshop. Knowledgeable and experienced instructors, great food, gorgeous scenery, and credit, too!
- ➔ **Zooplankton: Wild, Beautiful and Finally Identifiable (S, C) - Francis Marion C - Wendy Allen, North Inlet-Winyah Bay National Estuarine Research Reserve; Beth Thomas; Brock Renkas**
Gain practice identifying zooplankton using microscopes and the new illustrated guide, *Zooplankton of the Atlantic and Gulf Coasts*. Tips for collecting and analyzing plankton data will also be shared.



Annual Conference 8-10 April 2005 Concurrent Sessions Schedule



Pawleys Island, SC