

SeaScripts



The Newsletter of the South Carolina Marine Educators Association



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Spring 2014



SCMEA

The South Carolina Marine Educators Association

Dear SCMEA Members,

It's the middle of March and I am eagerly awaiting the first day of Spring! It has been quite a winter here in South Carolina complete with cold temperatures, just about every kind of precipitation, and even a few days off due to the Polar Vortex. While ice was forming on the Ravenel Bridge here in Charleston, snow repeatedly covered the North-east, and floodwaters rose in the Midwest.

The winter storms nationwide have, for some, renewed the conversation about climate change and remind me of a satirical article by Andy Borowitz published in the New Yorker: "Polar Vortex causes Hundreds of Injuries as People Making Snide Remarks about Climate Change are Punched in Face." The article went on to describe the fictional injuries that were suffered when unfortunate individuals used the cold snap as "proof" that global warming didn't exist. Some of us have probably made jokes along these lines too, knowing in the back of our minds that single weather events don't actually tell you a whole lot about the larger climate picture. Think back to the old adage that "climate is what you expect; weather is what you get."

Although climate change is a big global issue, we are already seeing some impacts locally. Sea level rise is probably the most obvious to us as marine scientists and educators. The issue is a daunting one to think about in the big picture, but I recently heard about a local initiative to help raise awareness: SC DHEC's King Tides Initiative. A "King Tide" is described as the highest seasonal tides each year. We are probably all familiar with coastal flooding as a result of unusually high tides. If you live in Charleston, how many times have you checked the tide chart before heading downtown, for example? The King Tide Initiative encourages folks to submit photographs of these unusually high tide events, the idea being that these seasonally high tides provide a preview of what we might experience regularly in the future. To find out more about the initiative, how you and your students can participate, and where to download the mobile app, visit <http://www.scdhec.gov/environment/ocrm/kingtides.htm> or just "Google:" SC DHEC King Tides. Get your cameras ready!



Hoping that you all enjoy the Spring weather that is (hopefully) in store for us soon!

-Blaik Keppler
SCMEA President

Salt Marsh STEAM

(Science, Technology, Engineering, Art, and Math)

ACE Basin National Estuarine Research Reserve

August 4-8, 2014

Get your students' creative juices flowing while learning valuable STEM skills in the salt marsh. Renowned batik artist, Mary Edna Fraser, will kick off the week with a presentation demonstrating how her art has been used for communicating science! Kevin Kurtz, children's book author of *A Day in the Salt Marsh*, joins nature photographer, Karen Beshears, visual arts teacher, Marie Nichols, and educators and researchers from SC Sea Grant, North Inlet-Winyah Bay NERR, and ACE Basin NERR for a workshop designed to capture the science of the salt marsh through art and literature.

Applications due: April 25.

To apply go to:

<https://www.surveymonkey.com/s/SaltMarshSTEAM>

Registration is \$50 and includes:

- all supplies
- lesson plans
- lodging, food, and transportation

Open to all 6th-12th grade teachers and nonformal educators.

Recertification credits available.

Activities:

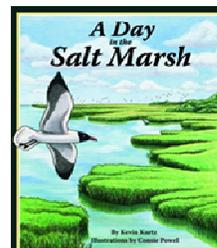
- Sketching
- Water-quality monitoring
- Photography
- Estuaries 101 curriculum
- Kayaking
- Writing
- Trawl aboard E/V *Discovery*
- Watercolor

Requirements:

- Commitment to five-day workshop, plus pre and post webinar
- MUST be able to tolerate summer temperatures, kayaking, insects, and physical activity
- Upon completion of the workshop, teachers must develop a lesson plan to be shared with all participants.



Questions? Contact EV Bell at elizabeth.vernon@scseagrant.org



Monterey Bay Ramblings

by Bruce C. Lampright, Director of Brays Island Nature Center

I recently returned from a great scouting trip to Monterey Bay, California. I was there to check out local resources and field sites for an upcoming Family Nature Summit that will be held at the end of June (6/28-7/4).



The Monterey Cypress is native only to two small areas, Pebble Beach & Pt. Lobos.....it has now been planted along much of the West Coast



Monterey shoreline at sunrise.....looking north across Monterey Bay toward Santa Cruz

It had been years since I was last on the Monterey Peninsula, but I've always remembered the phenomenal landscapes and great tide pooling during my past visits.....I was not disappointed this time either. After several days of rushing to tightly scheduled meetings, I finally got some time in the field. From our summit site at Asilomar Conference Center, it was only a few minutes to a sandy beach and rocky tidal pools loaded with marine organisms of every shape,

texture and color. Sea stars, anemones, crabs, gastropods and coralline algae were abundant in every piece of water I could find.....it reminded me of my old textbooks in Marine Science 101 at USC!

One memorable day was spent in a kayak, paddling the glassy waters of Monterey Bay in the morning and exploring the famous Elkhorn Slough that afternoon. The visibility in the bay was unnaturally clear (according to my naturalist guide); I could see at least 50 feet down to the ocean floor. Entire lengths of giant kelp harbored many species of fish, crustaceans, large nudibranchs, and even sleeping sea otters on the surface. Harbor seals playfully dove under our kayaks and then snorted at us from nearby. We had to pass downwind from a massive colony of basking California sea lions and had to smell them after hearing their great barking. Elkhorn Slough was just as special, with a rich assortment of birds, marine inverte-



Sea Otters napping at Moss Landing



California Sea Lions.....note the big male with the large sagittal crest

brates, and many more otters, seals and sea lions. Paddling in from Moss Landing we had to battle a rare ripping "King Tide", the west coast term for a big spring tide. The Slough is truly one of the finest birding destinations in North America.

As a summit faculty member I've had the wonderful opportunity to teach in places like Lake Tahoe, the Colorado Rockies, and Bar Harbor, Maine. I hope some of you can join us as a "summiteer" at this or a future summit.....and bring your family! Check us out at www.familynaturesummits.org.



2014 Project SORT Marine Debris Teacher Workshop Savannah Georgia

Where: University of Georgia Marine Extension Service, Skidaway Island, Savannah, Georgia

When: Monday, July 7 (starting at 8:30 AM) through Thursday, July 10 (ending at 12 PM), 2014

Who to contact: Dodie Sanders (912) 598-2340; sandersd@uga.edu for registration form.

Fee: \$50 per person

Logistics: Meals (Monday lunch, dinner, Tuesday breakfast, lunch, dinner, Wednesday breakfast, lunch, dinner and Thursday breakfast) education fees, lodging (if needed Sunday through Wednesday), workshop sessions, and education materials covered by the \$50 registration fee.

More about the workshop: The Project SORT Marine Debris Teacher Workshop, funded by the National Oceanic and Atmospheric Administration's Marine Debris Program, will be held on Monday July 7th through Thursday, July 10th (until noon). Interspersed with presentations given by research scientists on current marine debris topics are hands-on learning sessions that will take place in the lab and out in the field. Educational materials to enhance what you are already teaching will be provided. Marine debris topics will include types, sources, movements, micro plastics and conservation measures. A boat excursion to nearby Wassaw National Wildlife Refuge to conduct a marine debris shoreline survey will be a highlight!

More about the lodging: Dormitory style housing is provided by the University of Georgia Marine Extension Service and space is very limited! Please indicate if you require housing, along with any special dietary restrictions in the spaces below.

Other important information: Space for the workshop is limited and registrations are made first-come-first-serve. No-shows or cancellations made without at least 2 weeks prior-to-workshop notice result in forfeiture of registration fees. **Full attendance at all workshop sessions is required. Deadline for submission is June 20, 2014.**

E-mail Dodie Sanders (sandersd@uga.edu) for registration forms.





Santee, South Carolina

April 25-27, 2014

~Natural History Walks~

~Photography workshops~

~Canoe and kayak trips~

~Boat trip on Lake Marion~

~Birds, butterflies, reptiles, amphibians, and more!!~

Nature Photography Contest!

Deadline: March 31, 2014

Top winners announced...photography displayed

Keynote Dinner on Friday, April 25th

At Santee Cultural Arts Center with

Dr. Richard Porcher, Professor Emeritus

The Citadel

Santee Birding and Nature Festival

Santee National Wildlife Refuge

2125 Fort Watson Road

Summerton, South Carolina 29148

Phone: (803) 854-2131

www.santeebirdingfestival.com

Registration opens on March 1st

Find us on Facebook...like us, and share us!

Marine Mammals in Coastal Georgia

Teacher Workshop

Join experts in the Marine Mammal field who will speak on the North Atlantic right whale, Atlantic bottlenose dolphin, the Florida manatee and their connections to the Georgia coast. Current research, threats, and conservation efforts, life history, behaviors, and adaptations will be presented along with Estuaries 101 curriculum overview and fun classroom activity sessions.

DATE: Saturday April 12, 2014 from 8:45-5:00

LOCATION: Georgia Department of Natural Resources, Brunswick, Georgia

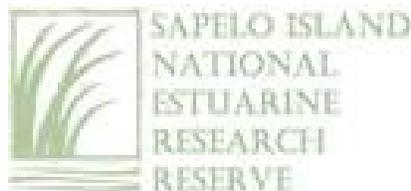
COST: \$20, includes refreshments, lunch, and resource materials

K-12 CURRICULUM AND RESOURCES: provided for all participants; workshop is open to all formal and informal educators.

Please contact Georgia Graves, for questions and more details

georgiabeachwalk@bellsouth.net

Topics and activities will include: Cetaceans of Georgia, Right Whale Life History and Conservation, Atlantic Bottlenose Dolphin and Morbillivirus in Georgia, marine mammal activity sessions, Life History and Conservation of the Florida Manatee in Georgia and Life History and Conservation of the Atlantic Bottlenose Dolphin



Also, save the date for summer workshops! June 16-18 Sea Turtle Conservation and June 25- 27 Coastal Ecology. Please let me know if you are interested in attending! Please contact me for additional information.

Seeking Nominations for Exemplary EE Lessons & Curriculum

The Captain Planet Foundation is scouring the country for the best, free, hands-on science lessons that teach concepts in an environmental context. If your organization has created, funded or featured outstanding open educational resources lessons or curriculum for grades K-12, on any topic in life science, earth and space science, or physical science, please consider sharing a review copy via hyperlink or pdf. If you have already aligned the materials with any science standards, it would be helpful to receive that correlation as well. Original directions or protocols for environmental stewardship activities, citizen science, STEM learning projects, and engineering challenges are also welcome.

The world is full of excellent science teaching resources, many of which show children the world through an environmental lens. However, no teacher has the time to sort through them all to find the best. Help us spotlight exemplary hands-on science lessons that use the environment as a context for learning and engage children in meaningful real-world activities. You'll be saving classroom teachers from re-inventing the wheel and gaining a wider audience for materials that have already been created.

Awards will be presented in numerous categories. Nominations will be accepted through April 30, 2014.

Curriculum documents, pdfs or hyperlinks may be emailed to Karan@CaptainPlanetFdn.org.

Hard copies may be mailed to:

Karan Wood
Director, Leadership Center
Captain Planet Foundation
133 Luckie Street
Atlanta, GA 30303



Sharing Ocean Acidification Resources for Communicators and Educators

This new webinar series provides ocean acidification communication tools to formal & informal educators, and stakeholders across the country. One of its primary goals, is to promote a more integrated and effective ocean acidification education community by sharing ocean acidification education and communication activities virtually. With awareness of and access to these resources, the ocean acidification education and communication community will be able to utilize and continue to create cutting edge communication tools that incorporate current scientific and communication research.

This series is jointly sponsored by the NOAA [National Marine Sanctuaries](#) and Ocean Acidification Program.

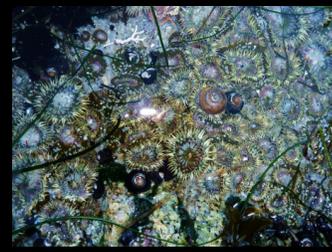
Webinar Schedule : Please check website to find finalized dates and times. Registration and webinar information will be posted shortly. (<http://oceanacidification.noaa.gov/AreasofFocus/EducationOutreach/SOARCEWebinarSeries.aspx>)



Cover photo

by Bruce Lampright

Aggregating
Anemones & Turban
Snails in a tide pool at
Pt. Pinos Lighthouse



2014 From Seeds to Shoreline Teacher Workshops!



What is S2S?: S2S is the only student-driven salt marsh restoration project in South Carolina. During the school year, students and teachers engage in all steps of cultivating and transplanting *Spartina alterniflora*, or smooth cord grass, the dominant plant in South Carolina salt marshes and learn about the importance of this critical coastal habitat. Learn more at: www.scseagrant.org/content/?cid=497

What's the Cost and Who Can Participate?

S2S is a free program available to South Carolina educators.

How Do I Get Involved? Attendance at one of the free teacher trainings is required for participation in the 2014-2015 school year.

What Can I Expect from the Training?

Learn about salt marsh ecology and *S. alterniflora* life cycle • participate in hands-on activities for cultivating and transplanting *S. alterniflora* • gain new ideas for classroom lessons and field activities • develop a strategy for implementing S2S during the 2014-2015 school year • receive S2S starter kits, educational resources, and lunch!

You might also have the chance to get muddy!

Are Credits Offered?

Yes. Credits will be determined based on participation in the workshop and during the 2014-2015 school year. More information will be provided upon registration.

Workshop Registration Directions:

To participate in the S2S program during the 2014-2015 school year, *attendance at one of the free teacher trainings is required*. Trainings will be from 9:00 AM - 5:00 PM in the following locations:

June 25th: SC Department of Natural Resources
James Island, SC

June 26th: Waddell Mariculture Center
Bluffton, SC

June 27th: Huntington Beach State Park
Murrells Inlet, SC

To Apply: Fill out the registration link:
<https://www.surveymonkey.com/s/M5Z6TB6>.
Deadline to apply is **May 5, 2014**.

Questions: EV Bell, Marine Education Specialist,
South Carolina Sea Grant Consortium
elizabeth.vernon@scseagrant.org



SCMEA Contacts

President:

Blaik Keppler

SC DNR/ACE Basin NERR
kepplerb@dnr.sc.gov

President Elect:

Meika Samuel

South Carolina State Museum
meika.samuel@scmuseum.org

Past President:

Beth Thomas

North Inlet-Winyah Bay NERR
beth@belle.baruch.sc.edu

Membership/Treasurer:

Lindsay Thomas

North Inlet-Winyah Bay NERR
LThomas@horrycountyschools.net

Secretary:

Derenda Marshall

McDonald Elementary School
dmarshall9@sc.rr.com

Media Coordinator:

Julie Binz

SC DNR/ACE Basin NERR
binzj@dnr.sc.gov

Board of Directors:

Karen Beshears

KDB Consulting
kbeshears@earthlink.net

Dr. Brandis Hartsell

Roper Mountain Science Center
bhartsel@greenville.k12.sc.us

Rachel Herold

DuBose Middle School
rherold12@gmail.com

Allie Kreutzer

Sewee Association
Sewee.educator@earthlink.net

Cindy Lilly

Ocean Bay Middle School
clilly001@horrycountyschools.net

Sarah Piwinski

Trident United Way
spiwinski@gmail.com

NMEA Representative:

Jaime Thom

South Carolina Aquarium
jthom@scaquarium.org

Scholarship/Awards:

Brian Thill

South Carolina Aquarium
bthill@scaquarium.org



Success at the 2014 STEM Festival

On a rainy Saturday morning in February, many different organizations from around Charleston braved the weather and came together to celebrate STEM – science, technology, engineering, and mathematics! The inaugural Charleston STEM Festival, an initiative of the Lowcountry STEM Collaborative, commenced on February 8th at Liberty Square in downtown Charleston. Over 25 local industries, non-profits, and educational institutions showcased activities and demonstrations that related to STEM. The wet morning turned into a sunny afternoon and about 1500 people came out to take part in the festivities. The Charleston STEM Festival also kicked off many other STEM events that were happening around Charleston in the weeks following the festival. A BIG thank you to the SCMEA members that were exhibitors at the event! Planning has already started for next year's festival. If you would like to be a part of the Charleston STEM Festival in 2015, then please email chs.stemfest@gmail.com to express your interest.

Sailing into Marine Education from the Ocean to the Bay NMEA Conference July 21-25 in Annapolis, MD

Registration is now open!
Early Bird Registration ends **April 30, 2014**
<http://www.nmea2014.com/index.html>

Apply for scholarships now through SCMEA <http://scomarineed.org/awards-scholarships/>

SCMEA is taking application for 2 Jacques Cousteau Memorial Scholarships (travel awards) for the summer conference. Applications are due **April 1!**

Robin Sheek at Laing Middle School was the 2013 award winner.

For questions or more information please contact Brian Thill at bthill@scaquarium.org or (843) 579-8546



NMEA

National Marine Educators Association Update

NMEA has been hard at work creating a new website that will provide excellent membership social networking opportunities. All members are now able to network with peers by using the updated website. As a member you should have been emailed a username and password to access your account. From there you can network to your hearts content!

Email nmea@marine-ed.org for help. Explore the site and have fun!
<http://www.marine-ed.org/>

SeaScripts is published and distributed on a quarterly basis. The submission of articles and announcements to the editor, **Kate Brown, at kbrown@scaquarium.org**, is greatly appreciated and encouraged. To ensure that your submission is included in the proper issue, please observe the following deadlines:

Spring Issue - February 15th
Summer Issue - May 15th
Fall Issue - August 15th
Winter Issue - November 15th