

SeaScripts



The Newsletter of the South Carolina Marine Educators Association



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www.scmarineed.org



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Winter 2013



SCMEA

The South Carolina Marine Educators Association

Captain's Corner

President's Letter

This year marks an important milestone in the life of SCMEA – 25 years! As we reflect on this anniversary, I wanted to take the time to point out to members some of the ways the organization continues to fulfill its mission to foster a network of individuals who share a passion for the marine environment and to improve and expand marine and aquatic education opportunities in South Carolina. Credit for the list below goes to EV Bell, but I am happy to use this forum to share the organization's accomplishments over the last 25 years.

SeaScripts: The *SeaScripts* newsletter has been provided quarterly to the SCMEA membership since the beginning of the organization in 1988. From 1988 until 2010, *SeaScripts* was a printed newsletter mailed to members; beginning in 2010, SCMEA transitioned to an electronic version. The newsletter helps keep members informed about programs, lessons, and activities. It's a great way for members to share with each other throughout the year.

Awards/Scholarships: SCMEA provides members with opportunities to apply for grants to assist with travel to the annual conference, the National Marine Educators Association Conference (NMEA), and support for educational projects. Over \$3,000 is available to members annually. If you are interested in attending the national conference or need some funding for a classroom project, check the awards and scholarships section of the website!

Representation at the National Marine Educators Association (NMEA): A Chapter Representative serves as the liaison between the national chapter, NMEA, and the SCMEA membership. Chapter Representatives participate in quarterly calls and also attend the NMEA annual conference. Our chapter always has a very strong presence nationally – go SCMEA!

Annual Conferences: Since SCMEA's establishment in 1988, the organization has held an annual conference. The conferences give members a chance to reconnect, meet fellow marine enthusiasts, and share their knowledge and expertise. The conferences auction also helps support the awards and scholarships program.

Speaking of conferences, this year's was a great opportunity to celebrate and thank those who have been involved in its success. In honor of the 25th, \$250 went towards conference registration costs for four lucky drawing winners. Participants also used 25th anniversary koozies to keep their Coca Cola's cold and enjoyed anniversary cake for dessert. A surprise champagne toast accompanied dessert, with 50 mL test tubes very appropriately standing in for champagne flutes. The past presidents each made a special toast to SCMEA, and this was hands-down my favorite moment of the day. It is so evident how important this organization is to those who have been a part of it for the long haul. I'm confident that as the organization continues to evolve, it will remain an awesome resource for marine educators for years to come.

Past Presidents toasting SCMEA at the 2013 Conference

I am truly honored to serve as President of this awesome organization and look forward to helping usher it into our next quarter-century!



SEAson's Greetings!

-Blaik Keppler

SCMEA President

2013 Annual Conference: "A Look into the Future of Marine Science"

By Blaik Keppler, SCMEA President

This year's conference was held in Charleston at the SC Department of Natural Resources' (SC DNR) Marine Resources Research Institute (MRRI). That may be a lot of acronyms, but the MRRI's focus on researching coastal and marine resources made it the perfect place to celebrate the past 25 years of the organization while taking "a look into the future of marine science."

The Conference opened this year at an appropriate spot for a bunch of marine enthusiasts – the beach! Out-of-towners stayed ocean-front at Folly Beach and walked across the street to Rita's where our Friday Welcome Social kicked off the conference. We enjoyed cocktails and tasty treats while reconnecting with old friends and meeting new ones.



Conference attendees meeting and greeting at the Friday night social at Rita's on Folly Beach

On Saturday, Dr. Leslie Sautter set the tone with a fascinating keynote talk: "Cabled Ocean Observatories: the Near Future of Ocean Research, Technology, Discovery, and Education."



Dr. Leslie Sautter

She shared her experiences aboard the Research Vessel Thomas G Thompson as part of the construction of the Regional Scale Nodes (RSN) fiber-optic cabled deep-sea observatory. Using state-of-the-art technology, the RSN observatory will examine the seafloor, the sub-seafloor, and the overlying water column at two sites off the coast of Washington and Oregon on the Juan de Fuca Plate. It will collect an enormous amount of physical, biological, chemical and geological data every minute, which will be internet-accessible in real time to anyone, including you and your students! This truly is the future of deep ocean research

and you can follow the progress: <http://interactiveoceans.washington.edu>.

She was a tough act to follow, but our concurrent session speakers stepped up to the challenge. From research boat tours to sea turtle games, zooplankton, and ROVs, conference attendees had no shortage of learning opportunities. As usual, the toughest part of the day was deciding which session to attend. THANK YOU to all presenters who shared their time and knowledge

and helped make the day an educational, engaging, and enjoyable learning experience!



Past Presidents toasting SCMEA at the 2013 Conference

Of course, it wasn't all about the learning – SCMEA-ites know how to have fun too! After the sessions, lawn games, beautiful weather, and the silent auction kept us busy until dinner. Bidders got into some pretty serious "silent" bidding wars over items, especially the Suzanne Tate and Kevin Kurtz books, the Wild Olive gift cards, and the Leopold bench. For dinner, we had a staple in our part of the state - lowcountry boil and southern fixins by DaVega Catering. The live auction was feisty as usual. Leslie Sautter and Bruce Lampright, the official SCMEA



Live auction items including the infamous blue footed booby

auctioneers, were back again with some good clean peer pressure to get the bids up. Bidders had some great items to choose from, including a lovely and quite large red drum fish print, which went for the highest bid of the night. And, of course what SCMEA auction would be complete without a little belly dancing? This year's auction raised a total of \$2,040 which will be used to support our scholarship and awards programs.

The conference couldn't have been possible without this year's sponsors and we would like to extend a big THANK YOU Ripley's Aquarium, Kudzu Bakery, the SC Department of Natural Resources, and the ACE Basin National Estuarine Research Reserve for their contributions and generosity.

Thanks also to everyone who came, learned, had fun, and helped make this conference a success. I, for one, can't wait to do it again next year!



Sue Morrison demonstrating the art of belly dancing

SCMEA AWARDS

A number of awards and scholarships were awarded at the November conference. Please join me in congratulating the following on their service to marine science education.

The 2013 Renkas Marine Education Grant was awarded to Cindy Lilly and Meika Samuel. *This grant supports educational programs for classroom teachers and other marine educators.*

Cindy is a 7th Grade science teacher at Ocean Bay Middle School in Myrtle Beach, SC. Cindy and her students are actively engaged in a *Seeds 2 Shore Program* where they are restoring part of Huntington Beach State Park's Oyster Bay with *Spartina alterniflora*. In addition to studying and restoring the salt marsh, students are creating public signage and keeping a journal throughout the unit. Great job Cindy!

Meika is the Director of Operations at the South Carolina State Museum in Columbia, SC. Meika will use the grant to support her SEA SMART science club for 20 young women in Richland and Lexington counties. The goal is to "bring the sea to the city" and help students understand how inland residents are connected to the marine environments in the middle of the state. Great job Meika!!!

2013 Fred James Travel Award was awarded to Lindsay Clark and Rebecca Carter. *This award supports travel to the annual SCMEA conference.*

Lindsay is an Environmental Education Specialist with Charleston County Parks and Recreation where she develops and teaches environmental education programs to numerous age groups.

Rebecca is a High School science teacher from Conway, SC. She teaches marine science at The Academy for the Arts, Science, and Technology, which is a STEM school that focus on inquiry based, real world experiences, problem solving and engineering.

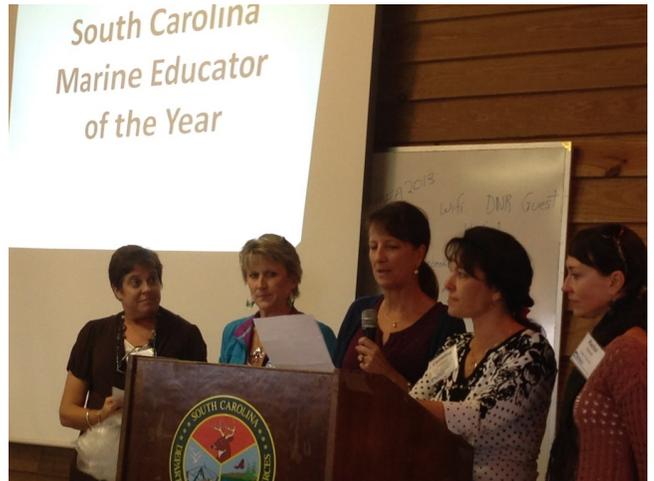


2013 SCMEA President's Award - Lindsay Thomas

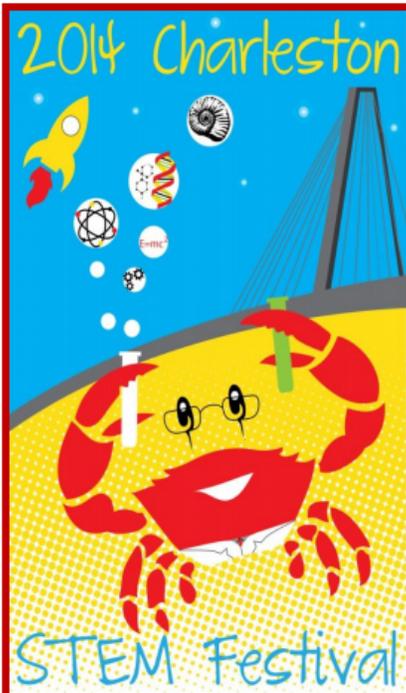
Lindsay is a 6th grade science teacher in Horry County and the SCMEA Treasurer. SCMEA President Beth Thomas said, "She has done an amazing job the past few months getting the SCMEA finances in order, reapplying for our new tax ID #, and submitting our info for 501c3." Congratulations Lindsay on this great award and thank you for your hard work!

2013 Educator of the Year Award - Sue Morrison

Sue is a High School teacher at James Island Charter High School. One of Sue's peers noted, "Sue Morrison is LONG overdue for this award, and I'm embarrassed that I did not nominate her years ago! Not only has Sue served as SCMEA president twice, but she has been a consistently AMAZING educator. She is the first person I think of when needing expertise from a high school-focused educator in marine and earth sciences." In addition to her previous SCMEA role, Sue has also been involved in programs, like Maury, COASTeam, National Ocean Science Bowl, SCORE, and Seeds to Shoreline to name a few.



Her students are very involved in environmental education programs and with scientists from the field. In fact as I write this article her students are participating in a Sea Turtle program at The South Carolina Aquarium.



The community is invited to attend the 2014 Charleston STEM Festival

A celebration of science, technology, engineering, and math (STEM) in the Lowcountry

Festival kick-off * February 8, 2014 * 10am - 3pm
Liberty Square in Charleston

Explore hands-on exhibits, meet local scientists and engineers, and participate in interactive demonstrations hosted by local businesses, non-profits and educational institutions. Discover just how much fun STEM can be!

Check out our "What is STEM?" art contest open to all residents of the Lowcountry. Details and entry form on our website.

www.charlestonstemfest.org
www.facebook.com/charleston.stem.festival

Meet Our 3 New Board Members: Karen Beshears, Allie Kreutzer and Cindy Lilly!

Name: Karen Beshears

Occupation: Consultant

Education: MA in Business

First Job: House Parent (social work) at a children's home in North Charleston

Favorite animal in SC: Red Wolves of Cape Romain NWR

Most unique animal you've seen: Galapagos Tortoises

Most unforgettable moment working in Environmental Education: When I was with SEWEE Association, we worked with all fifth-graders at St. James-Santee Elementary each year. One year a special needs student did not move on to sixth grade, so he repeated our Sewee Earth Stewards program with us that year. This student struggled in the classroom, but was completely at home in the field. He was able to lead the other students that year and gained self-esteem because learning by doing allowed him to excel.

Favorite part about working in Environmental Education: Seeing those "Ah-ha" moments when students get the connection that learning is fun and the natural world is exciting.

Most fulfilling part about working in Environmental Education: Hoping that I have helped students broaden their outlook and learn to think critically so they can make informed decisions later in life.

Funniest moment working in Environmental Education: While conducting an aquatics class at a pond in Waccamaw National Wildlife Refuge, one student had his net snagged by an animal of some sort that pulled him into the water (he thought it was a beaver). He came out soaked from head to toe! Thank goodness it wasn't in the dead of winter.

Favorite outside activity in SC: Nature photography

Other talents/hobbies: I work with the Loggerhead Sea Turtle Nest Protection programs of Cape Romain NWR and Edisto Beach State Park in the summer.

Where have you traveled: 43 states of the US, most of Europe, British Isles, North Africa, former Yugoslavia, Costa Rica, Galapagos Islands, Bahamas, Barbados & Roatan in Honduras

Where you want to travel, and why: New Zealand --- would love to hike the trails of South Island and explore a country that is still laid-back and wild

Something most people don't know about you: I would love to go into space someday --- hurry up Richard Branson!



Name: Cindy Lilly

Occupation: 7th Grade Science Teacher @ Oceanbay Middle School

Education: Bachelor's of science in business administration from Coastal Carolina University, and a Master's in Teaching from East Tennessee University

First Job: 6th Grade Science teacher at Whittemore Park, Conway SC

Favorite animal in SC: Great Blue Heron

Most unique animal you've seen: Only in videos but maybe one day in person the Yeti Crab

Most unforgettable moment working in Environmental Education: When a child looked up after being outside all day on our Manatee trip he said to me while watching the anhingas diving for fish and sunning their wings "When I got on the bus I was soo mad but now I can't even remember why I was mad!" I am a "Last Child Left in the Woods" advocate and believe the outdoors is therapeutic and healing.



Favorite part about working in Environmental Education: Being able to pass all my knowledge to my son and the children I teach

Most fulfilling part about working in Environmental Education: Getting kids outside to allow nature to clear their minds and set their souls free

Funniest moment working in Environmental Education: Bringing my then 4 year old through the pluff mud

Favorite outside activity in SC: Spending time in the Salt Marsh

Other talents/hobbies: I am a pottery, and a wanna be golfer.

Where have you traveled: Cross country on a motorcycle and a sailboat trip from Tampa to Antigua on a 34ft IOR Racing Boat

Where you want to travel, and why: Alaska to the Denali National Park and Preserve, Northern Lights in Northern Norway, and Colorado. Nature calls!

Something most people don't know about you: I get vertigo at heights higher than two stories and I get motion sickness very easily – yes the sail boat trip was very interesting!

Merry Fishmas: Enjoy this marine inspired puzzle!

(Hint: all of the words are holiday related – think of traditional holiday symbols)

Across

4. This echinoderm refers to an item that may be placed at the top of trees this season and frequent our beaches

5. Precipitation in the deep sea – or what it is considered to look like

6. Fish that may be gawking at the night sky

8. The grumpiest fish around the holidays: _____ Damselfish

9. This fish is as thin as the material used to wrap gifts

10. Fish resembling a red and white striped yummy holiday treat:
_____ prawn goby

Down

1. This _____ angelfish is probably not as tasty as watermint and spearmint mixed

2. Burrowing crab with furry claws (would keep them "warm" this time of year): Chinese _____

3. Worms resembling one of the most famous symbols of this holiday season

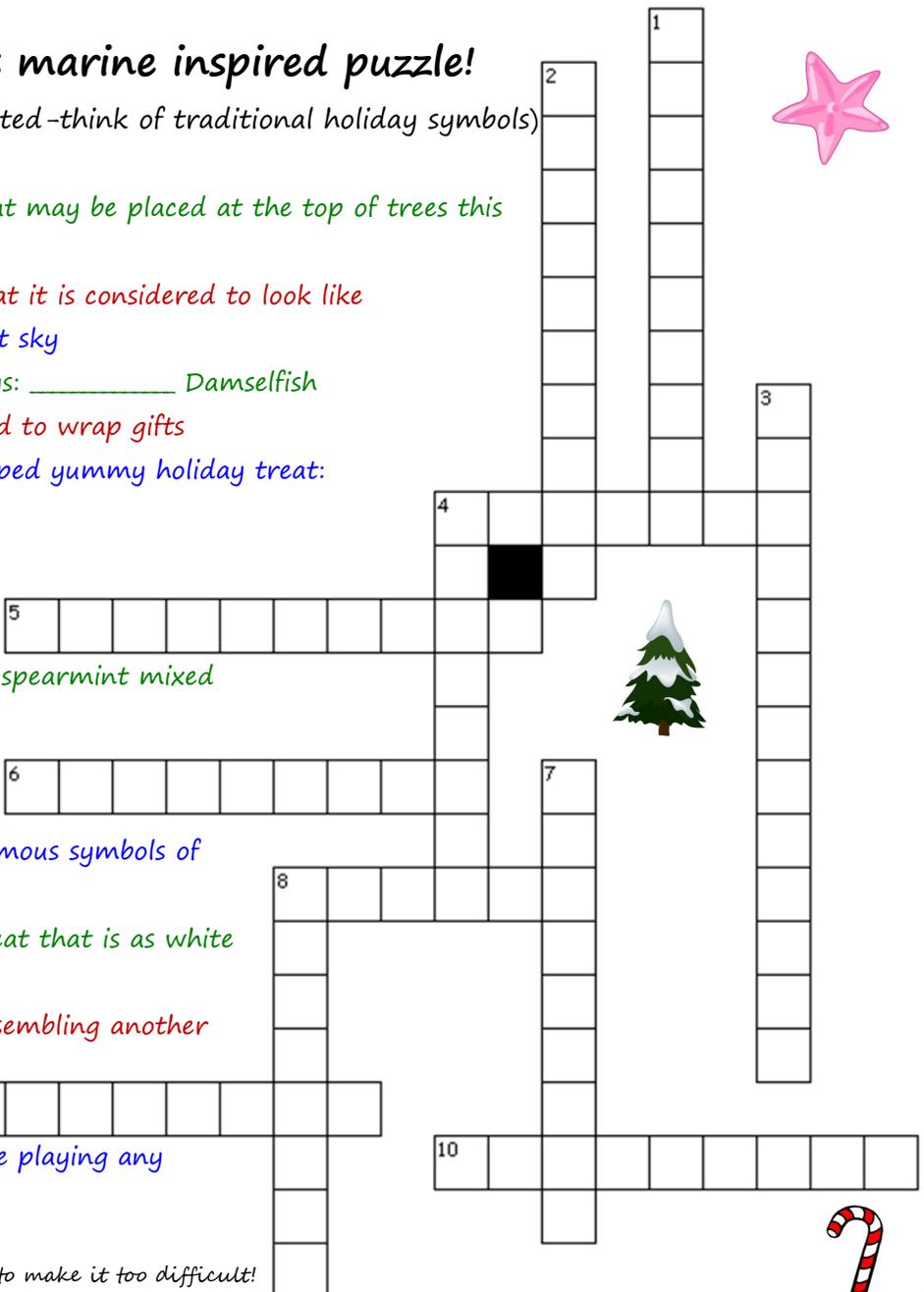
4. Crab named for its sweet, delicate meat that is as white as...

7. Bivalve similar to clam with ridges resembling another part of something that may be at the top of a tree

8. Earless marine mammal that won't be playing any musical instruments this season

*Some of these may be silly, but didn't want to make it too difficult!

Answers on last page of newsletter! –Kate



Name: Allie Kreutzer (new board member)

Occupation: Environmental Educator for the Coastal National Wildlife Refuges and National Forest

Education: B.S. in Biology from University of Kentucky, M.S. in Marine Biology from College of Charleston

First Job: My first real job was working in a SCUBA store in Cincinnati, Ohio while working on completing my Dive Master Cert

Favorite animal in SC: That's hard... I'm a big fan of many animals but I've always been partial to manatees, which make a semi-annual appearance in SC. As far as resident SC species I'd have to say Oyster Toad Fish.

Most unique animal you've seen: Probably a Duck-Billed Platypus at an aquarium in Australia. In the wild... a koala or maybe a nesting Leatherback sea turtle...

Most unforgettable moment working in Environmental Education: Probably the first time I took elementary (like 2nd or 3rd grade) students to the marsh. I'd dealt a lot with older students and just really had no idea how stuck a 45 pound being could become in 3.5 seconds... There was more than one lost shoe that day.

Favorite part about working in Environmental Education: I love that everyday is different. You can go to the same trail, beach, marsh, etc. everyday but with a different group they'll see something completely new or interpret something in a way you've never thought about it before.

Most fulfilling part about working in Environmental Education: I love when a student becomes completely wrapped up in something new or unexpected. Maybe it's a student that's complaining about being outside or being bored at the start but by the end you have to drag them away from their new collection of diving beetles, salamanders, and crayfish that they caught in the pond. In my line of work you don't really get to see the long term changes in students but at least you're left with the thought that you've changed their perspective on being outside.

Funniest moment working in Environmental Education: In retrospect probably the same pluff-mud story as above.. though not necessarily in the moment.

Favorite outside activity in SC: I love anything on the water... kayaking, boating, or just swimming the creeks and ocean.

Where have you traveled: I've been a fair amount of different places... Europe, Central America and the Carribean in high school and then I did Semester at Sea as an undergrad and got to see a long of very unique spots. The amazon in Brazil, Venezuela, South Africa, Mauritius, Myanmar, Vietnam, India, China, Hong Kong, Japan, Australia...

Where you want to travel, and why: To be honest I'd like to see more of this country but my next big trip is to the Mediterranean. Some SCUBA diving... in between eating my way through Italy, Spain, Greece, Turkey, and Croatia.

Something most people don't know about you: I'm an avid college basketball fan... Don't ever get me started in a conversation about it or you may not get out.



The National Marine Educators Association 2014 conference Call for Papers is now open!

Please consider presenting a session at this year's conference. There is a track for everyone: classroom and informal educators, researchers in a changing world, administrators and program developers. Special tracks include Next Generation Science Standards components, implementation and overcoming obstacles. There is even an Arts and Culture track for those who use the ocean as their muse!

You can find the Call for Papers link on the 2014 conference website, www.nmea2014.com. Session submissions will be accepted now through January 27th. For questions, please contact Ruth Gourley, Conference Session Co-Chair, at ruth.gourley@ncaaquariums.com. Set a course for 39N, 76.5W and Sail into Marine Education with us this summer!



National Oceanic and Atmospheric Administration (NOAA)
Office of Ocean Exploration and Research

oceanexplorer.noaa.gov



NOAA Ship *Okeanos Explorer*: America's Ship for Ocean Exploration

Introducing *Volume 2 of the Okeanos Explorer Education Materials Collection*:

How Do We Explore?

Professional Development

for Educators of Grades 5-12

Saturday, March 29, 2014

8:30 am - 4:00 pm

In Partnership with and Hosted by
South Carolina Aquarium
Charleston, South Carolina

This professional development introduces *Volume 2 of the Okeanos Explorer Education Materials Collection: How Do We Explore?* The NOAA Ship *Okeanos Explorer* is the Nation's first ship dedicated to solely exploring the world's ocean. Participants will learn how to use standards-based lessons and other online resources that guide classroom investigations into the innovative exploration strategies, sophisticated instrumentation and equipment used onboard the ship to explore our largely unknown world ocean. Topics include how targets are selected for exploration, mapping techniques, water column exploration, remotely operated vehicles and telepresence technology that enables access to real time ocean exploration. Participants will also learn how explorers use data gathered at target sites to learn more about our deep ocean world.

Registration is required and space is limited. Educators who attend the full day will receive a \$50 stipend. Each participant will receive *Volume 2 of the Okeanos Explorer Education Materials Collection, How Do We Explore?*, materials related to activities presented during the workshop, a NOAA Ocean Exploration Certificate of Participation, continental breakfast, and lunch.

Registration deadline: February 14, 2014

To register:

Email Jaime Thom at JThom@scaquarium.org

Or call Jaime at 843.579.8562



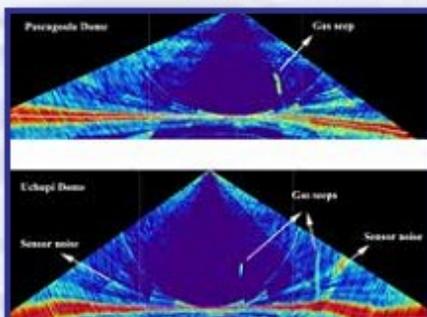
A gas capture device was added to the front of the *LRile Hercules* remotely operated vehicle for several dives. Image courtesy of the NOAA *Okeanos Explorer* Program.



A collage of images from the *Okeanos Explorer* Control Room and ROV systems. Image courtesy of the NOAA *Okeanos Explorer* Program.

How Do We Explore?

The NOAA Ship *Okeanos Explorer* is the United States' first dedicated ship for exploring our largely unknown ocean. The combination of multibeam mapping, remotely operated vehicles, oceanographic sensors, and telepresence communication technologies enables learners of all ages to participate in real time in voyages of discovery all over the world. Learn how NOAA works with ocean explorers to decide where to explore the ocean, what equipment and instrumentation is used in ocean exploration, and how ocean explorers interpret the data from the deepest reaches of the ocean floor for the purposes of discovery and the advancement of knowledge.



Water column targets (presumed gas seeps) detected over the Pacagoula and Uchupi dome during the Gulf of Mexico 2012 Expedition. Image courtesy of the NOAA *Okeanos Explorer* Program.

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Green Holiday Tips

- * For all those holiday parties that are coming up, use reusable glass ware, recyclable plastic ware and cloth napkins.
- * Whether you are shopping for that holiday feast or shopping for those special gifts don't forget the take your reusable bags
- * Hoping to make your gift truly special and not just another gift someone has to find something to do with consider giving gift certificates or bake items!
- * Put a twist on gift wrapping and try out reusable fabric cloth or the comics from the newspaper.
- * Do you have a whole drawer of old holiday cards? Use these to cut and decorate new gift tags for all your holiday gifts!
- * While you're busy picking out all those wonderful gifts save sometime by reusing recyclable box to pack and wrap your gift in.
- * Worried that holiday greetings card won't get there in time, then be green and send those well wishes via e-mail. If you're old fashioned and love to mail stuff then try to find cards printed on recycled paper!
- * Truly impress your guest and try your hand at cooking a holiday meal from local and/or organic ingredients (like a free range turkey or local produce)
- * For the folks that buy real Christmas Trees remember to buy local and when you're finished compost your tree with Charleston County so your tree can continue the gift of giving.
- * Remember: if you are traveling, two things will help you cut that carbon footprint. First, remember if possible to travel outside of the peak hours this will save you gas and time. The second thing to remember is to pack those snacks. Stopping and starting or dare we say it sitting at the drive through window will eat your gas and doesn't help the green.
- * Before you head out whether at home or at the office, remember to turn off and unplug all those electrical items. Saving energy will save you dollars (coffee pot, computer, lamps, microwaves, overhead lights, power strips, small electronics).



Answers from holiday crossword puzzle:

Across: 4- sea star, 5- marine snow, 6- stargazer,
8- humbug, 9- ribbonfish, 10- candy cane

Down: 1- peppermint, 2- mitten crab, 3- Christmas tree, 4- snow crab,
7- angel wing, 8- harp seal

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