

**The New York State Marine
Education Association**

Presents

**The 36th Annual Conference
October 25, 2014**

**“Coastal Treasures and Troubles:
Restoring, Managing, and
Monitoring Our Resources”**



NYSMEA

New York State Marine
Education Association

**Rachel Carson High School for Coastal Studies
New York Aquarium
Coney Island, Brooklyn**

Schedule

| | | |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 7:30 - 8:30 am | Registration Continental Breakfast, Exhibitors, Student Posters Silent Auction Opens | Lobby and Cafeteria |
| 8:10 - 8:25 am | Documentary: "Coney Island Creek: A Work in Progress" (15 minutes) | Auditorium |
| 8:30 - 9:45 am | Welcome Remarks Keynote Speaker: Steven Pekar, <i>"Looking back to our future: How studying past climate changes can show us the future of NYC's coastal areas"</i> | Auditorium |
| 10:00 - 11:00 am | Workshop Session 1 | |
| | A. <i>Whales of New York</i> Paul Sieswerda and Catherine Granton | Room 444 |
| | B. <i>Does Coney Island Creek Have a Future?</i> Charles Denson | Room 448 |
| | C. <i>Billion Oyster Project</i> Jeremy Esposito and Harbor School Students | Room 450 |
| | D. <i>Involving More Students in the Marine Environment</i> , David Chase | Room 459 |
| | E. Student Presentations | Room 461 |
| 11:15 am - 12:15 pm | Workshop Session 2 | |
| | A. <i>Using Real-Time Data to Teach About Hurricane Sandy</i> , Lou Siegel | Room 444 |
| | B. <i>Restoration of Tidally Restricted Salt Marshes at Rumney Marsh, MA</i> Ed Reiner | Room 448 |
| | C. <i>Catching the Wind: Engineering Design in the K-12 Classroom</i> Karen Woodruff | Room 450 |
| | D. <i>Hudson Estuary Climate Change Lesson Plans</i> Nordica Holochuk | Room 459 |
| | E. <i>Introduction to Youth Ocean Conservation Summit Program</i> Sean Russell | Room 461 |
| 12:30 - 1:15 pm | Lunch, Exhibitors, and Silent Auction | Cafeteria and Lobby |
| 1:15 - 1:45 pm | Awards, and Annual Chapter Business Meeting | Auditorium |
| 1:45 - 2:00 pm | Pick up Silent Auction Items | Lobby |

| | | |
|----------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 2:00 - 5:00 pm | Field Trips | Groups should assemble in parking lot to arrange car pools. |
| | 1. Environmental Study Center, 7151 Avenue T, Brooklyn | See descriptions of each trip later in the program. |
| | 2. The Salt Marsh Nature Center at Marine Park, Avenue U and East 33rd St., Brooklyn | |
| | 3. Kingsborough Community College, Oriental Blvd., Brooklyn | |
| | 4. Coney Island Creek Beach Walk and Seining, Kaiser Park, Brooklyn | |
| 5:00 - 6:00 pm | Return from Field Trips, Drive to NY Aquarium | Free parking in the Aquarium lot. Surf Ave. & W. 8th St. |
| 6:00 - 7:00 pm | Tour Aquarium on Your Own, or Behind-the-Scenes with Bob Cummings | Meet in lobby of Aquarium. |
| 7:00 - 8:15 pm | Buffet Dinner Continuation of Awards | Ocean View Room (2nd floor, above Glover's Reef) |
| 8:15 - 9:15 pm | Keynote Speaker: Kate Orff, "Living Breakwaters" | |
| 9:15 - 9:30 pm | Live Auction | |

Meet Our Exhibitors:

Environmental Study Center
Metropolitan Water Alliance
Micro-Optics
U. S. Satellite Laboratory

Welcome to the 2014 NYSMEA Conference!

Dear NYSMEAns,

Welcome to NYSMEA's 36th Annual Conference. Thanks so much for joining us.

Today's event is my last as your NYSMEA President. As an organization, we have done so much over the past five and a half years. We have taken two restoration trips to South Louisiana, hosted webinars with scientists and educators, organized Share-A-Thons and Common Core workshops, embarked on boat trips, enjoyed scientist lectures, revamped our website, revitalized our newsletter, begun using social media, and much more. I look forward to keeping the momentum going with our new President, Lane Rosen, a wonderful and energetic classroom teacher from John Dewey High School. Welcome Lane, and thank you all for your support.

Ocean literacy and marine education have also come a long way in the past five years. The Essential Principles of Ocean Literacy have been translated into several languages, including Japanese, Chinese, Portuguese, and Spanish. Educators in the EU have come together to form EMSEA, the European Marine Science Education Association and have organized two conferences to share their experiences and expertise. I recently attended the EMSEA conference in Sweden, and it was inspiring to meet educators from all over Europe and beyond who are working toward the same goals of improving ocean literacy that we are in New York.

Ocean Literacy Essential Principle 2 states that "The ocean and life in the ocean shape the features of Earth." We have become increasingly aware, particularly in this area, of changing sea levels and coastlines, and thinking about carbon cycling – past, present, and future. We will explore these ideas and more during this conference, which will provide food for thought as we look to the future in our coastal city.

An important feature of this conference is the student participation. We are especially excited to have so many high school students and undergraduates with us today. Welcome! Several students are presenting their research, and they will learn about successful youth marine conservation initiatives across the country, hopefully inspiring them to take on their own projects and follow their own passions. Please be sure to make our students feel included and help them to think about how to become leaders in our field.

Since we can't all be everywhere at once, today please tweet using #nmea14 to keep those at the conference and far beyond in the loop on today's happenings. Follow us at @nysmea and on Facebook at www.facebook.com/nysmea. Have a great conference.

Sincerely,

Meg

Dr. Meghan Marrero

NYSMEA President, 2009-2014

megmarrero@gmail.com

Keynote Speakers

Morning:



Stephen Pekar

Looking back to our future: How studying past climate changes can show us the future of NYC's coastal areas

Stephen Pekar, a geology professor at Queens College (CUNY), has been investigating past climate and oceanographic changes during times (16- 55 million years ago) when CO₂ was as high as what is predicted for this century (500-1000 ppm). As CO₂ is rising rapidly today, which is predicted to be like putting our climate on a "hot plate", exploring these times for him is like "Looking Back to Our Future." To investigate climate change of the past, he looks at sediments, microfossil, and geochemical data obtained from cores obtained from near-shore to deep-sea locations ranging from the tropics to Antarctica. His research has taken him on expeditions around the world, including four to Antarctica, one of which he was project leader.

Professor Pekar is a Queens native, growing up in the Rockaways and attending Queens College, first as a 20th century music composition major and then getting his BA in Education. He is enthralled and in love with exploring and discovering new places and ideas. He has traveled to over 50 countries, working in six of them ranging from archeology in France, grape picking in Germany, movie extra in China, to house pianist in a restaurant in Israel. However, as Antarctica is the most remote, coldest, and most harsh continent on Earth, for him going there to conduct research is like going to another planet and exploring undiscovered country.



Evening:

Kate Orff

Living Breakwaters

Kate Orff is a registered landscape architect and the founder of SCAPE, a design studio based in lower Manhattan. She is also an Associate Professor of Architecture and Urban Design at Columbia University.

Kate was the recipient of a 2012 United States Artist Fellowship and was inducted into the National Academy in 2013. She was project director for the SCAPE team's HUD Rebuild by Design initiative titled Living Breakwaters that received \$60 million for implementation via the State of New York

Workshop Descriptions

Documentary: "Coney Island Creek: A Work in Progress," 8:10 - 8:25 am (Auditorium)

Charles Denson's film looks at the city's plan to build a tidal barrier on Coney Island Creek and how it would affect this fragile ecosystem. This documentary shows the many faces of Coney Island's urban estuary.

Session 1: 10:00 - 11:00 am

A. Whales of New York (Room 444)

Paul Sieswerda and Catherine Granton, Gotham Whale

Gotham Whale is the Research and Education Arm of The American Princess Cruises, a whale-watching vessel in New York City. We outline our efforts to develop a Citizen Science project to survey the marine mammals that recently have returned to the waters of New York City. This work tracks the population of whales, dolphins, and seals by utilizing the platform of the *American Princess*, and enlisting Citizen Scientists to photograph, identify, and count marine mammals. We present some of the findings of this work and explore ways to connect to the educational community.

B. Does Coney Island Creek Have a Future? (Room 448)

Charles Denson, Coney Island History Project

The City's flood control plans for Coney Island Creek after Hurricane Sandy could transform the waterway into a thriving wetland or a toxic lake. Three major development projects will decide its future. The presentation includes my short documentary of the storm making landfall at Sea Gate, as well as a stand showing photos of the creek and information regarding the City's plan to dam up the creek with a tidal barrier and culverts. There's been little public information regarding the city's feasibility study for the creek.

C. Billion Oyster Project (Room 450)

Jeremy Esposito, Robina Taliaferrow and Students from The Harbor School

The New York Harbor School will share their experiences as a maritime-based CTE school in New York City. Robina Taliaferrow & Jeremy Esposito will talk about how their location, mission, and association with The Billion Oyster Project make them unique. Students from The Harbor School's Aquaculture class will be in attendance for discussion.

D. Involving More Students in the Marine Environment (Room 459)

David Chase, Coastal Steward

There are numerous reasons to involve more students in the marine environment. This discussion will focus not only on why we should, but also suggestions on how this may be accomplished. In addition to the marine science and oceanography classes that incorporate field trips and dissections, lessons may also be included in core subject areas that include various aspects about the marine environment. Furthermore, there are ways to provide opportunities for students to become involved at an early age so that it fosters coastal stewardship in the future.

E. Student Presentations (10 minutes each) (Room 461)

Adults and students are all invited to attend this workshop!

1. The Biodiversity of Three Sites: Norrie Point, Piermont and Long Island Sound

Fatima Lowman, Bronx Community College/Mercy College

Joseph Osei-Kusi, Bronx Community College

We began with our research question: Which of the three sampling sites (Norrie Point, Piermont and Long Island Sound) displays the most planktonic biodiversity? Samples collected from each site were analyzed and recorded to determine 1) the classification of organisms, 2) the basic necessities of both autotrophic and heterotrophic organisms, 3) the types of environments the organisms are able to thrive in, and 4) the importance of and maintenance of lifespans of such organisms. In all, the evidence demonstrates the differences in biodiversity in the three regions.

2. Biodiversity of Microorganisms in the Hudson River and Great South Bay Sites

Ja'Nice Walker, Rockland Community College

The types of microorganisms in three locations was observed and recorded. Organisms from Norrie Point, Mercy College and Long Island were organized by appearance and then their abundance was also tallied up and recorded. The information gathered was used to better understand that biodiversity varies in different environments.

3. Water Quality in Norrie Point Vs. Piermont Marsh

Kimberly Whyte, Mercy College

The analysis of water quality of the Hudson River where it is used for recreational and human consumption is essential to ensure health and safety of residents living in and around the river. The aim of the research is to determine if high levels of *Escherichia coli* (*E.coli*) bacteria, are present in the river water at Piermont Marsh in comparison to Norrie Point. The study was carried out in the Marsh of the two sites. Piermont Marsh is a brackish wetland located 25 miles North of New York City on the west bank of the Hudson River which has a diverse ecosystem. On the other hand, Norrie Point Marsh is a fresh water wetland located 100 miles north of New York City on the east side of the river which also has a diverse ecosystem. We hypothesize that high level of *Escherichia coli* will be present at Piermont Marsh in comparison to Norrie Point. Samples were collected from the sites marsh area once in June, on separate days. The samples were taken back to the lab and cultured for *E.coli* using aseptic techniques on nutrient agar,

Eosin-Methylene Blue (EMB) and 10% Sodium Chloride plates for 24 hours. Based on our findings, Piermont Marsh had one colony of *E.coli* present on the EMB and nutrient agar plate, while Norrie Point had none. Thus it was concluded that Piermont Marsh had higher levels of *E.coli* present than Norrie Point. The untreated sewage from Sparkill Creek that flows into the Tidal Creek parts of Piermont Marsh would have influenced the results. For future research, we hope to get a more quantitative data of colony forming units (CFU) / 100 ml, collect more samples from different areas in the marshes and to do a DNA profiling of the *E.coli* obtained in our sample to see if it is the pathogenic strain.

4. Understanding the Different Ecological Roles of Three Tilapia Species in Lake Turkana, Kenya

Taylor Bouraad, SUNY Stony Brook

Lake Turkana, located in Kenya, is the world's largest desert lake and is primarily fed by the Omo River in Ethiopia. The Kenyan government is interested in increasing the fisheries production of the lake, as its production is low for a lake of its size. At this time, the majority of catch that comes from the lake is made up of tilapia. There are three species of tilapia that reside in the Lake Turkana: *Oreochromis niloticus*, *Tilapia zilli*, and *Sarotherodon galilaeus*. These fishes are typically difficult to distinguish because of their morphological similarities, and because of this they are treated as the same species by the fishery. However, each species belongs to different genera and may have unique ecological requirements. Our goal for this study was to determine the degree of overlap between the tilapia species in the lake. Fish tissue samples were collected from four different sites in the central sector of Lake Turkana from 2008-2013. The samples were homogenized and packaged in the lab at Stony Brook University and then analyzed for ^{13}C and ^{15}N at Boston University. The data were analyzed using Stable Isotope Bayesian Ellipses in R, the output of which is an isotopic niche space, a proxy for ecological niches. *O. niloticus* had the largest niche of the three tilapia species. The isotopic niches of *O. niloticus* and *S. galilaeus* overlapped heavily, but not with the isotopic niche of *T. zilli*. The literature review supported these findings, showing that these three species have different reproductive requirements as well as diets in other African lakes. *O. niloticus* and *S. galilaeus* primarily feed on phytoplankton and epibenthic algae, while *T. zilli* feeds on macrophytes. Because of the differences that these findings demonstrate, it is suggested that the fishery should manage the three different tilapia species in Lake Turkana, Kenya, especially *T. zilli* separately.

5. Disasters' Effects on Water Quality and Aquatic Environments

Toni Pelligrino, Mercy College

Saheik Cisse, Mercy College

Copper, density, fecal coliform, pH, nitrate/nitrite, turbidity, pesticides, lead, and total dissolved solids measurements are all taken into consideration when checking water

quality. Water quality is often affected by natural disasters, everyday runoff, and poor waste management. Attend our presentation to discover more about Disasters' Effects on Water Quality and Aquatic Environment and the Water Quality of The Hudson River.

6. Intro to Underwater Robotics

Jake Chammas, Farmingdale High School

We will bring models, provide some information about Under Water Robotics, and share our experience with our introduction to ROV construction and testing. We will answer questions for students or educators interested in this type of program or class activity.

Workshop Descriptions

Session 2: 11:15 am - 12:15 pm

A. Using Real-Time Data to Teach About Hurricane Sandy (Room 444)

Lou Siegel, NYS Dept. of State

Use real-time data to document the passage of Irene, Sandy or other storms. Lou Siegel will discuss the various abiotic and atmospheric data recorded as Sandy passed the New York area. We will discuss how you can record or easily obtain daily measurements and relate these to local and global events.

B. Restoration of Tidally Restricted Salt Marshes at Rumney Marsh, MA (Room 448)

Ed Reiner, Senior Wetland Scientist, US EPA

Concerns for flood protection with rising sea levels raises issues associated with the preservation, protection and restoration of coastal wetlands affected by tide gates. Self-Regulating Tidegates (SRTs) provide a means to balance flood control needs with marsh restoration. Noncompliance with permit conditions, however, threatens the success of efforts which occurred at Rumney Marsh in Massachusetts where 11 SRT's were installed to replace broken, or non-functional conventional flap gates.

C. Catching the Wind: Engineering Design in the K-12 Classroom (Room 450)

Karen Woodruff, U.S. Satellite Laboratory

Explore the Engineering Design Process as an exciting pedagogical tool for teaching science and math content in the context of the ocean. Learn to engage students through important socioscientific issues, build marine science content knowledge, and make strong connections across disciplines while taking part in your own design challenge during this one-hour workshop.

D. Hudson Estuary Climate Change Lesson Plans (Room 459)

Nordica Holochuk, NY Sea Grant

NY Sea Grant has been working with the NYSDEC Estuary Program to create a set of middle school level lesson plans related to Climate Change. The lessons we've selected and adapted for the Hudson Estuary (and correlated to NYS, Next Gen and Common Core standards) are fun and designed to engage and empower students. I will give a brief presentation and then the group can try out one of the lessons -- also will provide take homes/learning resources.

E. Empowering Student Conservation Leaders (Room 461)

Sean Russell, Director, Youth Ocean Conservation Summit

Youth driven, Action Oriented, Conservation focused – the annual Youth Ocean Conservation Summit has successfully engaged young people from across the country in ocean conservation projects for the past three years. Through this informative session, you'll learn about the history and key components of this event, share stories with fellow student conservationists, discuss issues facing marine ecosystems in your local community, and learn how other young people across the country are coming together to take on similar challenges. You'll also have the chance to connect to resources to further explore the ocean conservation field through the Youth Ocean Conservation Team network, and learn how you can be involved in hosting a Youth Ocean Conservation Summit in your community!

Field Trips: 2:00 – 5:00 pm

Meet your group in the parking lot, and figure out whose cars to carpool in. Drivers with GPS access will have an easier time of locating each facility!

Field Trip 1: Environmental Study Center, 7151 Avenue T, Brooklyn

Assess the water quality of ESC's aquatic habitats by using probeware to conduct a variety of tests. Participants will understand how these tests are utilized to monitor NYC's water sources and how humans impact the overall quality of water health. Following the lab, enjoy a tour of the nature center's exhibits.

Field Trip 2: The Salt Marsh Nature Center at Marine Park, Ave. U and East 33rd St., Brooklyn

Leader: Karla Ferraro

Kayak in Gerritsen Creek, surrounded by salt marsh plants and birds, then enjoy a 1-hour nature walk led by an Urban Park Ranger. Bring a towel and a change of clothes for the evening event at the Aquarium.

Field Trip 3: Marine Science at Kingsborough Community College, Oriental Ave., Brooklyn. T-3 Building on the Bay Side. Room T-309

Leaders: Tom Greene and Blanca Ching

Immerse yourself in hands-on marine science lab activities! Learn about oyster gardening, do some testing for fecal coliform, perform a plankton tow, and use microscopes to look for diatoms and dinoflagellates.

Field Trip 4: Coney Island Creek Beach Walk and Seining, Kaiser Park at Bayview Avenue, near West 31st St., Brooklyn

Leaders: Merryl Kafka and Lane Rosen

Explore this forgotten creek with waders, seine nets, and a plankton net with a field scope. Bring a change of clothes for the evening at Aquarium.

NYSMEA Officers 2013-2014

Dr. Meghan Marrero, President

Keira Lam, Secretary

Sarah Richards, Treasurer

Andrea Oliver, Vice-President Elementary

Blanca Ching, Vice-President Secondary

Dale Stanley, Vice-President College

Dr. Merryl Kafka, Vice-President Informal Science Education

Thanks to the 2014 Conference Committee!

Lisa Breslof

Blanca Ching

Eileen Dugan

Tom Greene

Merryl Kafka

Meghan Marrero

* Sarah Richards

Lou Siegel

Dale Stanley

*Chair

**And Thanks to the Staff of Rachel Carson High School for
Coastal Studies and the New York Aquarium!**

NYSMEA Awards

Congratulations, 2014 Awardees!

Founder's Award

Presented to one of the original founders of the New York State Marine Education Association who has made a life-long commitment to advancing informal marine science education.

Rick Raymond



Rick Raymond is founder and principal of The Family Business Leader / The Growth Team, a management consulting / business coaching firm assisting family enterprises and closely-held businesses with their strategic planning, growth initiatives, and leadership development. He is also adjunct faculty in the Zicklin School of Business, Baruch College, CUNY.

Rick was founder and president of Coastal Consultants, an environmental management firm assisting marinas and waterfront property owners with environmental permitting and development issues. He also provided public participation services to the New York City Department of Environmental Protection.

Previously Rick worked for the New York State Legislative Commission on Science & Technology. He was involved in introducing the metrocard to regional legislatures, and directed efforts that resulted in the installation of tidal gauges for the maritime industry in the New York Harbor.

In addition, Rick worked for the New York Sea Grant Program/Cornell Extension where he assisted educators in the development of marine education programs, and had the opportunity to support education leaders in the formation of the New York State Marine Education Association.

Rick is a former trustee of the American Littoral Society, and former Peace Corps Volunteer. He lives in New York City with his wife, Shirlee Taylor. They have 2 children, Loren, founder and president of Third Rail Beer and Justine, Teach for America, Dallas.

Matthew Fontaine Maury Award

Presented to a member or non-member who has made a major contribution to any field related to marine endeavors, either in the sciences, education, and research, and social or artistic ventures.

Murray Fisher, New York Harbor School

Captains Frank DeSantis and Tom Paladino, American Princess Cruises



Murray Fisher is the co-founder of the New York Harbor School and the President of the New York Harbor Foundation, which together manage the Billion Oyster Project, a city-wide effort to engage the metropolitan community in restoring New York Harbor.

Murray has pursued an environmental conservation career since his earliest days growing up on a farm in Virginia. After a biology degree from Vanderbilt and a year in Bolivia with the Wildlife Conservation Society, Murray moved to New York City to work first for Hudson Riverkeeper, then Waterkeeper Alliance, where he was charged with recruiting, vetting, on-boarding and supporting new Waterkeepers.

He left Waterkeeper in 2002 to found the Harbor School with Richard Kahan and Nate Dudley that opened in Bushwick, Brooklyn. He led the school's move into a \$34 million facility on Governors Island in 2010. That same year Murray started the New York Harbor Foundation with the mission to "improve access to, the condition of, and education about New York Harbor" and which now funds the Harbor School, the Schooner *Lettie G. Howard*, and the Billion Oyster Project.



As a kid fishing along New York's shoreline, the sea was in his blood. Today **Captain Frank DeSantis** has navigated not only our local waterways with fishing boats, sight-seeing cruises, ferry service, and educational adventures, but also piloted boats for over 20 years up and down the east coast from Maine

to Florida. Tonight we honor his commitment to advancing public education in marine science, and marine mammal research and data collection with Gotham Whale, helping to document the whales visiting New York City!



Tom Paladino is a second-generation boat captain. His family started a boating business in 1945, and continues today with our D.O.E. vendor approved, 95 ft *American Princess*. Expanding from his dad's early days as a fisherman, Captain Tom has extended his mission to now include educational excursions of our wonderful waterways around Jamaica Bay, Breezy Point, Manhattan Island, and the Hudson River. The *American Princess* is now making a unique and significant

scientific contribution, along with Gotham Whale Naturalists, to catalog humpback whale data with citizen science whale watching trips. The *American Princess* also creates a floating classroom with "Science at Sea" programs for schoolchildren, with a crew dedicated to safety and marine science adventures. Captain Tom is owner and manager of the TWFM Ferry Service, accounting for this vessel's other work duties in the harbor.

Herman Melville Literary Award

Presented to a member or non-member who has made a major contribution to the world of maritime literature and/or art.

Stephen Yaeger



I am a Brooklyn native and as far back as I can remember I've always had an interest in science and how things work. After graduating New Utrecht HS I entered Hunter College, but that first year showed me I was not ready for a college experience. I "pushed up" my name in the draft, entered the Army, served in the Military Police and was married. A few years after I was discharged, I

re-entered college, earning my Bachelors and Masters by going to evening school, all the while supporting my wife, Judith, and three kids. Throughout my teaching career I taught general science, biology (my licensed subject, marine biology), chemistry, earth science and my own curriculum in limnology. I used my talent as an artist to enhance my lessons. I conducted workshops for teachers as a member of the NYS Biology Teachers Association and the Science Council of New York. I always found teaching rewarding and never failed to combine humor and classroom discipline as tools. Now retired, I devote my time to my art (wildlife is my favorite subject), photography and my interest in history.

Past NYSMEA Award Recipients

Founder's Award

Richard McIntyre, Karen Hensel, Lou Siegel, Al Siegel, Bob Abrams, and Mickey Maxwell Cohen

Matthew Fontaine Maury Award

Ross Nigrelli, Frank Braynard, Steve Schneider, Anita Freudenthal, James Goetz, Jerry Schubel, Barbara Dexter, Steven Engelbright, Robert D. Abrams, Ellie Fries, Lou Siegel, John Loret, Don Riepe, Alan Ascher, Sidney Horenstein, Al Siegel, Joseph Yaiullo, Barbara Cohen, Artie Kopelman, and Tom Lake

Herman Melville Literary Award

Maxwell C. Wheat, Richard McDermott, Eugene Kaplan, John Christophe Fine, Matthew Lerman, Katherine A. Kirkpatrick, Carl Safina, Merryl Kafka, Sarah Gruber, Arlene De Strulle, David Helvarg, Alexandra Mancuso, Brianina Lind, Ann McGovern, Richard Ellis, and Charles Denson

Kinghan Service Award

Gene Kinghan, Al Siegel, Lou Siegel, Walter Smith, Robert Jaeger, Karen Hensel, Alan Ascher, Merryl Kafka, Maryanne Cicchillo, Marilyn Hoffman, Elaine Dolgins Weiss, Addie Quinn, Eilene Evans, Joseph M. Varon, Eleanor Fries, Barbara Cohen, Mickey Cohen, Lorna D. Monterose, Nancy Maia, John Evans, Margaret Wilson, Michael Sandlofer, Susan Chiesa, Joel Teret, Doreen Bader, Dennis Bader, John Loret, Ben Kwaitkowski, George Linzee, Anthony DiLernia, Leticia Paler, Linda Kallinrude, Bunny Nadelman, Martin Kutikoff, Eileen Kutikoff, Kimberly Zimmer, Hugo Freudenthal, James Browne, Thomas F. Greene, Sarah Richards, Lisa Breslof, Gail David, Blanca Ching, Eileen Dugan, Karla Ferraro, Pamela Lynch, Ed Wilensky, Anne Bicker, Maritza Macdonald, Keira Lam, Meghan Marrero, Doreen Williamson, Kevin Williamson, Richard McIntyre, Larissa Graham, David Stolarz, and Maggie Flanagan

Science Council of NYC (SCONYC) Jerry Resnick Memorial Presidential Award

Robert Jaeger, Robert Abrams, John Loret, Lou Siegel, Richard McDermott, Al Siegel, Joseph Varon, Maxwell Cohen, Eleanor Fries, Merryl Kafka, Joel Teret, Eileen Evans, Dennis Bader, Doreen Bader, Hugo Freudenthal, Anita Freudenthal, Matthew Lerman, Anthony Dilernia, Bruce Carlsten, Sandy Shumway, Anne Bicker, Lou Siegel, Eileen Kutikoff, Martin Kutikoff, Sarah Richards, Lisa Milke, Lisa Breslof, Robert Cummings, Blanca Ching, Larissa Graham, Gene Ritter, Nordica Holochuk, and Eileen Dugan

Resource Contributors

American Museum of Natural History
American Princess Cruises
Atlantis Long Island Aquarium and Exhibition Center
Center for Environmental Research and Coastal Oceans Monitoring
Coastal Research & Education Society of Long Island
Cornell Cooperative Extension of Suffolk County
Eastern Long Island Audubon Society
Environmental Study Center
Gotham Whale
Hudson River Sloop Clearwater, Inc.
Kingsborough Community College
Long Island Maritime Museum
Long Island Science Center
Long Island Sound Study
Mercy College Graduate School of Education
Molloy College Earth and Environmental Studies
Nassau BOCES Outdoor and Environmental Education
National Marine Educators Association
New York Aquarium/ Wildlife Conservation Society
New York Sea Grant
Ocean Literacy
Quogue Wildlife Refuge
Rachel Carson High School for Coastal Studies
Riverhead Foundation for Marine Research & Preservation
Saint Ann's School, Brooklyn
Shinnecock Nation Cultural Center & Museum
SUNY Maritime College
SUNY Stony Brook School of Marine and Atmospheric Sciences
The Safina Center
Wheel Fun Rentals

Howard Hughes Medical Institute's BioInteractive is pleased to provide classroom resources for the 2014 NYSMEA Annual Conference. Visit www.BioInteractive.org for free science education resources, including short films, animations, virtual labs, and classroom activities.

Auction and Food Item

American Museum of Natural
 American Princess Cruises
 Bagel Boy of Bay Ridge
 Bob Cummings/New York
 Atlantis Long Island Aquarium and
 Brooklyn Aquarium Society
 Brooklyn Cyclones
 Chris Paparo
 Clemente's Crab House of Sheepshead Bay
 Eileen Dugan
 Eileen Evans
 Environmental Study Center
 High Quality Fossils by Mark Bennett
 Jimmy from Bagel Boy of Bay Ridge
 John Burroughs Association
 Lamplighter Wines & Liquors
 Meryll Kafka
 Pho Hoai Vietnamese Restaurant
 Rachel Carson H.S. for Coastal Studies/Ed Wilensky, Robin Marott, Salvatore Scalice
 SEAM "Societe of Exportation des Ammonites de Madagascar"
 South Street Seaport Museum
 Thanks also to those people who brought in auction items today!



Donors

History
 Aquarium, WCS
 Exhibition Center

NYSMEA 36th Annual Conference – Saturday, October 25, 2014 Professional Development Hours Verification Form

www.nysmea.org

Instructions: Note the session you attend for each time period. Verify attendance by obtaining the signature of the presenter or a NYSMEA Executive Board member. Sum the total hours attended and submit the form to your district.

| <u>Time</u> | <u>Event(s)</u> | <u>Attendance Verification –</u> Presenters or Board Members: Please print name and sign | <u>Hours</u> |
|--------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------|
| 8:00 – 9:00 AM | Breakfast and Networking – get signature from any board member | | 1 |
| 9:00 - 10:00 AM | Keynote Speaker: Stephen Pekar | | 1 |
| 10:00- 11:00 AM | Workshop I (note which workshop attended): | | 1 |

| | | | |
|-----------------------|-----------------------------------------------------------------------|---------------------------------------------------|-----|
| 11:15 AM- 12:15 PM | Workshop II (note which workshop attended): | | 1 |
| 12:30 - 2:00 PM | Networking Lunch Awards Presentation NYSMEA Business Meeting | | 1.5 |
| 2:00 - 5:00 PM | Field Experience (note which trip attended): | | 3 |
| 5:00 - 7:00 PM | NY Aquarium Tour | | 2 |
| 7:00 - 10:00 PM | Dinner, Networking, Keynote Speaker | | 3 |
| | | Total Professional Development Hours Earned | |

Please contact Meghan Marrero, NYSMEA President, at megmarrero@gmail.com with any questions or concerns.