

**The New York State Marine
Education Association**

Presents

**The 35th Annual Conference
September 20-22, 2013**

**“SEA Where Rivers Run:
Hudson to the New York Bight”**



NYSMEA
New York State Marine
Education Association

**Black Rock Forest Consortium
Cornwall, NY**

Schedule

7:30 - 9:00 am	Registration Continental Breakfast and Posters Silent Auction Opens	Lodge
9:00 - 10:00 am	Welcome Remarks Keynote Speaker: Tom Lake, NYS DEC <i>"The Lives and Legends of Hudson River Fishes"</i>	Lodge
10:00 - 10:50 am	Workshop Session 1	
	A. <i>The Day in the Life of the Hudson River</i> Chris Bowser and Margie Turrin (This is a double-session)	Lodge
	B. <i>Frogs and FrogWatch USA</i> Nalini Mohan, WCS	Classroom
	C. <i>Black Rock Forest's Brook Trout Program</i> Jack Caldwell, BRF	Trout Room, Lodge Basement
11:00 - 11:50 am	Workshop Session 2	
	A. <i>The Day in the Life...</i> (Part 2, continued)	Lodge
	B. <i>Changing Hudson Project - Watersheds Module</i> Kali Bird, The Cary Institute	Classroom
	C. <i>Black Rock Forest's Brook Trout Program</i> Jack Caldwell, BRF	Trout Room, Lodge Basement
12:00 - 1:30 pm	Lunch, Awards, and Annual Chapter Business Meeting	Lodge
2:00 - 4:30 pm	Field Trips	Car pools will be arranged for trips 1, 2, and 3.
	1. Marsh Trail Hike at Constitution Marsh Audubon Sanctuary, Garrison	See descriptions of each trip later in the program.
	2. Canoe with the Hudson River National Estuarine Research Reserve, Kowawese Point, New Windsor	
	3. Lighthouse Day at Stony Point Battlefield State Historic Site, Stony Point	
	4. Hike to Black Rock Summit	
5:00 - 6:00 pm	Keynote Speaker: Dr. Tim Sugrue, President & CEO of the Beacon Institute for Rivers and Estuaries/Clarkson University: <i>"Solving the Mystery of Rivers: The Changing Tide of Data Collection Through Innovation,</i>	Lodge

	<i>Coordination, and a Common Language"</i>	
6:00 - 7:00 pm	Poster Session and Silent Auction Wrap-Up	Lodge
7:00 - 9:00 pm	Dinner and Live Auction	Lodge

Welcome to the 2013 NYSMEA Conference!

Dear NYSMEAns,

Welcome to NYSMEA's 35th Annual Conference. Whether this is your first NYSMEA event or you're a seasoned veteran, we're glad you're here.

Ocean Literacy Essential Principle 6 states that, "The ocean and humans are inextricably interconnected." The same could be said of the Hudson River, the focus of our gathering here this weekend. A backbone to our state, the Hudson has a unique geologic history, rich biodiversity, and interesting chemical properties. The "river that flows two ways" has been culturally significant for several hundred years, from the Native Americans who depended on its waters, the European sailors who explored its banks, the conservationists who championed its restoration, to today's scientists, boaters, swimmers, fishers, and others who study and enjoy the river every day.

Our studies this weekend will help us to better understand Hudson River fish, current monitoring procedures, and local ecosystems in and around the river. During our field trips, we'll enjoy paddling on its waters, seeing expansive views from hikes, and visiting historic lighthouses. So let's "dive in" to the Hudson and increase our knowledge and awareness of this important New York lifeline. I mean that figuratively – it's probably best to stay in your canoes!

Sincerely,
Meg

Meghan Marrero
NYSMEA President
president@nysmea.org

Keynote Speakers

Morning:

Tom Lake

The Lives and Legends of Hudson River Fishes

Tom Lake lives in Dutchess County, Wappinger Falls, at Hudson River mile 67. He is the Estuary Naturalist for the New York State Department of Environmental Conservation's Hudson River Estuary Program. Besides shadowing eagles, studying fish, and teaching the ecology of the estuary, he edits the Hudson River Almanac, a natural history journal now in its 20th year. He also teaches anthropology, archaeology, and the Prehistory of the Hudson Valley at SUNY Dutchess Community College in Poughkeepsie.



Evening:



Dr. Tim Sugrue

Solving the Mystery of Rivers: The Changing Tide of Data Collection Through Innovation, Coordination and a Common Language

Timothy F. Sugrue, Ph.D. was appointed President and Chief Executive Officer in 2011 as Beacon Institute for Rivers and Estuaries entered into a formal strategic alliance with Clarkson University. Sugrue served as the Dean of Clarkson University's School of Business for over 13 years, during which time he successfully implemented several new traditional and online programs in Clarkson's School of Business. Under his watch, Clarkson University garnered high rankings from U.S. News & World Report for its graduate MBA

program and earned Entrepreneur magazine's distinction as one of the top 15 entrepreneurship programs in the nation. Upon joining Beacon Institute, Sugrue immediately conceived and launched the Institute's unique "River University" interdisciplinary summer program for undergraduates, as well as a new graduate program in engineering management that takes advantage of Beacon Institute's Hudson River location and environmental mission.

Sugrue holds a Ph.D. in business administration from the University of Massachusetts. He traces his Hudson Valley roots back to an undergraduate degree in engineering at the United States Military Academy at West Point, where he completed a thesis in river monitoring and competed as a member of the sailing team.

With an established research record in corporate finance, Sugrue also is an award-winning leader in graduate and undergraduate business education, and in developing and presenting professional and executive programs. Prior to joining Clarkson University, Sugrue was a professor of finance and senior associate dean at George Mason University in Fairfax, Virginia, and has taught on the faculty of West Virginia University and as an affiliate faculty member at both the United States Military Academy and the U.S. Army Command and General Staff College.

Workshop Descriptions

Session 1: 10:00 – 10:50 am

A. The Day in the Life of the Hudson River: The Mighty Hudson... Is It a River? Is It an Estuary? (Part 1, Lodge)

Chris Bowser and Margie Turrin

Department of Environmental Conservation Hudson River Estuary Program

The Day in the Life of the Hudson River is an annual field sampling event sponsored by the Department of Environmental Conservation Hudson River Estuary Program that brings ~3500 students (elementary to undergraduate) down to the river at ~70 sites for a day of physical, chemical and biologic sampling. Students gain an understanding of the Hudson at their own location and then share data so that they can extend their knowledge to the wider system. Using hands-on activities and data collected by our sampling school groups, we will explore the Hudson River estuary from the salty south at the Atlantic Ocean to the freshwater north at the Troy Dam. What lives where? How does it differ from end to end? Where's the salt? What drives some of its dynamic conditions? What important role does it play in our marine foodweb? What does the student-collected data tell us and how can we bridge our instruction from a focus on student-collected data to larger professionally collected datasets both locally and nationally?

B. Frogs and FrogWatch USA (Classroom 1)

Nalini Mohan

Wildlife Conservation Society/The Bronx Zoo

This interactive workshop covers Frogs 101 – biology and ecology of frogs, frogs as environmental indicators, threats and conservation of frogs. Learn about some NY frogs and FrogWatch USA and how to get involved with this stellar national citizen science program with WCS/the Bronx Zoo.

C. Brook Trout Program at Black Rock Forest (Classroom 2)

TBA

Black Rock Forest Consortium

A staff member will talk about how classroom teachers can incorporate "Trout in the Classroom" into a visit to BRF. *This is a multivisit course, although the program can be observed on a single-day visit.* This intensive hands-on course runs from December through May in concert with the life cycle of New York's only native trout species, the brook trout. Classes can sign up to integrate this into their curriculum or just observe on a day visit. Students observe brook trout in tanks from fertilization through fingerling stages, applying hatchery and lab techniques as a foundation for understanding life cycles, aquatic systems, and the behavior and requirements of

aquatic organisms. Participating classes make three winter visits to the Center for Science and Education and three spring visits to the freshwater streams of Black Rock Forest. The program concludes with the introduction (or stocking) of the raised brook trout into a stream environment that has been studied and concluded to be adequate trout habitat.

Workshop Descriptions

Session 2: 11:00 - 11:50 am

A. The Day in the Life of the Hudson River (Part 2, Continued in the Lodge)

See description on the previous page.

B. Changing Hudson Project - Watersheds Module (Classroom 1)

Kali Bird

Education Program Specialist, The Cary Institute of Ecosystem Studies

Kali Bird will present an overview of the Changing Hudson Project, one of a series of major education projects at the Cary Institute. Play and learn with her as she shows how to engage students by teaching about the watershed surrounding their school and how it extends to the environment around them.

C. Brook Trout Program (This is a repeat of the workshop, in Classroom 2, given during Session 1.)

See description on the previous page.

Poster Descriptions

Microbes in the Sea: Resource kits for hands-on marine science lessons

Sheean Haley, Senior Staff Associate, Lamont Doherty Earth Observatory

Sonya Dyhrman, Associate Professor, Lamont Doherty Earth Observatory

Long Island Sound Science Festival

Ann Marie Cunningham

Field Trips: 2:00 – 4:30 pm

Field Trip 1: Marsh Trail Hike at Constitution Marsh Audubon Center and Sanctuary

Cross the Hudson to Cold Spring! Ready for a walk? Choose this trip if you are up for a moderate hike (some steep slopes, particularly the first 10 minutes downhill). The hike includes a stroll along a 700-foot boardwalk through the marsh. Along the way, there are several benches to take in the marsh habitat and the unmatched view of the surrounding Hudson River Highlands. Although the visitor center will not be opened to us that day, the trip leader will provide information about Constitution Marsh K-12 and Public Education programs available throughout the year.

Location:

Constitution Marsh Audubon Center and Sanctuary
(www.constitutionmarsh.audubon.org)
127 Warren Landing Road
Garrison, NY
(27 minutes from BRF)

Field Trip 2: Canoe Trip on Hudson with staff from the Hudson River National Estuarine Research Reserve (limit 20 people)

Launch with NYSDEC/HRNERR Environmental Educators from Kowawese Unique Area at Plum Point. No prior canoe experience necessary. Kowawese Area is a 102-acre park site owned by New York State and managed by the Orange County Department of Parks, Recreation and Conservation. This park offers the public an idyllic natural resource for family recreation, plus one of the most dramatic views of the Hudson River!

Location:

Kowawese Unique Area, Plum Point Park

(www.orangecountynyparks.com)
Rt. 9W, New Windsor, New York
(17 minute drive from BRF)

Field Trip 3: Lighthouse Day at Stony Point Battlefield State Historic Site

September 21st is Lighthouse Day at Stony Point!

This field trip option invites conference participants to join the annual public celebration at this NYS Historic Site, which will be ongoing that day from 1-4 pm.

Celebrate the history of lighthouses on the Hudson River. Tours of the small lighthouse will be given throughout the day. Nineteenth-century maritime music and storytelling will be performed by Balladeer Linda Russell and Storyteller Jonathan Kruk in the shadow of the lighthouse. A costumed interpreter, portraying Lighthouse Keeper Mrs. Nancy Rose, will host a tea party for visitors. NYSMEA conference participants will enjoy the historic view overlooking the Hudson (great photo opportunity).

Location:

Stony Point Battlefield State Historic Site

(nysparks.com/historic-sites/8/details.aspx)

44 Battlefield Road

Stony Point, NY 10980

(25 minute drive from BRF)

Field Trip 4: Hike to Black Rock Summit, led by veteran hiker Pete Macchia

At 1,410 feet (429.76 meters), Black Rock Mountain is the namesake for the Forest, featuring granite gneiss outcrops that contain dark-colored mineral deposits such as iron and hornblende. The summit provides outstanding views to the north, west, and south of features such as the Catskill and Shawangunk Mountains, the Hudson River and the Great Valley including the city of Newburgh and Stewart Airport.

Black Rock Peak is one of the closest peaks to the visitor center and has a nice panoramic view of the Hudson Valley. The hike requires a slight uphill climb to Aleck Meadow Reservoir using a cut-through path and spending some time on the dirt roads in the park. Some balance is helpful for crossing a dam to the path behind Aleck Meadow reservoir and on the back side of the reservoir begins a more challenging hike to the summit, which is mostly uphill hiking with some use of the hands and high steps to get over boulders and steep inclines. Depending on the speed of the group, we can return on the same path or pursue a longer return by circling around the summit and descending on the other side of the peak. Peter will have some basic first aid supplies and would advise anyone wishing to join him for the hike to bring some snacks, water, and be dressed comfortably to be physically challenged on the final summit. He will wear running shoes, shorts, and have a few layers dri-fit shirts to either cool down or warm up with for comfort, lightness, and speed. He will bring a good-size hiking bag and can help carry some snacks or drinks for someone that benefits from traveling light. Some parts of the trail may be easier with some hiking gear if that is your preference. Hiking boots, hiking poles, a daypack, and other gear is welcome if that is your normal routine, but is not necessary. A camera is a good idea or Pete can share pictures he takes. If anyone heats up on the return, a swim in Aleck Meadow Reservoir always feels good!

NYSMEA Officers 2012-2013

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 2013 Conference Committee!

Lisa Breslof
Blanca Ching
Bob Cummings
Eileen Dugan
Tom Greene
Nordica Holochuk
Merryl Kafka
Eileen & Marty Kutikoff
Meghan Marrero
* Sarah Richards
Lou Siegel
Dale Stanley
David Stolarz

*Chair

**And Thanks to the Staff of Black Rock Forest Consortium
Especially Jack Caldwell, Barbara Brady,
and Matthew Munson**

NYSMEA Awards

Congratulations, 2013 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.

Mickey Maxwell Cohen

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.

Tom Lake

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.

Charles Denson

Kinghan Service Award

Presented to a member with at least three years of outstanding participation in the Association and who has contributed to the needs of the organization.

Maggie Flanagan

SCONYC Jerry Resnick Memorial Presidential Awards

Presented by individual member associations of the Science Council of New York City to an individual or organization that has contributed to the goals of the association as exemplified by SCONYC's second president.

Eileen Dugan

Past NYSMEA Award Recipients

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, and Artie Kopelman

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, and Richard Ellis

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, and David Stolarz

SCONYC Jerry Resnick Memorial Presidential Awards

Robert Jaeger, Robert Abrams, John Loret, Lou Siegel, Richard McDermott, Al Siegel, Joseph Varon, Maxwell Cohen, Eleanor Fries, Merryl Kafka, Joel Teret, Eilene 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, and Nordica Holochuk

Resource Contributors

American Museum of Natural History
Amy Gulick
Atlantis Long Island Aquarium and Exhibition Center
Beacon Institute for Rivers and Estuaries
Black Rock Forest Consortium
Blue Ocean Institute
Cary Institute of Ecosystem Studies
Coastal Research & Education Society of LI
Coastal Studies for Girls
Constitution Marsh Audubon Center & Sanctuary
Ducks Unlimited
East End Getaway
Fire Island National Seashore
Gina Jack, Public Affairs, NYSDEC
Hudson Highlands Nature Museum
Hudson River Museum
Hudson River National Estuarine Research Reserve
Hudson River Sloop Clearwater, Inc.
Hyatt Place
Long Island Maritime Museum
Long Island Sound Science Festival
Long Island Sound Study
National Marine Educators Association
New York Sea Grant
New York State Department of Environmental Conservation
Ocean Literacy
Quogue Wildlife Refuge
Riverhead Foundation for Marine Research & Preservation
Shinnecock Nation Cultural Center & Museum
South Fork Natural History Museum & Nature Center
SUNY Maritime College
SUNY Stony Brook School of Marine and Atmospheric Sciences
Wildlife Conservation Society

Auction and Food Item Donors

American Museum of Natural History
American Princess Cruises
Bob Cummings/New York Aquarium, WCS
Atlantis Long Island Aquarium and Exhibition Center
Chris Paparo
Clemente's Crab House of Sheepshead Bay
Denise McClean, Director, Prospect Park Zoo, WCS
Eileen Dugan
GIANTmicrobes Aquatics, www.giantmicrobes.com
Jimmy from Bagel Boy of Bay Ridge
John Burroughs Association
Lamplighter Wines & Liquors
Lou Siegel
Lucky Chocolates
Merryl Kafka
Nalini Mohan/Bronx Zoo Education Dept, WCS
Nordica Holochuk
Randazzo's Seafood Restaurant, Sheepshead Bay
Viking Fleet, Montauk
Working Harbor Committee

Thanks also to those people who brought in auction items today!

Upcoming NYSMEA Events. Please Join Us!

November 10: Board Meeting and Visit to "Whales: Giants of the Deep" Exhibit at the American Museum of Natural History

December 7: Annual Holiday Party at Eisenhower Park, East Meadow. Dr. Chris Gobler Stony Brook University, guest speaker

The Lower Hudson Valley has so much to offer!

Here are a couple of interesting places not too far from our conference location to visit on your way home. Remember too, that both the Stony Point Historic Site and Constitution Marsh (field trip options) are within a ½ hour drive from BRF. Here is a recent travel article about the region from the New York Times, which includes some destinations to the North:

http://travel.nytimes.com/2013/07/28/travel/36-hours-in-the-hudson-valley-new-york.html?pagewanted=all&_r=0

Storm King Art Center

Widely celebrated as one of the world's leading sculpture parks, Storm King Art Center has welcomed visitors from across the globe for fifty years. It is located only one hour north of New York City, in the lower Hudson Valley, where its 500-acre landscape of fields, hills, and woodlands provides the setting for a collection of more than 100 carefully sited sculptures created by some of the most acclaimed artists of our time.

1 Museum Road
New Windsor, NY 12553
(845) 534-3115
stormkingartcenter.org

U.S. Military Academy at West Point

The Visitors Center provides an excellent central starting point for all visitors to the U.S. Military Academy. The Visitors Center and West Point Museum are open to the general public on a daily basis. Visitors may enter the academy grounds by guided tour. It is strongly recommended that visitors call the Visitors Center first: (845) 938-2638
Visitor Center: 2107 New South Post Rd, West Point, NY 10996

Hudson Highlands Nature Museum

This nature center's mission is to develop responsible caretakers of the natural world through its special focus on environmental education. It uses its living collections of native animals, natural habitats and trails to present a wide variety of programs for people of all ages at its two locations:

Outdoor Discovery Center:

100 Muser Drive Cornwall, NY | Mail: P.O. Box 451 12518 | 845-534-5506

Visitors Center open 9am - 4pm Saturdays and Sundays

Nature Play | Nature Programs | Hiking Trails

Wildlife Education Center:

25 Boulevard Cornwall-on-Hudson, NY 845-534-7781

Open Friday - Sunday 12pm - 4pm. Animal Program Sat and Sun at 2:30pm.

Live native animals | Special exhibits | Story walk for children