15 MAY 2021
09:30am-4:00pm ET
BRIDGING OUR CONNECTIONS TO WATER

NYSMEA is a 501c3 nonprofit organization dedicated to educating others about marine & freshwater environments & conservation.

www.nysmea.org
nysmea@gmail.com
Find Us On Facebook
@NYSMarineEd
Presidents Message

Dear NYSMEANs,

The last 6-7 years as president of this extraordinary organization has been an amazing journey. As a team we put on conferences, field trips, meetings, coastal cleanups and holiday parties each year. I have much gratitude and thanks to my marine science colleagues. My NYSMEA partners and friends played a central role in motivating me. David Stolarz, our webmaster and secretary did an excellent job coordinating our website and producing our newsletter the Strandline. NYSMEA activities have helped me grow as a person, leader and teacher. I want to take a moment and thank fellow NYSMEANs: Merryl Kafka, Lou Siegel, Sarah Richards, David Stolarz, Beth Ritter, Late Gene Ritter, Lisa Breslof, Adam Riback, Michael Danza, Thomas Greene, Leann Winn, Meghan Marrero and Blanca Ching for all your help and support over the presidential term.

Sincerely,

Lane Rosen

NYSMEA President
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<tr>
<td>9:30-10:10am</td>
<td>Welcome and Introduction to the Day</td>
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<td>10:10-10:25am</td>
<td>Ice Breaker and Reflection</td>
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<td>10:30am-12:00pm</td>
<td>Three Concurrent Sessions with Two Tracks</td>
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<td>12:00-12:30pm</td>
<td>Lunch Break and Optional Networking Session</td>
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<td>1:00pm</td>
<td>Silent Auction Closes</td>
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<td>2:00-3:00pm</td>
<td>Awards and Announcements</td>
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<td>3:00-4:00pm</td>
<td>Live Auction and Door Prize</td>
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*Speaker bios, session descriptions, awardees, and ancillary materials in following pages.*
Meet the Speakers

**Curtis Zunigha, Co-Director of The Lenape Center**

Curtis Zunigha is an enrolled member of the Delaware Tribe of Indians in Oklahoma. ([www.delawaretribe.org](http://www.delawaretribe.org)) The Delaware Indians are the modern-day descendants of the Lenape, the original Indigenous people of the NYC area. He is currently the Cultural Director for his tribe and an acknowledged expert on Delaware/Lenape culture, language, and traditional practices. He has over thirty-five years of experience in tribal government, community development, cultural preservation, and telecommunications. Mr. Zunigha is Co-Director of The Lenape Center, a non-profit organization based in New York City which promotes the history and culture of the Lenape people (aka Delaware Indians) through the arts, humanities, and environmental activism. ([www.thelenapecenter.com](http://www.thelenapecenter.com))

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**Theresa Keith, 2021 Knauss Marine Policy Fellow for the UN Decade, NOAA Research**

Twitter [@waterworldtrvlr](https://twitter.com/waterworldtrvlr)

Theresa Keith is a 2021 Executive Fellow with NOAA’s Office of Oceanic and Atmospheric Research in the role of UN Decade-Domestic Engagement Policy Advisor and Secretariat. Theresa received a B.S. in Biology and Spanish Language with a minor in Latin American Studies from the University of San Francisco in 2018. She participated in the Joint-Degree Water Cooperation and Diplomacy program, receiving an M.S. in Water Resources Policy and Management awarded by Oregon State University and IHE-Delft Institute for Water Education (Netherlands) and an M.A. in Water Cooperation and Diplomacy awarded by the University for Peace (Costa Rica) in 2020. She is an active member of the North American Youth Parliament for Water and serves as the Editor and Program Manager for their Drops of Change blog, in which young professionals share their views on climate, adaptation, and water topics. Theresa will also serve this year as an All-Atlantic Ocean Youth Ambassador representing the United States at the All-Atlantic Ocean Research Alliance where she will work with her counterparts from other countries to develop communication and engagement strategies to promote conservation of the Atlantic Ocean.
Detailed Schedule

9:30  Main Room Opens

9:35  Opening thanks to the land and water
      Curtis Zunigha, Co-Director of The Lenape Center

9:45  Welcome to the UN Decade of Ocean Science for Sustainable Development
      Theresa Keith, 2021 Knauss Marine Policy Fellow for the UN Decade, NOAA Research

9:55  Outline for the day

10:10 Ice Breaker

10:30-11:55  Morning Sessions

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<td>10:30-10:55</td>
<td>Margaret Flanagan and Jake Madelone</td>
<td>John Tanacredi</td>
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<td>Waterfront Alliance</td>
<td>Molloy College</td>
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<td></td>
<td>Hands-On Coastal Resilience:</td>
<td>Our Coastlines Under Siege: Myths and Facts</td>
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<td>Activities for Understanding and</td>
<td>Regarding the Richness of the Long</td>
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<td>Addressing Climate Change</td>
<td>Island Coastal Natural Resources</td>
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<td>11:00-11:25</td>
<td>Jonathan Turer</td>
<td>Owen Foote, Brad Vogel, Celeste LeCompte</td>
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<td>NYCH2O</td>
<td>Gowanus Dredgers Canoe Club</td>
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<td>Horseshoe Crab Tales and Plumb Beach</td>
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<td>11:30-11:55</td>
<td>Godwyn Morris</td>
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<td>Dazzling Discoveries/Skill Mill NYC</td>
<td>Rutgers University</td>
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<td>Engineering with Paper: Building Bridges</td>
<td>How are our Tidal Marshes Coping With Sea Level</td>
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12:00  Break for Lunch

12:15-12:30  Optional Networking Session
            K-12 Formal Educators
            Post-secondary Educators
            Informal Educators
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| 12:30-12:55 | **Adriana Aquino**  
American Museum of Natural History  
*Diversity of Fishes: Discovery of New Species and Patterns of Similarity* | **Artie Kopelman**  
Coastal Research & Education Society of Long Island, Inc.  
*My Decades Among the Seals of NY* |
| 1:00-1:25 | **Laurel Zaima and Margie Turrin**  
Lamont-Doherty Earth Observatory of Columbia University  
*Critical Habitats in the Concrete Jungle* | **William Monahan**  
Nassau BOCES  
*My Favorite Mollusks* |
| 1:30-1:55 | **Thomas Greene**  
Kingsborough Community College  
*The Oyster Garden* | **Lovelle Ruggiero**  
New Rochelle School District  
*Confronting Relative Sea Level Rise with Engineering. Can Venice be Saved?* |

2:00-3:00  
**Return to Main Room**  
Awards  
Newly-elected officers announced  
Upcoming event announcements

3:00-4:00  
Silent auction winners posted  
**Live auction**

4:00  
Closing and door prize winner announced
Workshop Descriptions
(alphabetically by first presenter’s last name)

Minds-On

Owen Foote and Brad Vogel, Gowanus Dredgers Canoe Club
@gowanusdredgers
Celebrating Shorelines as a COVID Response
When New York City Parks shut down due to COVID19, Privately Owned Public Space at the shoreline remained open. City rules require paving, planting and linear seating, without any amenities such as play space, restrooms, dog runs, or other programming that often serve to activate outdoor spaces resulting in a bland, underused waterfront edge. The Gowanus Dredgers Canoe Club in Brooklyn responded in 2020 with a series of programs to gather with distance and celebrate that arts, diversity and the quirky energy of NYC is still very much alive. Enjoy a presentation and conversation about lessons learned from such efforts by a few volunteers who share a passion for our harbor and natural environment.
All Audiences, Government Agencies

Artie Kopelman, Coastal Research & Education Society of Long Island, Inc.
@CRESLI_Inc
My Decades Among the Seals of NY
An informative and photographic overview of the various species of seals in our backyard, their status, their history, and research being conducted to better understand site usage and haulout fidelity.
All Audiences

William Monahan, Nassau BOCES
My Favorite Mollusks
Sharing a few interesting facts about some of Long Island’s interesting Mollusca.
All Audiences

Lovelle Ruggiero, New Rochelle School District
@DrRuggiero
Confronting Relative Sea Level Rise with Engineering. Can Venice be saved?
Bridging Our Connection to Water: Rising seawater in the Adriatic threatens to swallow up the historic city of Venice. How can we keep the rising levels of seawater from jeopardizing this magical city along with its multiple habitats and ecosystems.
6 - 8 Teachers (Middle), Informal Educators
John Tanacredi, Molloy College

*Our Coastlines Under Siege: Myths and Facts Regarding the Richness of the Long Island Coastal Natural Resources*

A discussion of the facts and fallacies surrounding the robust natural resources health of the Long Island coastal ecosystem over the last 10 years and in spite of the Covid-19 pandemic: From Horseshoe crabs to Septic Systems.

All Audiences, College Instructors, Informal Educators, Resources Managers, Government Agencies

Judith Weis, Rutgers University

*How Are Our Tidal Marshes Coping With Sea Level Rise?*

When faced with sea level rise (SLR), marshes must either increase their elevation to keep up or migrate inland. SLR is particularly high in the mid-Atlantic. Many marshes in NY/NJ are not getting enough new sediment to elevate quickly enough, and many have developed areas behind them and cannot migrate inland - the problem of "coastal squeeze." Four potential remedial measures are: finding migration pathways, changing Phragmites management, thin-layer deposition of sediments, and installation of living shorelines. There four options will be discussed.

All Audiences

**Hands-On**

Adriana Aquino, American Museum of Natural History

@AAquinoG

*Diversity of Fishes: Discovery of New Species and Patterns of Similarity*

This is an interactive presentation with goals at different levels. In terms of science content, the learning objectives fit in a unit about evolution, in particular focusing on the concept of common ancestry as the best explanation of the patterns of similarity observed among species. The activity itself models the process by which ichthyologists discover new species. At the broadest level, the instructional sequence of the activity models best practices for designing learning experiences in an informal setting. In this model, the “field trip” represents the “field work,” during which data are collected. In the context of the NGSS, the activity addresses the *Scientific Practice #8* related to obtaining, evaluating, and communicating information; the *Life Science Disciplinary Core Idea* of “Biological Evolution: Unity and Diversity,” and the *Crosscutting Concept* of patterns.

All Audiences

Margaret Flanagan and Jake Madelone, Waterfront Alliance

@ourwaterfront #ourwaterfront

**Hands-On Coastal Resilience: Activities for Understanding and Addressing Climate Change**

Join in two interactive activities that reveal connections between ourselves, our estuary, and our climate. Designed to be easily implemented at home for distance learning, or in a classroom, we’ll highlight one game and one mapping activity from Waterfront Alliance’s Coastal Resilience Education Toolkit, which offers six complete lesson plans for learning about our estuary’s coastal resilience. Gather a pen and paper, and get hands on for environmental education!

All Audiences
Thomas Greene and Michael Danza, Kingsborough Community College

The Oyster Garden

Appearances can be deceiving. Just look at the oyster. It's not very appealing. Yet, this bottom dwelling shelled animal is an all-around wonder!! It can filter feed wastes from sea water, form a protective reef against beach erosion, create a habitat for other marine creatures and provide a very nutritious food for us to consume. Today we will examine an oyster garden on a floating dock at the Kingsborough Community College Marina where we grow and study this fascinating creature.

All Audiences

Godwyn Morris, Dazzling Discoveries/Skill Mill NYC
@engineeringwithpape and @dazzlingdiscoveries

Engineering with Paper: Building Bridges

Paper, a sustainable material, is so commonly used for drawing and writing but most students do not know how to use it for 3-dimensional projects. Amazing bridges (and other projects) can be made with just paper, tape and scissors. Using Engineering with Paper techniques, I will show you how you can confidently guide students through innovative, creative, curriculum-based engineering projects in school or via online platforms. This workshop will get you cutting, folding, connecting and building in a matter of minutes, and be ready to implement new activities with students immediately.

All Audiences

Jonathan Turer, NYCH2O

Horseshoe Crab Tales and Plumb Beach

New York City beaches are home to some incredibly fascinating creatures - such as horseshoe crabs. In this session we'll examine these unusual residents. We'll discuss their habits, their anatomy, their role in international bird migration patterns as well as their benefit to human medicine. We'll also talk about the beach where we introduce students to horseshoe crabs - using our new ArcGIS StoryMap.

All Audiences

Laurel Zaima and Margie Turrin, Lamont-Doherty Earth Observatory of Columbia University
@ldeo_fieldstation

Critical Habitats in the Concrete Jungle

While NYC is one of the largest urban agglomerations in the world, a very unique and highly utilized marine habitat neighbors the concrete jungle. The Hudson is a critical habitat for many threatened and endangered species. Rich habitats for flora and fauna are found within the NYC area, providing a bounty of biodiversity and ecosystem services. Through activity and discussion this session would engage participants in using maps to locate the diversity of critical habitat around NYC harbor, while exploring some of the species richness that is hidden in this urban landscape.

All Audiences
2021 NYSMEA Awards

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 (in)formal marine science education.

2021 winner: Alan Ascher

Alan has served in many roles over the years. For several years he was the chairperson of our student conference. He is a leader in in-service and preservice teacher education on a state and local level as an Instructor of Elementary and Secondary Science Methods and Discovery Learning and Integrated Curricula and Supervisor of Student Teaching Teacher Academy.

Past winners: Richard McIntyre, Karen Hensel, Lou Siegel, Al Siegel, Bob Abrams, and Mickey Maxwell Cohen, Rick Raymond, Tony DiLernia, and Joe Varon

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.

2021 winner: Lane Rosen

I am very proud to accept the Matthew Fontaine Maury Award. With the help of my colleagues, I have been able to carry on the NYSMEA mission over the past seven years. There have been many coastal cleanups, meetings, holiday parties, conferences and field trips to which I proudly contributed. I am humbled by this award and hope to participate in many future events.

Past winners: 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, Tom Lake, Murray Fisher, Captain Frank DeSantis, Captain Tom Paladino, Michael Farina, Artie Raslich, Paul Sieswerda and Councilman Mark Treyger
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.

2021 winner: Gowanus Dredgers

The Covid19 crisis led to the closures of many local businesses across the city but New Yorkers of the Gowanus Dredgers Canoe Club stepped up to support their neighbors in business. These change makers responded as COVID19 impacted New York last year in the same way mariners change course at a moment's notice of turbulent wind or bad weather. Throughout the summer of 2020, the organization's maverick boating volunteers conducted an amazing variety of culturally diverse and spirited activities along the waterfront. From organizing a dance performance above a platform of floating canoes, to an evening of brass band performance in canoes, to a boat the vote event, encouraging early voting with an opera singer and french quartet performance on canoes, viewed with social distance from the shoreline. Week after week the organization brightened spirits with free canoeing, educational programs and health and wellness activities focused on skill building of paddlesport in New York City.


Kingshan 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.

2021 winner: Leann Winn

Leann returned home 4 years ago and since, has played an integral role by representing our chapter at all National Marine Educators Association meetings and conferences. At Trevor Day School, Leann holds an Upper School Faculty position after instituting the Marine Science curriculum. Since the inception of Sharks4kids, Leann has developed curriculum and works to create new ocean advocates. In partnership with local organizations such as the
Wildlife Conservation Society and The South Fork Natural History Museum, Leann has been part of the research team studying sharks off our coast. As a member of the Teacher Advisory Council for the New York Aquarium, Leann serves to develop and assess their educational programming. During these trying times, Leann has proven to be our online lifeline keeping our organization going through virtual activities. It is appropriate that we present this award to Leann, as they share so many of Gene’s beliefs.


Gene Ritter Aquatic Education Award
Presented to someone who has used diving as a means to further education.

2021 winner: Lenny Speregen

I went to John Dewey HS where I tried the patience of Lou Siegel in the Marine Biology program and met Gene and Beth Ritter. I have been diving for over 46 years, of which 42 as a professional diver in the recreational, commercial, safety, and movie industries. I had the honor of working with Gene and Beth Ritter in a program we created called “Classroom on the Pier” for several years. We took our commercial diving equipment and taught the public about the marine environment with a live view from the bottom. I have been teaching the Professional Diving CTE at The Urban Assembly New York Harbor School for the past 6 years.

Past winner: Bernie Chowdhury
Freudenthal Research Award
Presented to a member or non-member who has made a significant contribution to furthering our knowledge of the marine environment.

2021 winner: Artie Kopelman

Dr. Artie Kopelman, is one of the co-founders of the Coastal Research and Educational Society of Long Island (CRESLI; https://cresli.org) and is its president, senior-scientist, and web-master. Dr. Kopelman is also a director of Save the Great South Bay (https://savethegreatsouthbay.org). He is a population ecologist whose research interests, since 1987 include the study of finback, humpback, and other and dolphins, whales of New York and New England; and since 1995, the population dynamics of pinnipeds of NY. Through the use of photo-identification, Dr. Kopelman has been examining the site fidelity of harbor seals at Cupsogue Beach Park in Westhampton Beach, NY, since 2006. He received his PhD in Biology in 1982 from The Graduate School and University Center of CUNY. Dr. Kopelman was a Full Professor of Science in the Department of Science and Mathematics, Fashion Institute of Technology of the State University of NY and retired in July 2020. He is now a Professor Emeritus (the 9th individual to receive this honor in FIT’s 75 years). In May 2010, Dr. Kopelman was appointed a Distinguished Service Professor by the State University of New York Board of Trustees. Distinguished Professorship is the highest honor conferred upon instructional faculty in the State University of New York (SUNY) system. Dr. Kopelman is now a SUNY Distinguished Professor Emeritus. Dr. Kopelman is also an Adjunct Lecturer in Marine Mammals at SUNY Stony Brook, School of Marine and Atmospheric Sciences.
Conference Schedule At-A-Glance:

**Tuesday, July 13**
12:00-1:00 & 7:00-8:00 Optional - How to Whova
5:30-6:30 New Member/Newcomers Social

**Wednesday, July 14**
2:00 - 2:15 Welcome and Announcements
2:15 - 3:00 Plenary Speaker or Panel Discussion
4:00 - 6:00 Concurrent Sessions
6:00 Committee meetings

**Thursday, July 15 (Simultaneous Student Conference)**
1:15 Committee meetings
2:00 - 2:15 Welcome and Announcements
2:15 - 3:00 Plenary Panel Discussion
3:15 - 5:15 Concurrent Sessions
5:30 - 6:00 Chapter Meetings & International Meetup
6:00 Committee meetings
7:00-8:30 Trivia (optional)

**Friday, July 16**
1:15 Committee meetings
2:00 - 2:15 Welcome and Announcements
2:15 - 3:00 NMEA Business Meeting and Awards Ceremony
3:15 - 4:45 Concurrent Sessions
4:45 - 5:45 Stegner Lecture
5:45 - 6:00 Closing

**Saturday, July 17 (Regional In Persons)**
Jones Beach Energy and Nature Center
We plan to do a tour, followed by kayaking and/or a beach cleanup. Afterwards, we are proposing to go down the beach to the zip line, open bar with music, which we are considering using as a venue for an off-site event during the 2022 conference.
We are excited to announce that we will be hosting the 2022 National Marine Education Association Conference in a hybrid format with the in person option located at Hofstra University. Exact dates TBD.

**Stay tuned for more details.**

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**Newly Elected Officers**

**President:** Lou Siegel  
**Treasurer:** Sarah Richards  
**Secretary:** Lisa Breslof  
**V. P. College:** Meg Marrero  
**V. P. Secondary Ed:** Christine Nealy  
**V. P. Elementary Ed:** Tom Greene  
**V. P. Special Ed:** Blanca Ching