Session A 10:00-10:45 AM

The Long Island Sound Schools Network: Connecting Schools Across the Sound

Diana Payne and Meghan Marrero
UConn & Connecticut Sea Grant Mercy College

Interested in joining like-minded educators in protecting the Long Island Sound watershed and inspire the next generation of stewards? Mini-grants to implement school-wide and/or community projects and stipends for two teachers from your school to make it happen? How about the possibility of travel funds to present at SENEME, NYSMEA, and even NMEA conferences? Or connections with USA and international Blue Schools communities? Join us to learn about this exciting opportunity for schools in the Long Island Sound watershed! (ES, MS, HS)

The NOAA B-Wet Tacklebox: Resources for Teaching Experiential Education in Alternative School Settings

Nina Quaratella and Hannah King
New England Science & Sailing Foundation (NESS)

This session will highlight developed resources and best practices identified through a partnership between NESS and Natchaug Clinical Treatment Day Schools. Through a research cohort of alternative school teachers, in tandem with hands-on student programming in-school and on the water, we have identified best practices of delivering experiential programming focused on academic growth and social and emotional learning. We will dive into the activities and free lesson plans that have come out of the teacher research cohort, as well as review the program takeaways. (ES, MS, HS)

The Living Seashore

Peter E. Pellegrino, Ph.D.
Southern Connecticut State University

The Living Seashore is a PowerPoint based, interactive, multimedia program that combines live video footage of shallow water invertebrates along with physical descriptions of habitats and organisms. The interactive format allows the user to control the flow of information. This program allows the viewing of living invertebrates with their natural colors rather than just looking at lifeless, contorted, colorless preserved specimens. This program will allow the user to gain the true essence of these animals and to appreciate their natural beauty. (HS, College)

Session B 11:00-11:45 AM

Using Art to Communicate Science Ideas
Valerie Cournoyer
Amity Regional Schools, Woodbridge, CT

Creating and sharing art is an effective way to communicate science ideas. This is evident in the examples shared by two of our guest speakers today, Patrick Lynch, visual artist and field guide author and Dr. James T. Carlton, Mystic-Williams College whose work on marine debris has been featured in the new art exhibit at Mystic Seaport called "Oceanus" by Alexis Rockman.

In this workshop we will make an optical illusion artform called an agamograph. This art is well suited to show concepts including cause and effect, before and after, stability and change and more! Perfect for climate change impacts and solutions, tides, nocturnal and diurnal activity in habitats and glaciation (to name a few!) Two pictures are drawn (or printed), cut apart and alternately sequenced. One side of the agamograph will show the before image and the other will illustrate the after. Students create labels explaining their concepts and display work at school. The lesson and student work will be available.

Valerie will also describe the Amity School District STEAM Day event bringing 5th graders to the high school for a fun-filled day of science. (All)

IEPs For Everyone
Anna Stuart-Vieira and Jen Blessing
Curtis Corner Middle School, Wakefield, RI

Discover how choice boards with station work in secondary science can lead to more small group instruction and in turn greater learning outcomes. A classroom teacher and special educator will demonstrate a typical day in their classroom. (MS)

Long-Term Experiments on Corals as Capstone Projects
Anthony Wasley
Hall High School, West Hartford, CT

Capstone projects as graduation requirements can be done in the science classroom with corals in aquariums. We will discuss how students can conduct 10-12 week experiments on corals by changing variables such as lighting, feeding, interactions with other corals, and more while students measure coral growth along the way. In addition, we will discuss how marine aquarium care can be embedded in your curriculum through journal assignments. (HS)

Session C 1:30-2:15 PM

Promoting Stewardship- Take Science Outside!
Susan P Unger, PhD
St Peter School, Warwick, RI

A description and proposed model for a local field trip promoting stewardship of natural resources. Students walked to a local park with a variety of ecosystems, both land and sea-based, and participated in authentic Science research. (ES, MS)

Youth Marine Debris Action Planning*
Demi Fox
NOAA Marine Debris Program

The NOAA Marine Debris Program will introduce educators to a key tool for coordination on the issue of marine debris: regional Marine Debris Action Plans, collaborative efforts to prevent, remove, and study marine debris in a geographic region. NOAA will model an engaging lesson that draws on students' creativity and critical thinking through designing projects to implement Action Plan goals. Students will consider the steps for action implementation while exploring real-world examples of goal-setting, collaboration, and meaningfully addressing marine debris. (MS, HS, College) **virtual presentation*

Tour the Marine Science Magnet High School
Amy Ferland and MSMHS Students

Visit the state-of-the-art freshwater and saltwater aquaculture labs and learn why MSMHS has been nationally recognized as one of the best high schools in Connecticut and the nation. The Marine Science Magnet High School, established in 2011, is a public, interdistrict magnet high school serving Connecticut students in grades 9-12. MSMHS offers an extensive array of marine science themed programs and opportunities, as well as academically rigorous college preparatory opportunities that meet the needs of all students. (MS, HS)

Keynote Presentation 9:00-9:45 AM

A Tale of Two Estuaries
Patrick J. Lynch

Connecticut's two largest riverine estuaries have long been recognized as world-class natural treasures, also rich with the human history of our region. The two very different characters of the Connecticut River and the Thames River estuaries are due to accidents of geology that determined their fates. We owe the gorgeous rural character of the Lower Connecticut River to vast amounts of sediments left behind by the Ice Age glaciers, which prevented the development of large ports on the Connecticut. The historical importance of the Thames River ports of New London and Groton grew from the deep natural harbors of the Thames estuary. Both rivers have been critical to New England's natural history and human development, and both estuaries are now part of the new Connecticut National Estuarine Research Preserve. This talk will compare and contrast the Thames and Connecticut River estuaries, emphasizing the natural history of our regional estuaries and coastal habitats.

Patrick J. Lynch is an artist, photographer, and author who has written ten books published by Yale University Press, including "A Field Guide to Long Island Sound.". His next book, "A Field Guide to the Connecticut River," will be published by Yale Press in the spring of 2024.

Special Presentation 12:30-1:15 PM

The Age of Invasive Species Meets the Age of Plastics: How Tsunamis, Ocean Rafting, Coastal Development, and Climate Change May All be Related
Dr. James T. Carlton

This is the remarkable story of how nearly 400 living Japanese species were rafted to North America and Hawaii on marine debris after the March 11, 2011 Great Earthquake & Tsunami in Japan, and the discovery that plastic marine debris facilitates the dispersal of marine species and has led to the establishment of coastal animals in the Great Garbage Patch.

Dr. James T. Carlton is Professor of Marine Sciences Emeritus at Williams College and Director Emeritus of the Williams College-Mystic Seaport Maritime Studies Program. His research focuses on the environmental history of coastal marine ecosystems, including invasions of non-native species and modern-day extinctions in the world's oceans. His research sites include the Pacific and Atlantic coasts of North America, the Hawaiian Islands, and the Galapagos Islands.

Field Trip 3:00-5:00 PM

Exploring the Connecticut National Estuarine Research Reserve

Larissa Graham
Education Coordinator, Connecticut National Estuarine Research Reserve

Long Island Sound is considered one of Connecticut's Greatest Natural Treasures. It provides countless recreational opportunities, serves as a critical habitat for fish and other marine wildlife, and improves the quality of life in Connecticut. Designated in 2022, the Connecticut National Estuarine Research Reserve is one of 30 Research Reserves in the country that are focused on research, education, and stewardship of estuarine ecosystems. With more than 52,000 acres of marsh, upland, and open water, the Reserve provides essential habitat for wildlife, offers educational opportunities for students, teachers, and the public, and serves as a living laboratory for scientists. During this field trip, you'll travel to one of the Reserve sites – Bluff Point State Park – to learn about this special place and get your hands wet collecting data of your own. Participants should dress for the outdoors and be prepared to walk approx. 3 miles.