

NEOSEC

New England
Ocean Sciences
Education Collaborative

Ocean Literacy Summit

Concurrent Sessions

Friday, November 12, 2010

Session A: From Microbes to Whales: Recording and Sharing Diversity of Ocean Life.

Presented by the Encyclopedia of Life (EOL), an unprecedented effort to make available information for all species of life on Earth. EOL is currently undertaking a Marine Theme, promoting synthesis and dissemination of marine biodiversity information online worldwide, including many Census of Marine Life projects. Learn about new web tools and resources that are being developed and added to allow more people, including students, to contribute to the EOL in and out of the classroom and to enjoy learning about the living world.

Presenter: Tracy Barbaro, Project Coordinator for the Learning + Education Group of the [Encyclopedia of Life](#)

B. Tools for Learning about Ecosystem Diversity: "Intertidal Survivor."

Immersion Learning guides participants as they build models of rocky shores and sandy beaches and create intertidal creatures with adaptations from each habitat. "Intertidal Survivor", from Immersion's *Monterey Bay* program, will explain why intertidal zones are such harsh environments, as well as describe how to protect intertidal areas.

Presenter: Katie Cubina, Vice President and Executive Producer for [Immersion Learning](#)

C. Tools for Learning about Ecosystem Diversity: Concept Mapping Interdisciplinary Science Topics

The Center for Ocean Sciences Education Excellence - Ocean Systems will provide a short demonstration of concept mapping, then participants will analyze and rework concept maps created by ocean scientists, such as physical oceanographer Jim O'Donnell ("Ocean Currents"), biological oceanographer Deb Goodwin ("Seasons in the Sea"), and ecosystem modeler Andy Pershing ("Right Whale Prediction"). The resulting modular and flexible concept maps demonstrate to learners how organisms are intricately tied to their physical environment.

Presenters: Carla Companion and Christy Herren, Research Associates at [COSEE Ocean Systems](#)

D. Tools for Learning about Estuaries: Part 1

Three National Estuarine Research Reserves come together in this workshop to provide an in-depth exploration of estuary species, ecosystem biodiversity, water quality data resources, estuary research and monitoring, and topics including climate change, invasive species and storm water pollution prevention along New England's coasts

Tools for Learning about Estuaries: Part 2

Guided by staff from three National Estuarine Research Reserves, educators will develop an understanding of how to lead their own students through some creative, offbeat and data savvy lessons in the biodiversity of estuary species and ecosystems.

Session Presenters: Kit Van Wagner, Education Coordinator for the [Narragansett Bay Research Reserve in Rhode Island](#); Joan Muller, Education Coordinator for the [Waquoit Bay National Estuarine Research Reserve on Cape Cod MA](#); Kelle Loughlin, Education Coordinator for the [Great Bay National Estuarine Research Reserve in New Hampshire](#)

E. From Intertidal to Deep Sea: Monitoring Ecosystem Diversity

Presented by NERACOOS, the Northeastern Regional Association of Coastal Ocean Observing Systems, this session will showcase how ocean observing is being used in both formal and informal education. Participants will see how the Earth as a System is Essential (EaSiE) project of the Maine Mathematics and Science Alliance and the Seasons of the Sea exhibit at the Seacoast Science Center in Rye, NH have utilized the dynamic nature of ocean observing information. Participants will explore the valuable resource of ocean observing systems, including NERACOOS' real-time buoy data, and learn how to engage audiences in understanding the interactions between the Earth's land, oceans, atmosphere, and living world.

Presenters: Ru Morrison, Executive Director of [NERACOOS](#); Joyce Tugel, K-12 Science Specialist at the [Maine Mathematics and Science Alliance \(MMSA\)](#), and Project Director for the [NOAA-funded Earth as a System is Essential: Seasons and the Seas initiative](#); and Perrin Chick, Education Director at the [Seacoast Science Center](#).

F. Tools for Learning about Biodiversity: Under the Lens.

The Sea Education Association (SEA) will help participants observe microbial life in water using inexpensive magnifiers from hand lenses to plastic field microscopes. Leave this session with a new way to show off the diversity of microbial life in every puddle of water.

Presenter: Erik Zettler, Associate Dean for Institutional Relations and Research at [SEA](#)

G. Tools for Learning about Human Impacts on Diversity of Life:

"Endangered Ocean Ecosystems."

Mystic Aquarium will lead participants through an interactive program focusing on how climate change, marine pollution, and by-catch from fishing are affecting the oceans' diversity of aquatic plants and animal life. Leave this session with activities and ideas which can be immediately translated into engaging programs.

Presenters: Kelly Matis, Vice President of Education and Public Conservation Programs at the Mystic Aquarium; MaryEllen Mateleska, Instructor and Public Conservation Programs Manager at the [Mystic Aquarium](#).