SPRING 2018 MEETING OF THE
NEW ENGLAND ESTUARINE RESEARCH SOCIETY (NEERS)
Co-hosted with New England's National Estuarine Research Reserves

April 26 – 28, 2018
Portsmouth, NH

Meeting Hosts

Sara Grady –NSRWA MassBays Program
Jennifer West – NBNERR
Cory Riley - GBNERR

Gold Supporters

Silver Supporters

Bronze supporter

Comprehensive Environmental, Inc.

NEERS and NERRS Joint meeting, Schedule-at-a-glance

Thursday, April 26th

All sessions are in the Ballroom
Registration and all breaks are in the Ballroom Lobby

8:30 am – 9:30 am	Meeting registration
9:30 – 4:30 pm	Special NERRS Symposium: **Salt Marsh Response and Resilience to Changing Conditions - Prospects for Management**
1:00 – 1:45	Lunch
4:30 – 6:00 pm	Meeting registration
5:00 – 7:00 pm	Welcoming social at Martingale Wharf
7:00 pm	Dinner on your own in Portsmouth

Friday, April 27th

All sessions are in the Ballroom
Registration and all breaks are in the Ballroom Lobby

7:00 – 8:00 am	Meeting registration
8:00 – 10:00 am	Oral sessions: Education; Blue Carbon; Sediment dynamics
10:15 – 10:45 am	Break
10:45 am – 12:30 pm	Oral sessions: Estuarine habitats; Aquaculture
12:30 am – 1:30pm	Lunch
1:30 – 3:00 pm	Poster Session
3:00 – 5:30 pm	Oral sessions: Nitrogen dynamics; IGNITE; OWWTS
5:30 – 6:15 pm	NEERS Business Meeting
6:00 – 8:00	Social at The Portsmouth Brewery
8:00 pm	Dancing in Portsmouth

Saturday March 18th

All sessions are in the Prescott Room

8:30 – 9:45 am	Oral sessions: Marsh structure; Marsh birds
9:45 – 10:00 am	Break
10:00 – 11:30 am	Oral sessions: Mapping coastal change; Water quality
11:45 am	Awards Presentation
12:00 pm	Adjourn and Field Trips

Thursday, April 26th

National Estuarine Research Reserve System (NERRS)
Special Symposium: Salt Marsh Response and Resilience to Changing Conditions – Prospects for Management

8:30 AM WELCOME AND OVERVIEW - Jennifer West, Narragansett Bay NERR

SALT MARSH SUSTAINABILITY IN NEW ENGLAND: PROGRESS AND REMAINING CHALLENGES - Cathy Wigand, EPA

HOW ARE COASTAL MARSHES FARING IN NEW ENGLAND?

- Coastal wetland loss in Rhode Island: 1850s-present - Beth Watson, Drexel University
- Marsh Impairment and Future Considerations: A Massachusetts Overview - Marc Carullo, MA Office of Coastal Zone Management
- Maine: State of the State's salt marshes -Susan Adamowicz, USFWS
- Prospects and uncertainties for tidal marshes in New Hampshire - Dave Burdick, UNH
- Long Island Sound tidal marshes in the Anthropocene - Scott Warren

BREAK

HOW ARE WE BUILDING COASTAL MARSH RESILIENCE THROUGHOUT THE REGION?

- No management is active management: a regional evaluation of salt marsh conservation and restoration opportunities in a changing climate.- Rachel Stevens, Great Bay NERR
- A soils/landscape perspective to salt marsh migration -Mark Stolt, URI
- Upland vegetation removal as a potential strategy for facilitating salt marsh migration - Kenny Raposa, Narragansett Bay NERR
- Increasing salt marsh surface elevations as an adaptation strategy- will it work in New England?- Caitlin Chaffee, RI Coastal Resources Management Council
- Ditch remediation pilot studies in National Wildlife Refuges of the Northeast - Dave Burdick, University of New Hampshire
- Marsh response to shallow drainage or runnels - Wenley Ferguson, Save The Bay

1:00 PM LUNCH

WHAT MONITORING AND ASSESSMENT STRATEGIES ARE BEING USED IN THE REGION?

- Long-term tidal wetland changes at Barn Island, Stonington, CT - Ron Rozsa, plant community ecologist
- Overview of salt marsh losses on Cape Cod, with special emphasis on crab-driven vegetation losses and consequences Steve Smith, National Park Service
- Multimetric indices for integrated assessments of salt marsh integrity- Hilary Neckles, United States Geological Survey
- Drone applications for estuarine monitoring and assessment - Bob Hartzel, Comprehensive Environmental Inc.
- Appropriate use of numerical models for simulating salt marsh geomorphic evolution - Neil Ganju, United States Geological Survey

BREAK

3:25 PM GROUP DISCUSSION AND WRAP UP

4:30 PM ADJOURN

Friday, April 27th

New England Estuarine Research Society Spring 2018 meeting

8:00 AM WELCOME AND INTRODUCTARY REMARKS – Sara Grady, NEERS President

EDUCATION

Session Chair: Brett Branco

8:15 AM **Walter J. Berry*** and K.K. Mulvaney
U.S.EPA, Narragansett, RI.
NEERS: NATURALLY, EFFECTIVE EDUCATION REQUIRES SILLINESS

8:30 AM **Larry T. Spencer**
Biological Sciences, Plymouth State University, Plymouth, NH.
A LOOK BACK IN HISTORY: THE INTRODUCTION TO THE MARINE SCIENCES COURSE AND ITS RAMIFICATIONS ON MARINE SCIENCE EDUCATION IN NH.

BLUE CARBON

Session Chair: Brett Branco

8:45 AM **Mark H. Stolt**
Department of Natural Resources Science, University of Rhode Island, Kingston, RI.
CARBON ACCOUNTING IN ESTUARIES (BLUE CARBON)

9:00 AM **Inka Forbrich***[1], A.E. Giblin[1] and C.S. Hopkinson[2]
[1] Marine Biological Laboratory
[2] University of Georgia.
CONSTRAINING MARSH CARBON BUDGETS USING LONG-TERM C BURIAL AND CONTEMPORARY ATMOSPHERIC CO^2 FLUXES

9:15 AM **(K) Aidan B. Barry***[1], S.K. Ooi [1], A.M. Helton[1,2], C.S. Elphick[3], B. Steven[4], and B.A. Lawrence[1,2]
[1] Department of Natural Resources and the Environment, University of Connecticut, Storrs, Connecticut; [2] Center for Environmental Science and Engineering, University of Connecticut, Storrs, Connecticut; [3] Department of Ecology & Evolutionary Biology, University of Connecticut, Storrs, Connecticut; [4] Department of Environmental Sciences, Connecticut Agricultural Experiment Station, New Haven, Connecticut.
SALT MARSH VEGETATION INFLUENCE ON CARBON-BASED SERVICES

SEDIMENT DYNAMICS IN COASTAL SYSTEMS

Session Chair: Tay Evans

9:30 AM **(R) Cody J. Murphy*** and B.A. Oakley
Department of Environmental Earth Science, Eastern Connecticut State University.
POST-1900 SEDIMENT ACCUMULATION IN THE POINT JUDITH HARBOR OF REFUGE, POINT JUDITH, RHODE ISLAND

9:45 AM **Gregg E. Moore** *[1,2] D.M. Burdick [1,3] M.R. Routhier [4], A. Novak [5], and P. Phippen [6]
[1]Jackson Estuarine Laboratory, University of New Hampshire, Durham, NH; [2]Dept. of Biological Sciences; [3]Dept. of Natural Resources; [4]Geospatial Science Center Earth Systems Research Center, Institute for the Study of Earth, Oceans, and Space; [5]Dept. of Earth and Environment, Boston University, Boston, MA; [6]MassBays National Estuary Program, Merrimack Valley Planning Commission, Haverhill, MA.
DOCUMENTING THE EFFECTS OF A LARGE-SCALE NATURALLY-OCCURRING SEDIMENT DEPOSITION EVENT ON PLANT COMMUNITY STRUCTURE AND PRODUCTIVITY IN SALT MARSHES IN MASSACHUSETTS

10:00 AM **(K) Amber Hardy** * and M. Stolt
Department of Natural Resources Science, University of Rhode Island.
TIDAL MARSH RECOVERY AFTER NATURAL STORM-SURGE DEPOSITION AND INTENTIONAL DEPOSITION IN THIN-LAYER PLACEMENT MANAGEMENT

10:15 AM BREAK

ESTUARINE HABITATS

Session Chair: Megan Tyrell

10:45 AM **Giancarlo Cicchetti** *[1] and E.J. Shumchenia [2]
[1]U.S. EPA, Atlantic Ecology Division, Narragansett RI; [2]Great Lakes Environmental Center, Traverse City MI.
THE CHANGING ECOLOGY OF NARRAGANSETT BAY AS TOLD BY HABITAT

11:00 AM **Patrick D. Barrett***[1], W.S.K. Helt [2], H.A. Kinney [2], J.H.Grabowski [3], A.R. Hughes [3], E.G. Schneider[1].
Division of Marine Fisheries, Rhode Island Department of Environmental Management, Jamestown, RI 02835, USA; (2) The Nature Conservancy, Providence, RI 02906; (3) Marine Science Center, Northeastern University, Nahant, MA 01908, USA.
IMPROVING JUVENILE FISH POPULATIONS BY ENHANCING FISH HABITAT – EVALUATING THE USE OF OYSTER REEFS AS A TOOL TO INCREASE FISH PRODUCTIVITY

11:15 AM **Heather A. Nuhn**, *[1], W.Helt[1], C.Deacutis[2], E.Shneider[2], and P.Barrett[2]
[1]The Nature Conservancy, Providence,RI; [2]Rhode Island Department of Environmental Management, Division of Fish &Wildlife, Jamestown, RI.
BENTHIC VIDEO MONITORING IN THE PROVIDENCE RIVER ESTUARY: APPLYING CMECS TERMINOLOGY TO EVALUATE SITE SUITABILITY FOR HABITAT RESTORATION

11:30 AM Sebens, K. P. [1] and **Ted .J. Maney Jr.** *[2]
[1]Department of Biology, University of Washington, Seattle, WA [2]Department of Biology, Salem State University, Salem, MA.
DECADAL SCALE RESEARCH IN ROCKY SUBTIDAL HABITATS, MASSACHUSETTS BAY

AQUACULTURE

Session Chair: Tay Evans

11:45 AM **(R) Katherine Parker**,*[1], M. Condon [1], C. Jones [1], C. Byron[2], and A. St.Gelais[2]
[1]Center for Excellence in the Marine Sciences, University of New England, Biddeford Maine, USA; [2] Department of Marine Sciences, University of New England, Biddeford Maine, USA.
HISTOPATHOLOGICAL ANALYSIS OF PARASITES AND ENVIRONMENTAL STRESS RESPONSES OF FARMED BLUE MUSSELS (*MYTILUS EDULIS*) IN CASCO BAY, MAINE

12:00 PM **(R) Mary G. Hollandbeck,*[1]**, A. St. Gelais[2], O. Barberi[1], G. Grebe[3], K. Burkholder[4], and C.J. Byron[1]
[1]Marine Science Department, University of New England, Biddeford, ME; [2]Center for Excellence in the Marine Sciences, University of New England, Biddeford, ME; [3]School of Marine Science, University of Maine, Orono, ME; [4]Biological Science, University of New England, Biddeford, ME.
ESTABLISHING THE RELATIONSHIP BETWEEN COLIFORM AND VIBRIO BACTERIA SPECIES ON THE SURFACE OF FARMED SUGAR KELP SACCHARINA LATISSIMA AND IN SURROUNDING SEAWATER

12:15 PM **(K) Pooja Potti,**
University of Massachusetts, Dartmouth, SMAST.
COMPARING HISTORIC OYSTER POPULATIONS TO PRESENT DAY AQUACULTURE ACTIVITIES IN EAST COAST ESTUARIES

12:30 PM LUNCH

1:30 – 3:00 PM **POSTER SESSION**

EDUCATION & STEWARDSHIP

P-1 **Terry***, **J.P**. [1] and J. Tucker [2;]
(1) Gulf of Maine Institute, West Newbury, MA;(2) The Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA.
GULF OF MAINE INSTITUTE: LEARNING TO STEWARD THE GULF

P-2 **Mandeville*, C**. and A. Eberhardt;
NH Sea Grant and University of New Hampshire Cooperative Extension
Lee, NH.
CITIZEN SCIENCE TO ACHIEVE BOTH RESEARCH AND ENGAGEMENT OBJECTIVES: EXAMPLES FROM THE COASTAL RESEARCH VOLUNTEER PROGRAM

WATER RESOURCES AND COASTAL HABITAT MANAGEMENT

P-3 **Flickinger, S**. Narragansett Bay Commission, Providence, RI.
PROVIDENCE RIVER AND NARRAGANSETT BAY PHYTOPLANKTON POST-WASTEWATER TREATMENT FACILITY NITROGEN LOAD REDUCTIONS

P-4 **(D) Wigginton, S.K.**[1], E.Q. Brannon[2], P.J. Kearns [3], B. Lancellotti[1], G.W. Loomis[4] and J.A. Amador [1]; [1]Laboratory of Soil Ecology and Microbiology, Univ. of Rhode Island, Kingston, RI. [2] Dep. of Biological Sciences, Univ. of Rhode Island, Kingston, RI. [3] Dept. of Microbiology and Molecular Genetics; Plant Resilience Institute Michigan State University, East Lansing, MI. [4]New England Onsite Wastewater Training Center, University of Rhode Island, Kingston, RI.

BIG PIPE VS. SMALL PIPE: A COMPARISON OF NITROGEN CYCLING MICROBIAL COMMUNITIES IN A NITROGEN REMOVING WASTEWATER TREATMENT PLANT AND IN NITROGEN REMOVING SEPTIC SYSTEMS

P-5 **(D) Alissa H. Cox*** and J. A. Amador;
Department of Natural Resources Science, University of Rhode Island, Kingston, RI.
HISTORIC CHANGES IN GROUNDWATER TABLE HEIGHTS ALONG THE SOUTHERN RHODE ISLAND COAST

P-6 **(W) Nimal De Lanerolle***, A. Dries, S. Condit, N. Cormier, A. Guvenc, G. Marino, M. McNamara. Suffolk County Community College, Selden, NY
RESTORATION OF SALT MARSHES ON LONG ISLAND FOLLOWING HURRICANE SANDY: INTERN'S PERSPECTIVE

P-7 **(D) Christopher E. Meyer**; School of Marine and Atmospheric Sciences at Stony Brook University.
CREPIDULA FORNICATA AS POTENTIAL LIVING FILTERS FOR MICROPLASTICS

P-8 **Nicholas M. Uline**; Ecosystem Center, Marine Biological Laboratory, Woods Hole, MA.
A DEMONSTRATION IN POLYCULTURE ON CAPE COD, MASSACHUSETTS

P-9 **Ivy M. Mlsna**[1,2]; [1]U.S. Environmental Protection Agency, New England Office, Boston, MA; [2]Department of Urban and Environmental Policy and Planning, Tufts University, Medford, MA.
A GUIDE TO BETTER PRACTICES FOR TIDAL SALT MARSH CONSERVATION: CLIMATE CHANGE CONSIDERATIONS FOR RESILIENT INVESTMENTS

P-10 **Jordan W. Mora**; Waquoit Bay National Estuarine Research Reserve, Waquoit, MA.
BUT WHY THE DECLINE? SHIFTS IN MACROALGAL BIOMASS IN A SHALLOW, MICROTIDAL ESTUARY

P-11 **(D) Thomas W. Privott*** and M.H. Stolt; Department of Natural Resources Science, University of Rhode Island, Kingston, RI. USING A SOILS APPROACH TO IDENTIFY SHALLOW GROUNDWATER DISCHARGE LOCATIONS IN SOUTHERN NEW ENGLAND COASTAL PONDS

P-12 **(W) Jennifer A. Croteau** and B.A. Oakley; Eastern Connecticut State University. croteauje@my.easternct.edu
GREEN CRAB ABUNDANCE AND IMPACT ON THE FRINGING SALTMARSH OF THE NAPATREE LAGOON: WESTERLY, RI

P-13 **(D**) **James A. Elliott**.; School of Forest Resources, University of Maine, Orono, ME .
FACTORS INFLUENCING HABITAT SUITABILITY AND HIGH PRIORITY TRAPPING SITES FOR THE EUROPEAN GREEN CRAB (CARCINUS MAENAS) IN THE NORTH SHORE OF MASSACHUSETTS

P-14 **(D) Devin Thomas***, J. Haskins, D. Trueblood, A. Watts, and W.K. Thomas; University of New Hampshire, Durham, NH
ENVIRONMENTAL DNA – AN EMERGING TOOL IN WATER RESOURCES MANAGEMENT

MAPPING AND MODELLING ESTUARINE SYSTEMS

P-15 **(W) Madeline R. Varney** and B.A. Oakley; Department of Environmental Earth Science, Eastern Connecticut State University. varneyma@my.easternct.edu
EVALUATION OF SHORELINE CHANGE AND SPIT NAPATREE LAGOON, WATCH HILL, RHODE ISLAND USING HISTORICAL AERIAL PHOTOGRAPHS, DIGITAL ORTHOPHOTOGRAPHS AND DIFFERENTIAL GPS

P-16 **(D) Kristine T. Erskine*** [1] and R. Boger[1,2]; [1]CUNY Graduate Center; [2]Brooklyn College.
A GEOSPATIAL HABITAT SUITABILITY MODEL TO DETERMINE THE SPATIAL AND TEMPORAL VARIATION OF ULVA BLOOMS IN A EUTROPHIC ESTUARY- JAMAICA BAY, NEW YORK.

P-17 **(W) John Doyle,** B. Johnson, and P. Dostie ; Department of Geology, Bates College, ME.
CARBON STORAGE IN EELGRASS BEDS OF CASCO BAY, GULF OF MAINE

FISH AND INVERTEBRATE PHENOLOGY, FOOD WEBS, AND DISEASE

P-18 **Darron Kriegel*** [1], P. Neubert* [1,] J. Ray [2,] and G. Dolan [3;]
[1]AECOM, [2]APEX Companies, LLC., [3] Massachusetts Clean Energy Commission.
TEMPERATURE SHIFTS AND WINTER FLOUNDER PHENOLOGY: CLIMATE CHANGE ADAPTATIONS

P-19 **(W) Emily C. Cox*** and S.C. Wainright; Dept. of Science, U.S. Coast Guard Academy, New London, CT.
TROPHIC RELATIONSHIPS BETWEEN WALLEYE POLLOCK AND THEIR SURROUNDING MARINE FOOD WEB NEAR KODIAK ISLAND, ALASKA

P-20 **(W) Michaela J. Kenward***, A. Cicia, and M. Frederich; Marine Science Center, University of New England. mkenward@une.edu
AN INVESTIGATION INTO THE PRESENCE AND PREVALENCE OF WASTING DISEASE IN GULF OF MAINE SEA STARS, ASTERIAS FORBESI AND ASTERIAS RUBENS, THROUGH HISTOLOGY AND DNA ANALYSIS

3:00 PM **ORAL SESSIONS RESUME**

NITROGEN DYNAMICS

Session Chair: Cathy Wigand

3:00 PM **(K) Sean Khan Ooi***, A. Barry, B. Lawrence, C. Elphick, and A. Helton
University of Connecticut, Storrs CT.
POTENTIAL DENITRIFICATION RATES VARY WITH SALT MARSH VEGETATION ZONES

3:15 PM **Amber D. Unruh***, and B.L. Howes
Department of Estuarine and Ocean Science, UMass Dartmouth SMAST, New Bedford, MA.
QUANTIFYING DENITRIFICATION IN FRESHWATER POND SEDIMENTS AS A SIGNIFICANT COMPONENT OF NITROGEN ATTENUATION IN CAPE COD, MA

3:30 PM **Jamie M. P. Vaudrey***[1], E. Green-Beach[2], and R. Karney[2]
[1]Department of Marine Sciences, University of Connecticut, Groton, CT; [2]Martha's Vineyard Shellfish Group, 220 Weaver Lane, Vineyard Haven MA.
EVIDENCE FOR NITROGEN REMOVAL VIA PHYTOREMEDIATION WITH PHRAGMITES

3:45 PM **(K) Micheline S. Labrie***, D. Schlezinger, M. Sundermeyer, and B. Howes
School for Marine Science and Technology, University of Massachusetts Dartmouth, New Bedford, MA.
EVALUATION OF THE POTENTIAL FOR OYSTER MEDIATED NITROGEN REDUCTION IN A COASTAL SALT POND: YEAR TWO FINDINGS

4:00 PM **Hillary L. Sullivan***[1], L.A. Deegan[1], B.J. Peterson[2], and A.E. Giblin[2].
[1]Woods Hole Research Center
[2]Marine Biological Laboratory.
DETERMINING THE FATE OF LAND-DERIVED NITROGEN IN SALT MARSHES USING A ^{15}N ISOTOPE TRACER EXPERIMENT

4:15 PM **(K) Jaylyn W. Babitch***, J.A. Nelson and B.A. Stauffer
Department of Biology, University of Louisiana at Lafayette, Lafayette, LA.
THE PLANKTONIC PIECE OF THE PIE: RESOLVING NITROGEN USE BY PHYTOPLANKTON IN A MESOTIDAL SALT MARSH OF PLUM ISLAND ESTUARY

IGNITE: A WADER FULL OF TOPICS

Session Chair: Christine Feurt

4:30 PM **(K) Nicholas B. Anderson***, D.D. Torio, and F.T. Short.
Jackson Estuarine Laboratory, University of New Hampshire, Durham NH 03824, USA.
THE EFFECT OF SIMULATED CDOM ON ZOSTERA MARINA GROWTH

4:35 PM **Eliza C. Moore**
Narragansett Bay Commission.
BENTHIC VIDEO MONITORING IN THE PROVIDENCE RIVER ESTUARY - WHAT DO WE SEE?

4:40 PM **Paul E. Stacey**
Footprints In The Water LLC, Moodus, CT.
MAKING NATURE GREAT AGAIN: EPISODE II - THE PHANTOM MENACE

4:45 PM **Michael Bradley***[1], C. Schmidt[2] and G. Cicchetti[3]
[1]University of Rhode Island [2]Narragansett Bay Estuary Program
[3]U.S. EPA Atlantic Ecology Division.
HISTORICAL CONTEXT OF THE TIER 1 SUBMERGED AQUATIC VEGETATION MAPPING EFFORTS IN NARRAGANSETT BAY

4:50 PM **QUESTIONS?**

ONSITE WASTEWATER TREATMENT

Session Chair: Cathy Wigand

5:00 PM **(R) Alicia M. Boucher***, B. Ross, S. Wigginton, and B. Lancellotti
Laboratory of Soil Ecology and Microbiology, University of Rhode Island, Kingston, R.I.
INVESTIGATING THE EFFECT OF MICROBIAL COMMUNITIES ON THE PERFORMANCE OF ADVANCED ONSITE WASTEWATER TREATMENT SYSTEMS

5:15 PM **Jose A. Amador***[1], J.H. Görres [2], G.W. Loomis [1,3], and B.V. Lancellotti[1,4].
[1]Laboratory of Soil Ecology and Microbiology, Univ. of Rhode Island, Kingston, RI; [2]Dept. of Plant and Soil Science, Univ. of Vermont, Burlington, VT; [3]New England Onsite Wastewater Training Program, Univ. of Rhode Island, Kingston, RI' [4]Rubenstein School of Environment and Natural Resources, Univ. of Vermont, Burlington, VT.
NITROGEN LOADING FROM ONSITE WASTEWATER TREATMENT SYSTEMS IN THE GREATER NARRAGANSETT BAY WATERSHED: MAGNITUDE AND REDUCTION STRATEGIES

5:30 PM **(K) Bianca Ross***, A. Boucher, J. Ludovico, K. Hoyt, G. Loomis, and J. Amador
Department of Natural Resources Science, University of Rhode Island, RI.
ASSESSING NITROGEN INPUTS TO THE CHARLESTOWN COASTAL WATERSHED FROM ADVANCED ONSITE WASTEWATER TREATMENT SYSTEMS

Notes:

*Presenter;
(K) Ketchum Prize candidate – best graduate oral presentation
(R) Rankin Prize candidate -best undergraduate oral presentation
(D) Dean Prize candidate - best graduate poster presentation
(W) Warren Prize candidate – best undergraduate poster presentation

FACTORS AFFECTING MARSH STRUCTURE

Session Chair: Jamie Vaudrey

8:00 AM **(K) Tessa M. Dowling***, G.P. Zogg, S.E. Travis, and P. A. Morgan
University of New England, Biddeford, ME.
FACTORS INFLUENCING THE GROWTH OF *SPARTINA PATENS* IN UPLAND SOIL

8:15 AM **(K) Andrew R. Payne**
Department of Natural Resources, University of New Hampshire.
EFFECTS OF SEA-LEVEL RISE ON SALT MARSH ELEVATION DYNAMICS IN NEW HAMPSHIRE

8:30 AM **Vitalii A. Sheremet***[1] and J. W. Mora[2]
[1]Graduate School of Oceanography, University of Rhode Island, Narragansett, RI;
[2]Waquoit Bay National Estuarine Research Reserve, Falmouth, MA.
CORE POROSITY AND CONE PENETRATION TESTING IN WAQUOIT BAY SAGE LOT MARSH

8:45 AM **Susan C. Adamowicz***[1] and G. Wilson [2]
[1]US Fish and Wildlife Service, Rachel Carson National Wildlife Refuge, Wells, ME
[2]Northeast Wetland Restoration.
FARMERS IN THE MARSH: AN OVERVIEW OF HISTORIC FARMING PRACTICES, PERSISTENT FEATURES, AND LASTING IMPACTS

9:00 AM
(K) Annesia L. Lamb *[1], J.K. Kim[2], C. Yarish [3], and B.F. Branco [4]
[1]Department of Earth and Environmental Sciences, The Graduate Center, City University of New York, NY. [2]Department of Marine Sciences, School of Natural Sciences, Incheon National University, Republic of Korea;
[3]Department of Ecology and Evolutionary Biology, University of Connecticut, Stamford, CT [4]Department of Earth and Environmental Sciences, Brooklyn College, City University of New York, NY.
IDENTIFICATION OF THE BLOOM FORMING ULVA IN JAMAICA BAY, NEW YORK

MARSH BIRDS

Session Chair: Susan Adamowicz

9:15 AM **Bri A. Benvenuti*** and K.M. O'Brien
Rachel Carson National Wildlife Refuge, Wells, ME.
CONSERVATION AND MANAGEMENT OF MAINE'S TIDAL MARSH BIRDS

9:30 AM **(K) Logan M. Maxwell*[1]**, J. Walsh[2], B.J. Olsen [3], and A.I. Kovach [4]
[1]Department of Natural Resources and the Environment,University of New Hampshire,Durham,NH; [2]Fuller Evolutionary Biology Program,Cornell Laboratory of Ornithology,Ithaca,NY; [3]School of Biology & Ecology, University of Maine,Orono,ME; [4]Department of Natural Resources and the Environment, University of New Hampshire, Durham, NH.
NESTING ADAPTATIONS AND FITNESS IN A HYBRIDIZING POPULATION OF SALTMARSH AND NELSON'S SPARROWS

9:45 AM BREAK

MAPPING COASTAL CHANGE

Session Chair: Susan Adamowicz

10:00 AM **Mark Borrelli** [1,2]
[1]School for the Environment, University of Massachusetts, Boston, MA
[2]Center for Coastal Studies, Provincetown, MA.
A NEW METHOD FOR CALCULATING RATES OF SHORELINE CHANGE IN A COASTAL EMBAYMENT WITH FRINGING SALT MARSH

10:15 AM **Katerine D. Lavallee*** and M.B. Adams
National Park Service, Cape Cod National Seashore, Wellfleet, MA.
COASTAL CHANGE ALONG THE OUTER CAPE: APPLICATION OF THE DIGITAL SHORELINE ANALYSIS SYSTEM (DSAS) TO MAP THE DYNAMIC SHORELINE OF CAPE COD NATIONAL SEASHORE

10:30 AM **Arnis Mangolds***
C-2 Innovations, Inc.
AUTONOMOUS BROAD AREA SEAFLOOR MAPPING

WATER QUALITY

Session Chair: Walter Berry

10:45 AM **Courtney E. Schmidt*** [1] and K. Cortes[2]
[1]Narragansett Bay Estuary Program, Providence, RI.
[2]Narragansett Bay Commission, Providence, RI.
STANDING ON THE SHOULDERS OF GIANTS (AND PICKING THE LOW-HANGING FRUIT) – UPDATING THE NARRAGANSETT BAY WATERSHED NUTRIENT BUDGET

11:00 AM **Veronica M. Berounsky*** [1], A. DeSilva[1,2], E. Peterson [2], R. Sharif [2], L. Green[3], and E. Herron [3]
[1]Graduate School of Oceanography, University of Rhode Island, Narragansett, RI;
[2]Narrow River Preservation Association, Saunderstown, RI;
[3]Watershed Watch Program, University of Rhode Island, Kingston, RI.
MONITORING WATER QUALITY AND MANAGING ANTHROPOGENIC INPUTS FOR A QUARTER CENTURY (1992-2017) IN THE PETTAQUAMSCUTT ESTUARY (RI) WITH COMPARISONS TO 1970'S DATA AND LOWER NARRAGANSETT BAY DATA.

11:15 AM **Christine R. Comeau**
Narragansett Bay Commission, Providence, RI.
LONG TERM MONITORING OF TWO WATER QUALITY SITES IN THE UPPER NARRAGANSETT BAY: A TREND ANALYSIS

11:30 AM **Andrea M. Price***[1], R.E. Turner [1], V. Pospelova [2], G.L. Chmura[3], M.R.S. Coffin[4], J.S. Latimer[5], and N.N. Rabalais[6].
[1]Department of Oceanography and Coastal Sciences, Louisiana State University, Baton Rouge, LA; [2]School of Earth and Ocean Sciences, University of Victoria, Victoria, BC; [3]Department of Geography, McGill University, Montreal, QC; [4]Department of Biology, University of Prince Edward Island, Charlottetown, PEI; [5]US Environmental Protection Agency, Narragansett, RI; [6]Louisiana Universities Marine Consortium, Chauvin, LA.
MONITORING WATER QUALITY IN NORTHWEST ATLANTIC COASTAL WATERS USING DINOFLAGELLATE CYSTS

11:45 PM **AWARDS**

12:00 PM **ADJOURN AND FIELD TRIPS**

Notes:

*Presenter;
(K) Ketchum Prize candidate – best graduate oral presentation
(R) Rankin Prize candidate -best undergraduate oral presentation
(D) Dean Prize candidate - best graduate poster presentation
(W) Warren Prize candidate – best undergraduate poster presentation