

NEW ENGLAND ESTUARINE RESEARCH SOCIETY

SPRING 1998

THURSDAY, MAY 7, 1998

SPECIAL SESSION: THE CONNECTICUT RIVER ESTUARY

LOCATION: CT DEP - MARINE HEADQUARTER, OLD LYME, CT

0830-1100 Meeting Registration

Session Chair - Ron Rozsa

0900 Arthur J. Rocque, Jr., Commissioner, Connecticut Department of Environmental Protection
WELCOME/OPENING REMARKS

0910 Ron Rozsa, Connecticut Department of Environmental Protection
BIOPHYSICAL SIGNATURE OF THE LOWER CONNECTICUT RIVER

0930 Ralph Lewis, State Geologist, Connecticut Department of Environmental Protection
GEOLOGY OF THE LOWER CONNECTICUT RIVER

1000 Stephen Gephard, Connecticut Department of Environmental Protection
CONSTRUCTING SMALL SCALE FISHWAYS IN CONNECTICUT TO SUPPORT ANADROMOUS FISH RESTORATION

1030 **BREAK**

1050 Tom Savoy, Connecticut Department of Environmental Protection
ABUNDANCE AND DISTRIBUTION OF ADULT SHORTNOSE STURGEON IN THE LOWER CONNECTICUT RIVER, 1988-1998

1120 Scott Warren, P. E. Fell, K. Bowman, L. DeCosta, J. Grimsby, L. Israelian, G. C. Rilling, K. Williams and J. Wilson, Connecticut College
***PHRAGMITES* CONTROL ON BRACKISH TIDELANDS OF THE LOWER CONNECTICUT RIVER ESTUARY: IMPACTS ON VEGETATION, MACROINVERTEBRATES AND FISH**

1150 **LUNCH**

Field Trip: Connecticut River brackish tidal wetlands - "Wetlands of International Importance". Observe and discuss brackish tidal marshes and wetland restoration.

1330 Chris Rilling¹, Paul Fell² and Scott Warren²¹Connecticut Department of Environmental Protection and ²Connecticut College
FISH USE OF BRACKISH HIGH MARSH AREAS IN THE LOWER CONNECTICUT RIVER: A COMPARISON OF A *PHRAGMITES AUSTRALIS*-DOMINATED VS. A RESTORED MARSH

1400 James O'Donnell, W. Frank Bohlen, M. M. Howard-Strobel and D. Cohen, University of Connecticut
OBSERVATIONS OF THE CIRCULATION IN THE ESTUARINE REACH OF THE CONNECTICUT RIVER

1430 Frank Bohlen, O'Donnell, J., Howard-Strobel, M.M., and D. Cohen, University of Connecticut
TIMES SERIES OBSERVATIONS OF THE SUSPENDED MATERIAL FIELD WITHIN THE CONNECTICUT RIVER ESTUARY

1500 Scott Warren, Connecticut College
CLOSING REMARKS

1930 **THURSDAY NIGHT SOCIAL AND REGISTRATION**

LOCATION: "THE CRO'S NEST", CROZIER WILLIAMS COLLEGE CENTER, CONNECTICUT COLLEGE, NEW LONDON

FRIDAY, MAY 8, 1998

SESSIONS OF CONTRIBUTED PAPERS

LOCATION: BLAUSTEIN HUMANITIES CENTER, ERNST COMMON ROOM, CONNECTICUT COLLEGE, NEW LONDON

(K indicates Ketchum Prize Candidate, R indicates Rankin Prize candidate)

0830-1130 **Meeting Registration**

Session Chair: Jeff Hughes

0900 David Lewis, Provost, Connecticut College

WELCOME

0905 Frederick Short, NEERS President, University of New Hampshire

WELCOME

0910 Windsor Sung¹ and Maurice Hall², ¹ENSR Consulting & Engineering; ²Massachusetts Water Resources Authority **TRACE METALS IN MWRA WASTEWATER**

0930 James Blake¹, Barbara Hecker and Eugene Gallagher², ¹ENSR and ²University of Massachusetts Boston
DEVELOPMENT OF A THRESHOLD INDEX FOR MONITORING BENTHIC COMMUNITIES IN MASSACHUSETTS BAY

0950 K Douglas Hodum, University of Maine

THE POSSIBLE EFFECTS OF ENGINEERING STRUCTURES ON THE INVERTEBRATE COMMUNITY BIODIVERSITY OF THE MUDFLATS IN CASCO BAY, MAINE

1010 **BREAK**

1030 James Kremer and the Thames River Study Group, University of Connecticut and Project Oceanology

DRAMATIC SUB-SURFACE CHLOROPHYLL MAX FORMATION IN THE UPPER SECTION OF THE THAMES RIVER

1050 K Mark Brush¹, John Brawley², Scott Nixon¹ and Jim Kremer², ¹University of Rhode Island and ²University of Connecticut
MODELING PHYTOPLANKTON PRODUCTION. I. PROBLEMS WITH THE EPPLEY CURVE AND AN EMPIRICAL ALTERNATIVE

1110 K John Brawley¹, Mark Brush², Jim Kremer¹ and Scott Nixon², ¹University of Connecticut and ²University of Rhode Island
MODELING PHYTOPLANKTON PRODUCTION. II. APPLICATION OF AN EMPIRICAL MODEL TO SHALLOW WATER ECOSYSTEMS

1130 **LUNCH**

Session Chair: Marshall Pregnell

1330 K Joanne Bintz, Scott Nixon, Stephen Granger, Susan Sherwood and Betty Buckley, University of Rhode Island **RESPONSE OF EELGRASS (*ZOSTERA MARINA* L.) TO NUTRIENT ENRICHMENT: SOME RESULTS OF A SERIES OF MESOCOSM EXPERIMENTS**

1350 Jeff Hughes¹, Linda Deegan¹, Jim Kremer² and John Brawley², ¹Marine Biological Laboratory and ²University of Connecticut
NITROGEN LOADING EFFECTS ON THE QUALITY OF JUVENILE FISH HABITAT

1410 R Angeline Marshall and Michael Dadswell, Acadia University

THE ROLE OF EELGRASS (*ZOSTERA MARINA*) IN RELATION TO THE EPIBENTHIC MACROFAUNA IN MAHONE BAY, NOVA SCOTIA

1430 K Michael Morss, Bruce Woodin, Michael Moore, Alice Shumate and John Stegeman, Woods Hole Oceanographic Institution
CELL PROLIFERATION IN ZOOPLANKTON AND LARVAL FISH

1450 **BREAK AND POSTER SESSION**

(D indicates Dean Prize candidate)

D Aimee Phillipi and Nancy O'Connor, University of Massachusetts Dartmouth
EFFECTS OF SURFACE FLOCKING ON LARVAL AND ALGAL RECRUITMENT PATTERNS

D Mike Peck, David Bengtson, Robin Katersky, and Lisa Menard, University of Rhode Island
AN ENERGY BUDGET OF THE INLAND SILVERSIDE, *MENIDIA BERYLLINA*: ENERGETICS VS. LIFE HISTORY IN A RHODE ISLAND ESTUARY

D Jonna Grimsby and Paul Fell, Connecticut College
***PHRAGMITES* CONTROL ON BRACKISH TIDELANDS OF THE LOWER CONNECTICUT RIVER ESTUARY: IMPACTS ON MACROINVERTEBRATES**

John Carlson¹, Todd Randall², and Matthew Mroczka³, ¹Southern Connecticut State University, ²University of Mississippi, and ³Cedar Island Marine Research Laboratory
FEEDING HABITS OF WINTER FLOUNDER (*PLEURONECTES AMERICANUS*) IN A HABITAT EXPOSED TO ANTHROPOGENIC DISTURBANCE

Todd Randall¹, John Carlson² and Matthew Mroczka³, ¹Gulf Coast Research Laboratory, ²University of Mississippi and ³Cedar Island Marine Research Laboratory
DISTRIBUTION AND DENSITY OF SUBMERGED AQUATIC VEGETATION BEDS IN A CONNECTICUT HARBOR

1520 K William DeLeo, Chris Kincaid and Rob Pockalny, University of Rhode Island
EFFECTS OF SAKONNET RIVER CONSTRICTIONS ON MOUNT HOPE BAY FLUSHING

1540 R Joseph Mack, Alan Young and Mark Fregeau, Salem State College
COMPARISON BY SCANNING ELECTRON MICROSCOPY OF ATLANTIC AND GULF COAST POPULATIONS OF THE HERMIT CRAB *PAGURUS LONGICARPUS*

1600 K Beam Friedman, Brooklyn College CUNY
DISTRIBUTION AND ABUNDANCE OF COPEPODS IN LOW MARSH POOLS IN JAMAICA BAY, NEW YORK - PRELIMINARY RESULTS

1620 K Tracy N. Wiegner and Andy Lipsky, Rutgers University
A COMPARISON BETWEEN PHOTOCHEMICAL AND MICROBIAL DEGRADATION OF DOM IN NON-POINT SOURCE RUNOFF

1650 **BUSINESS MEETING**

1730 **POSTER SESSION AND SOCIAL - FACULTY LOUNGE**

1900-2130 **AWARDS BANQUET - BLAUSTEIN HUMANITIES CENTER, HOOD DINING HALL**

SATURDAY, MAY 9, 1998

SESSIONS OF CONTRIBUTED PAPERS

BLAUSTEIN HUMANITIES CENTER, ERNST COMMON ROOM, CONNECTICUT COLLEGE, NEW LONDON

Session Chair: Ernest Ruber

0930 Marshall Pregnell, Vassar College

SEASONAL NUTRIENT DYNAMICS IN THE CASPERKILL, A TRIBUTARY OF THE HUDSON RIVER ESTUARY

0950 Pamela Amofsky, Woods Hole Oceanographic Institution, and James Blake, ENSR

IS THE TAXONOMIC TERM SPIONID ECOLOGICALLY MISLEADING?

1010 Ernest Ruber and Jack Card, Northeastern University

EXPERIMENTS ON THE CONTROL OF SALT MARSH *AEDES CANTATOR* AND *AE. SOLLICITANS* WITH *BACILLUS SPHAERICUS* (VECTOLEX) AND AN ASSESSMENT OF POSSIBLE SIDE-EFFECTS TO COPEPODS

1030 **BREAK**

1050 James Latimer¹, David Scott², Gail Chmura³, ¹US Environmental Protection Agency, ²Dalhousie University and ³McGill University

PALEOECOLOGY IN THE COASTAL MARINE ENVIRONMENT: A TOOL FOR ENVIRONMENTAL ASSESSMENTS

1110 Heather Saffert¹, Drew Carey¹, Peggy Murray¹ and Thomas Fredette², ¹SAIC and ²US Army Corps of Engineers

MICROPALEONTOLOGICAL TECHNIQUES FOR DEMONSTRATING CAPPING OF DREDGED SEDIMENTS

1130 Christine Tietjen, Save the Bay

A COMMUNITY BASED APPROACH TO HABITAT RESTORATION IN NARRAGANSETT BAY

1150 Frederick Short, NEERS President, University of New Hampshire

CLOSING REMARKS

1300 FIELD TRIP: BARN ISLAND WILDLIFE MANAGEMENT AREA, STONINGTON, CONNECTICUT

This is the site of the classic Miller & Egler 1950 paper entitled "Vegetation of the Wequetequock-Pawcatuck tidal marshes, Stonington, Connecticut " The upland border of *Juncus gerardii* has been replaced by a panne/forb complex - Is this in response to rising sea level or readjustment of the groundwater table position as the mosquito ditches have not been maintained since the early 1980's. Since 1978, CT DEP has been systematically restoring 5 impounded valley marshes and after 10 to 15 years, are still responding to initial tidal flow restoration.

Lunch can be purchased on campus. Plan on departing from the Campus at 1300.

**Connecticut Department of Environmental Protection
Office of Long Island Sound Programs
79 Elm Street
Hartford, CT 06106**