

New England Estuarine Research Society



THE 1984 FALL MEETING

18-20 OCTOBER 1984 *** NARRAGANSETT, RI

JOINTLY HOSTED BY

THE GRADUATE SCHOOL OF OCEANOGRAPHY, UNIVERSITY OF RHODE ISLAND
AND
THE ENVIRONMENTAL RESEARCH LABORATORY, NARRAGANSETT,
ENVIRONMENTAL PROTECTION AGENCY

PROGRAM SCHEDULE ** PRE-REGISTRATION ** COMMUNICATION TO MEMBERS

MEETING SITE: Talks and poster sessions will be held at the Graduate School of Oceanography (GSO-URI) or the Environmental Research Laboratory (ERLN-EPA) in Narragansett, RI. Social events and accommodations will be at Durfee's at the Pier, five miles down the coast.

Thursday, October 18

1300 - 1730	Eutrophication Symposium, ERLN-EPA Conference Room, program enclosed
1900 - 2200	NEERS Registration--Casino Room, Durfee's at the Pier
1900 - ????	Beer Blast--same place (bring your kazoos)

Friday, October 19

0800	Registration--Corless Auditorium, Watkins Building, GSO-URI
0800	Poster Set-up--Rm 12, Watkins Building, GSO-URI
0825	Welcome - Dr. William Brungs, Director, Environmental Research Laboratory, Narragansett. U.S. E.P.A.

PAPER SESSION 1

Session Chair - Walter Berry, University of Rhode Island.

0830	The Shadow Responses of Estuarine Copepods. Buskey, E.J., E.Swift, and C. Mann. University of Rhode Island
0850	Notes of Jellyfish Watcher: Evidence That Two Contiguous Populations of <u>Cyanea</u> are Genetically Isolated. Brewer, R.H., Trinity College

0910 Microbial Iron Reduction in Enrichment Cultures of Estuarine Sediments.
Tugel, J.B., M.E. Hines, and G.E. Jones, University of New Hampshire.

0930 Experimental Use of Macrocosm Seagrass Cultures.
Short, F.T., University of New Hampshire.

0950 Poster Session and Coffee Break - Rm 12, Watkins Building

PAPER SESSION 2

Session Chair - Don Gordon, Bedford Institute of Oceanography

1020 Application of Triterpanes and Steranes in Marine Sediments as Indicators of Fossil Fuel Pollution.
Requejo, A.G., Battelle New England

1040 Application of Organic Geochemical Techniques to the Study of Contaminated Coastal Sediments.
Eganhouse, R.P., University of Massachusetts

1100 Analysis of Trace Organics in Aquatic Environments, Part 1: Di-n-Butyl Phthalate Ester.
Libby, A.J., Jr., U.S. Coast Guard R&D Center and UConn Marine Sciences Institute

1120 *The Geochemistry of Dissolved Organic Copper and Chromium in Narragansett Bay Interstitial Waters.
Douglas, G.S., University of Rhode Island.

1140 Pathways of Pollutant Entry to Narragansett Bay.
Hoffman, E.J., J.S. Latimer, G.L. Mills, C.G. Carey and J.G. Quinn, University of Rhode Island

1200 Lunch Break
(Buffet served in Rm 12, Watkins Building)

PAPER SESSION 3

Session Chair - D. Michael Johns, EPA-Narragansett

1320 A Case Study on the Effects of Contaminated Dredge Spoils on Heart and Ventilatory Rhythms of the American Lobster.
Bill, R.G., NOAA, NMFS.

1340 Very Rapid Aquatic Toxicity Testing.
Jackim, E. and D. Nacci, EPA Environmental Research Laboratory

1400 *Sublethal Predation Effects on Reproduction and Population Dynamics of Polydora ligni.
Zajac, R.N., University of Connecticut.

- 1420 A Comparative Analysis of Growth in Bay Scallops from Southern Rhode Island.
Jones, J.P. and H.M. Rines, University of Rhode Island.
- 1440 Geologic Control of Molluscan Communities in a Coastal Bay, Western Gulf of Maine.
Shipp, R.C. and S.A. Staples, University of Maine and D.B. Packer, Smithsonian Institution.
- 1500 Break and Poster session - Rm 12, Watkins Building

PAPER SESSION 4

Session Chair - Barbara Welsh, University of Connecticut

- 1530 *Hypsographic Analyses of Narragansett Bay.
Chinman, R.A., University of Rhode Island
- 1550 Barnstable Harbor Wetlands Classification Using Landsat Thematic Mapper.
Richardson, K.A., University of Rhode Island.
- 1610 Ecological Importance of Fundy Salt Marshes.
Gordon, D.C., Jr., P.J. Cranford, and P. Schwinghamer, Bedford Institute of Oceanography.
- 1630 The Narragansett Bay National Estuarine Sanctuary
Greene, R., Rhode Island Department of Environmental Management
- * denotes Ketchum Prize Papers
- 1650 BUSINESS MEETING
- 1830 HAPPY HOUR--Casino Room, Durfee's at the Pier
- 1930 BANQUET--same place

Saturday, October 20

NARRAGANSETT BAY - A LABORATORY AND A RESOURCE

- 0830 Registration--Corless Auditorium, Watkins Building, GSO-URI
- 0900 Introductions
- 0915 Flow Patterns in Narragansett Bay.
Frank White, University of Rhode Island
- 0940 Post Glacial Geologic History of Narragansett Bay.
Robert McMaster, University of Rhode Island.
- 1005 Coffee Break

- 1035 Fish and Fishermen of Narragansett Bay; Past and Present
H. Perry Jeffries, University of Rhode Island
- 1100 An Environmentalist's View of Narragansett Bay.
Trudy Coxe, Save The Bay, Inc.
- 1125 Summary and Discussion
Lynne C. Hanson, Center for Ocean Management Studies

POSTER PAPERS

The Probability of Underwater Resuspension of Estuarine Sediment by Rain.
Anderson, F.E. and T.C. Shevenell, University of New Hampshire

National Wildlife Refuge System Master Planning and Land Acquisition.
Chase, G.L., U.S. Fish and Wildlife Service

Evaluation of the Archiannelid Dinophilus gyrociliatus for Use in Short-term
Chronic Bioassays.

Curran, M.D., and R.S. Carr, Battelle New England and M. Mazurkiewicz,
University of Maine

Sea Grant Work in Estuaries.
U.R.I. Sea Grant

Hazard Assessment: A Case Study. Field Verification Program--Aquatic Disposal.
U.S. EPA, Environmental Research Laboratory, -Narragansett.

REGISTRATION: The NEERS registration desk will be open on Thursday, 1900-2200 hours at Durfee's and on Friday, 0800-1100 hours and on Saturday, 0830-1000 hours at GSO-URI. Pre-registration is \$8.00 (see enclosed form); on-site registration is \$10.00; registration for Saturday only is \$5.00. Do not procrastinate, put that check to NEERS in the mail today. (Berry wants your money!)

KETCHUM PRIZE: A prize of \$100.00 will be awarded to the student who, in the opinion of the prize committee, presents the best paper in terms of scientific content and in clarity and professionalism of presentation (including graphics). To be eligible, the student must be the sole author of the paper and may not have been a previous winner. All Ketchum Prize papers will be presented on Friday. Contributions towards the endowment fund for this prize would be greatly appreciated by NEERS.

SATURDAY MORNING SPECIAL SESSION: How does the past affect the future of our estuaries? What can we learn from the physical oceanography of an estuary? These and other questions will be addressed by the invited speakers and brought up for discussion with the audience during the session on "Narragansett Bay, A Laboratory and a Resource."

EUTROPHICATION SYMPOSIUM: On Thursday afternoon (October 18) MERL, the Marine Ecosystem Research Laboratory at URI, will host an afternoon of presentations on nutrient enrichment in coastal waters as seen in both mesocosm and field studies. This will be held at ERLN-EPA.

Eutrophication Symposium

- 1:00 Introduction to Symposium
P.L. Donaghay - MERL/GSO/URI
- 1:10 Nutrients in Narragansett Bay: Background for a Mesocosm
Eutrophication Experiment
M.E.Q. Pilson - MERL/GSO/URI
- 1:20 Effects of Eutrophication on System Production and Respiration
C.A. Oviatt - MERL/GSO/URI
- 1:35 Effects of Eutrophication on Planktonic Primary and Secondary
Production Processes
P.L. Donaghay and B.K. Sullivan - MERL/GSO/URI
- 2:00 Benthic Response to Nutrient Enrichment
J.B. Frithsen, P. Sampou, D.T. Rudnick, J. Maughan and E. Klos
MERL/GSO/URI
- 2:15 Changes in the Fate and Cycling of Carbon in Eutrophic Systems
J.N. Gearing, J. Maughan, P.J. Gearing - MERL/GSO/URI
- 2:30 Microcosm Nitrogen and Phosphorus Balances: Sediments are not the
Answer
R.B. Beach, M.E.Q. Pilson, T. Sowers, S.J. Richards and
J. Boucher - MERL/GSO/URI
- 2:45 Break
- 3:00 Nutrient Enrichment Studies on Chesapeake Bay Subestuary
C.F. D'Ellia, J.G. Saunders and W.R. Boynton - Ches. Biol. Lab.
- 3:25 Development and Verification of a Simplified Nitrogen Mass Balance
Model in a Shallow Eutrophied Estuary Seasonally Dominated by
Ulva lactuca
M.D. Curtis, D.A. Johnson, B.L. Welsh - Univ. Connecticut
- 3:45 Is Lower Narragansett Bay Becoming Eutrophic?
T. Smayda - GSO/URI
- 4:05 Evaluation of Mechanism Controlling Ecosystems Dynamics Under
Eutrophication: a Mesocosm Perspective
P.L. Donaghay - GSO/URI
- 4:20 Panel Discussion: What have we learned from the alternative approaches
to the study of eutrophication?

Panel Members: P.L. Donaghay (URI), C.F. D'Ellia (CBL), V. Smetacek (Univ. Kiel,
W. Germany), T.J. Smayda (URI), M.E.Q. Pilson (URI), V. Bierman
(EPA-ERL Narragansett)