

BOSTON HARBOR SYMPOSIUM

OCTOBER 23, 1986

NEW ENGLAND AQUARIUM

PROGRAM

- 8:00 REGISTRATION
- 8:30 WELCOME
- RECENT ADVANCES IN KNOWLEDGE ABOUT BOSTON HARBOR AND MASSACHUSETTS BAY
- Michael Gritzuk, Massachusetts Water Resources Authority, Chair
- 8:40 E. Eric Adams, Richard F. Kossik and Philip M. Gschwend, Massachusetts Institute of Technology, MATHEMATICAL SIMULATION OF HALOCARBON DISTRIBUTIONS IN BOSTON HARBOR.
- 8:55 Bradford Butman and David Aubrey, U.S. Geological Survey, RECENT WINTER CURRENT MEASUREMENTS IN CAPE COD BAY.
- 9:10 George B. Gardner, University of Massachusetts, HYDROGRAPHIC OBSERVATIONS IN BOSTON INNER HARBOR.
- 9:25 Philip Gschwend, Shian-chee Wu, Bruce Brownawell and John Farrington, Massachusetts Institute of Technology, EVALUATING THE IMPORTANCE OF CONTAMINATED BOTTOM SEDIMENTS AS A CONTINUING SOURCE OF TOXIC ORGANIC CHEMICALS TO COASTAL MARINE ENVIRONMENTS.
- 9:40 Robert P. Eganhouse, Benson R. Gould, Deanna P. Olaguer and Curtis S. Phinney, University of Massachusetts, EVALUATING THE DISPERSION AND ACCUMULATION OF MUNICIPAL WASTES IN MASSACHUSETTS BAY: THE POTENTIAL OF MOLECULAR MARKERS.
- 9:55 Gordon T. Wallace, Jr. and George B. Gardner, University of Massachusetts, METAL-DISTRIBUTIONS IN MASSACHUSETTS BAY - SOURCES AND SINKS.
- 10:10 BREAK
- 10:30 Michael P. Shiaris, University of Massachusetts, DISTRIBUTION OF INDICATOR BACTERIA AND VIBRIO PARAHEMOLYTICUS IN SEWAGE-POLLUTED INTERTIDAL SEDIMENTS.
- 10:45 David K. Ryan and William E. Robinson, New England Aquarium, BIOACCUMULATION OF METALS IN MUSSELS (MYTILUS EDULIS) TRANSPLANTED TO SALEM SOUND.
- 11:00 Vincent Zdanowicz, Donald F. Gadbois and Martin W. Newman, National Marine Fisheries Service, LEVELS OF ORGANIC AND INORGANIC CONTAMINANTS IN SEDIMENTS AND FISH TISSUES AND PREVALENCES OF PATHOLOGICAL DISORDERS IN WINTER FLOUNDER FROM ESTUARIES OF THE NORTHEAST UNITED STATES, 1984.

- 11:15 Jerry M. Neff, R. S. Carr and R. E. Hillman, Battelle New England Marine Research Laboratory, IMPACT OF AND OCEAN SEWAGE OUTFALL ON WINTER FLOUNDER: BIOCHEMICAL AND HISTOPATHOLOGICAL STUDIES.
- 11:30 John J. Stegeman, Frances Y. Teng and Elisabeth A. Snowberger, Woods Hole Oceanographic Institution, ENVIRONMENTALLY-INDUCED CYTOCHROME P-450 IN WINTER FLOUNDER (PSEUDOPLEURONECTES AMERICANUS) FROM COASTAL MASSACHUSETTS EVALUATED BY CATALYTIC AND MONOCLONAL ANTIBODY PROBES.
- 11:45 Carol Reinisch, Tufts University, THE USE OF IMMUNOLOGICAL TECHNIQUES TO EVALUATE INVERTEBRATE DISEASE PROBLEMS.
- 12:00 Judith Capuzzo, Woods Hole Oceanographic Institution, SUMMARY AND RECOMMENDATIONS.
- 12:30 LUNCHEON on board "Discovery"

WHAT AND WHY DO WE STILL NEED TO LEARN ABOUT BOSTON HARBOR AND MASSACHUSETTS BAY?
Richard Delaney, Massachusetts Coastal Zone Management Office, Chair

1:30 Bruce Tripp, Office of Coastal Zone Management

1:50 Sarah Warner, Massachusetts Water Resources Authority

2:10 Thomas Hruby, Massachusetts Audubon Society and Paul Boyle, New England Aquarium; Boston Harbor Monitoring Program

2:30 Keith Stolzenbach, Massachusetts Institute of Technology and Gordon Wallace, University of Massachusetts at Boston; Harbor/Bay Research Consortium

3:00 BREAK

3:20 HOW DO WE TAKE THE NEXT STEPS - Panel and Discussion

Charles H.W. Foster, Kennedy School of Government, Chair

Lorraine Downey, Director, Environment Department, City of Boston;
Board Member, Massachusetts Resources Authority; and Chair,
Harbor Park Advisory Committee

Senator William Golden

Representative Henri Rauschenbach

Ian Menzies, Senior Fellow, McCormack Institute; and Vice
President, Save the Harbor/Save the Bay

Peter Shelley, Senior Attorney, Conservation Law Foundation

5:00 RECEPTION

New England Estuarine Research Society



FALL MEETING

OCTOBER 24-25, 1986

HOWARD JOHNSON'S MOTOR LODGE
Boston, Massachusetts

Hosted by

The University of Massachusetts
Boston, Massachusetts

PROGRAM AND ABSTRACTS

Friday. 24 October 1986

(*Denotes Ketchum Prize Candidates)

Session I, Chairman: Michael Shiaris

- 8:30-8:35 Welcome
- 8:35-8:55 Rhoads, D.C., Science Applications International Corp.,
Newport, RI. HYPOXIC BOTTOM FACIES IN LONG ISLAND SOUND.
- 8:55-9:15 Welsh, B.L., Marine Sciences Department, University of
Connecticut, Avery Point, Groton, CT. LONG ISLAND SOUND
HYPOXIA.
- 9:15-9:35 *Sisson, J.D., University of Massachusetts, Boston, MA. DENSITY
EFFECTS ON GROWTH AND REPRODUCTION IN THE NORTHERN BAY SCALLOP.
- 9:35-9:55 *Falk, K., Environmental Sciences Program, University of
Massachusetts, Boston, MA. EXPERIMENTAL STUDIES OF THE FEEDING
ECOLOGY OF LEITOSCOLOPLOS SPP. (ORBINIIDAE: POLYCHAETA) FROM
BARNSTABLE HARBOR AND BOSTON HARBOR.
- 9:55-10:15 *Stockmayer, M.A., Biology Department, University of
Massachusetts, Boston, MA. HISTOPATHOLOGICAL ANALYSIS OF MYA
ARENARIA FROM BOSTON HARBOR.
- 10:15-10:30 COFFEE BREAK
- 10:30-10:50 Wilson, W.H., Manomet Bird Observatory, Manomet, MA. THE
IMPORTANCE OF EPIBENTHIC PREDATION IN A BAY OF FUNDY MUDFLAT
COMMUNITY.

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- 10:50-11:10 *McKenna, J., Graduate School of Oceanography, University of Rhode Island, Narragansett, RI. SIMULATION MODEL FOR BENTHIC DYNAMICS FOR NARRAGANSETT BAY.
- 11:10-11:30 Brousseau, D.J., Department of Biology, Fairfield University, Fairfield, CT. LIFE TABLES FOR TWO FIELD POPULATIONS OF MYA ARENARIA FROM LONG ISLAND SOUND.
- 11:30-12:30 POSTER SESSION - Small Conference Room
- Rodriguez, V., Graduate School of Oceanography, University of Rhode Island, Narragansett, RI, and J. Rodriguez, Department of Ecology, University of Malaga, Spain. PLANKTON DYNAMICS AND NUTRIENT CYCLING IN A HARBOR SYSTEM.
- Choromanski, J. and S. Stiles, National Marine Fisheries Service, Milford, CT. A RECIRCULATING SYSTEM TO OBTAIN BIVALVE SPAWN FOR USE IN POLLUTION STUDIES OF FIVE LONG ISLAND SOUND SITES.
- Mantel, L.H., M. Sommer, A. Ng, and L. Buck, Department of Biology, City College of New York, New York, NY. NEUROENDOCRINE EFFECTS OF OSMOREGULATION ON THE GREEN CRAB, CARCINUS MAENAS.
- Gratto, G.W. and M.L.H. Thomas, Division of Sciences, University of New Brunswick, St. Johns, NB. FOOD LIMITATION ON A MIGRATORY STAGING AREA AS A POTENTIAL SOURCE OF MORTALITY IN JUVENILE SANDPIPERS.
- 12:30-1:30 LUNCH
- Session II: COASTAL EUTROPHICATION
Chairman: Arthur Gaines
- 1:30-1:50 Loder, T., C. Vorosmarty, and F. Short, University of New Hampshire, Durham, NH. THE SPECTRUM EFFECT: NUTRIENT CYCLING IN TIDALLY-DOMINANT SALT MARSH ESTUARIES.
- 1:50-2:10 Berounsky, V.M. and S.W. Nixon, Graduate School of Oceanography, University of Rhode Island, Narragansett, RI. NITRIFICATION AND A NITROGEN BUDGET FOR THE PROVIDENCE (RI) RIVER ESTUARY.

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2:10-2:30 *Beatty, L.L., Graduate School of Oceanography, University of Rhode Island, Narragansett, RI. THE EMERGENCE OF SUSPENSION FEEDERS AS AN IMPORTANT COMPONENT OF THE BENTHOS IN EUTROPHIED SYSTEMS

2:30-2:50 Heufelder, G.R., Barnstable County Health and Environmental Department, Barnstable, MA. BACTERIOLOGICAL MONITORING IN BUTTERMILK BAY, MA: A CASE STUDY.

2:50-3:10 Yarish, S.M., Marine Sciences Research Center, SUNY, Stony Brook, NY. BENTHIC NITROGEN REGENERATION IN LONG ISLAND SOUND SEDIMENTS.

3:10-3:30 COFFEE BREAK

3:30-5:00 PANEL DISCUSSION: COASTAL EUTROPHICATION: CAUSES? CURES?

An informal panel discussion on the definitions, causes, cures, and management of eutrophication in coastal waters.

Panel Members: Arthur Gaines, Woods Hole Oceanographic Institution, Woods Hole, MA, moderator
Pat Hughes, Coastal Zone Management, Boston, MA
George Heufelder, Barnstable County Health and Environmental Department, Barnstable, MA
Sandy MacFarlane, Shellfish Department, Orleans, MA
Carlton Hunt, Battelle, Duxbury, MA
Norb Jaworski, U.S. Environmental Protection Agency, Narragansett, RI
Percy Donaghay, University of Rhode Island, Narragansett, RI

5:00-5:45 BUSINESS MEETING

BANQUET AND SOCIAL HOUR

Saturday, 25 October 1986

Session III Chairman: Joseph Cooney

9:00-9:20 Redmond, M.S. and K.J. Scott, SAIC and U.S. Environmental Protection Agency, Narragansett, RI. PREDATION ON AMPHIPODS BY THE POLYCHAETE NEPHTYS INCISA.

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- 9:20-9:40 Batdorf, C. and T. Hruby, Massachusetts Audubon Society, Gloucester, MA. COMPARING TWO INTERTIDAL BENTHIC COMMUNITIES WITHIN GLOUCESTER HARBOR.
- 9:40-10:00 Heber, M., M. Hughes, S. Schimmel, and W. Berry, SAIC and U.S. Environmental Protection Agency, Narragansett, RI. RESULTS OF TWO 7-DAY TOXICITY TEST METHODS USING COMPLEX EFFLUENTS ENTERING MARINE/ESTUARINE WATERS.
- 10:00-10:20 COFFEE BREAK
- 10:20-10:40 Hruby, T., Massachusetts Audubon Society, Lincoln, MA. OPEN MARSH WATER MANAGEMENT IN MASSACHUSETTS: FROM BASIC RESEARCH TO MANAGEMENT IN THREE YEARS.
- 10:40-11:00 Cooney, J.J. and G.W. Pettibone, Environmental Sciences Program, University of Massachusetts, Boston, MA. INTERACTIONS BETWEEN TIN AND ESTUARINE BACTERIA.
- 11:00-11:20 McManus, P.J. and K.E. Keay, Gulf of Maine Research and University of Massachusetts, Boston, MA
CHANGES IN A BENTHIC INFAUNAL COMMUNITY ALONG A POLLUTION GRADIENT IN AN INTERTIDAL MUDFLAT AT SAVIN HILL COVE, DORCHESTER, MA.
- 11:20-11:40 Turner, R.D., Museum of Comparative Zoology, Harvard University, Cambridge, MA. MARINE FLORA AND FAUNA OF THE NORTHEASTERN UNITED STATES: MOLLUSCA.
- 11:40-12:00 Watling, L., Ira C. Darling Center, University of Maine, Walpole, ME. MARINE FLORA AND FAUNA OF THE NORTHEASTERN UNITED STATES: AMPHIPODA.
- 12:00 NOON MEETING ADJOURNED
- 1:00- East Coast Association of Marine Invertebrate Taxonomists (ECAMIT) Workshop
Workshop Leader: Sheldon Pratt

BOSTON HARBOR/MASSACHUSETTS BAY SYMPOSIUM: A special symposium on the Boston Harbor/Massachusetts ecosystem will be held Thursday, October 23, at the New England Aquarium. The symposium, the third in an annual series dwelling on scientific and policy issues affecting Boston Harbor and Massachusetts Bay, will be jointly hosted by The Environmental Sciences Program at the University of Massachusetts at Boston, The New England Aquarium, The Massachusetts Bay Marine Studies Consortium, The Sea Grant Program of the Massachusetts