# New England Estuarine Research Society

SPRING MEETING

# 4, 5, 6 MAY 1978

## at The Rusty Anchor, Route 27, Boothbay, Maine

# HOST

**Bigelow Laboratory for Ocean Sciences** 

#### PROGRAM

#### THURSDAY, 4 MAY 1978

- 1700 2100 REGISTRATION: RUSTY ANCHOR
- 1900 BEER BLAST: RUSTY ANCHOR

## FRIDAY, 5 MAY 1978

0530 - 1200 REGISTRATION: RUSTY ANCHOR

# PAPER SESSION PETER LARSEN, CHAIRMAN

- 0830 Welcome. Charles Yentsch, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine.
- 0835 Macrobenthic invertebrates of the Housatonic River estuary. Brian Meehan, University of Bridgeport, Bridgeport, Connecticut.
- 0855 Annelida from a Puerto Rican estuary. Charlene D. Long, 69 Winsor St., Arlington, Massachusetts, and William Bhajan, Center for Energy and Environment Research, San Juan, Puerto Rico.
- 0915 The development of a fouling community in mid-coast Maine. Brian Field, Ira C. Darling Center, University of Maine at Orono, Walpole, Maine.
- 0935 Invertebrate distribution patterns on subtidal rocks. Luana Read, Marine Sciences Institute, University of Connecticut, Groton, Connecticut.
- 0955 The distrubution of benthic macroinvertebrate communities in coastal New Hampshire. Pat Clark, Weldon Bosworth, and Ronna LaPenn, Normandeau Associates, Bedford, New Hampshire.

1015	Coffee
1030	Overwintering intertidal aggregates of the mud snail, <u>Nassarius</u> <u>obsoletus</u> . Michael Mazurkiewicz and Michael Day, University of Maine at Portland-Gorham (POGO), Portland, Maine.
1050	The packaging of ova in the egg cases of <u>Aplysia californica.</u> Thomas R. Capo and Paul Kandel, College of Physicians and Surgeons, Columbia University, New York, New York.
1110	Growth rates in subtidal populations of <u>Mytilus edulis</u> along the Maine coast and their relationship to energy flows, total biomass (density), and shell morphology. James Chalfant, Alton West, and Thomas Archambault, Maritec, South Bristol, Maine.
1130	Trends in size, sex, movements and catchability of lobsters (Homarus americanus) and rock crabs (Cancer irroratus) in the Piscataqua River estuary, N.H. Robert Hasevlat and Neil Savage, Normandeau Associates, Bedford, New Hampshire.
	STANDBY PAPERS
	Abnormalities in the shell of the Maine-grown European oyster <u>(Ostrea</u> <u>edulis)</u> . Maureen D. Logue, Ira C. Darling Center, University of Maine at Orono, Walpole, Maine.
	The seasonal variation in the flesh weight and total lipid content of the bay scallop, <u>Argopecten irradians</u> (Lamarck). Lawrence L. Drolet, Marine Science Institute, Northeastern University, Boston, Massachusetts.
	A program for the development of the shellfisheries of five towns on Martha's Vineyard. Richard C. Karney, Martha's Vineyard Shellfish Group, Oak Bluffs, Massachusetts.
	The reproduction cycle of mahogany quahog, <u>Arctica islandica.</u> Pat Clark, Normandeau Associates, Bedford, New Hampshire.
1150 - 1340	LUNCH. TOUR OF BIGELOW LABORATORY
	PAPER SESSION EDWARD L. BOUSFIELD, CHAIRMAN.
1340	Baseline studies of the physical oceanography of Cobscook Bay, Maine. Paul A. Schroeder, New England College, Henniker, New Hampshire.
1400	Physical and chemical characteristics of the Saint John River estuary, New Brunswick, Canada - a river dominated multi-basin estuary. M.J. Dadswell and C.D. Metcalfe, Department of Fisheries and Environment, Fisheries and Marine Service, Biological Station, St. Andrews, New Brunswick.

1420	Hydrography of the Gulf of Maine, Northeast Channel and adjacent Slope Water. W.B. Wright and R.J. Schlitz, National Marine Fisheries Service, Northeast Fisheries Center, Woods Hole, Massachusetts.
1440	A preliminary budget for copper in the Great Bay estuary, New Hampshire. Wm. Berry Lyons and Henri, E. Gaudette, Department of Earth Sciences, University of New Hampshire, Durham, New Hampshire.
1500	COFFEE
1515	Geochemical effects of episodic sedimentation events in the upper Chesapeake Bay. David J. Hirschberg, Marine Sciences Research Center, State University of New York, Stony Brook, New York.
1535	The application of a new sea floor mapping system for delineating benthic environments. Charles A. Menzie and Hugh F. Mulligan, EG & G, Environmental Consultants, Waltham, Massachusetts.
1555	The recovery of <u>Aerococcus viridans</u> (var.) <u>homeri</u> from lobsters and sediments. Jane Doherty, Normandeau Associates, Bedford, New Hampshire.
1615	Metabolism of toxaphene by estuarine microorganisms. Fred Weber, Biology Department, Northeastern University, Boston, Massachusetts.
1635	Siderophore-production by marine bacteria. L.J. Spencer, M. O'Connell, J. Tugel, and C.E. Jones, Jackson Estuarine Laboratory, University of New Hampshire, Durham, New Hampshire.
	STANDBY PAPERS
	Pore water chemistry in Ouiambog Cove, Connecticut. Ernie Matson, Marine Research Laboratory, University of Connecticut, Noank, Connecticut.
	Benthic community metabolism and nutrient flux across the sediment- water interface of an intertidal mudflat. Lee E. Dunbar, Marine Sciences Institute, University of Connecticut, Groton, Connecticut.
	Heavy metals in Connecticut quahogs. David W. Alley, U.S. Coast Guard Academy, New London, Connecticut.
	Trace metal studies in marine phytoplankton cultures by differential pulse polarography. L.J. Spencer, M. Salvaggio, and G.E. Jones, Jackson Estuarine Laboratory, University of New Hampshire, Durham, New Hampshire.

- 1830 HAPPY HOUR, CASH BAR: RUSTY ANCHOR
- 1930 BANQUET: RUSTY ANCHOR
- 2100 SPECIAL INTEREST DISCUSSION GROUPS

#### SATURDAY, 6 MAY 1978.

PAPER SESSION DOUGLAS S. TOLDERLUND, CHAIRMAN

- 0830 Toxicity of <u>Gonyaulax excavata</u> cysts. Claudia Nickelson, Clarice Yentsch, Carrie Lewis, Francis Hague, and John Hurst, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine.
- 0850 Occurrence of red tide resting cysts in the Gulf of Maine. Carrie M. Lewis and Clarice Yentsch, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine.
- 0910 Inorganic nitrogen uptake by phytoplankton near Squirrel Island. Jane J. MacIsaac, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine.
- 0930 The delayed winter phytoplankton blooms of 1977 and 1978 in eastern Long Island Sound. Linda E. Bireley, John P. Balser, and Carl S. Fontneau, Northeast Utilities, Hartford, Connecticut.
- 0950 The seasonal importance of micro-zooplankton as grazers of phytoplankton biomass in Long Island Sound. Gerard Matthew Capriulo, Marine Sciences Research Center, State University of New York, Stony Brook, New York.
- 1010 Analysis of zooplankton survival after passage through a power plant. Deborah L. Taylor, Doreen S. Newhouse, and Ronna LaPenn, Normandeau Associates, Bedford, New Hampshire.
- 1030 COFFEE
- 1045 Comparative study of the population processes of the larvae of the rock gunnel, <u>Pholis gunnellus</u> Linnaeus. David Townsend, Ira C. Darling Center, University of Maine at Orono, Walpole, Maine.
- 1105 Preliminary observations on the abundance, distribution, and growth of post-larval sea scallops, <u>Placopecten magellanicus</u>, on Georges Bank. Richard M. Lee and Peter F. Larsen, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine.
- 1125 Seasonal aspects of nutrient recycling by the mud snail <u>Nassarius</u> <u>obsoletus.</u> Steven Edwards, Marine Sciences Institute, University of Connecticut, Groton, Connecticut.
- 1145 Ventilation and oxygen consumption in <u>Nephtys incisa.</u> Wayne R. Davis, D.S. Environmental Research Laboratory, Narragansett, Rhode Island.

1205 Hansen's challenge. Seth Barker, Ira C. Darling Center, University of Maine at Orono, Walpole, Maine.

#### 1210 - 1215 BUSINESS MEETING

## STANDBY PAPERS

- A bioenergetic approach to modelling the decomposition processes. James Reed, Ecosystems Center, Marine Biological Laboratory, Woods Hole, Massachusetts.
- Determination of trace metals in seawater by anodic stripping voltammetry (ASV). Mary Lou Brann and Clarice M. Yentsch, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine.
- Growth response of the bivalve <u>Tapes japonica</u> fed <u>Thalassiosira pseudonana</u> (3H) grown in continuous culture with varying carbon and nitrogen levels. Scott M. Gallager, Marine Biological Laboratory, Woods Hole, Massachusetts.
- Distribution of in-vivo chlorophyll fluorescence in the New York Bight, August 1977 and April 1978. Joseph J. Tokos, Marine Sciences Research Center, State University of New York, Stony Brook, New York.
- Non-selective social and reproductive behavior in the winking mattressback, <u>Lectodorsum nictans</u> Lutz, and the venerable swain, <u>Lothario senescens</u> Hidu. Robert A. Radulski, Southern Connecticut State College, New Haven, Connecticut.
- NOTE: Simultaneous Morse code translation of all papers into Icelandic will be provided.

#### POSTER SESSION: RUSTY ANCHOR

- Displays will be on view Thursday Saturday. Authors of the displays will attend them to answer questions before and after the banquet.
- The 1978 Thames River (Connecticut) spring phytoplankton bloom.Mark W. Cerasale, George T. Elliott, and JohnM. Baker, U.S. Coast Guard Academy, New London, Connecticut.
- An ecological characterization of Maine's coast north and east of Cape Elizabeth. Stewart Fefer, Larry Thornton, Patricia Schettig, and Russ Brami, Energy Resources Co., Inc., Cambridge, Massachusetts.