M A R I N E S C I E N C E S R E S E A R C H C E N T E R N E W S L E T T E R
State University of New York Stony Brook, N.Y. 11790

Vol. 2, No. 2 Fall, 1970

APPOINTMENTS

To the MSRC and/or Marine Environmental Studies Program (MESP) at Stony Brook:

Mr. James R. Boyce, as Research Planner, MSRC; Adjunct Assistant Prof. Urban and Regional Planning, MESP. Currently in the Urban Science and Engineering Program, SU/Stony Brook, and President, Design Futures, Inc., New York City (behavioral planning policy research; management consulting).

Dr. Ronald I. Caplan, as Research Biologist, MSRC; Instructor of Marine Biology, MESP. Formerly an Instructor of Oceanography at Oregon State U.

Dr. John L. McHugh, as Senior Research Biologist, MSRC; Prof. Marine Resources, MESP. Former Head, International Decade of Ocean Exploration Office, National Science Foundation, and Acting Director, Office of Marine Resources, U.S. Dept. of Interior.

Mr. H. Crane Miller, as Visiting Prof. Marine Law, MESP. Currently Chief Counsel, Subcommittee on Oceanography, U.S. Senate Committee on Commerce.

Dr. Charles F. Wurster, Jr., as Research Environmentalist, MSRC; Assistant Prof. Marine Sciences, MESP. Since 1965, Assistant Prof. Biological Sciences, SU/Stony Brook; Chairman, Scientists Advisory Committee, Environmental Defense Fund, Inc.--an organization in the forefront of the national movement to ban DDT.

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Dr. Richard B. Moore, as Director of the Lake Ontario Environmental Laboratory, SU College at Oswego. A microbiologist with background in oceanography, Dr. Moore formerly was manager of a group at the Syracuse Research Corp. studying interactions between algae and pesticides.

Dr. John Kingsbury, Dept. of Botany, Cornell University, to chair an Advisory Committee on Marine Biology at Cornell. The Committee reviews the status of instructors and research in marine biology; recommends ways for the University to organize and seek future support for these activities. Liaison between Cornell and the MSRC will be the responsibility of this Committee.

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AWARDS

THE WESTERN NEW YORK NUCLEAR RESEARCH CENTER, INC., SU/BUFFALO, RECEIVED A GRANT FROM THE BUREAU OF SPORT FISHERIES AND WILDLIFE, U.S. Dept. of Interior, to study mercury pollution of Lake Erie and its aquatic life. The program, allocated $28,000 for the first of five years, is directed by Mr. C.C. Thomas, Jr., a nuclear chemist who is Research Manager of the Center. Coinvestigators are Dr. K.K.S. Pillay of the Center, a specialist in nuclear analytic techniques, and Dr. E.J. Massaro, Assistant Professor of Biochemistry at Buffalo's School of Medicine.

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ACILITIES

30,000 Square feet of newly refurbished oceanographic research laboratory space and teaching facilities of the NEW YORK OCEAN SCIENCE LABORATORY, Montauk, L.I., were formally DEDICATED ON OCTOBER 3 by the nonprofit education-research consortium, Affiliated Colleges and Universities, Inc. Formerly a Republic Aerospace facility, the site has available over 300,000 square feet of floor space that will be converted into additional laboratories, a library, maintenance facilities, an administration center and dormitories. A 400-foot pier with a 40-foot draft at mean low tide, five railroad sidings, a seaplane station and a helicopter pad add to the desirability of the site. The Hon. Perry B. Duryea, Jr., Speaker of the New York State Assembly, presented the dedicatory address.

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PUBLICATIONS

MSRC:

Weyl, P., On the annual temperature-salinity variation of the ocean surface, J. Geophysical Res. 75:2209-2210, 1970

McHugh, J.L., Trends in fishery research, in A Century of Fisheries in North America. Amer. Fish. Soc. special publication No. 7, Washington, D.C., 1970, pp. 25-56

SU/Buffalo:

Shaw, R.P., Dong, W-N, and Gilley, G., An experimental investigation of a weak link for a deep moored instrument cable, Proc. Marine Tech. Soc., 1970, pp. 1139-1145

SU College at Buffalo:

Sweeney, R.A., The Great Lakes Laboratory of the State University College at Buffalo, Limnos 3:13-17, (spring) 1970

The Discovery Bay Laboratory, Jamaica:

Goreau, T.F., et al., On feeding and nutrition in Fungiacava eilatensis (Bivalvia, Mytilidae), a commensal living in fungiid corals, J. Zool. London 160:159-172, 1970

Land, L.S. and Goreau, T.F., Submarine lithification of Jamaican reefs, J. Sedimentary Petrology, 457-462, 1970

Hartman, W.D. and Goreau, T.F., Jamaican coralline sponges: their morphology, ecology and fossil relatives, in Fry, W.G. (ed.): Symposia of the Zoological Society of London No. 18; Biology of the Porifera, London: Academic Press, Inc., pp. 205-243

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RESEARCH ROUND-UP

Seismic methods delineate waste deposits. Application of standard low-power seismic profiling shows great promise for quickly, cheaply and conveniently mapping and determining the volume of waste deposits in coastal waters, according to Prof. M. Grant Gross, Senior Research Oceanographer, MSRC. The technique was tested on a joint MSRC-Institute of Marine Sciences (U. Conn.) cruise September 14 to 18 that took in Long Island Sound from New London to Stamford.

Formerly the nature and geographic extent of deposits had to be determined by core sampling, a somewhat hit-or-miss technique that is extremely time-consuming and laborious, delaying acquisition of data for many months. "Using seismic methods we can bring back data instead of samples," Dr. Gross said, pointing out, however, that in this study the composition of deposits was checked by chemical analysis of samples in the laboratory. By familiarizing themselves with this technique scientists will eventually be able to use it to determine not only the dimensions of waste deposits but also the nature of the materials contained.

The cruise, which served as a research and training project for graduate students of both institutions, was financed by Dr. Gross's Public Health Service grant and utilized IMS's research vessel, "T441".

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Oxygen in Sound dips sharply in August. Top-to-bottom oxygen readings of less than 2.5 parts per million were found in Long Island Sound from the East River to City Island during the first week in August, according to a team of MSRC investigators headed by Dr. Peter K. Weyl, Senior Research Oceanographer at the Center. Conditions worsened approaching the New York metropolitan area, where values of 1.5 ppm oxygen were recorded, the researchers found on three cruises of the area.

Oxygen levels of 7-8 ppm are considered normal for unpolluted coastal waters, while 4 ppm represents the Federal Water Quality Administration's minimal quality criterion. The lower values recorded by the MSRC are indicative of areas hostile to active animal life for long periods, and perhaps even lethal.

East of City Island intense algae blooms occurred in the surface waters, turning them a deep coffee color. Extensive menhaden kills were also observed. Thus, a precipitous reduction in water quality coincided with the height of the summer demand for marine recreation.

Water conditions improved in October, as evidenced on a subsequent three-day cruise of the Sound. Oxygen levels at the western end had in general recovered but were still low in the East River. The improvement was due to various factors, principally an increased mixing of the water column vertically and algal die-offs caused by a depletion of nutrients.

The August and October cruises, respectively were conducted aboard Suffolk County Community College's research ship, captained by Edwin Sherril, and the "Atlantic Twin", a double-hulled vessel provided on loan by Dr. Gerald Posner, Executive Director of the oceanographic program at City University of New York.

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CONFERENCES

FORTY-EIGHT FACULTY AND ADMINISTRATORS OF SUNY UNIVERSITY CENTERS AND FOUR-YEAR COLLEGES were introduced to the Marine Sciences Research Center, its faculty, facilities and programs, at a University-wide conference there April 30 to May 1. The meeting stressed research needs as well as the not-always-compatible sources of funding. Discussing problems of the marine environment were Lee Koppelman, Executive Director of the Nassau-Suffolk Regional Planning Board; David H. Wallace, Director of the Division of Marine and Coastal Resources, N.Y. Department of Environmental Conservation; and Peter K. Weyl, Senior Research Oceanographer, MSRC. Over-all federal funding potential was outlined by keynote speaker H. Crane Miller, Counsel on Oceanography, U.S. Senate Committee on Commerce. Harold Goodwin, Sea Grant Planning Officer, presented a vivid picture of research and training avenues open through the Sea Grant Program.

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SEA GRANT NEWS

A UNIVERSITY-WIDE SEA GRANT GOVERNING BOARD, responsible for Sea Grant policy making within SUNY, final project review and funding allocation, was appointed over the summer by Chancellor Gould. Representation is as follows. State University Central Administration: Dr. Merton W. Ertell, Vice Chancellor for University-wide Activities. University Centers: President Louis T. Benezet, SU/Albany; Dr. Lisle C. Carter, Vice President for Social and Environmental Studies, Cornell; Dr. W. Keith Kennedy, Vice Provost, Cornell; Dr. H. Bentley Glass, Academic Vice President, SU/Stony Brook; Dr. S. Stewart Gordon, Vice President for Academic Affairs, SU/Binghamton. Four-year Colleges of Arts and Science: President Albert W. Brown, Brockport; President E.K. Fretwell, Jr., Buffalo. Two-year Colleges: President Albert M. Ammerman, Suffolk County Community College.

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A SCHEDULE OF PRIORITIES FOR RESEARCH ON THE LONG ISLAND SOUND-NEW YORK BIGHT AREA to be carried out under Sea Grant auspices was the culmination of two meetings of the Advisory Council for the marine sector held May 30 and September 30 at the Marine Sciences Research Center. The 12-man Council represents marine commercial, planning, recreation and conservation interests pertaining to New York's Atlantic seaboard. A separate council has been chosen for the Great Lakes.

The May meeting served as an initial get-together to introduce Council members to one another, to SUNY and the MSRC, to the Sea Grant concept and, specifically, to outline the potential impact of University research upon the future of New York's marine environments and economy. September's meeting, which coincided with a Sea Grant site visit, focused upon actual facets of the Sea Grant research programs. Four broad research areas were put forward and designated priority as follows:

No. 1: Pollution (Waste solids, oil, pesticides, heat, waste waters, biological effects)
No. 2: Coastal Utilization (Recreation, coastal stabilization, wetlands management)
No. 3: Substrate Inventory
No. 4: Resource Development (fin and shell fisheries, new industry).

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