MARINE SCIENCES RESEARCH CENTER NEWSLETTER State University of New York Stony Brook, N.Y. 11790

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The Marine Sciences Research Center <u>Newsletter</u> is published three times a year to report developments in SUNY's expanding marine program. The predominant feature of the summer was travel--researchers were out in the field gathering data, attending meetings, lecturing.

RECENT APPOINTMENTS

MSRC gains Associate Director. Mr. Frederick G. Roberts joined the MSRC as Associate Director this fall, thus becoming the Center's greatly needed second-in-command for administrative matters. The Associate Director's myriad responsibilities include supervising the operations of the Center's Stony Brook facilities and outlying field stations; representing the Director, as necessary, on other SUNY campuses in connection with program development as well as at meetings, public hearings, conferences, etc.; preparing technical reports and handling correspondence; and many other routine administrative functions. Mr. Roberts came to the Stony Brook campus one year ago as an assistant to President John S. Toll. Before that he spent 7 years as Assistant Dean of the Princeton U. Graduate School and 10 years in the Foreign Service of the State Department. . . Mr. Spencer L. Baird, Jr., assumed the post of Senior Electronics Technician at the MSRC on Sept. 1. Formerly, Mr. Baird held research positions at the Science Research Inst., Oregon State U., and the Inst. for Muscle Research, Woods Hole, Mass. . . Participating in thermal pollution studies at the MSRC this summer were Dr. George Hechtel, Asst. Prof. Biological Sciences at Stony Brook; Mr. C. Douglas Hardy, Assoc. Prof. Marine Sciences and Technology, Suffolk County Community College (as part of a year's sabbatical at the Center); and Mr. Erwin Ernst, head of science at a local Long Island high school.

--Mr. Norman Copland is the newly appointed Laboratory Manager of the Discovery Bay Laboratory, Jamaica. Mr. Copland, a native of England, has lived in Jamaica since 1961, where he has taught high school science and, as Principal of St. Andrew Technical H.S., he developed a comprehensive science program. An expert diver and consultant to many private and government diving groups, Mr. Copland has developed training procedures which contribute to the outstanding safety record of Jamaican diving organizations. For 2 years he has taught a field course in marine biology for high school students, and he will continue to do so at the Lab.

--Dr. Wendell Mordy, former Prof. of Atmospheric Physics and Director of the Desert Research Inst., U. Nevada, will coordinate the Lake Erie Environmental Studies Program at Fredonia, in his capacity as newly appointed Special Assistant to the President for Advanced Studies and Research (part-time). . .Fredonia faculty receiving support for summer Lake Erie work were Drs. R.K. Fahnestock and W. Metzger, who studied the geomorphology of the Lake's shoreline, and Dr. K.G. Wood, who studied photosynthesis of Lake Erie algae. . .Dr. Thomas F. McKinney of Vassar College, as the recipient of a Lake Erie Environmental Studies summer research associateship, spent the summer studying the Lake's nearshore sediments.

--Dr. John H. Judd joined the staff of LOTEL, Oswego, as Research Scientist on July 1. Dr. Judd's doctoral research (U. Wisconsin) concerned the effect on a small lake of salt runoff from street deicing. His long-range research interests include cause and effect of meromixis upon lakes, especially when this phenomenon is man-made, and the effects of eutrophication upon benthic organisms and consequently, the food web.

--Mr. Jack Fisher, a chemist formerly with the Bell Labs, Wheatfield, N.Y., has been appointed Research Associate at the Great Lakes Laboratory, Buffalo Coll.

AWARDS, FELLOWSHIPS

\$76,500 For 5 marine projects awarded to SUNY. The Army Corps of Engineers awarded \$25,566 to Dr. M. Grant Gross of the MSRC to study "Minor Elements in Selected Wastes and Waste Deposits in the New York Harbor-Long Island Sound Areas." The project is a part of Dr. Gross's broad program to determine the effects of dumped waste solids upon the marine environment. . The Maritime College, Fort Schuyler, received a \$10,000 research contract from ESSA for a Central Engine Room Control system data acquisition and unitization study in connection with ESSA's Class I vessels. Aaron R. Kramer, Assoc. Prof. of Engineering, is project director. . The Federal Bureau of Commercial Fisheries and the Eric County Legislature have awarded \$10,000 each to the Great Lakes Lab for a study of utilization of Lake Eric trash fish for fish protein concentrate. The Laboratory also received a \$6000 contract from the Corps of Engineers for a 10-month study of resuspension as a means of clearing harbors of sediments. The Lab's director, Dr. Robert A. Sweency, is principal investigator. In addition, one- and two-week courses for grades 2 and 3 sewage plant operators have recently been initiated at the Laboratory supported by the N.Y. Dept. of Health (\$15,000).

--Research Assistantships at the MSRC have been awarded to 6 first-year graduate students who entered Stony Brook this fall. Four students are biologists; the others will be doing research on the Long Island sea breeze phenomenon through the Dept. of Engineering.

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CONFERENCES HELD, ATTENDED

MSRC Advisory Committee adds members. The MSRC Advisory Committee met at the Maritime College, Fort Schuyler, on April 17, adding 3 new members to its rostrum: Dr. Robert Allen, of SU/Albany, Chairman, SUNY Committee on Biology; Dr. Raymond F. Jones, Chairman, Dept. of Biological Sciences, Stony Brook; and Dr. John A. Jones, Acting Director, Lake Erje Environmental Studies at Fredonia. The meeting focused upon potential SUNY acquisition of new sites for marine stations and facilities, and subcommittee was established to study the legal, financial and geographic pro's and con's of each available location. The need for swift action was underlined due to the increasing scarcity and skyrocketing costs of waterfront property. Several northern, temperate and tropical sites are under consideration.

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2-Year college meeting highlights marine tech. "Marine Technology-Exactly What Is It?" might be an appropriate title for the 2-year-college conference on marine science and technology held at the MSRC on May 16 and 17 (See spring Newsletter). Participating were about 40 faculty from 19 colleges plus invited panelists representing the education and marine technology fields. With the above question never totally out of sight, discussions covered such areas as job availability in the marine technology field and the type of 2-ye. Curriculum needed to prepare students for this market. Although few concrete resolutions emerged from the meeting, results were positive. A baseline for intercampus cooperation was established: faculty became aquainted with colleagues from other schools and learned of their marine interests and programs. It is hoped that this was only the beginning of an ongoing dialog. A committee was named to investigate U.S. marine tech. training needs.

Dr. Peter Weyl, MSRC Research Oceanographer. Addressed were specialists in Quaternary studies, who met at the U. of Cambridge, and the National Institute of Oceanography, Wormley, Surrey. . Dr. George Williams joined biologists from the NATO countries in an Organization-sponsored conference on Evolution of the Vertebrates, where he chaired a session on theoretical aspects of natural selection. The meeting was held in Istanbul, Turkey, August 4-15. . Dr. M. Grant Gross was among 60 scientists, engineers and

government representatives who advised the FWPCA on matters pertaining to waste disposal in the coastal ocean, at a July meeting at Jackson Hole, Wyo. The week-long conference was sponsored by the National Academy of Sciences and the National Academy of Engineering Committee on Coastal Wastes Management. Later in the month, in San Diego, Calif., Dr. Gross participated in an evaluation of a HEW-Dillingham Corp. study of oceanic disposal of solid wastes and industrial sludge from U.S. coastal cities. . .Dr. Edward Baylor taught a course in Marine Ecology this summer at the Woods Hole Oceanographic Institute.

--Fredonia has received a \$2000 SUNY "Conversation in the Disciplines" award to hold a conference on the social and economic impact of environmental changes in the Great Lakes. At the conference, to be held in early November, Dr. David Chandler of the Great Lakes Research Division, U. Michigan, will outline the environmental changes that have occurred in the region; Dr. Richard Tybout of the Water Research Center, Ohio State U., will discuss economic aspects of the environmental changes—e.g., pollution; and Dr. Basil Zimmer of the Dept. of Sociology at Brown U. will speak on demographic aspects of the environmental changes. About 60 SUNY representatives of the environmental and social sciences and economics will be invited to participate.

--On Sept. 11 the Subcommittee on Ecological Problems of the Great Lakes, N.Y. Joint Legis-lative Committee on Environmental Management and Natural Resources, held hearings in Oswego. Issues addressed were "Does thermal pollution or nuclear contamination pose an ecological threat to Lake Ontario?" and "Evaluation of the pollution abatement program in correcting (or maintaining) the quality of Lake Ontario." SUNY participants included Mr. Robert Sykes and Dr. John Judd of LOTEL and Dr. Robert Sweeney of the Great Lakes Lab. . . Dr. John Judd of LOTEL presented a paper, "Effects of Sali Runoif from Street Deicing on a Small Lake," at a meeting of the American Society of Limnology and Oceanography, ha Jolla, Calif., Sept. 8-12. . . How some algae may partially detoxify the insecticide Lindane in natural waters was described by Dr. Robert Sweeney of the Great Lakes Lab., at the 12th Conference of the International Association for Great Lakes Research held at the U. Michigan, Ann Arbor, May 5-7. Dr. Sweeney's presentation, "Metabolism of Lindane by Unicellular Algae," will be summarized in the Encyclopaedia Brittannica's 1969 Yearbook of Science and the Future.

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PUBLICATIONS

MSRC issues Technical Report Series. The MSRC launched its Technical Report Series recently with the issuance of two publications: 1. New York City—A Major Source of Marine Sediment, by Dr. M. Grant Gross, MSRC; and 2. An Invertebrate Survey of Flax Pond—Summer, 1967, by Dr. George Hechtel, Asst. Prof. Biological Sciences at Stony Brook. The Series is intended to make preliminary technical data available to the scientific community and interested members of the lay public but does not constitute formal publication as defined in the International Rules of Zoological and Botanical Nomenclature. Copies may be obtained by writing to the Center.

--The Great Lakes Lab., Buffalo College, recently issued the following: Proceedings of the Conference on Changes in the Biota of Lakes Erie and Ontario. R.A. Sweeney (ed.), Bull. Buffalo Soc. Natural Sciences 25 (1), 1969. This conference was held at Buffalo State in April, 1968. Major contributors include Drs. R.O. Brinkhurst (U. Toronto), C.A. Dambach (Ohio State U.), C.C. Davis (St. Johns Memorial U.). In addition to a review of the changes in the biology of the Lakes, with emphasis upon plankton and benthos, the booklet contains a detailed discussion of techniques employed. Copies may be purhased for \$2.10 through the Buffalo Museum of Science, Humboldt Park, Buffalo, N.Y. 14211...The Laboratory has compiled and is offering free upon request a bibliography of algae references for Lake Erie.

FACILITIES

Center's boat christened R.V. MICMAC. Climaxing a gala contest to name the MSRC's new research vessel was the selection of the winning entry, R.V. MICMAC, submitted by Miss Leona Peters of the Center. The Mic-macs were a tribe of Indians native to Nova Scotia, the birthplace of this illustrious ship. Miss Peters has yet to collect her prize of an all-day, all-expense cruise on Long Island Sound off scenic Northport. The MICMAC is available for the use of qualified SUNY researchers. Please make reservations with the Facilities Manager of the Center.

--Planning funds for the MSRC laboratory facility at Flax Pond have been approved by Central Administration. An architect has not yet been named. . .The Center is participating in the development of the New York Ocean Science Laboratory at Montauk, L.I., in conjunction with Affiliated Colleges and Universities, Inc., of which SUNY is a member. The consortium is renting a large tract of waterfront property belonging to the Republic Aerospace Corp. and will convert 5 existing buildings into laboratory and storage facilities. Other colleges in the consortium are Long Island U., St. Johns, Fordham, Hofstra, Adelphi, New York U., New York Inst. of Technology and Queens College of the City U. of New York.

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Dr. Squires observes long-term radiation effects on Bikini. As part of the U.S. government's preparations to repatriate the inhabitants of the Bikini atoll, who were removed from the island in 1946 to make way for atomic bomb tests, Dr. Donald F. Squires joined a group of scientists there in May to study the residual tissue effects of radiation upon Bikini's fauna. In particular, evidence of increased tumor incidence is being sought in rats, gekkos, the coconut, rock and hermit crabs, and an intertidal snail—animals known to concentrate biologically radioactive elements. The work is supported by the National Cancer Institute and the Defense Atomic Support Agency, contractors in the resettlement project.

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SEA GRANT NEWS

Cornell-SUNY to request "planning" funds. A September meeting between Dr. W. Keith Kennedy, Vice Provost of Cornell, and Dr. Donald Squires and Mrs. Judy Smith of the MSRC, provided the finishing touches to an application for a \$15,000 planning grant, which will support activities such as intercampus meetings leading to the development of a full Sea Grant Institutional proposal. An initial draft is being revised to be submitted in late October.

The <u>Newsletter</u> would like to receive newsworthy items related to SUNY's marine sciences program. Such material might include reports of new marine-related courses or research projects, faculty appointments, grants, fellowships, meetings, publications, etc. This material, subscription requests and miscellaneous inquiries should be addressed to Mrs. Judy Smith of the MSRC.