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June 23, 1970

Memorandum

To: Bentley Glass

From:; D. F. Squires

Subject: Annual Report Data

Attached is the information for the Marine Sciences
Research Center Annual Report for 1969-70.

Annual Report 1969-70

Marine Sciences Research Center

1. Outstanding honors:

D.F. Squires-

Appointed Member, Fire Island National Seashore Advisory Commission.

Elected Member, Board of Trustees of Affiliated Colleges and Universities, Inc.

Appointed Member, Steering Committee, Port of New York Authority Study, Environmental Studies Board, National Academy of Sciences/National Academy of Engineering.

Appointed Member, Committee on Systematics in Support of Biomedical Research, National Academy of Sciences.

Elected Member, Executive Committee, Bahamas National Trust.

Principal Speaker, 150th Anniversary of the Naturhistoriska Riksmuseet, Stockholm, Sweden. October, 1969.

Peter Weyl-

Invited to chair session on "Climate and Man", national meeting of American Association for the Advancement of Science, Boston. December, 1969.

Invited lecture on Chemical Oceanography, American Institute of Chemical Engineers, San Juan, Puerto Rico. May, 1970.

M. Grant Gross-

Invited participant, National Academy of Sciences, National Academy of Engineering Steering Committee on Coastal Waste Management, Jackson Hole, Wyoming. August, 1969.

Invited participant, National Academy of Sciences, Ad-Hoc, Pollution Advisory Baselines Group, Woods Hole. May, 1970.

Invited lecture on Urban Aspects of Marine Geology, American Institute of Chemical Engineers, San Juan, May, 1970.

Invited lecture on Marine Geology, Third Joint Meeting Instituto de Ingenieros Quimicos de Puerto Rico and American Institute of Chemical Engineers, San Juan, Puerto Rico. May, 1970.

Keynote speaker at Northeast Regional Meeting of National Association of Geology Teachers, Adelphi University, "Waste Disposal Activities as a New Geological Problem". April 10, 1970.

M. Grant Gross-

Corps of Engineers, Ad Hoc Federal, Bistate committee on waste solid disposal problems in the New York Metropolitan Region, 1970.

Federal Water Quality Administration, New York State Health Department, and Interstate Sanitation Commission, Planning and Coordination Committee, Long Island Sound studies for summer, 1970.

National Academy of Sciences, Committee on Oceanography Ad Hoc Panel on Baseline Monitoring, 1970.

Interstate Sanitation Commission, Planning group for instrumental techniques, 1970.

Hearings and Testimony to State and Federal Committees:

Hearings on Thermal Pollution, U.S. Congressional Subcommittee, Congressmen Wolff, Addabbo, Ried. February 6, 1970. Testimony by Profs. Squires, Weyl, Williams.

Hearings of U.S. Senate Committee on Public Works, Subcommittee on Air and Water Pollution on Oceanic Disposal of Wastes. Prof. Gross. March 5, 1970.

Joint N.Y.S. Legislative Committee on Environmental Management and Natural Resources. Testimony by Prof. Weyl, Gross, Squires. October 23, 1970.

Joint N.Y.S. Legislative Hearing on Education in Environments. Prof. Gross. January 22, 1970.

Meetings with State and Federal Agencies at which testimony was presented:

Fisheries Management Incentive Program, New York State Conservation Department. D.F. Squires.

New York State and Connecticut State Officials at Milford and Hartford, Connecticut regarding Long Island Sound Studies. Profs. Squires and Weyl.

Television:

Suburban Spotlight - "Long Island Sound and Pollution". D.F. Squires, March 26, 1970 WPIX.

Program-

News Front - "Environmental Problems" M. Grant Gross, April 15, 1970 WNDT.

New Jersey Speaks - "Ocean Waste Disposal Problems". M. Grant Gross, April 24, 1970. WNDT.

NBC Documentary Series - "The Great Barrier Reef" May 22, 1970. D.F. Squires, Production Consultant.

Lectures and symposia:

D.F. Squires-

Lectures and symposia (cont.)

Invited Paper, Second Annual Roundtable on Information Problems in the Biological Sciences. American Institute of Biological Sciences Annual Meeting, Burlington, Vermont, August, 1969.

Invited Speaker, Symposium of the Systematics Association of Great Britian, "Advances in Data Processing in Biology and Geology", Cambridge, England, September, 1969.

Invited Principal Speaker, 150th Anniversary of Naturhistoriska Riksmuseet, "Natural History Museums and the Community", Stockholm, Sweden, October, 1969.

Invited Speaker, Conference on Computer Technology in the Humanities, The University of Kansas, Lawrence, Kansas, September, 1969.

Invited Speaker, "Biology and the Community", Joint Meeting, Scientific Research Council, Jamaica and the Association of Island Marine Laboratories of the Carribbean, Kingston, Jamaica, September, 1969.

Invited Speaker, IBM Executive Seminar for Museum Directors, Poughkeepsie, New York, March, 1970.

Discussant and Consultant, Colloquium on Environmental Education, New York State Education Department, Albany, New York, June, 1970.

M. Grant Gross-

Lecture, Henry James College, "What can you do about Pollution?", April 7, 1970.

Lecture, New York State Senate, "Political Aspects of the Environmental Problem", Albany, New York, April 22, 1970.

Lecture, Princeton University, "Coastal Ocean Problems and Waste Disposal Practices", April 27, 1970.

Lecture, Long Island section of American Institue of Aeronautics and Astronautics, "Coastal Ocean Problems and Waste Disposal Practices".

F. G. Roberts-

Lecture, "Marine Sciences", Boy Scout Troop, Bayshore, Long Island, April 11, 1970.

Consultant, Kingsborough Community College on tropical biology, May 2, 1970.

Lecture, "Pollution in Long Island Sound", High School teachers boarding the "Clearwater Cruise", May 25, 1970.

Lectures and symposia (cont.):

P. Weyl-

Lecture, "On the Origin of Life", Geology Department
Rutgers University, November 24, 1970.

Lecture, "Theory of the Ice Ages", Subdepartment of
Quaternary Research, Cambridge University,
England, July 17, 1969.

Lecture, "Theory of the Ice Ages", National Institute
of Oceanography, Godalming, Surrey, England,
July 22, 1970.

Lecture, "Origin of Life", Geology Department, Rice
University, Houston, Texas, April 1, 1970.

Lecture, "On Annual Variation of Temperature and
Salinity in the Ocean", American Geophysical
Union, Washington, D.C. April 20, 1970.

G. Williams-

Lecture, City University of New York, Seminar on
Evolutionary Biology, February, 1970.

2. New Programs:

In March, 1970 the Marine Environmental Studies Program was initiated in the College of Liberal Studies. This interdisciplinary instructional program initially will offer the Master of Science degree in Marine Environmental Studies with a core curriculum involving, biological, physical, socio-economic and legal-political considerations of the marine environment, particularly emphasizing the management of the coastal zone. A curriculum has been developed and approved for an offering in the Fall, 1970. Three faculty positions are approved and have been filled for the Program, all positions being jointly appointed with the Marine Sciences Research Center. The faculty of the Research Center will also participate in the academic program.

Together with the Division of Biological Sciences, a Master of Science and a Ph.D. program in Marine Biology has been developed and will be offered in the Fall, 1970. The program involves members of the Marine Sciences Research Center, the Marine Environmental Studies Program and the several Departments and Programs within the Division of Biological Sciences.

Completion of the new 9,000 square foot laboratory at Discovery Bay has opened the possibility of an outstanding educational opportunity for upperclass undergraduates and graduate students. (See also problems relative to delays in initiation of this program). Plans are being made for a full semester 14 credit hour instructional course in Marine Biology at this facility on a University-wide basis for an enrollment of 25-30 students.

Initiation of development of the Isle of Shoals Laboratory jointly with Cornell University will mean the potential for an academic program for as many as 60 students in the Summer of 1971. The State University quota will be 20 students, with the potential of using the unfilled quotas of the University of New Hampshire and Cornell.

Increased utilization of the Flax Pond field area is reported and will be enhanced by the provision (by the Marine Sciences Research Center) of living accommodations for students from off-campus. The R/V MicMac was also used by increased numbers of schools for instructional purposes.

A planning grant was awarded for the development of the Institution Support proposal under the National Sea Grant Act. Through these funds, a series of conferences have been held with members of the faculties of State University and Cornell in the planning of research and advisory services relative to the program. The Sea Grant Institutional proposal is scheduled for completion and submission in November, 1970.

3. Changes in Administrative Arrangements:

Mr. Frederick Roberts was appointed as Associate Director, Marine Sciences Research Center in January, 1970. This appointment provides the Center with a continuing high level administrative support required for its research and facilities programs. The appointment of Mr. Roberts strengthens the position of the Center as a university-wide operation and will facilitate the development of the Institutional Sea Grant Program.

Dr. George Williams was appointed as Director of Graduate Studies for the Marine Environmental Studies Program for the period of April - September, 1970.

4. Changes in Enrollment:

The initiation of the Marine Environmental Studies Program will introduce graduate students into the activities of the Marine Sciences Research Center in a more direct way than has been the case in the past.

5. Significant Problems:

These problems are not developed in detail here, additional material can be supplied as required.

Facilities Program:

1. Planning for the Flax Pond Field Laboratory. This has been very slow in developing and probably will result in construction being delayed past the Summer of 1971 thereby delaying a summer instructional program yet another year.

2. Acquisition of an adequate research vessel for all weather operations in Long Island Sound and the New York Bight has been delayed for budgetary and political problems. An end is in sight, but will probably result in a temporary palliative pending the support required to operate a totally satisfactory vessel. Such support will be derived from both Federal and State funds, neither of which are yet at the level required.

3. Space for laboratories and to provide for incoming faculty has been a persistent problem. The absence of other than temporary quarters has a depressing effect upon staff morale and upon the development of campus programs.

4. Lack of an adequate equipment budget has restricted the development of laboratories to the optimal level. Restrictions in Federal funding for facilities has made the situation quite acute at the new Discovery Bay Laboratory and on the Stony Brook campus. The situation is partially rectified by an aggressive program of surplus equipment acquisition.

Research Program:

1. Absence of budgetary support for equipment has delayed certain programs this year. This is slowly being rectified by Federal research grants and surplus properties.

2. Absence of an adequate and reliable platform for sea work has been a major deterrent to research activities. The R/V MicMac is a fair weather day boat and cannot provide the required level of sea ^{performance} ~~programs~~ for our programs. Its maintenance on a restricted budget has resulted in a relatively low level of reliability ^{causing} ~~resulting in~~ the cancellation of numbers of cruises.

3. Inadequacy of staff support, particularly in ship operations, has meant that ^{time has} ~~an~~ large proportion of research assistants ^{technician} ~~have~~ had to be moved from laboratory research to operational activities. In as much as these personnel are sponsored research supported, some research schedules have not been met.

6. Community Activities:

General Marine Sciences Research Center Activities:

Long Island Sound Conference for universities and governmental agencies, on theme "Man's Impact on Marine Environment", January 10, 1970.

University-wide meeting on ~~Research Centers~~ ^{Maine Research}, Stony Brook campus, April 30 - May 1, 1970.

Ground truth for New York State Atomic and Space Development Authority Infra-red aerial surveys.

Earth Day Activities. All staff participated in numerous high school and university programs (over 12 recorded lectures).

Committees, Commissions, Panels, etc.:

D.F. Squires-

Advisory Committee on Water Resources, State University of New York. 1968--

Committee on Systematics in Support of Biomedical Research, National Academy of Sciences. 1968-70.

North American Committee, Commission on Education, International Union for Conservation of Nature and Natural Resources. 1968--

Chairman, Education Committee, and member of Regional Marine Resources Council, Nassau-Suffolk ~~County~~ Bi-County Planning Commission. 1968--

Member, Advisory Commission to Brookhaven Township on Mt. Sinai Harbor. 1969--

Member, Fire Island National Seashore Advisory Commission, 1970-72.

Member, Board of Trustees, ^{Affiliated} ~~Associated~~ Colleges and Universities, Inc. - New York Ocean Science Laboratory. 1969--

Steering Committee, Port of New York Authority Study, Environmental Studies Board, National Academy of Sciences/National Academy of Engineering. 1970

Executive Committee, Bahamas National Trust. 1970.

Water Resources Board, Office of Water Resources and Marine Sciences, Cornell University. 1969.

New York State Environmental Conference, Steering Committee, 1970.

Advisory Board, Registor of Tumors in Lower Animals, National Cancer Institue/Smithsonian Institution, 1970--

7. Academic Activities:

1. The late start given the Marine Environmental Studies Program has resulted in a frantic effort at recruitment of faculty which has been in part successful. It has also resulted in a lower number of applicants, and a lower quality of applicants than we should expect under optimal circumstances.

2. The death of Professor T. F. Goreau, the Resident Director, Discovery Bay Laboratory, resulted in the postponement of the planned academic program for the new laboratory facility there.