

University of California Institute of Marine Resources

Administrative History

Deborah Day

On November 7, 1950, Roger Randall Dougan Revelle, Acting Director of the Scripps Institution of Oceanography, wrote a letter to University of California President Robert Gordon Sproul. The letter discussed the formation of the new Inter-American Tropical Tuna Commission and the fishing industry. Dr. Revelle mentioned the importance of finding *a mechanism whereby the University could furnish more adequate scientific and educational assistance to the California fishing industry*. Dr. Revelle concluded,

...it would appear reasonable that the University of California might considerably expand its research and teaching programs related to the problems of marine fisheries. These problems are so varied in character and broad in scope that adequate solutions must depend upon the application of many skills and disciplines representing a number of departments of the University. I would, therefore, like to suggest that the University consider the desirability of establishing a University-wide Institute of Marine Fisheries to foster interest in, and work on, fisheries problems wherever appropriate, throughout the University. ¹

Dr. Revelle further suggested that the headquarters of the Institute be located on the campus of the Scripps Institution of Oceanography at La Jolla.

The concept of the Institute was discussed by Dr. Norris Rakestraw at Revelle's request during a meeting of the Graduate Council at UCLA on November 9. Dr. Revelle also discussed the Institute with members of the California Marine Research Committee, a committee established by the California Legislature in 1948 to investigate the causes of the sudden depletion of sardines in California waters.

At their meeting on January 30, 1951, the members of the Marine Research Committee of the State of California passed the following resolution:

Moved by Mr. Saxby, and seconded by Mr. Morris that the members of the Marine Research Committee meet with President Sproul to discuss the over-all marine research program as it affects the University of California on a permanent long-range basis, Motion passed unanimously. ²

On April 12, 1951, University of California President Robert Gordon Sproul, University Vice President Corley, Roger Revelle, Carl Hubbs, Robert Miller, John Morris and Julian Burnette met in Berkeley to discuss the proposed Institute. ³ After the meeting, *President Sproul discussed the matter with the Regents of the University and received their assent to have a study made of the need, function, and proposed organization of such an Institute.* ⁴

The minutes of the next meeting of the Marine Research Committee, held July 18, 1951, includes the following paragraphs:

The Chairman [Dr. Julian G. Burnette] reported on the recent meeting that several of the members held with President Sproul... regarding the long-range research program. Dr. Revelle gave his ideas on the proposed Institute of Marine Resources... A general discussion ensued, during which some of the Committee members stated that such an institute could be of great value to the fishing industry and the people of the state.

It was moved by Mr. Saxby and seconded by Mr. Crocker that the Chairman appoint a sub-committee to meet with Dr. Revelle and develop an outline for the proposed Institute of Marine Resources... Motion carried unanimously. ⁵

On October 1st, Dr. Wilbert McLeod Chapman, the Director of Research for the American Tunaboat Association, a member of the Marine Research Committee and a supporter of the proposed Institute, attended a meeting of the California Assembly Committee on Fish and Game in San Diego. Dr. Chapman presented a statement before the Committee which advocated the establishment of an Institute of Marine Resources. Chapman described his statement in a letter to University President Sproul dated December 21, 1951. Chapman assured Sproul that the Assembly Committee solidly supported the establishment of the Institute. ⁶

Following the suggestions made in Chapman's statement, Assemblyman Frank Luckel offered to present the matter of funding for the Institute before the Assembly. This was done in the fall of 1952, and the Assembly authorized the funding for fiscal year 1953-1954.

On October 22, 1951, President Sproul appointed a Special Committee on the Institute of Marine Resources to undertake a study of the proposed Institute and appointed University Vice President Baldwin M. Woods as Chairman. Roger Revelle, who had recently assumed the Directorship of the Scripps Institution of Oceanography, was appointed a member of the Special Committee. ⁷ On November 5th, Revelle submitted a memorandum entitled *Prospectus of the Proposed Institute of Marine Resources* to Vice President Woods. The *Prospectus* was approved, and Revelle presented it to the Marine Research Committee at their meeting on November 14, 1951. On November 26th, the Special Committee reported to the President. The Committee recommended that the Institute of Marine Resources be established, adopted the *Prospectus* and forwarded it as part of their report, and recommended that the *Prospectus* be used as a guide for the establishment of the Institute. ⁸

The *Prospectus of the Proposed Institute of Marine Resources* stated that the objective of the Institute was:

To foster research, education and public service of the University of California in the development of fisheries and other resources of the sea for the benefit of the people of California. ⁹

The *Prospectus* recommended that the Institute be established on a University-wide basis. It should be administered by a Director who would report to the President of the University through the Director of the Scripps Institution. Institute policies would be established by an Executive Committee appointed by the President, and the Institute Director and Executive Committee would be advised by an Advisory Council appointed by the President.

After receiving the report of the Special Committee, President Sproul referred the matter of the Institute to the University of California Committee on Educational Policy, a committee of the University Academic Senate. The Committee on Educational Policy visited the Scripps Institution on March 14-16, 1952, and reported favorably on the proposed Institute in a report dated April 24, 1952. ¹⁰

Funds to support IMR were allocated for academic year 1953-1954 and the Executive Committee held their organizational meeting on November 23, 1953, but the Institute was not formally launched until January 13, 1954 when President Sproul approved the Executive Committee recommendation that Rear Admiral Charles Delorma Wheelock, Ret. be named Acting Director. ¹¹ Sproul also asked in his letter of January 13th that the Executive Committee draft a constitution for the Institute.

Revelle's *Prospectus* was studied by the Executive Committee and served as the basis for draft constitutions considered by the Committee from 1953 to 1955. President Sproul approved the final version on September 29, 1955. It was not, however, until May 7, 1956 that the Executive Committee finally adopted the Constitution.

This document defined the purposes, scope and organization of the Institute of Marine Resources and outlined the responsibilities of the Director. It was intended to guide the Executive Committee rather than rule them, and changes were made in the document over the years.

The Constitution defined marine resources as including:

Energy in many forms converted by and in the ocean from captured solar energy. Water, minerals, plants and animals in and beneath the ocean, bays, marshes, and beaches. The recreational, esthetic, educational and scientific values of beaches, bays, marshes and oceans, the atmosphere above the sea, the surface of the ocean with its special properties for floatation of vessels. The oceans as a dump for man's liquid and solid wastes. ¹²

It stated eight purposes of the Institute:

Be a focal point for the interest and action of those who are concerned with marine resources.

Accumulate and disseminate knowledge of marine resources.

Evaluate the present and potential benefits to mankind to be realized from marine resources.

Develop techniques for conserving and economically using these resources to the end that the people of California will benefit.

Increase and disseminate knowledge about forces and reactions in the marine environment that are destructive to man's interests.

Develop means for controlling or ameliorating the effect of destructive forces and reactions.

Broaden the experience of research scientists, engineers and students engaged on Institute work through encouraging their association with and guidance from mature professors.

Encourage a progressive transfer of non-faculty personnel from the Institute rolls into industry and government service.

The Constitution stated that the Institute was to consist of an Executive Committee with nine members appointed by the President, an Advisory Council of fifteen Presidentially appointed members who were not on the active rolls of the University, a Director appointed by the Regents upon Presidential nomination, an office staff appointed by the Director, a staff of investigators, faculty members and others nominated by the Director and approved by the Executive Committee.

The Constitution stated that the Director was to report to the President *via the Chief Local Administrative Officer on the La Jolla campus*. ¹³ It further directed that the IMR Director would oversee the research program of the Institute and carry out the purposes of the Institute, find, encourage and support staff, prepare budgets, represent the Institute to prospective sponsors and seek financial support, supervise expenditures, coordinate research projects, represent the Institute and membership in publicity matters, call meetings of the Executive Committee and Advisory Council and prepare agendas for their meetings, and prepare an annual report on the activities of the Institute.

Although the Constitution did not delineate the functions of the Executive Committee and the Advisory Council, the Executive Committee became the policy-making body, ¹⁴ and the Advisory Council served mainly to advise the Executive Committee and the Director on the research program. ¹⁵ The Advisory Council was

appointed in March, 1956 and first met on August 13th. Their subsequent meetings were infrequent and were often held in conjunction with the Executive Committee.

The Constitution directed that the Executive Committee be composed of five members appointed by the President and four ex-officio members. The ex-officio members include the Directors of the Institute and of the Scripps Institution of Oceanography, the Deans of the College of Engineering at Berkeley and Los Angeles in biennial rotation, and the Deans of the School of Business Administration at Los Angeles and Berkeley in biennial rotation. This structure was changed slightly by vote of the Executive Committee at their meeting on December 5, 1958. Exofficio membership by the Deans of the College of Engineering and Business Administration at Berkeley and Los Angeles was deleted, and the President was asked to appoint two members without specific program affiliations.

Members of the Advisory Council were appointed by the President in consultation with the Directors of SIO and the IMR. The Constitution directed that appointments to the Advisory Council should be made in such a way that five new members could be appointed annually.

The administrative structure of the Institute followed the outline of the 1956 Constitution until 1973. The Institute was administered by the Director. The Director appointed the staff of the Institute composed, as it is today, of faculty, research staff and graduate students representing a variety of disciplines and resident at a number of University of California campuses. Most of the staff held full time faculty or research staff appointments at their home campus and conducted only portions of their research under the auspices of the IMR. Graduate students received support to conduct research or assist on research projects of interest to IMR. The Director and administrative staff assisted Institute staff with the preparation of proposals, facilitated contracts with granting agencies and administered resulting contracts.

At the joint meeting of the Advisory Council and Executive Committee held March 6, 1958, the Director's duties were slightly changed. He was empowered to appoint a Chairman for the Advisory Council. The Chairman would *call and conduct meetings; consult on meeting dates; receive, accept and reject agenda items; ask for data; insure action, [and] appoint committees.* ¹⁶

Although some IMR researchers conducted research alone, most worked in teams for one or more projects. For instance, API Project 51 was begun in 1950 to conduct extensive geological studies of the coastal waters of the Gulf of Mexico. The project was funded by the American Petroleum Institute and placed under IMR auspices in 1954. The project required the efforts of a number of researchers representing many disciplines. The large project staff changed to meet the requirements of each project phase.

A more formal research team structure existed at IMR in the form of research groups. For example, the Marine Science Laboratory was created as part of IMR in 1955. It was directed by Dr. Harold S. Olcott, Professor of Marine Food Technology, and located at the Berkeley campus. Some forty investigators were attached to the Laboratory and their basic mission was to study the biochemistry of marine food products such as tuna. In addition to laboratory work, the Laboratory staff conducted field investigations. They collected samples at sea to determine distribution and quantity of pesticides in fish, for instance. The research efforts of the Laboratory were supported by several sponsors and a number of research projects were undertaken simultaneously.

In 1961, Admiral Wheelock retired as IMR Director and assumed the chairmanship of the IMR Executive Committee. At a meeting of the SIO Department of Oceanography on March 23, 1961, John Isaacs, Martin Johnson and Fred Phleger were asked to serve on an ad hoc committee to consider the future of the Institute and make recommendations to the Department. Their report, delivered on March 29, 1961, stated that the Institute continued to be of public service and recommended a broader focus for the IMR research program. The ad hoc Committee further recommended that the new Director of IMR be a scientist with broad interests, rather than a specialist in a narrow field. These recommendations were echoed by the IMR Advisory Council in a resolution adopted by the Council on March 29, 1961. ¹⁷

Milner Baily Schaefer was appointed Director of the Institute in 1962. At his request, the Executive Committee modified two policies concerning the duties of the Director and the staff of the Institute. At their meeting on October 31, 1962, the Executive Committee and the Advisory Council noted that the Director had established a scientific review procedure to monitor the IMR kelp research project. It was agreed *that the Director should appoint scientific review and guidance committees for specific projects and programs funded from institutions or agencies which do not have their own adequate scientific review procedures.* 18

The Council and Committee also discussed the appointment of research assistants at IMR at the October 31st meeting. The Executive Committee approved the Director's recommendation that henceforth, research assistantships be reserved for second year graduate students selected by a committee appointed for that purpose by the Director.

The Institute grew significantly during Schaefer's directorship. In 1963, Schaefer invited John Douglas H. Strickland to join IMR and form the Food Chain Research Group. The Group studied *the formation of organic matter in the sea and paths and processes whereby it is transferred up the food chain and recycled.* 19 The investigations undertaken by the Group involved marine chemistry, phytoplankton taxonomy and physiology, bacteriology and zooplankton ecology and physiology.

During the same year, the Scripps Tuna Oceanography Research Group was administratively placed under IMR. STOR had begun in 1957 with the support of the U.S. Bureau of Commercial Fisheries. It was directed until 1971 by Maurice Blackburn. Its purpose was to determine the distribution and abundance of tunas that contributed to San Diego fisheries, and it studied the effects of temperature on tuna, distribution of zooplankton and a number of other topics. 20

The El Niño Project was primarily designed by IMR:

This program... consists of taking simultaneous oceanographic sections off the coast of Northern South America from Central Peru to Panama, by vessels of Peru, Ecuador, and Columbia at three-month intervals. This series of cruises commenced in November 1963. 21

The project investigated an El Niño:

...a strong incursion of warm water from the north and west along the coast of Peru, which occurs at an irregular period of about seven years, and is related to changes in the intensity of the trade wind systems of the northern and southern hemispheres. 21

Footnotes:

1 Roger Revelle to Robert Gordon Sproul, November 7, 1950, p. 3. In S.I.O. Archives, S.I.O. Office of the Director, 1953-1963 (Revelle) (81-23), Box 1, *Correspondence, Outgoing, 1950 July-December.*

2 Minutes of Meeting of the Marine Research Committee, January 30, 1951, p. 3. In SIO Archives, Records of the Marine Research Committee, 1948-1978 (81-8).

3 See letter from John C. Marr to Julian G. Burnette, June 7, 1951. SIO Archives, Papers of Carl Leavitt Hubbs, 1927-1979 (81-18), *IMR-Organization, etc.*

4 Minutes of Meeting of the Marine Research Committee, July 18, 1951, p. 9. Records of the Marine Research Committee, 1948-1978 (81-8).

5 Ibid. p. 3.

6 See letter, Wilbert M. Chapman to Robert Gordon Sproul, December 21, 1951. Papers of Carl Leavitt Hubbs, 1927-1979 (81-18), *IMR-Organization, etc.* The text of Chapman's statement before the Assembly Committee is in Records of the S.I.O. Office of the Director, 1950-1963 (Revelle) (81-23) *Institute of Marine Resources, October-December, 1951.*

7 The report of the Special Committee was dated December 13, 1951. It was reproduced in a memorandum from Milner Baily Schaefer to the IMR Executive Committee and Advisory Council dated October 1, 1962. In SIO Archives, Records of the UC Institute of Marine Resources, Office of the Director, 1951-1970, AC3, Box 6, f384. The other members of the Special Committee were Alva R. Davis, Ewald Grether, Vernon Knudson, Morrrough O'Brien, Morris Stewart, Clark Kerr, Theodore Jahn, Gordon MacKinney and Emil Mrak.

8 Minutes of Meeting of the Marine Research Committee, July 18, 1951, p. 9. Records of the Marine Research Committee, 1948-1978 (81-8).

9 Minutes of Meeting of the Marine Research Committee, July 18, 1951, p. 9. Records of the Marine Research Committee, 1948-1978 (81-18).

10 "Committee on Educational Policy. Report on the Establishment of an Institute of Marine Resources, April 24, 1952." Papers of Carl Leavitt Hubbs, 1927-1979 (81-18), "IMR Executive Committee."

11 When Wheelock was appointed Acting Director, the Executive Committee charged a subcommittee to find a permanent Director. Apparently, this plan was abandoned, for Wheelock was named IMR Director by a vote of the Executive Committee at their meeting on December 5, 1958.

12 The Constitution is included in a memorandum by Milner Schaefer to the IMR Executive Committee and Advisory Council dated October 1, 1962. Records of the UC Institute of Marine Resources, Office of the Director, 1951-1970, AC 3, Box 6, f384.

13 Originally this Officer was the Director of the Scripps Institution of Oceanography, but after the establishment of the University of California, San Diego, the IMR Director reported to the Chancellor of UCSD. On March 6, 1967, it was decided at a joint meeting of the Advisory Council and Executive Committee that the IMR Director should report to the President both through the Director of Scripps and the Chancellor of UCSD.

14 Minutes of the Joint Meeting of the IMR Executive Committee and Advisory Council, October 31, 1962, p. 2. Records of the UC Institute of Marine Resources, Office of the Director, 1951-1970, AC 3, Box 7, f399.

15 In his letter of June 13, 1957, IMR Director Wheelock stated that the Advisory Council membership consisted of *substantial citizens*. He noted that the Council *is designed to provide guidance and stimulate interest on a broader basis...* Records of the SIO Office of the Director, 1950-1963 (Revelle) (81-23), *IMR Advisory Council, August 1956-1957.*

16 Minutes of Meeting of the IMR Advisory Council and Executive Committee, March 6, 1958. Records of the UC Institute of Marine Resources, Office of the Director, 1951-1970, AC 3, Box 7, f393.

17 *Report of the Ad Hoc Committee of the Department of Oceanography on the Institute of Marine Resources.* March 29, 1961. Papers of Carl Leavitt Hubbs, 1927-1979 (81-18), *IMR-Notes on Background.*

18 Minutes of Joint Meeting of Institute of Marine Resources Executive Committee and Advisory Council, October 31, 1962. Records of the UC Institute of Marine Resources, Office of the Director, 1951-1970, AC 3, Box 7, f395.

19 Minutes of Meeting of IMR Executive Committee and Advisory Council, April 6, 1965. Records of the UC Institute of Marine Resources, Office of the Director, 1951-1970, AC 3, Box 7, f396.

20 STOR and other IMR research programs are discussed in Chapter 6, *A Potpourri: The Institute of Marine Resources*, in Elizabeth Noble Shor's *Scripps Institution of Oceanography: Probing the Oceans, 1936-1976* (San Diego: Tofua Press, 1978).

21 Minutes of Meeting of IMR Executive Committee and Advisory Council, April 6, 1965. Records of the UC Institute of Marine Resources, Office of the Director, 1951-1970, AC 3, Box 7, f396.

Directors of the Institute of Marine Resources through 1980

Charles Delorma Wheelock (1897-1980)

Appointed Acting Director, January 4, 1954; appointment confirmed by President Sproul on January 13, 1954. Title changed to Director by IMR Executive Committee on December 5, 1958. Retired July 1, 1961.

John Dove Isaacs III(1913-1980)

Appointed Acting Director on July 1, 1961. Served until August 31, 1962.

Milner Baily Schaefer (1912-1970)

Appointed Director, September 1, 1962. On leave of absence July, 1967 to February, 1969 to serve as Science Advisor to Secretary of the U.S. Department of the Interior Stewart Udall. Resumed Directorship in March, 1969. On leave of absence November, 1969 to January, 1970 to conduct research in South America. Became ill while on leave and did not return to the directorship until March 2, 1970. Died, July 26, 1970.

Henry William Menard (b. 1920)

Appointed Acting Director, April 28, 1967. Served until Schaefer's return from Washington.

John Douglas Hipwell Strickland (1920-1970)

Assumed "administrative duties" for IMR from November, 1969 to March, 1970 during Schaefer's second leave of absence and subsequent illness. Strickland died on November 12, 1970.

Richard Wayne Eppley (b. 1931)

Appointed Acting Director, September, 1970 after the deaths of Drs. Schaefer and Strickland. Served until March, 1971.

John Dove Isaacs III (1913-1980)

Appointed Director, April, 1971. Retired February 29, 1980.

Fred Noel Spiess (b. 1919)

Appointed Director March 1, 1980.