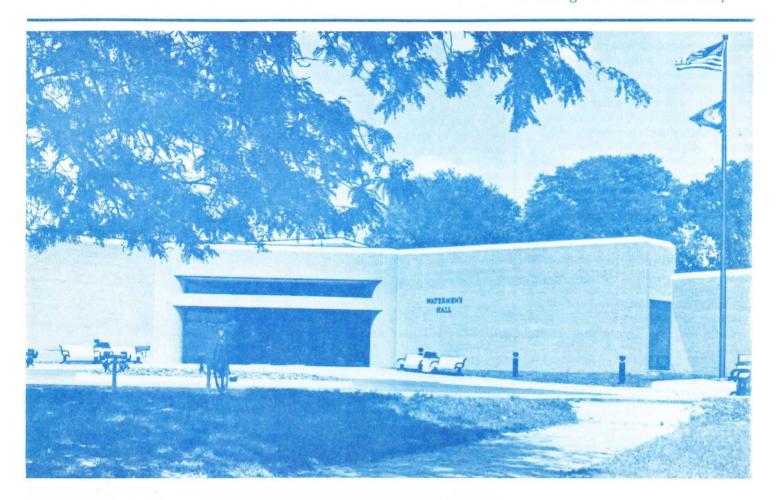
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A Special NEWSLETTER

Volume 1, Number 1 Summer 1984 for the Benefactors and Friends of the Virginia Institute of Marine Science School of Marine Science The College of William and Mary



WATERMEN'S HALL DEDICATED

Emphasizing the important role the Virginia Institute of Marine Science plays in the Commonwealth of Virginia's stewardship of the Chesapeake Bay and the State's marine resources, Governor Charles S. Robb dedicated Watermen's Hall at the Gloucester Point campus on June 29.

The new building, encompassing 40,000 square feet and costing \$4 million, adds significantly to the Institute's ability to discharge its responsibilities under the Code of Virginia, according to Dr. Frank O. Perkins, Dean/Director of VIMS.

"... the Institute was formed and mandated to educate the scientists and managers of tomorrow, as well as to provide useful advice to the managers and users of Virginia's estuarine and marine natural resources, advice derived from a strong program of applied and basic research. This facility will markedly enhance our ability to respond to those mandates."

Watermen's Hall provides space for the Institute's library, computer center, graduate education laboratories and classrooms, an auditorium and display area, and offices for the Marine Advisory

Services staff as well as space for administrative, financial and business personnel.

With a collection that includes 33,000 volumes of books and bound journals, the Institute's library is housed on the lower level of the new facility. In addition to providing adequate display and expansion of the collection, the new library provides much needed reading and study space.

The computer center moved from its cramped space in Byrd Hall into a larger area in the new building, thus permitting it to better serve the research, advisory

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services and graduate education programs. Productivity of the center is expected to improve with better facilities and working conditions.

Graduate education in marine science is one of the three major reasons for the existence of VIMS. The educational program will now be able to develop more fully by the addition of three classrooms and three teaching laboratories. The laboratories have running estuarine water for maintaining living organisms as well as a diversity of equipment to permit instruction in biological, chemical, geological, and physical oceanography.

The 273-seat auditorium in Watermen's Hall now permits the Institute to host national and international meetings on various topics in marine science. A national meeting on estuarine circulation has been scheduled for February of 1985 as part of the College's Charter Day ceremonies. In the planning stages is a national meeting on fish pathology, also to be held in 1985.

In the lobby area immediately adjacent to the auditorium is a display area. Seven aquaria, ranging in size from 45 gallons to 1,700 gallons, will hold estuarine and marine organisms representative of species found from the fall line to the Atlantic coastal waters of Virginia. Also in the display area will be artifacts, paintings, statuary, and other items of interest relevant to maritime history and marine science.

Expanded and improved office space will facilitiate the work of the Advisory Services staff as well as the efforts of the administrative, financial and business personnel.

COMBINATION GIFT AIDS GEOLOGICAL OCEANOGRAPHY

The Institute has received a gift of \$114,500 for a side scan sonar system from Mr. Lewis L. Glucksman and a companion gift of a deep water tow fish, valued at \$23,900, from the Environmental Equipment Division of EG&G International, Inc., manufacturer of the side scan sonar. The two gifts will significantly enhance the Institute's ability to advance the frontiers of knowledge in geological and physical oceanography.

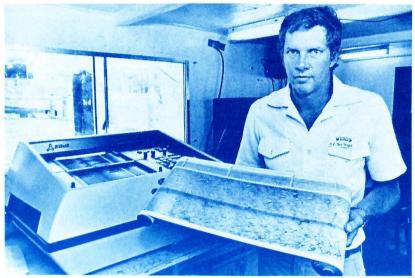
"This instrumentation will permit us to view the bottom of the Chesapeake Bay and its tributaries as though we had the ability to drain those bodies of water and view them from several hundred feet elevation in an airplane," stated Dean/ Director Frank O. Perkins.

He added, "The side scan sonar system will permit us to map the bottom of the Chesapeake Bay with respect to sediments and oyster reefs, thereby yielding information of value to managers who must judge the effects of dredging operations, channel deepening, harbor improvements and other activities."

Mr. Glucksman, a member of the William and Mary Board of Visitors, and EG&G representative, Mr. Michael Wasteneys, were both on hand for the official announcements of their respective gifts during Watermen's Hall dedication ceremonies.

Mr. Lewis L. Glucksman (left) views the side scan sonar system he presented as a gift to the Institute with Governor Charles S. Robb.





Dr. L.D. Wright, Chairman of the Department of Geological Oceanography, displays an example of the information gathered by the tow fish and fed into the side scan sonar system on his right.

ALLIED MAKES GIFT TO VIMS CAPITAL CAMPAIGN

Dr. Frank O. Perkins, Dean/Director of the Virginia Institute of Marine Science of The College of William and Mary has announced receipt of a gift in the amount of \$20,000 from Allied Corporation of Petersburg, Virginia to support the Submerged Aquatic Vegetation (SAV) Research Program at the Institute.

This was the first gift received for the capital support campaign and will be used to meet capital equipment needs of the SAV program. In accepting the gift for VIMS, Dr. Perkins stated, "We are very pleased that Allied Corporation has expressed its support for this important aspect of our research program in such a meaningful way. This initial gift to our capital campaign represents a significant first step toward our goal of \$1.8 million for scientific instrumentation."

The SAV Research Program was begun in 1978 under the auspices of the Environmental Protection Agency's Chesapeake Bay Program. It has continued through the combined efforts of the State and Federal governments to learn more about this important part of the Chesapeake Bay's ecosystem.

According to Dr. Robert J. Orth, who heads the Institute's SAV Research Program, SAV aids in stablilizing sediments, helps to prevent shoreline erosion, provides a source of food for wintering waterfowl, and serves as a habitat, a feeding area, a refuge from predation and a nursery area for large numbers of macroinvertebrate species. "In particular, these shallow-water grass meadows may be a key nursery area for juvenile blue crabs," Orth said.

Interest in SAV communities, on a Baywide basis, has been heightened by the drastic decline of all species in almost all areas of the Bay. Research conducted at the Institute has revealed that the decline of SAV, which occurred during the past two decades, is unprecedented in the Bay's recent history (300 years).

SAV research at the Institute is entering a new, twofold phase: The first area of emphasis is to continue propagation studies (initiated under the EPA Bay Program and supported the last two years by a special appropriation from the 1982's General Assembly) to understand the reasons for the success and failure of recent transplants. The second area is to determine the contribution of these shallow-water vegetated habitats in the life cycle of the blue crab and their ulti-

mate role in contributing to the commercial stock of blue crabs.

In presenting the gift to VIMS, Mr. Jack G. Owens, Vice President of Allied, commented, "The important work being done at the Institute to learn more about the Bay's ecosystems is of great interest to us. We feel the SAV program holds great potential for contributing significantly to the continued vitality of an important component in the ecology of the Chesapeake Bay."

Through the generosity of Allied, the

SAV program is in the process of purchasing a special underwater light meter to aid in the study of the effects of light on eelgrass. Additionally, the gift will provide for purchase of ten fiberglass holding tanks to store eelgrass seeds and plants between harvesting and reseeding/transplanting efforts. These tanks will be housed in the Institute's greenhouses. With some matching support from the Institute, the Allied gift will also provide

for the installation of a basic seawater system to serve the Institute's two

greenhouses. The plumbing materials

have already been received, and the

pumps are on order. It is anticipated that

the system will be working by September.

1984 GENERAL ASSEMBLY

IMPORTANT FOR VIMS

The 1984 session of the General Assembly was a very important one for the Virginia Institute of Marine Science. Through the combined efforts of the Marine Science Development Council, a number of friends of the Institute and The College of William and Mary, and Rector Peebles, President Graves, and Dean Perkins, the General Assembly was persuaded to provide increased support for the Institute. The support included forgiveness of the Institute's \$5.7 million debt, approval of \$150,000 for sub-

merged aquatic vegetation research, and \$1.7 million for three specific marine research projects. The latter appropriation was passed through the Council on the Environment and the Virginia Graduate Marine Science Consortium to VIMS.

"Our friends in the private sector and at the College made this great day possible, but these efforts would not have been successful if the members of the General Assembly had not been interested in the Institute and its role in preserving the quality of the Chesapeake," noted Dean Frank Perkins.

According to Dean Perkins, the Institute is now in a better position to perform its role of providing the data and interpretations required by our governmental leaders, natural resource managers, business and industrial leaders, and the general public in their efforts to make informed decisions about the estuarine and marine environment.

GIFT FUNDS PURCHASE EQUIPMENT

Gifts from the members of the Founders' Society, Friends of VIMS and other donors to the VIMS annual fund provide a special pool of unrestricted monies that allow the Dean/Director of the Institute the flexibility to respond to needs as they arise. Several equipment purchases have been made possible through the generosity of these benefactors.

Late this past spring the Department of Estuarine and Coastal Ecology was faced with a severe dilemma: the department's autoclave had been rendered useless due to a crack in the unit's solid monel door. After extensive efforts it was determined that the unit was not repairable.

Although the warranty had expired on the unit, the Institute arranged through successful negotiation with the manufacturer to obtain a new autoclave (retail value approximately \$36,000) for \$12,083. Founders' Society funds are to be used to purchase the new instrument this summer.

The autoclave is an indispensable tool in modern scientific research. It provides a means of sterilizing relatively large volumes of media or glassware. Media are used for the detection of microorganisms such as marine bacteria, enteric bacteria of sanitary significance in shellfish growing waters, and for preparation of microorganism-free or sterile glassware required for experimental purposes. Media can also be used for growing algae as food in the cultivation of oysters. Additionally, this instrument can be used to sterilize solutions of radioisotopes.

Another piece of equipment secured through annual gift funds was a sonic

digitizer for striped bass research. This piece of equipment interfaces with a microcomputer, a printer, an asychromores serial interface and a microfiche reader which the Institute already has to bring the fish-aging capabilities up to a state-of-the-art level. It provides for increased production and precision over the optical readers previously used by VIMS' scientists in fish-aging work. The cost of the digitizer was \$865.

Gift monies are also planned for purchasing a light meter system for the Submerged Aquatic Vegetation Research Program and will provide program support for the Department of Oceans and Coastal Law. Five thousand dollars will be expended to purchase the underwater light meter system to aid in critically evaluating the effects of light in the success of eelgrass transplant efforts, while the law department will receive two thousand dollars in restricted gift monies to further its development.

VIMS HAS A GREAT YEAR*

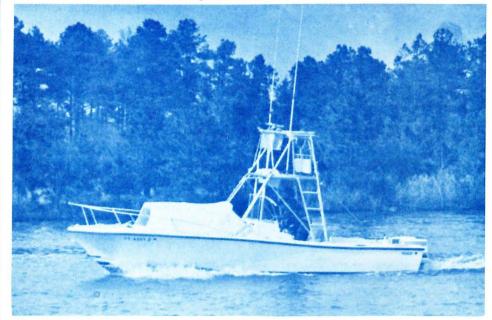
As of June 30, 1984, the Institute's annual fund efforts had raised \$28,685 from 34 donors. Additionally, \$198,400 in gifts to the capital campaign was received from 4 donors during the same time period.

A review of the annual fund shows funds of \$28,000 from 23 members of the Founders' Society, while the Institute will benefit from 11 gifts totaling \$685 through Friends of VIMS and Other Gifts.

The faculty, staff and students sincerely appreciate the generosity, thoughtfulness and interest in the development of the Institute expressed by the individuals, corporations, businesses and other organizations that made this excellent beginning possible.

* The gift amounts in this article reflect gifts received between 1/1/83 (when VIMS began seeking private support) and 7/1/84.

MAKO 25 JOINS VIMS' FLEET



Pictured above is the latest addition to the Institute's research fleet, a Mako 25 Sportfisherman. The vessel was given to the Institute by Mr. Geoffrey D. Simmonds of Greenwich, Connecticut, to support research and graduate education. Current plans for using the boat include sequential sampling of estuaries known as "slack water surveys,"

wetlands and fisheries inventories, sea turtle research, and a comprehensive water sampling survey which will cover the Virginia portion of the Chesapeake Bay. This is the first vessel given to the Institute under the Send Your Boat to College program outlined on the next page.

FOUNDERS' FIRST FISH FRY A SUCCESS

Gene Silberhorn (left) is joined by Rose and Sam Brown at the Raw Bar.

The Virginia Institute of Marine Science of The College of William and Mary held its first fish fry March 16, 1984 to recognize the support and interest expressed by the members of the Founders' Society in the work of the Institute.

Although the weather was chilly, the 85 people who attended the fish fry appeared to enjoy themselves. The menu for the evening included clam chowder, which proved to be a big favorite, fried sea trout, clam fritters, cole slaw, roasted oysters and clams, and a well-stocked raw bar. The trout caught fresh that morning off the coast of North Carolina was the hit of the evening.

The Society, begun in late 1982 with a gift from George W. Roper, II, had grown to 20 members at the time of the fish fry. An active campaign to encourage support for the Institute through the Society was not begun until the summer of 1983.

Besides the members of the Founders' Society, Institute faculty, members of the senior administrative staff from the College, several members of the Institute's Marine Science Development Council and four members of the William and Mary Board of Visitors were in attendance. Rector of The College of William and Mary, Miss Anne Dobie Peebles, had kind words for the Institute and the volunteer leadership which provides support for the College and VIMS. She expressed her sincere belief that William and Mary was indeed blessed to have so many friends who were willing to contribute their time, energy and money to maintain the College and its schools as leaders in the academic community.



Dr. James C. Wright, Chairman of the Founders' Society, welcomed the Founders' and their guests to what he hoped was the first in a long line of fish fries to honor the membership of the Society. Dr. Wright noted, "We all have a common bond through our interest in the quality of the marine environment."

He thanked the people who attended the fish fry and reminded them that, "Through the efforts of the Founders' Society and the Institute's friends, VIMS is receiving funds that will aid in performing the research so very important to reversing the decline of the Chesapeake Bay and its tributaries." Dr. Frank O. Perkins, Dean/Director of the Institute, expressed his sincere appreciation and that of the faculty, staff, and students for the support of the Founders' Society. He singled out Dr. James Wright and Mr. George Roper for their efforts in making the Founders' Society possible. He noted that without the efforts of Dr. Wright and Mr. Roper the Institute would not be enjoying the progress it has made in the last year.

In his comments Dr. Perkins stated, "Let me say this fish fry is our way of saying thank you to the members of the Founders' Society for the many good things you make possible."

SEND YOUR BOAT TO COLLEGE

There are many possible benefits to donating your boat to the Virginia Institute of Marine Science/School of Marine Science. It can be advaṇtageous from a financial standpoint to give your vessel to the Institute rather than sell it. Current tax laws provide substantial tax savings to donors of up to 50 percent of adjusted gross income extended over a five-year period.

Besides the benefits to you as a donor, the gift of a vessel is very beneficial to the Institute. It can provide a platform for conducting important estuarine and coastal studies by the Institute's scientific research teams and aid in the education of future marine scientists. If VIMS cannot use the vessel in research or education, it can be sold and the proceeds used to provide funds to support vital scientific research.

The gift of a vessel is a way to actively support the Institute's efforts to provide the scientific research necessary to maintain the vitality of the Chesapeake Bay and its tributaries.

Your gift would be a great help in advancing one of the leading programs in the country for estuarine and coastal research and education.

Graduate Education: SIGNS OF TROUBLE

The following editorial appeared in **Science**, Volume 223, page 881, March 2, 1984, and has been reprinted with the permission of the American Association for the Advancement of Science (Copyright 1984). The comments contained in the editorial substantiate the arguments and position of the Institute which have been presented in support of our private sector fund raising efforts. VIMS is obviously not unique in its need to obtain funds for equipment acquisitions. Other educational and research institutions in the country are experiencing the same difficulty in identifying such funds. As a consequence, individuals, businesses, and corporations have a clearly defined opportunity to make valuable contributions to American scientific endeavors.

Graduate education in the United States is in trouble. The nation's economy, its diplomatic and defense capabilities, and its social and cultural life rely heavily on men and women with graduate preparation. When our institutions of graduate education are endangered, so is our national well-being. Only effective action by the federal government will avert a crisis.

These are the principal findings and conclusion of a report approved unanimously by the National Commission on Student Financial Assistance. The commission was composed of 12 persons appointed, four each, by President Ronald Reagan, House Speaker Thomas P. O'Neill, Jr., and Senate President Pro Tem-

pore Strom Thurmond.

The commission identified warning signs of erosion throughout the graduate enterprise. Two factors specifically endanger the future of graduate work in engineering and the sciences: the exodus from the campus to corporations of some of our best graduate students and teachers and the decay of the facilities and equipment essential to scholars working on the frontiers of knowledge.

Many college graduates who 30 years ago would have pursued advanced studies now avoid graduate preparation because they perceive little future in it along-side the opportunities they find in business and industry. In areas such as engineering, solid-state electronics, and digital systems, faculty vacancies threaten the nation's capacity to teach the next generation of scientists and engineers.

One recent survey found that university instrumentation inventories were nearly twice as old as those of leading commerical laboratories. A review of equipment for the sciences at 15 institutions revealed that the cost to meet their needs over the next 3 years would be nearly twice what they had spent in

the preceding 4 years.

Although financing graduate education is not the sole responsibility of any one sector of our society, it is the special obligation of the federal government to ensure stable and continuing support of outstanding graduate research and training. Federal

support for basic and applied research at colleges and universities should grow with the economy at a rate at least sufficient to keep pace with inflation. In addition, funds should be made available, both to meet national needs in fields such as physical and computer sciences and to protect other areas, such as the humanities and social sciences, that have been hard hit by the current retrenchment.

Adequate student aid--through loans, fellowships, research and teaching assistantships, and college work study--must be provided, especially to minorities and women. Because graduate training is intimately connected to research, assistance to students cannot be reduced without diminishing the entire research endeavor. The federal government should substantially increase funds for modernizing university laboratories, equipment, and instrumentation. Business and industry should be encouraged, through appropriate tax incentives, to contribute equipment to universities. New support should be provided for promising young faculty in the natural sciences and engineering as well as in the humanities and social sciences. The government should establish a mechanism to produce "educational impact statements" to evaluate the effects of federal policies and programs--particularly budgetary decisions--on the supply of educated men and women.

The purpose of the actions recommended by the National Commission on Student Financial Assistance is not to increase the size of the graduate enterprise but rather to protect and enhance its research and training functions. In the judgement of all 12 members of this commission, our graduate schools urgently require federal support. Unless they receive it, they will not, by the year 2000, be able to produce the new knowledge and trained individuals necessary to the security, prosperity, and cultural life of the nation.—John Brademas, President, New York University, New York 10012, and Chairman, Graduate Education Subcommittee, National Commission on Student Financial Assistance.



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