

# newsletter

Stony Brook, New York 11794

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Dr. James B. McKenna, Associate Academic Vice President, welcomes the Associates.

#### MSRC ASSOCIATES' DAYS

The MSRC Associates met for the second annual Associates' Days on 14-15 September, 1979. The Associates, together with officials of the University and MSRC faculty and friends, wielded mallets to pound open the blue crabs served at a crab and clam dinner held at the Center. Those present viewed a film produced by Prof. Malcolm Bowman that depicted the scientific activities on an MSRC cruise aboard the R/V RIDGELY WARFIELD. After dinner, several MSRC faculty members described their research activities to the Associates.

Prof. Iver Duedall showed a film on a study done in Conscience Bay that tested the environmental acceptability of an artificial fishing reef built there two years ago. This reef was constructed from blocks of stabilized coal wastes. The film showed how various species of fish and other organisms have made their homes among the blocks.

Prof. Henry Bokuniewicz discussed his efforts to measure the flow of groundwater into Great South Bay. The flow of groundwater, a freshwater supply that comes from the soil under the bay into the overlying waters, had never been directly measured before; it had been estimated indirectly by calculation. Using direct measurements from devices built from the ends of oil drums, Prof. Bokuniewicz estimated that 50 million gallons of groundwater enter the bay each day through its floor.

Prof. Bud Brinkhuis described the research he, his colleagues, and their students are doing on nutrient cycling in Great South Bay. One of these projects involves the cycling of nutrients among the phytoplankton, water, rooted plants and sediments of the bay. Prof. Brinkhuis discussed his assessment of the role of eelgrass in determining the distribution of nutrients in the waters throughout the bay.

Prof. Robert Malouf discussed the most pressing management questions of the \$100 million/year hard clam industry in Great South Bay. He also gave a brief overview of the broad range of field and laboratory studies he and his students are conducting on the biology of the hard clam.



William Swan, the Center's first Associate, presents award to Professor Henry Bokuniewicz.

## BOKUNIEWICZ RECEIVES DISTINGUISHED TEACHING

Professor Henry J. Bokuniewicz, Jr. was named by the Center's graduate students as the recipient of the MSRC Associates Distinguished Teaching Award. Dr. Bokuniewicz received his Ph.D. from Yale University and joined MSRC in 1977. He teaches the MSRC core course in Geological Oceanography, which is a study of the geological processes that shape the sea floor and the shoreline.

Dr. Bokuniewicz is studying estuarine sedimentary dynamics, and has conducted research into the problems of dredging and the disposal of dredged sediments in coastal waters. Much of this work was done in Long Island Sound. He and his students are presently working not only in the Sound but also in the Hudson River, New York Harbor and along the north and south shores of Long Island.



HUDSON RIVER CRUISE II A SUCCESS

On 1 October 1979, the R/V ONRUST sailed from Port Jefferson for the second annual SUNY-wide educational cruise. The 12-day cruise on the Hudson River was sponsored by the MSRC and the New York Sea Grant Institute.

The ONRUST made several stops along the Hudson to allow students from SUNY schools to come aboard for a "real world" look at oceanography. Scientific equipment and techniques were demonstrated by Captain H. C. Stuebe and MSRC personnel Lee Arnold, Cliff Jones, Steve Leffert, Alison Mitchell, Glynis Nau-Ritter, Don Powers, Jay Tanski and Kevin Wyman. Dick Murdoch and Denise Polsinelli of the N.Y.S. Dept. of Environmental Conservation collected water samples, and Barry Allen of the Lamont-Doherty Geological Observatory ran salinity-temperature-depth profiles.

Once the ONRUST reached Albany, the crew was interviewed by a local television station. Later that day an invitational cruise was held for SUNY administrators including: Dr. and Mrs. Murray Block, Dr. George Frangos, Mr. Jim Kalas, Dr. Kenneth MacKenzie, Dr. and Mrs. Herbert

McArthur, Prof. Mary Pratt, Dr. and Mrs. Paul Silverman, Dr. and Mrs. Alan Vincelette, and Mr. and Mrs. Bill Wise. This event, along with the rest of Hudson River II, was a resounding success, and the crew wishes to thank everyone who participated. We look forward to the Hudson River Cruise II with great anticipation.

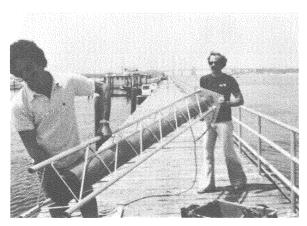
## NUTRIENT RELEASE RESEARCH MAY INTEREST CLAM FISHERY MANAGERS

Clam fishery managers may take a special interest in the results of Cynthia Dietz's research. Ms. Dietz is investigating the rate of release of nitrogen compounds from the sediments of Great South Bay into the overlying waters, and hopes to identify the locations where these compounds are released at accelerated rates. This research may be particularly relevant to the hard clam industry because the compounds that Ms. Dietz is studying, such as ammonia and nitrate, are nutrients for phytoplankton, which are thought to be the major food source for hard clams.

Ms. Dietz is also attempting to evaluate the impact that clam raking has on the release of nutrients from sediment by using an apparatus similar to a clammer's rake. If she finds that raking mobilizes a large release of nutrients, managers might be able to control the inputs of nutrients in different parts of the Bay by regulating the activities of clammers in certain areas. Ms. Dietz, who is a masters degree candidate, has been working on this study for several months and plans to continue her research for another year.

### MSRC ASSOCIATES

We welcome Marie Barrett and William Bissell as new MSRC Associates.



MSRC scientists install a tide gauge in Great South Bay.



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