

# NEWSLETTER

WOODS HOLE OCEANOGRAPHIC INSTITUTION

Vol. 14

February 22, 1973

No. 3

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WINTER HASN'T EVEN STARTED YET....?



The last time Eel Pond was frozen solid in several feet of ice was a full five years ago, during the winter of 1968. But according to Matthew Souza, game warden for the Town of Falmouth, there's still plenty of time for a hard freeze this year.

Souza, a native of the Cape, makes predictions on weather from year to year based on the animals he observes both at home and on the job. By looking at their habits, and the development of "coat and carcass," he comes up with what he feels is a good guess on what the weather holds in store.

Last September, when his horses grew a heavy coat a bit ahead of the season, Souza judged that winter would be long and severe. And while January and December were actually mild months, he hasn't really changed his opinion on the length of the winter ahead.

Birds travel south early in the year if they feel a long winter coming on, according to Souza, and those that do not migrate spend more time feeding to develop extra body fat. And the muskrats build their homes a bit higher than usual in anticipation of a long and wet winter. The behavior of these animals and others leads him to believe that "maybe winter hasn't even started yet!"

Souza points out that we haven't had a long enough freeze this year to produce a thick layer of ice on Eel Pond. But if animal signals are correct, winter could last into spring and Eel Pond may yet freeze over. The game warden recalls that Cape Cod has been known to have rough weather as late as July, and he predicts winter this year will last another six weeks, at least.

## PERSONNEL CHANGES

### Arrivals

Marine	John M. Clark (O.S.)
Geology and Geophysics	Carolyn Dean (Lab Assistant)
Administration	William Dodge (Security Guard)
Marine	J. Michael Frawley (Radio Operator)
Geology and Geophysics	Stephen R. Gegg (Research Assistant)
Marine	Richard C. Hayden (3rd Asst. Engr.)
Administration	Dorothy Hillman (Executive Sec'y.)
Chemistry	Gilbert C. Medeiros (Research Asst.)
Administration	Scot Wilson (Photo. Technician)

### Departures

Marine	Serafin A. Alonso (O.S.)
Physical Oceanography	Jennifer Garland (Part-Time Helper)
Administration	Clarice M. Munson (Secretary)
Marine	Lawrence A. Roberge (Corpsman)
Ocean Engineering	John Rackliffe (Temp. Lab Asst.)
Marine	Charles E. Singleton (O.S.)
Administration	Alfred F. Wilde (Co-op Student)
Geology and Geophysics	Satoshi Yamamoto (Research Asst.)
Marine	Richard J. Hart (Messman)
Administration	Linda C. Low (Secretary)
Administration	Stephen P. Morley (Security Guard)
Marine	Joseph S. Vogel (Oiler)
Marine	Jao dos Santos (Messman)
Marine	Kenneth H. Gassett (O.S.)
Physical Oceanography	Mary Ann Kinney (Part-Time Helper)
Marine	William White (Oiler)
Chemistry	Mark L. Winston (Temp. Res. Asst.)
Chemistry	Gabriella Andreoli (Visiting Inves.)
Marine	Stephen Cropper (3rd Mate)
Marine	Robert A. Goudle (A.B.)
Physical Oceanography	William Gould (Visiting Inves.)
Administration	Heidi Schultz (Draftswoman)
Chemistry	Nancy Van Cleave (Part-Time Helper)
Marine	Carl Vogel (Oiler)
Administration	Carl von Dannenberg (Sr. Draftsman)
Marine	Ralph Wordell (2nd Asst. Engineer)

The NEWSLETTER welcomes photos and items of interest to the WHOI community. Contact Linda Harbison at extension 270 or in the Co-op.

## INSTITUTION SCIENTISTS CONTRIBUTE TO U-MASS RADIO SHOW

A new public service radio show called U-MASS INSIGHTS last Sunday presented a program on aquaculture that featured W.H.O.I.'s John Huguenin as "guest expert."

The new weekly radio show is sponsored by the Public Affairs Departments of the University of Massachusetts. It will be organized around a different subject every month, and the topic for February is "The Sea -- the Necessary Frontier."

This month's series is being hosted by Charles Yentsch, formerly with the Institution and currently Director of the U-Mass Oceanographic Field Station at Gloucester.

Coming up this Sunday, February 25 is a program involving yet another Institution scientist, Bob Ballard, on "Ocean Geology.... Diving on the Mid-Atlantic Ridge." The show may be heard on New Bedford's WBSM at 11:30 p.m. or on Boston's WEZE at 7:30 a.m.

## W.H.O.I. ARCHIVIST IS FORMER BANANA TESTER

Stan Reeves, who works part-time as W.H.O.I.'s Archivist and part-time in the Property Office, has an unusual former occupation. He used to take the temperatures of bananas for the United Fruit Company.

Reeves' job was one of the final links in a long chain of operations, from the carving of orchards out of wild jungles to the transporting of fruit to American cities. It was his responsibility to see that bananas shipped by railroad reached their destination at rigidly controlled temperatures.

His work included testing several bananas in every carload by sticking them with a sensitive nitrogen-filled thermometer, Reeves explained. Next a decision had to be made on whether ice should be put in the bunkers, whether the car should be ventilated, or in winter whether heaters should be put in. On occasion Reeves rode with a shipment in the caboose of a train to see that the fruit travelled safely in changeable weather.

According to Reeves, the temperature of the bananas is very crucial, beginning when a bunch (containing as many as 200 bananas) is cut down from a 16 to 30-foot stalk. It is then rushed to the seacoast where within a few hours it is stowed in a refrigerated hold of a banana ship. Since the stem is cut green and absorbs oxygen as it ripens, each storage place must be carefully ventilated as well as temperature-controlled between 55 and 60 degrees. Any change in temperature can quickly ruin an entire shipment.

Stan Reeves likes his current job more than his former occupation, partly because as a banana tester he was on call 24 hours a day.

## COMMITTEE STUDYING QUESTION OF EQUAL RIGHTS FOR WOMEN

As a result of Staff Meeting last month, and a discussion of the Institution's attitude toward women, Dr. Fye has named a committee of five to study the subject and submit a progress report by the end of February.

The Committee's members are Mary McGilvray, Kathy Busa, Jan Battee, Anne Riley, and Frederica Valois. They are in the process of meeting with other W.H.O.I. women to review employment practices and to prepare a comprehensive report.

Special consideration is being given equal pay for equal work, accommodations and rules for women scientists who go to sea, evaluation of women on the technical staff, a permanent grievance committee, qualifications for secretarial positions, advancement for women, and salary scales.

This week's meeting for all women employees will be held in Smith Conference Room at noon on Thursday, February 22. All conclusions will be presented to Dr. Fye and Staff Council for review and action.

## VINE HONORED BY ALMA MATER

Last month Al Vine (Geology & Geophysics) became one of the first Fellows to be inducted into the newly-formed Garfield Society of Ohio's Hiram College, where he received his undergraduate degree.

The Garfield Society, established to honor graduates of "outstanding accomplishment," is named for the 20th President of the U.S. who was a student at Hiram and later its president.

## BIOLOGIST WRITES ABOUT WARM FISH

"Fishes with Warm Bodies" is the title of a recently-published article by Frank Carey of the Biology Department.

In it he talks about the countercurrent heat exchangers that keep the bodies of tunas and mackerel sharks warm, and discusses the advantages to these fishes of having higher body temperatures.

Carey's article has been published in this month's Scientific American Magazine.

Although he is authorized to act as a police officer in his bridge tending job, Tiny has never issued a ticket to anyone on the bridge. "It's easier just to tell people when they do something wrong, and they usually listen. Tourists and little boys are the biggest problems."

Raising the bridge occurs anywhere from zero to 85 times a day, Tiny points out. "It averages maybe 50 times a day in summer and five times a day in the winter when most of the traffic is from W.H.O.I. and M.B.L." During slow days he passes the time reading, knitting, and whittling small boats for kids. "But mostly I like to talk to people," he said, "and the longest days are in bad weather when no one visits."

Tiny keeps a log on all boats going under the bridge, and he is sometimes called on by the Coast Guard to track down a missing boat. "It's an interesting job, and my hours change every few months. I don't get much of a chance to be bored."

During the summer, when his hours are long, Tiny hears the same question almost every morning at 5:30 or 6 a.m. -- "Where can I get a cup of coffee?" And as he has a stove and refrigerator in the small tender's house, he occasionally extends his hospitality to visitors.

"Tiny's bridge," which has a span of 30 feet for boats, is about 33 years old. Its predecessor, also a drawbridge, was badly damaged in the 1938 hurricane and later rebuilt as it is today. The bridge is maintained by the Town, and according to Tiny, a sizeable appropriation is in the works for much-needed paint and repairs.



The old Stone Arch, which preceded the first drawbridge, provided a roadway over Eel Pond from 1879 until the early 1900's.

NEW FACES



Frank C. Shephard  
Temp. Res. Asst.  
G&G/D. Ross  
Big. 109; Ext. 216



Joseph M. Singer  
Helper  
Admn./A. Wessling  
Big. G-8; Ext. 349



Dr. Colin P. Summerhayes  
Assistant Scientist  
G&G/J. Heirtzler  
Big. 210; Ext. 212



Mildred L. Taylor  
Office Assistant  
Grad. Studies/A. Peirson  
Big. 103; Ext. 219



Martha J. Thomson  
Drafting Aide  
Admn./A. Wessling  
Smith 205; Ext. 260/261



Deena M. Wallace  
Executive Secretary  
Admn./A. Maxwell  
Big.; Ext. 250



Ralph W. White  
Carpenter  
Admn./J. Mitchell  
Smith 120; Ext. 211

## NEW FACES



Carole R. Merson  
Secretary  
Admn./B. Steinbach  
Big. 103; Ext. 200-219



Lynda S. Murphy  
Research Assistant  
Biology/G. Rowe  
Red. 2-22; Ext. 347



Paula L. Neitz  
Secretary  
Admn./F. Schneider  
Co-op Bldg.; Ext. 388



Michael E. Parke  
Temp. Res. Assistant  
P.O./R. Millard  
Smith 124; Ext. 238



Ronald D. Penton  
Laboratory Assistant  
Chemistry/W. Jouris  
GEOSECS; 540-2773



James Posgay  
Student Helper  
Admn./J. Stimpson  
Fisher House



Helen L. Quinby  
Research Assistant  
Biology/S. Watson  
Red. 2-32; Ext. 312

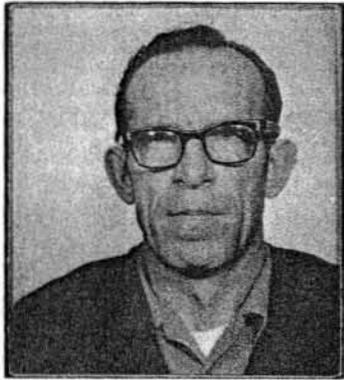


William T. Rice  
Security Guard  
Admn./A. Wessling  
Smith Lobby; Ext. 251



Frederic W. Schneider  
Development Officer  
Admn./F. Mangelsdorf  
Co-op Bldg.; Ext. 388

NEW FACES



Anthony Jurkiewicz  
Messman  
Marine/J. Pike  
CHAIN; Ext. 208



Dag Klaveness  
Guest Investigator  
Biology/R. Guillard  
Red. 2-26; Ext. 317



Mary-Linda Koons  
Research Assistant  
G&G/W. Bryan  
Big. 208; Ext. 227



William S. Little, Jr.  
Research Associate  
O.E./M. Rosenfeld  
Swift Hse.; Ext. 435



Catherine Linton  
Secretary  
Biology/A. Gunning  
Red. 2-05; Ext. 344



Robert G. Lowe  
Security Guard  
Admn./A. Wessling  
Smith Lobby; Ext. 251



George W. Lumsden  
Mechanic's Helper  
Admn./C. Wing  
Iselin Fac.; Ext. 255



Patricia McComb  
Clerk-Typist  
Admn./A. Henderson  
Chall. Hse.; Ext. 371



William H. MacLeish  
Ed. of Oceanus & Rep.  
Foundation Liaison  
Admn./F. Mangelsdorf  
Co-op Bldg.; Ext. 393

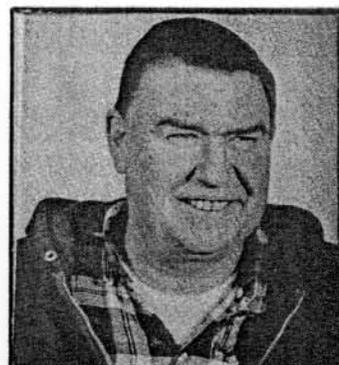
## NEW FACES



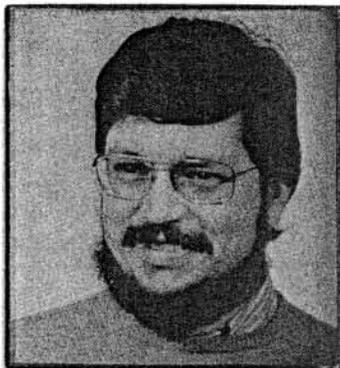
E. E. Ali Ahmed  
Special Student  
G&G/J.R. Heirtzler  
Big. 104; Ext. 222



Cheryl L. Brady  
Laboratory Assistant  
Biology/C. Remsen  
Red. 2-30; Ext. 314



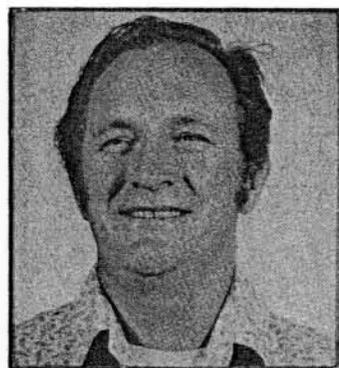
Richard J. Breivogel  
Painter  
Admn./A. Wessling  
Big. G-8; Ext. 349



Melbourne G. Briscoe  
Assistant Scientist  
P.O./F. Webster  
Smith 101D; Ext. 276



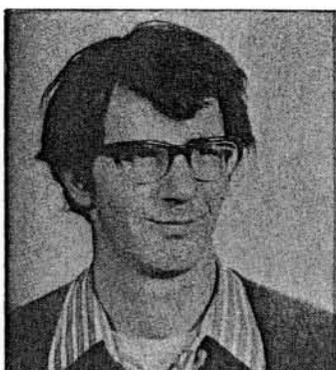
Steven H. Boyd  
Research Assistant  
Biology/P. Wiebe  
Red. 2-20; Ext. 313



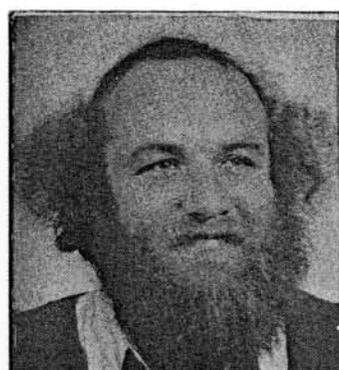
John F. Connell  
Research Assistant  
G&G/S. Knott  
Big. 304; Ext. 274



Dr. Richard H. Fillon  
Postdoctoral Invest.  
G&G/W. Berggren  
DESC/540-0626

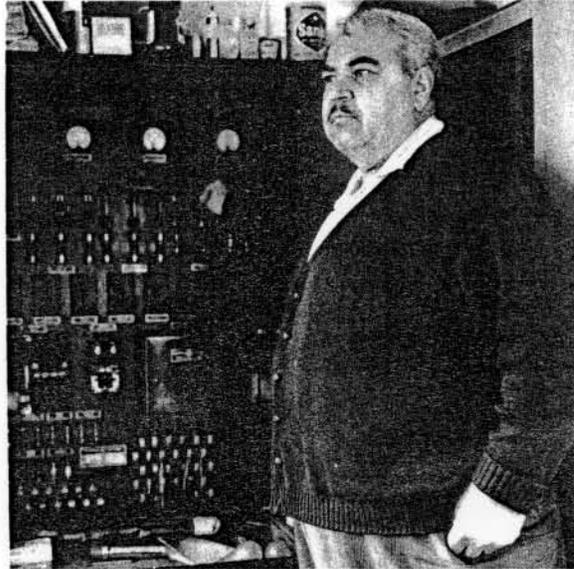


Kenneth G. Goutal  
Laboratory Assistant  
O.E./M. McElroy  
Big. 301; Ext. 223



Robert S. Jordan  
Laboratory Assistant  
P.O./H. Armstrong  
Smith 118; Ext. 229

## VIEW FROM THE BRIDGE



Most people know the Woods Hole Drawbridge Tender as "Tiny."

"Step behind the yellow line and take the children and dogs with you!" is a familiar cry during the summer months in Woods Hole. The voice belongs to Michael Marchisin, or "Tiny." He's been bridge tender here for barely three years, but in that time he has become a sort of local institution.

Aside from his regular duties as keeper of the bridge, Tiny is an information and message bearer for a host of Woods Hole people and visitors. College students during spring break check in with him to get leads on job possibilities in town; summer tourists stop by for directions to restaurants and attractions; and "regulars" drop in every day to leave and pick up messages, or just simply to chat.

In his three years on the bridge Tiny has met celebrities, provided babysitting services for visiting dogs, and answered questions ranging from the price of quahogs to how much water is contained in Eel Pond ("Would you like it in quarts or gallons?").

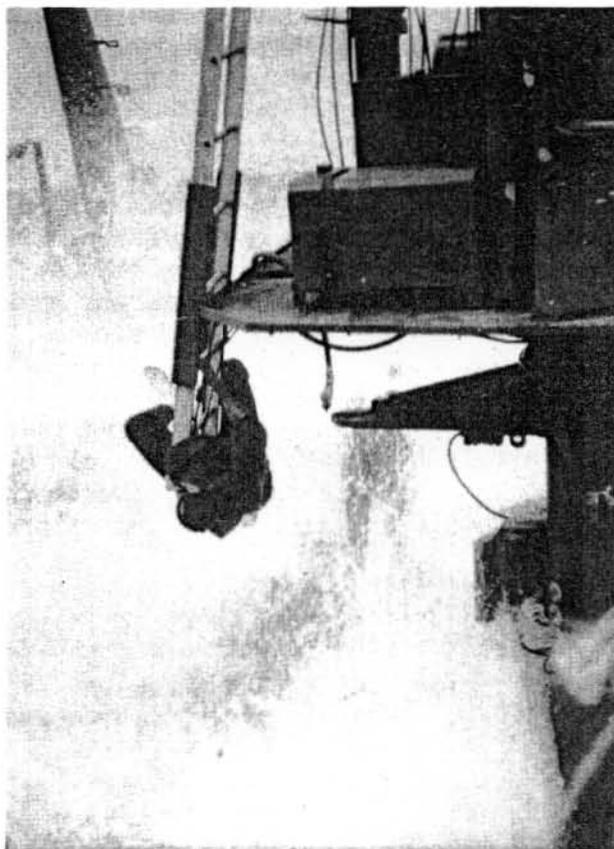
Tiny runs a kind of floating library of books and magazines that are given to him by passersby, and which he in turn gives to crew members on the ships. He used to post a Thought-for-Today (like "Ban T.V.") in the window of the tender house, a practice he has discontinued because "some of the signs made people think too much!"

As bridge tender, Tiny is responsible for the safe passage of boats, vehicles, and people. His job includes operating the signal lights -- which he claims are often ignored by pedestrians and automobiles alike. "Everyone wants to race the bridge," he said. "People always want to beat something....it's human nature." To get the attention of moving traffic Tiny often uses his siren, but even the loud warning isn't always successful.

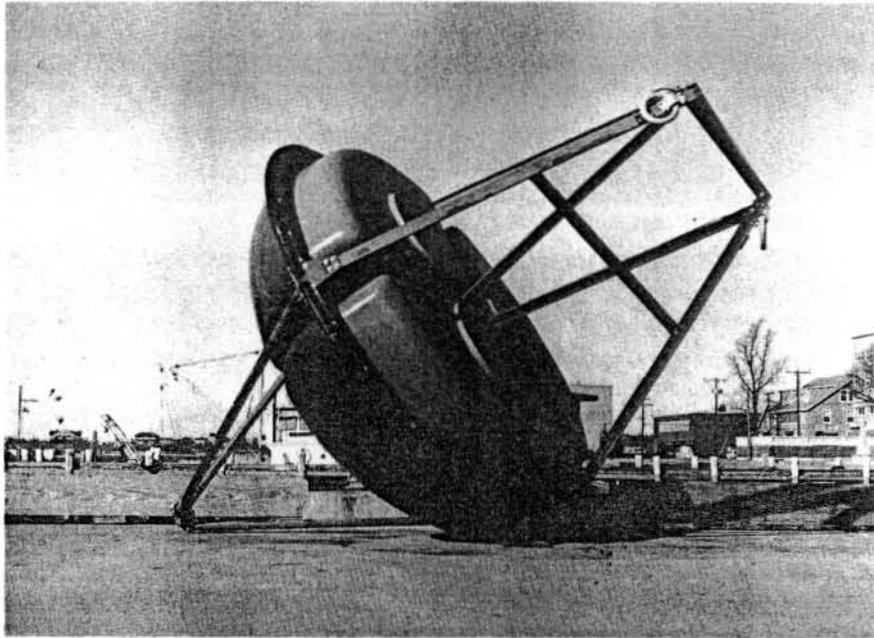
CHAIN's first cruise for MODE will depart Woods Hole on March 6 under Chief Scientist Bob Heinmiller. The first part of the field experiment calls for deployment of one surface buoy and 16 subsurface moorings in the MODE region. Each subsurface mooring contains instrumentation for measuring currents, temperature, and pressure variations in the water, and measurements will be taken over a four-month period. A buoy recovery cruise by CHAIN is scheduled for the end of June.

Between the first cruise in early March and the end of the experiment in July, CHAIN will make four additional cruises to the MODE site for density measurements. The Institution's Eli Katz will serve as Chief Scientist during the first segment of the Density Program.

Throughout the course of the field work, a MODE Hot Line Center will be maintained in Bermuda as a communications focal point for coordinating the experiment, and as a data collection center to provide the information needed for decision-making during the project.



KEEPING HIS FEET DRY is Bill Moyer during a CHAIN cruise for MODE in November. The cruise tested Sofar Floats, which will be used in the Experiment. (Photo: F. Le Cerf)



Planned for use in the MODE Experiment is a new 2,000-pound surface buoy that was designed by W.H.O.I.'s Bob Walden.

#### MODE EXPERIMENT SET TO BEGIN

A study of water dynamics in the deep ocean, with particular attention to low-frequency motions at depths below 500 meters, is the goal of a four-month project scheduled to start at the beginning of March.

Known as MODE, for Mid-Ocean Dynamics Experiment, the project calls for participation by fifteen universities and oceanographic institutions. MODE, which is underwritten by the National Science Foundation and the Office of Naval Research, was officially begun in 1971 with a series of preliminary field exercises leading up to the more intensive work about to take place.

From early next month until mid-July, six research ships will take part in Project MODE, in an area some 350 miles southwest of Bermuda and 600 miles east of Florida. The ships are CHAIN, Duke University's EASTWARD, DISCOVERY of the National Institute of Oceanography, the RESEARCHER of Miami's Atlantic Oceanographic and Meteorological Lab, University of Rhode Island's TRIDENT, and F.V. HUNT.

NEWLY-PUBLISHED BOOK ON OCEANOGRAPHY  
FEATURES W.H.O.I.



A photograph of Susan Schlee,  
taken locally, appears on the  
jacket of her new book.

Susan Schlee, a local writer whose newly-published book on oceanography contains material on the history of W.H.O.I., was given a reception recently at Market Book Store that attracted a large group of Institution people.

Her book, The Edge of an Unfamiliar World: A History of Oceanography, was written over a period of about 4 years and according to the author, several Institution scientists contributed much assistance and advice on various chapters.

Susan Schlee first came to Woods Hole in 1968 with the intention of writing a book about oceanography, and it was completed a year ago. The chapter entitled "American Oceanography in the Early Twentieth Century" contains the story of Henry Bigelow and the founding of W.H.O.I.

The Edge of an Unfamiliar World was published by E.P. Dutton and is available at Market Book Store in Falmouth.

## W.H.O.I. GEOPHYSICIST IN INDIAN OCEAN STUDY

Jim Heirtzier (Geology and Geophysics) recently served as co-director of scientific work aboard GLOMAR CHALLENGER during Leg 27 of the Deep Sea Drilling Project. The month-long cruise ended in December.

Samples of the oldest sediments yet found in the Indian Ocean, approximately 135 to 140 million years old, were recovered during the expedition from a drill site in the eastern Indian Ocean near the Australian continental margin.

According to participating scientists - from Australia, Italy, Russia, Switzerland, and the U.S. - information from DSDP Leg 27 will be combined with results from earlier cruises to permit the drawing of isochrons (contours of age) of the ocean floor west of Australia.

The cruise was part of a continuing effort to work out the complex history of the separation and migration of the southern continents, and the effects of this history on world-wide climate, oceanic circulation, and oceanic resources.

## BIOCHEMICAL STUDIES CONDUCTED ON CHAIN CRUISE

A group of about 25 scientists from W.H.O.I. and several universities including Harvard, Texas A&M, and Tufts departed Woods Hole aboard CHAIN on February 6 bound for Bermuda. The two-week cruise was organized by biologists, chemists, and physical oceanographers to explore differences in the biochemical cycles of various water masses found between here and Bermuda.

According to Ralph Vaccaro, who headed the cruise, scientists on CHAIN were especially interested in the activities of plankton and bacterial populations. He explained that the different water masses support different types of populations, depending on the local availability of organic material, trace elements, and plant nutrients.

Because the water masses are "well-defined," Vaccaro pointed out they give rise to a sound basis for comparative studies. Samples were obtained with net tows and Niskin water samplers, with some processing of the samples taking place on board ship and more planned for the laboratory when CHAIN returns to Woods Hole.

After putting in to Bermuda on February 18, the ship left again on the 20th to begin a second leg under Chief Scientist Dick Haedrich of the Biology Department. CHAIN is scheduled to arrive back in port on March 3.

## NOTICES

Coming up next on the Oceanographic Film Society's schedule is "Accident" starring Dirk Bogarde. The film will be shown, along with the short subject "Paint," on March 2 at 8 p.m. in Redfield Auditorium.

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A meeting of women employees will be held at noon on Thursday, February 22, in Smith Conference Room. The purpose of the meeting is a discussion of employment practices at W.H.O.I., and all women are encouraged to attend.

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"Marine Environments" is the subject of a new course being offered to members (and non-members) of the New England Aquarium. The first five-week session will begin on March 28, and classes will be held on Wednesday evenings from 6 to 7:30. Reservations may be made by calling the Education Department, 742-8830.

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Falmouth Recreation Committee offers the following activities:

Men's Volleyball	Monday	6-7pm	Gym
Women's Exercises	Monday	7:30-8:30	Room
Karate	Monday	8:30-10	Gym
Women's Exercises	Tuesday	6-7pm	Room
Men's Club 30	Tuesday	6-7:30	Gym
Ladies Volleyball	Tuesday	7:30-10	Gym
Men's Club 30	Wednesday	6-7pm	Gym
Judo	Wednesday	7-8:30	Gym
Karate	Wednesday	8:30-10	Gym
Women's Exercises	Wednesday	6:30-7:30	Room
Women's Exercises	Thursday	6:30-7:30	Room
Men's Club 30	Thursday	6-7:30	Gym
Women's Club 30	Thursday	7:30-9	Gym
Free	Thursday	9-10	Gym
Men's Club 30	Friday	6-7pm	Gym
Men's Volleyball	Friday	7-8:30	Gym
Women's Exercises	Friday	7-8pm	Room
Co-ed Volleyball	Friday	8:30-10	Gym
Judo	Saturday	12:30-2:30	Gym
Free	Saturday	2:30-5	Gym
Free	Saturday	6-8pm	Gym
Open Volleyball	Saturday	8-10	Gym
Weightlifting Club	Monday through Saturday	2:30-4:30 and 7-9pm	Room