
NEWSLETTER

WOODS HOLE
OCEANOGRAPHIC INSTITUTION



AUGUST 1990

WHOI introduces westerners to ocean science

High school students from Utah and Arizona visited WHOI last month and learned how to assess an oil spill, collect a water sample and run an out-board motor.

"Everything was new, even the weather," says Rachel Yellowhair, one of the students on the visit.

The students, five of whom are Navajo Indians, spent a month at WHOI as part of Upward Bound, a program designed to help high school students go on to college. Scientists and Joint Program students volunteered to take the students on field trips and gave them their first taste of ocean research.

"We made the students contribute," says George Hampson, who, with Jake Peirson and the education office, organized the WHOI visit. "They did everything from launching the boat to putting equipment away. They collected samples and helped write up the information."

Upward Bound is geared toward students from low-income families and who have parents who never attended college. The six students who visited WHOI were among the best in their classes in science and math.

The students worked in groups of two or three with several scientists.

George took two students to Naushon Island to assess the damage caused by the recent oil spill there.

"It was hands-on research for the students," he said. "And we had three sets of eyes instead of one."



Upward Bound students (front row) Lonnie Begay, Rachel Yellowhair, and Stephanie Black, (back row) Theda Whiterock, Donna Luna, Barbara Starr (coordinator), and Elroy Charles.

The students looked for gastropods under rocks on both oiled and unoiled beaches and compared their findings.

"That was an example taking advantage of a learning experience," George said. "The funds from Sea Grant extended far beyond their normal use."

Others helped Sean Kery with the Dynamoor project, a study of the dynamics of off-shore mooring.

A group that worked with Dale Goehringer went to local marshes and

took water samples to see what would happen if more nutrients were added to the water there.

During a trip to Buzzards Bay, the students learned how meters are deployed and collected to measure oxygen levels and wind speed.

"These kids are fantastic," George said, "They're very savvy about computers and science."

George said he was optimistic that another group of students could spend time at WHOI next summer.

'Water Baby' due out next month

Water Baby, the 25-year history of ALVIN by WHOI Science Writer Victoria Kahari, will be here soon. Deliveries to bookstores around the country will start September 14, according to the book's publisher, Oxford University Press.

We've been awaiting the book for a long time, and presumably, so has President George Bush. The December 1989 issue of *Esquire* magazine said *Water Baby* was one of the select books the magazine was giving the president for Christmas . . . last year.

Oxford's catalogue calls *Water Baby* a "riveting history of the world's first deep-diving submarine." We know about ALVIN's superb accomplishments, but here's more from the publisher:

"Attractively illustrated with 16 pages of color plates and dozens of black and white photographs, *Water Baby* offers a fascinating history of ALVIN's deep-sea exploration, deftly

combining the excitement of an adventure story.

"The scientists who dive in ALVIN discover an entirely new and unimagined ecosystem whose ultimate energy source is not the sun, but heat within the planet, minerals never before found in nature, and bizarre, unknown animals, including fist-sized radioactive protozoa, crustaceans with teeth at the end of their eye stalks, clams as large as dinner plates, and scarlet-tipped tubeworms up to 12 feet long.

"Kahari excels at conveying the feeling of diving miles beneath the surface — the awe, the fear, and the excitement of scientists as they explore a totally unknown world. 'We all started jumping up and down, we were dancing off the walls,' MIT scientist John Edmond remembers. 'It was so completely new and unexpected that everyone was fighting to dive.'

"She provides absorbing on-the-spot accounts of ALVIN's major achievements and adventures: its recovery of an H-bomb off the coast of Spain; the discovery of hydrothermal vents teeming with unknown life and black smokers belching fluids hot enough to melt lead; the descent to the boundary of creation, a seam of the planet where new earth is continually formed in fiery lava; and of course, its visit to the most famous shipwreck of all time, the RMS TITANIC.

"Kahari also draws fascinating portraits of all the people involved, from the bureaucrats and administrators to daredevil pilots to the motley but dedicated crew of LULU (ALVIN's first mother ship), to the scientists who had the courage and wisdom to dive in this midget submarine."

When *Water Baby* arrives in September, it will be available to WHOI employees at a discount.

Mass Maritime course features WHOI staff

Research Associate George Hampson will coordinate a course on Buzzards Bay at the Massachusetts Maritime Academy this fall.

The course, titled *Your Buzzards Bay: Yesterday, Today, Tomorrow*, will use Buzzards Bay as a model for studying the seacoast and how it is affected by land use and development.

Visiting experts will speak on the geological history of the Bay, coastal pollution, and environmental issues (nutrient loading, red tide, oil spill effects, PCBs and toxic metals) and recovery contingency planning. Lectures will be geared toward the general public.

Guest speakers will include Bob Oldale from USGS, and Brian Howes, Dale Goehringer, Judy McDowell, Michael Moore and Bruce Tripp from WHOI. Other speakers have yet to be confirmed.

The course is a cooperative effort between WHOI and Mass Maritime's Community Service Program. The registration fee is \$25, and all proceeds over cost will be donated to the Coalition for Buzzards Bay.

The 10-week course will be held

on Wednesday evenings at 7:30 p.m. beginning Sept. 12. For more information, or to request a registration form, call Mass Maritime at 759-5761, ext. 448. Walk-in registration will be held at the Academy August 20-31.

'WHOI in the Arctic' symposium planned for Aug. 30

"WHOI in the Arctic," the last of three symposia held in honor of WHOI's 60th anniversary, will be held Thursday, August 30 at 6:30 p.m. in Redfield Auditorium.

Panelists will include: Richard Harbison, a Senior Scientist in the Biology Department; Susumu Honjo, Senior Scientist in G&G; Scott Lehman, Assistant Scientist in G&G; Kenneth

Prada, Senior Research Specialist in AOP&E; Keith von der Heydt, Research Specialist in AOP&E; and Peter Wiebe, Senior Scientist and Department Chairman in Biology.

Panelists will discuss WHOI's research programs in the Arctic.

The symposium will be for a non-technical audience and is free and open to the public.

Studds hearing reveals airway abuse

Congressman Gerry Studds held a public hearing in Clark 5 recently on hoax calls to the U.S. Coast Guard.

Testimony from representatives of the Coast Guard, the Federal Communications Commission and the Inshore Draggermen's Association indicated that more needs to be done to minimize abuse of emergency radio channels and punish offenders.

"The amount of abuse on the airways is incredible," said Frank Mararchi, President of the Massachusetts Inshore Draggermen's Association. "There are calls asking for bluefish reports or the time of day."

In addition to abuse of the airways, false distress calls are also increasing.

The local Coast Guard district has had 97 reported hoax calls so far this year, compared with 18 in all of 1989,

according to Rear Admiral Richard Rybacki, commander of the First Coast Guard District of the U.S. Coast Guard. Rybacki said he believes part of the reason for the increase is "copy cat" cases resulting from the Sol-E-Mar case.

Sol-E-Mar Captain William Hokanson and his son, William Jr., were killed in a boating accident last March after their distress call was mistaken for a hoax call.

Ralph Oberlander of the Coast Guard Auxiliary and Richard Smith of the Federal Communications Commission both called for improved equipment to locate radio transmitters and to require identifying signals. Such signals could reduce the incidence of hoax calls and make it easier to identify violators.

Ballard honor to benefit young scientist

Bob Ballard will receive Sigma Xi's 1990 William Procter Prize for Scientific Achievement. The award will be presented at the Society's annual meeting in October, and Bob will deliver the Procter Prize Address, titled, "Beauty in the Depths of the Ocean."

Instituted in 1950 by the Scientific Research Society of America, the prize is awarded annually by Sigma Xi to a

scientist who has made outstanding contributions to scientific research and has demonstrated the ability to communicate this research to scientists in other disciplines. The prize consists of a certificate and \$2,500. The recipient also designates a young scholar, usually working in the same field, to receive a \$2,500 Grant-in-Aid of Research from the Procter Prize Fund.

Soviet scientist reports on environment

Dr. Raphael Vartanov of the USSR Academy of Sciences gave a talk last month on Soviet Environmental Policy.

The first official report on environmental activities in the Soviet Union was issued in 1989, Vartanov said.

Attention to environmental concerns has been slow to develop in the Soviet Union because of political hindrances, Vartanov explained. Since the government is responsible for both

controlling pollution and for producing resources such as coal and oil, it allows pollution to continue.

"In school, we learned that it is inherent in capitalism to create a monopoly," Vartanov said. "We did not realize that a centralized government was the biggest monopoly."

In addition to political difficulties, Vartanov said, problems with distributing information also hinder environmental reform. Although studies are

Ship notes

RV ATLANTIS

RV ATLANTIS left Seattle, Washington August 15 on Leg XI of Voyage #125. This leg will carry the vessel to Astoria, Oregon.

The purpose of the cruise is to support the NOAA research program investigating the impact of hydrothermal venting systems on the chemical environment of the global ocean.

DSV ALVIN will make 19 dives for sampling and observation. At the start of the cruise, an additional dive was made to attach recovery lines to an underwater camera recently lost from the NOAA vessel DISCOVERER.

RV OCEANUS

RV OCEANUS returned to Woods Hole August 6 from Voyage #222. The cruise was for Rutgers University and the U.S. Geological Survey. Its primary purpose was to collect bottom samples at the Deep Water Dumpsite 106 locations recently visited by DSV ALVIN.

RV OCEANUS will remain in port until Sept. 8 for scheduled maintenance.

RV KNORR

Work continues on the refitting of RV KNORR at the McDermott Shipyard in Amelia, Louisiana.

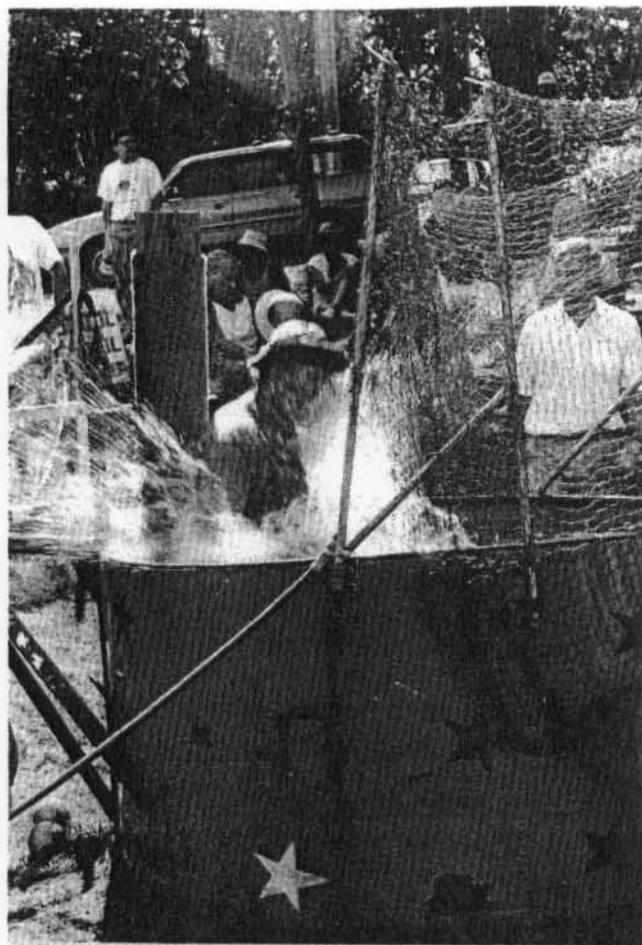
done on such incidents as the Chernobyl accident, they are not widely distributed.

Vartanov did say that environmental awareness is improving. As local governments become more independent, those governments are showing more concern for the environment. In addition, some separation of powers, such as the creation of a legislative branch, should improve pollution regulation.

WHOI Picnic 1990



John Farrington watched as Craig Dorman takes the plunge at the annual picnic...



...but it wasn't long before John had his turn getting dunked.



Kathy Hall painted arms and faces to add color to the picnic.

Photos by
Terri Corbett



The Lionhouse Blues Band entertained the crowd.



Shuttle bus driver Victor Fontana put on a clown suit and handed out balloons.

NEW FACES



Einat Aharonov
JP Student
Education
Clark 5
Ext. 2814
R. Beardsley



Jerzy S. Blusztajn
Research Associate
G&G
Clark 248
Ext. 2837
S. Hart



He Huang
JP Student
Education
Bigelow Trailer
Ext. 3447
J. Lynch



Roger N. Hughes
Expedition Leader
ALVIN Group
Smith 301
Ext. 2407
B. Walden



James R. Ledwell
Associate Scientist
AOPE
Bigelow 102A
Ext. 3305
A. Williams 3rd



Richard D. Norris
Postdoctoral Scholar
Education/G&G
Clark 119
Ext. 2839
D. Ross



Alan Polasky
MPOM Fellow
MPOM
Swift
Ext. 2601
J. Broadus



Tracy Ann Villareal
Postdoctoral Fellow
Education/Biology
Clark 403
Ext. 2824
J. Goldman



W. David Yowell
Boat Operator
Marine Operations
R/V EAGLE MAR
Ext. 2208
J. Coburn

Promotions

Eleanor Botelho (Controller's Office)
to Senior Accounting Assistant 6/4

Susan Handwork (Controller's Office)
to Senior Payroll Assistant 7/15

Dorinda Ostermann (G&G)
to Research Associate 7/16

Barrie Walden (AOPE)
to Senior Research Specialist 6/18

Correction to last newsletter: Catherine
Ferreira was promoted to Staff Assistant III
in Facilities.

Staff Training Office has audio tape library

A lending library of audio cassette tapes is available from the Staff Training and Development Office, Nobska House. Call x3272 or x2217 to borrow any of the following:

- *Communicating with Employees
- *Communicating To Help You and Your Organization Get Ahead
- *Communicating to Help You and Your Colleagues Work Together
- *High Impact Meetings
- *How To Deal With Difficult People
- *How To Listen Powerfully
- *How To Speak Up, Set Limits, and Say No
- *Management Skills for the Technical Person in a Leadership Role
- *Relax, Renew and Re-Energize
- *Stress Management for Professionals

Tapes can be borrowed for two weeks and are renewable if no one else requests them.

Lunar samples found

Does anyone know anything about the lunar samples that the Security Office has kept safely in the Smith vault since before 1984?

If you do, or if you have interest in seven plastic boxes of various specimens and microscope slides, contact Jane Caruso on ext. 2723.

WHOI in the '60s: a time of maturing

1960-1965

Editor's note: This is one in a continuing series on the history of the Woods Hole Oceanographic Institution in celebration of our 60th anniversary this year.

WHOI matured during the 1960s with the growth of its educational activities and the improvement of research facilities. The implementation of appointment policies and the establishment of tenure contributed to its evolution.

The formal tenure policy helped WHOI to compete with universities for the best scientists. Tenure also protected scientists from arbitrary decisions and demonstrated faith in the sound future of the Institution.

The ATLANTIS II came to Woods Hole in 1963, and the annual report



The construction site of Redfield Laboratory. The new lab was dedicated in May, 1964. (WHOI photo)

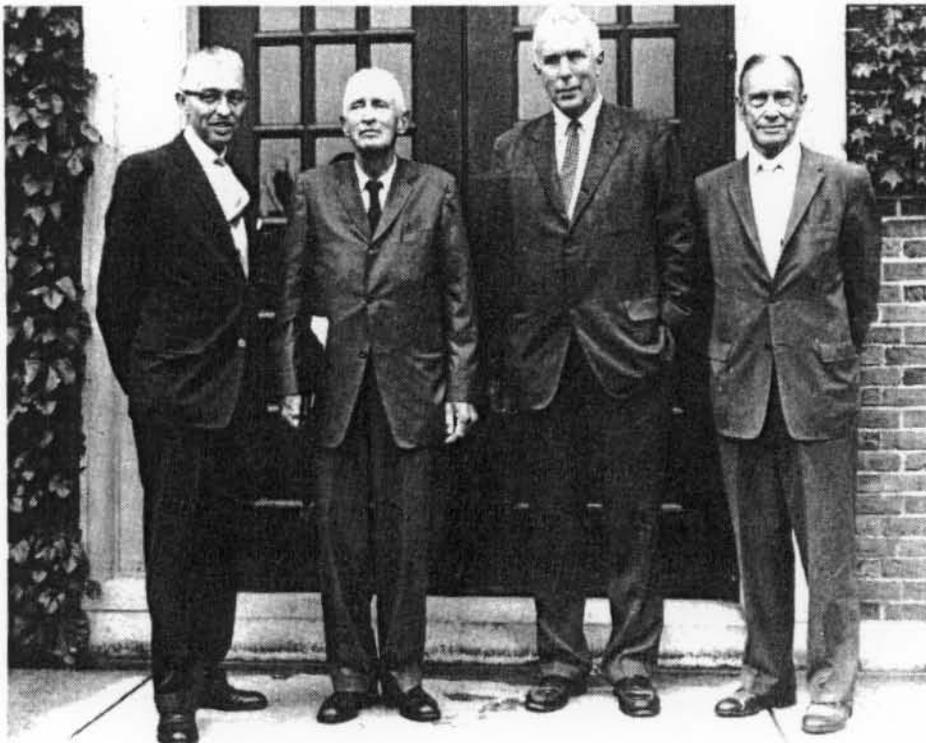
for that year described it as "the finest oceanographic research vessel

afloat." The ship steamed more than 30,000 miles in its first year.

A new biology and chemistry building, now known as Redfield, was also added to the Institution that year.

The field of oceanography entered a new phase in the 1960s. In the wake of the International Geophysical Year, WHOI participated in several other international projects, including the International Indian Ocean Expedition, the International Cooperative Investigations of the Tropical Atlantic and the Cooperative Study of the Kuroshio Current.

Although the Institution was not yet awarding degrees to students, its educational programs advanced during the early '60s. Programs ranged from summer student employee programs for undergraduates to postdoctoral fellowships. In 1963, three new formal courses in oceanography used the ketch ATLANTIS II to introduce students to the ocean-going side of the work.



WHOI Director Paul Fye (left) poses with former directors Henry Bryant Bigelow, Columbus Iselin, and Edward Smith, Jr. The photo was taken about 1960. (WHOI photo)

Visiting scholar series continues

Dr. Margaret Palmer of the University of Maryland gave a special seminar last month on "What Feminists are Saying About Science."

Increasing the number of female role models, enabling students to switch into science later in their academic careers, and teaching high school science across the curriculum could all help to attract more women into science, Palmer said.

She pointed out that feminist theorists advocate using gender neutral language, including females as experimental models, and allowing subjective, experiential information into data bases to make science more ac-

cessible to women.

Palmer was the fourth Visiting Scholar Lecture Series participant. The series was created to bring in female scientists and scholars in an effort to provide a wider variety of role models for staff and students. Palmer offers a course on Women in Science at University of Maryland.

As an Assistant Professor of Zoology, Palmer also lectured on "How Stream Fauna Survive Hydrological Disturbances," and "Separating the Effects of Fish Predation, Disturbance, and Hydrodynamics on Estuarine Meiofauna Populations."

IN MEMORIAM

Gerard A. Fulham

Honorary Corporation member Gerald A. Fulham, 70, died August 19 in Boston of complications associated with diabetes.

He was the husband of Barbara McGoldrick Fulham and resided in Oyster Harbors and Boston.

Born in Winthrop, he graduated from Harvard University in 1942 and served in the Navy during World War II. He was associated with the brokerage firm of Estabrook & Company before joining his family's business, Fulham Brothers. In 1959, he became chief financial officer of Cleveland Pneumatic Tool Co. in Cleveland, Ohio.

In 1969, he was elected chairman and chief executive officer of Pneumo Corp., a diversified New York stock exchange company, with holdings in the aerospace defense industries and a major distributor of food and drugs in the Northeast. He retired from Pneumo Corp. in 1985 when the company was acquired by I.C. Industries.

Mr. Fulham was a WHOI Corporation member since 1981, and was

named an honorary corporation member when he turned 70.

He owned the Kennedy Butter and Eggs stores, Friend's Beans and LaTouraine Bickford Corp. He was a former director of the Wallace Murray Corp. and was a member of the corporations of Massachusetts General Hospital and served on the board of directors of Cape Cod Academy.

He was a member of the Oyster Harbors Club, the Clover Club of Boston and the Harvard Club of Cape Cod. He was also a Knight of Malta.

In addition to his wife, he is survived by two sons, John B. Fulham of Centerville and Gerard A. Fulham of Needham; four daughters, Trudy Sullivan of Centerville and Newton, Gerarda and Barbara Ann Fulham of Oyster Harbors and Maura Edmonds of Elberton, Va., a sister, Margaret Mullin of Osterville; two brothers, Thomas A. and John N. Fulham of Wellesley; and 11 grandchildren. He was the brother of the late Sister Ellen Vianney Fulham.

Housing available

The WHOI housing office has some good listings of year-round apartments and houses.

Call Mary Jane Tucci at x2389

Day care center offers services

The Woods Hole Daycare Cooperative wants to introduce its staff and facilities to families in the Woods Hole community. Located at 37 Memorial Circle, near both the Quissett campus and the Village, the Coop has been providing daycare programs since it was founded in 1980.

All staff members meet licensing requirements and take courses throughout the year to update their child care skills.

If you are looking into daycare for your child, ages 15 months through kindergarten, feel free to visit the Coop after September 4. For registration information, call Sandy Gifford, the lead teacher/director, at 548-9473.

Safety officer announces auto accident report

Safety Officer Eric Spencer announces that a recent report by the Bureau of Labor Statistics says automobile crashes are the number 1 cause of death and injury in the workplace. The report said almost 40 percent of

In 1989, 4,200 employees were killed and another 200,000 seriously injured in job-related auto accidents. The cost to U.S. employers is estimated to be over \$10 billion in direct expenses and \$15 billion per year in lost productivity.

seatbelt use is the best defense against fatal or crippling injury from a crash.

Based on these statistics, it is expected that OSHA will issue a new regulation that requires all employees to use seatbelts while driving or riding on the job.