





# MCZ newsletter

MUSEUM OF COMPARATIVE ZOOLOGY

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Philip J. Darlington, Jr.

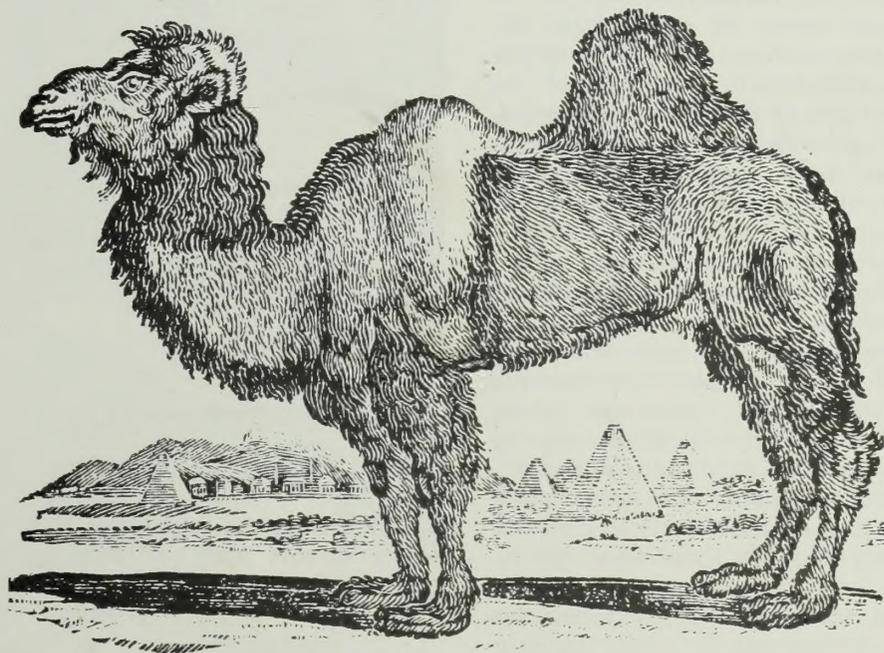
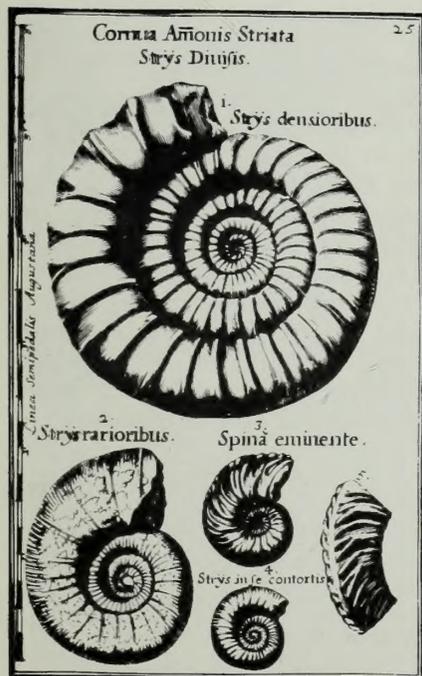
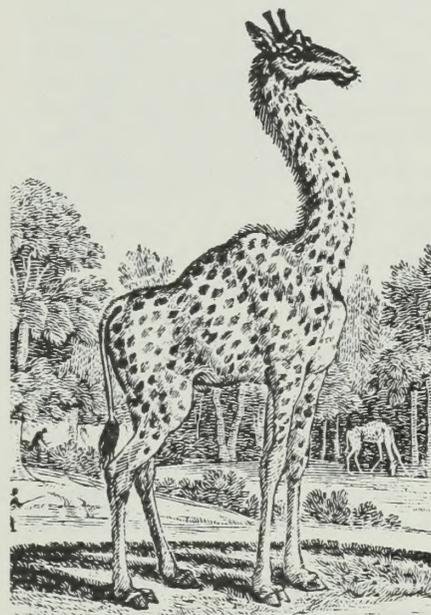
## MCZ LIBRARY UNDERGOES REJUVENATION

A three-year major reorganization of the MCZ Library is underway. The goals of the reorganization, as described in a proposal prepared by Librarian Eva Jonas and her staff, include pleasant, well-lit, quiet reading areas for study; improved bibliographic control over the collection (including the establishment of a subject catalog), and increased security and accommodation for the special collections.

Reconstruction of rooms will take place this summer; the Library will be closed to the public from

June 4 until September 14. Internal service will be provided throughout the summer as construction allows. The Romer Library will be open to staff and students for current journals, new books, and the most heavily-used reference books. Other projects, such as the reorganization of the serials in alphabetical order, will be completed by the end of 1981.

The new area will allow the Library to display, on a monthly basis, volumes from the special collections, from which the illustrations on this page are taken.



From Langius, C. N.: *Historia lapidum figuratorum Helvetiae ejusque viciniae*; 1708.

From Bewick, Thomas: *A general history of quadrupeds*; 1791.

## STAFF NOTICES

### Three Professors Receive Guggenheim Awards

Drs. Bert Holldobler, Richard C. Lewontin, and Karel F. Liem have received support from the John Simon Guggenheim Foundation for their sabbatical year research projects.

Dr. Holldobler plans to spend the next academic year at the Commonwealth Scientific and Industrial Research Organization (CSIRO) in Canberra, Australia where he will collaborate with entomologist Dr. R. W. Taylor on comparative studies of the behavioral organization of ant societies. According to Dr. Holldobler: "The institute in Canberra is excellently equipped for my analytical laboratory work and the ant fauna of Australia is overwhelmingly rich . . . Australia has a rich diversity of species of the taxonomically most primitive subfamilies *Ponerinae* and *Myrmeciinae*. In collaboration with Australian myrmecologists, I hope we can initiate a long ranging research program in order to learn more about the behavioral organization of these primitive social insects."

For the past two years, Dr. Lewontin has been engaged, with a small group of postdoctoral research fellows, in a study of the methodology of agricultural research and the forces that determine the direction of that research. The group, which, aside from population geneticist Lewontin includes an economist, an economic historian, a nutritionist, a developmental expert, an agricultural botanist, a sociologist, and an anthropologist, has been examining the nature of agricultural research in the United States and certain other countries in an attempt to understand how agricultural research influences the amount and kind of food available to different sectors of the population and the general well-being of both producers and consumers. During his sabbatical year, Dr. Lewontin plans to concentrate on several field

studies in connection with this comprehensive project and, in collaboration with his colleagues, analyze the reports of the other field teams and write a final analysis.

Dr. Liem is spending this year starting an ambitious project: he is writing a synthesis of the evolution of fishes by compiling, for the first time, the new discoveries in physiology, behavior, population genetics, and evolutionary patterns of fishes into a digestible account for both the student and the specialist. This work is being supported by Dr. Liem's second award from the Guggenheim Foundation, having received the first in 1970.

### Graduate students receive honors and awards

Several MCZ graduate students have recently been recognized for their past accomplishments and future potential:

**George Lauder** has been elected to the Society of Fellows as a Junior Fellow. He has also been appointed Assistant Professor of Anatomy at the University of Chicago.

**Gary Alpert, Joseph Levine, James Traniello and Kathleen Smith** have received National Science Foundation grants for improving predoctoral dissertation research.

**Dano Ono** has received the Raney Award from the American Society of Ichthyologists and Herpetologists for his study of the evolution of the fine structure of muscles in fishes.

### Professor Robert May, 1979 Prather Lecturer

Noted theoretical ecologist **Professor Robert May** of Princeton University delivered the Prather Lectures this Spring. His subject: "Living together: The dynamics of natural and managed ecosystems."

### Dr. David P. Crews Receives Sloan Fellowship

The Sloan Fellowships provide \$10,000 to support basic research for one year in physics, chemistry, mathematics, or neuroscience. **Dr. David P. Crews**, Assistant Professor of Biology, was one of this year's 78 recipients throughout the United States and Canada.

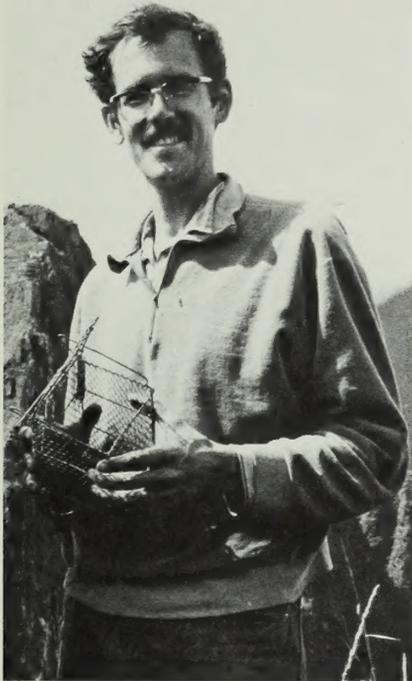
### Professor E. O. Wilson Receives National Recognition

It has been an eventful Spring for Dr. E. O. Wilson who not only received the Leidy Medal (awarded once every three years for outstanding work in biology, especially evolutionary studies), the Archie Carr Medal of the University of Florida (for work in natural history), and two honorary degrees (from Lawrence University and the University of West Florida) but also captured the Pulitzer Prize for his book, *On Human Nature*, which introduces the discipline of sociobiology to a literate general public. The resulting publicity has brought an avalanche of requests for speaking engagements, but Dr. Wilson has decided to resist. As he puts it: "For the first time in ten years I'm out from under the yoke of writing big books, and the promotion period for *On Human Nature* is mercifully over. I'm determined to get back fully into laboratory and theoretical work, and so I will be avoiding most outside commitments for the next year or two".

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## JOHN KIRSCH TO JOIN MAMMAL DEPARTMENT



Dr. John A. W. Kirsch, presently on the staff of the Peabody Museum of Natural History, Yale University, has been appointed Associate Professor of Biology/Associate Curator of Mammalogy in the MCZ. He will take up residence in September.

Dr. Kirsch received the Ph.D. degree from the University of Western Australia and pursued postdoctoral studies at the Universities of Kansas and Adelaide (South Australia). He has been an active member of the Yale faculty since 1971.

Dr. Kirsch's broad research interests include the theory of systematics; zoogeography, systematics, anatomy, behavior, and ecology of mammals, especially marsupials. His current work is on the systematics of New World marsupials and rodents and on numerical methods of analysis of the data of biochemical systematics. As he explains: "The continuing fascination of the taxonomy of southern hemisphere organisms lies in the possibilities it presents for the intergration of biological and geological informa-

tion in the reconstruction of Tertiary events." His field work takes him to both South America and Australia, where, this Spring, he is conducting a project on wombats.

## UNCOMMON SHREW



*This active African elephant shrew, *Elephantulus rufescens*, is currently living in the MCZ Labs and contributing to Dr. Uri Oron's studies on the energetic costs of locomotion.*

## BENJAMIN SHREVE BEGINS HIS FIFTIETH YEAR AT THE MCZ



Mr. Benjamin Shreve, who has a total of 60 new species of snakes, frogs, and lizards, mainly from South America, to his credit, did not start out in the Herpetology Department when he arrived at the MCZ in September of 1930. An avid amateur ornithologist, he was first employed by the Mammal Department. However, in the following year he joined Curator Arthur Loveridge and subsequently received thorough personal training in the science of reptile and amphibian identification. He has been there ever since and, according to the current curator, Professor Ernest E. Williams, "has been indispensable to the functioning of the Department. Mr. Shreve is immensely valuable in that he identifies so much of what comes in."

Still loyal to the birds, Mr. Shreve never neglects his daily bird walk, weather permitting, and frequently takes a bird census at lunchtime.

# HAWAII TRIP REPORT by Gabrielle Dundon



*Typical Hawaiian coastline.*

Photo by Catherine Nelson



*Downtown Honolulu.*

Photo by Austin Kibbee

A group of fourteen Friends of the MCZ, accompanied by guides Phillip Lobel (coral reef fishes), James Moore (whales) and myself, visited four Hawaiian Islands, including Hawaii ("the big island"), Maui, Kauai, and Oahu last February 17-March 5.

Highlights of the trip included hiking in Volcano National Park (where spirits were only slightly dampened by the worst rainstorm in half a century); snorkelling in the coral reefs off Kona (where the sun made a welcome reappearance); watching humpback whales off Lahaina on the island of Maui; welcoming the dawn at Haleakala crater and searching for a silversword in bloom; hiking in the mud at Kokee State Park on Kauai and learning to identify the endemic forest birds; and, finally, fighting the traffic for a fascinating visit to the Bishop Museum in Honolulu, unfortunately the fastest growing city in the United States, where the most pervasive smell is of fresh-poured concrete.

As we traveled from island to island, often escorted by local

biologists, we were repeatedly struck by the urgency of the need for strict conservation measures to preserve the great number of endangered endemic species. We learned early and often that the State of Hawaii has the largest number of endangered species of all the United States and it was easy to see why. The demands of immigration and tourism are destroying the natural habitats with frightening speed. Fortunately, the Nature Conservancy is taking action to preserve the most endangered areas. At present, a fund drive to expand the Kilauea Point Seabird Refuge on Kauai, where the red-footed boobies and waved albatross nest, is being mounted. Donations are being sought to raise the \$300,000 needed to buy the land ahead of the resort developers. Tax-deductible contributions may be sent to the Nature Conservancy in care of Dr. Steven Montgomery, University of Hawaii at Manoa, College of Tropical Agriculture, Department of Entomology, 2500 Dole Street, Honolulu, Hawaii 96822.



Photo by Eudoxia Woodward

*Fern. Kokee State Park.*



*Red-footed booby at Kilauea.*

Photo by James Moore

## AFRICA PREVIEW

The Friends of the MCZ Africa adventure (February 9-March 4, 1980) promises to be an unusual opportunity to see a variety of habitats. The itinerary includes a week in the Kenyan game parks, timed to coincide with the total eclipse of the sun on February 16, a week in Madagascar to observe lemurs and a variety of endemic birds, and eight days in Tanzania, climaxed by a final three days in a tented camp in the Serengeti where the annual migration of wildebeests and zebra should be in full swing.

Dr. Don W. Fawcett, James Stillman Professor of Comparative Anatomy, Harvard Medical School, will be the scientific guide for this African safari. Emily Hubbs Scott will also accompany the group. Complete information is now available (495-2463).



*On the itinerary for the MCZ African adventure.*

Photo by Don W. Fawcett

## EARLY SKULL FOUND

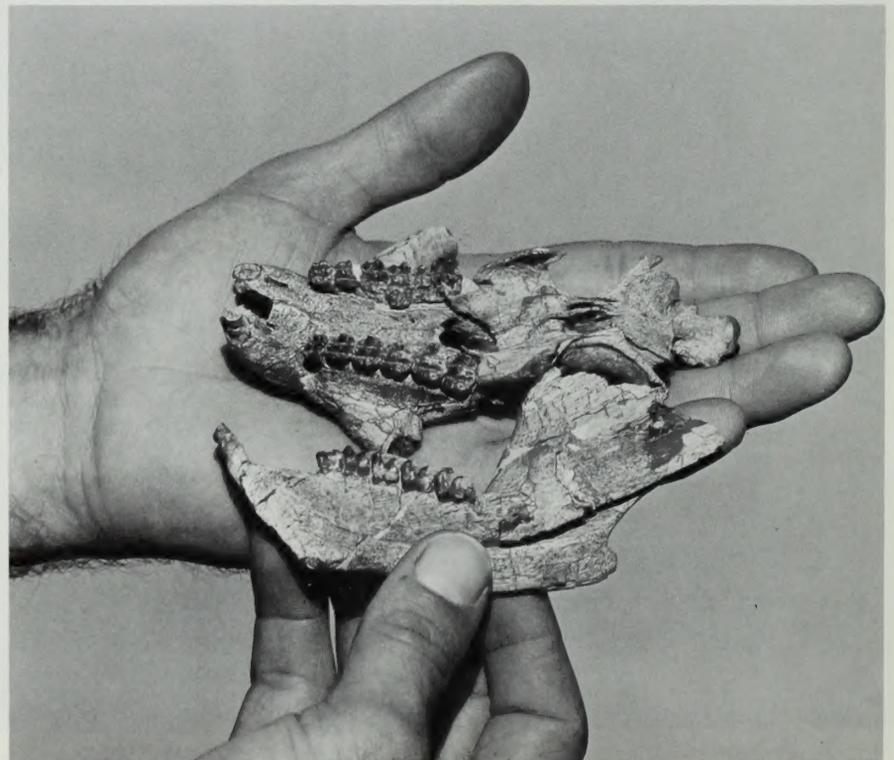
About 200 million years ago the dominant terrestrial animals were a group loosely referred to as the mammal-like reptiles. Most of these animals had become extinct 20 million years later except for two interesting and important survivors of this earlier radiation. These were the first mammals and a bizarre group known as the tritylodontids. The latter had a worldwide distribution. The photograph, showing the palatal view of the skull and inside view of the lower jaw, is of perhaps the best preserved tritylodont skull discovered so far. It was one of the many discoveries of tritylodonts found in the Kayenta Formation by Professor Farish A. Jenkins and his team during the expedition (supported by the National Science Foundation) last summer. The delicate task of separating the fossilized bone from the matrix was executed by preparator William Amaral.

The tritylodonts were too specialized to give rise to mammals but

they did evolve many mammalian characteristics in parallel with true mammals (which lived alongside them) such as double-rooted molariform teeth.

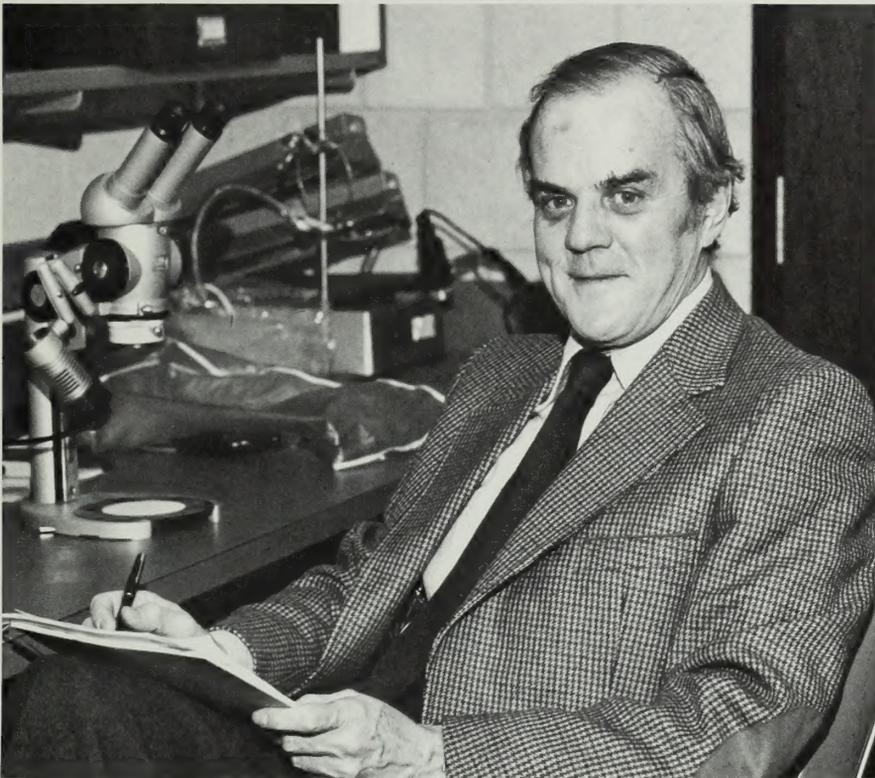
In addition to providing impor-

tant information on the structure of tritylodontids, the new collection will help towards an understanding of the biology of the mammal-like reptiles and the earliest mammals.



## VISITORS

### Dr. P. Humphry Greenwood



Dr. P. Humphry Greenwood, Senior Principal Scientific Officer at the British Museum (Natural History) has been teaching in Biology 130 (Biology of Fishes) this Spring while Professor Karel F. Liem is on sabbatical leave. Dr. Greenwood is also working jointly with Dr. Liem on an ongoing de-

scription of the phylogenetic relationship of cichlid and other perchlike fishes.

Dr. Greenwood, who is the President of the Linnaean Society of London, is currently attempting to organize the first meeting of this society in the United States.

### Dr. Geoffrey M. Maloiy



From the University of Nairobi, where he is Professor of Animal Physiology and Dean of the School of Veterinary Medicine, Dr. Geoffrey M. Maloiy has been lecturing jointly with Drs. C. Richard Taylor and Vaughan A. Langman on comparative physiology of African vertebrates this Spring.

Dr. Maloiy, who is a member of the Masai tribe and a graduate of the University of Aberdeen, is one of three members of the governing board of trustees which advises Kenya's Minister of Tourism and Wildlife. Together with Professors T. R. Odhiambo (Entomology) and R. J. Olembo (Botany), Dr. Maloiy

provides the scientific expertise necessary for the enlightened regulation of tourism to protect Africa's wildlife.

Differing from some popularly-held opinion, Dr. Maloiy does not think it is true that Africa's wild animals are dying out. "On the contrary", according to Dr. Maloiy, "the elephants and rhinos are coming back now that there is a total ban on hunting and the anti-poaching laws are being strictly enforced." Tourism, rather than contributing to the destruction of natural habitats, as is often asserted by conservationists, is actually increasing awareness of the necessity to protect the natural environment from encroaching civilization. The economic factor is a strong incentive since tourism is the second most important source of foreign currency (the first being the sale of agricultural crops).

Dr. Maloiy points out that not only are the animals in a reserve like Masai Mara protected inside the park, but the government is now giving permission for the establishment of tented camps only in areas which do not interfere with the animals' migratory routes.

When the Friends of the MCZ visit Kenya next February, Dr. Maloiy plans to meet the group at the Nairobi Airport to extend a special welcome on behalf of his country.

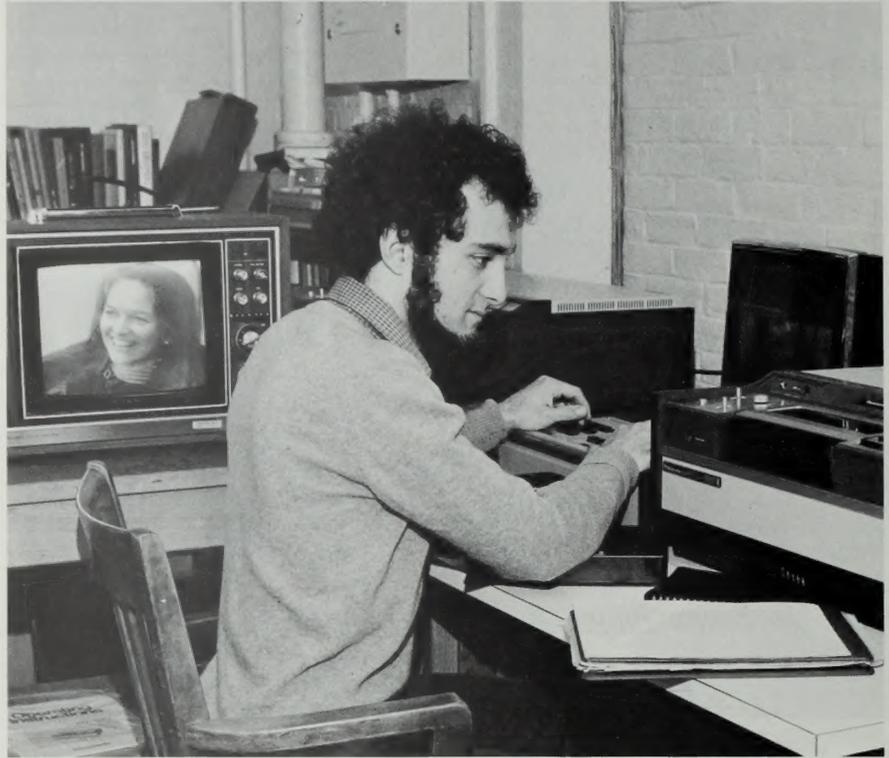
### SUMMER ILLUSTRATION COURSE OFFERED

Karen Stoutsenberger will again be teaching *Drawing from Nature with an Introduction to Scientific Illustration* from July 9 - August 3 on Monday, Wednesday and Friday mornings. Call 495-2463 to register.

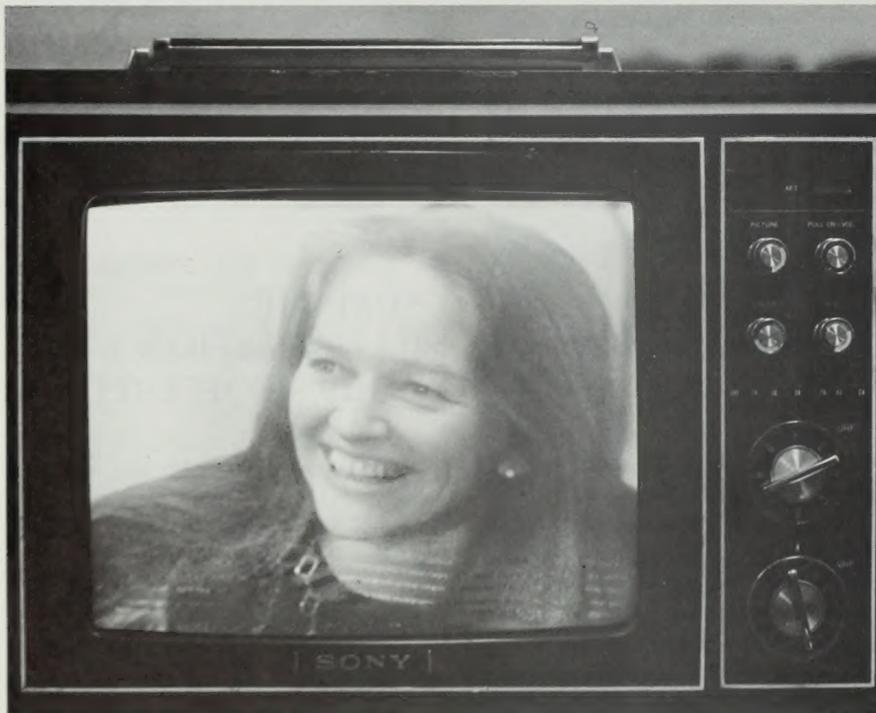
# MCZ PUBLIC PROGRAMS LAUNCHES VIDEOTAPE PROJECT

The MCZ Public Programs Department is now producing videotapes, thanks to the generosity of a loyal supporter. The donated equipment includes a black-and-white camera, monitor, and editing facility to produce 3/4-inch videotapes.

The first program, entitled *Kaki Aldrich: A Teacher and her Methods*, has just been completed by Robert Morris, who served as writer, cameraman, editor, producer, and director for the project. The subject, Kaki Aldrich, who also plans educational exhibits for the Children's Museum, has been training volunteer guides to conduct one-hour sessions with school groups visiting the Museum for the past two years. Her approach to the purpose and value of museum field trips is refreshing and will undoubtedly evoke discussion in museum education circles. The program will be used both as a training tool within the museum's



*Robert Morris at the controls of the museum's new videotape equipment.*



*Kaki Aldrich, a teacher of teachers, in a new videotape program on her educational philosophy.*

guide program and to publicize the program in the community. It will be on view at the Open House next fall.

Plans are underway to produce a series of videotape programs which would introduce the public to the research conducted in the MCZ's various departments. These programs, which would be on view in the public exhibition area, would add a lively dimension to the animal exhibits on display.

