

The
ACADEMY
NEWSLETTER



April 1989

April Members' Meetings
Frogs, Hormones And Paraguay
Wednesday, April 12 2:00 and 7:30 p.m.
Thursday, April 13 7:30 p.m.



In the heart of South America lies a vast, semi-arid region known as the Gran Chaco. Sparsely inhabited, this area encompasses most of Paraguay and part of northern Argentina. The bleak ecological terrain of the Gran Chaco contains a number of frog species that are of particular interest to scientists because of their unique ability to adapt to this harsh environment. Some of the frogs secrete waxy substances to make themselves waterproof while others form a dense cocoon that allows them to survive in a dormant state without water for 10 months at a time. On Wednesday, April 12 at 2:00 and 7:30 p.m. and April 13 at 7:30 p.m., Dr. Rodolfo Rubial will present "Frogs, Hormones and Paraguay." In his lecture Dr. Rubial

discusses the frogs' amazing physiological abilities as well as their potential to benefit humankind. The study of these unique amphibians has provided a surprising and dramatic contribution to scientists' understanding of hormones and neurotransmitters in mammals, including humans. Further study has revealed that the skin secretions of the frog *phyllomedusa* may provide chemical compounds that could be medically beneficial in scientific research and the treatment of disease. The Academy Store will be open before and after the April meetings. Next month, Dr. Robert Drewes of the Academy's Herpetology Department, will present "A Naturalist in the Land of Genghis Khan" on May 17 and 18.

**Planetarium
Concert**
April 18 8:00 p.m.



Kazusa Shimaoka

The Planetarium Concert series offers a unique and intimate setting for a wide range of musical events. This month, Kazusa Shimaoka will perform traditional Japanese music on the *koto* under the stars of the Morrison Planetarium on April 18 at 8:00 p.m.

Ms. Shimaoka began her studies at the age of seven in Japan. She received a Masters teaching credential from the Ikuta School in Chikushi-kai, Japan and later attended the University of San Francisco. In 1970, she opened the Chikushi Koto School in San Francisco and formed the San Francisco Koto Ensemble. Since 1969, Ms. Shimaoka has given numerous performances throughout California. In 1984, she performed at the National Theater of Mexico. Ms. Shimaoka currently teaches koto music at San Francisco State University.

Tickets are \$6 for members and \$8 for non-members. To purchase tickets, send a self-addressed, stamped envelope to the Morrison Planetarium, Golden Gate Park, San Francisco, CA 94118. For more information, call (415) 750-7129.

Traditional Arts in April

The Traditional Arts programs at the Academy bring the world to visitors by offering a wide range of presentations, featuring music, folk art and cooking from all over the world. The programs take place each Saturday in Wattis Hall, and are endowed by a gift from the Paul L. and Phyllis Wattis Foundation. All programs begin at 1:00 p.m.

April 1—Under the direction of Martha Espejo, Danzas Folkloricas del Peru perform regional Peruvian dances featuring an ancient Inca war dance - *valicha* - from the town of Cuzco, *marinera nortena* (from the north) and *marinera punuena*, from Puno's annual February carnival.

April 8—NO PROGRAM

April 15—Members of Bay Area Cambodian communities present a selection of dances in the royal classical ballet style.

April 22—Dalmacijo choral group sing a medley of folk songs from Yugoslavia, primarily in the Croatian dialect, accompanied by live instrumental music.

April 29—Robert Willhite demonstrates his clairvoyant abilities in interpreting runes—ancient Scandinavian symbols that predate Christianity and are used as a spiritual communication tool. Willhite will also discuss the history of these mystical signs and their secret powers.

Young Audiences



Jay Blakesberg

Banana Slug String Band

Funded by the McKesson Foundation, Young Audiences of the Bay Area, Inc., is proud to present a series of performing arts programs for children, taking place one Sunday every month through June in Wattis Hall of Human Cultures. On Sunday, April 26 at 1:00 p.m., The Banana Slug String Band performs. Zany characters like Mr. Dirt, Nature Man and a six-foot Banana Slug teach students about ecology through music and song in a wild mixture of science class, vaudeville and old-fashioned sing-alongs.

Gorilla Lecture Tapes



Michael S. Nichols

You saw the exhibit, bought the book and heard the lectures... now you can purchase tapes of all Gorilla lectures presented at the Academy. Tapes of the following are available for purchase by members:

“The Mountain Gorillas of Rwanda” with Dr. David Watts. This is a two-tape program of a presentation made to the Academy membership as a part of the Annual Lilienthal Distinguished Lecturer Series.

Also available is “The Lowland Gorillas of Nigeria,” a one-hour lecture in which Dr. Sandy Harcourt discusses the recent discovery of lowland gorillas in the northern reaches of Nigeria.

To purchase lecture tapes, fill in and send this form.

Gorilla Tapes Order Form

Name _____

Address _____

City _____ Zip _____

Daytime phone _____

Enclosed is a check payable to the California Academy of Sciences for:

_____ tapes of “The Mountain Gorillas of Rwanda”

\$8 for members, \$10 for non-members

_____ tapes of “The Lowland Gorillas of Nigeria”

\$5 for members, \$7 for non-members

Please send this form and your check to:

The Special Programs Office
California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118

For more information call
750-7217.

No refunds/No exchanges

Science Fair April 8-12

The 36th Annual San Francisco Bay Area Science Fair will be held at the California Academy of Sciences from April 8 through 12. The fair will display the winning science projects of junior and senior high school students who have developed original scientific experiments and worked them into project form. Each year the fair presents an impressive array of projects reflecting a high level of understanding of scientific problems and research processes. The winners will be honored at an awards ceremony on Saturday, April 8. Please note that in order to set up the Science Fair, African Safari, Wattis Hall and Wattis Gallery will be closed from April 4 until the opening on April 8.

Emerald Web in the Morrison Planetarium May 1, 2, and 3



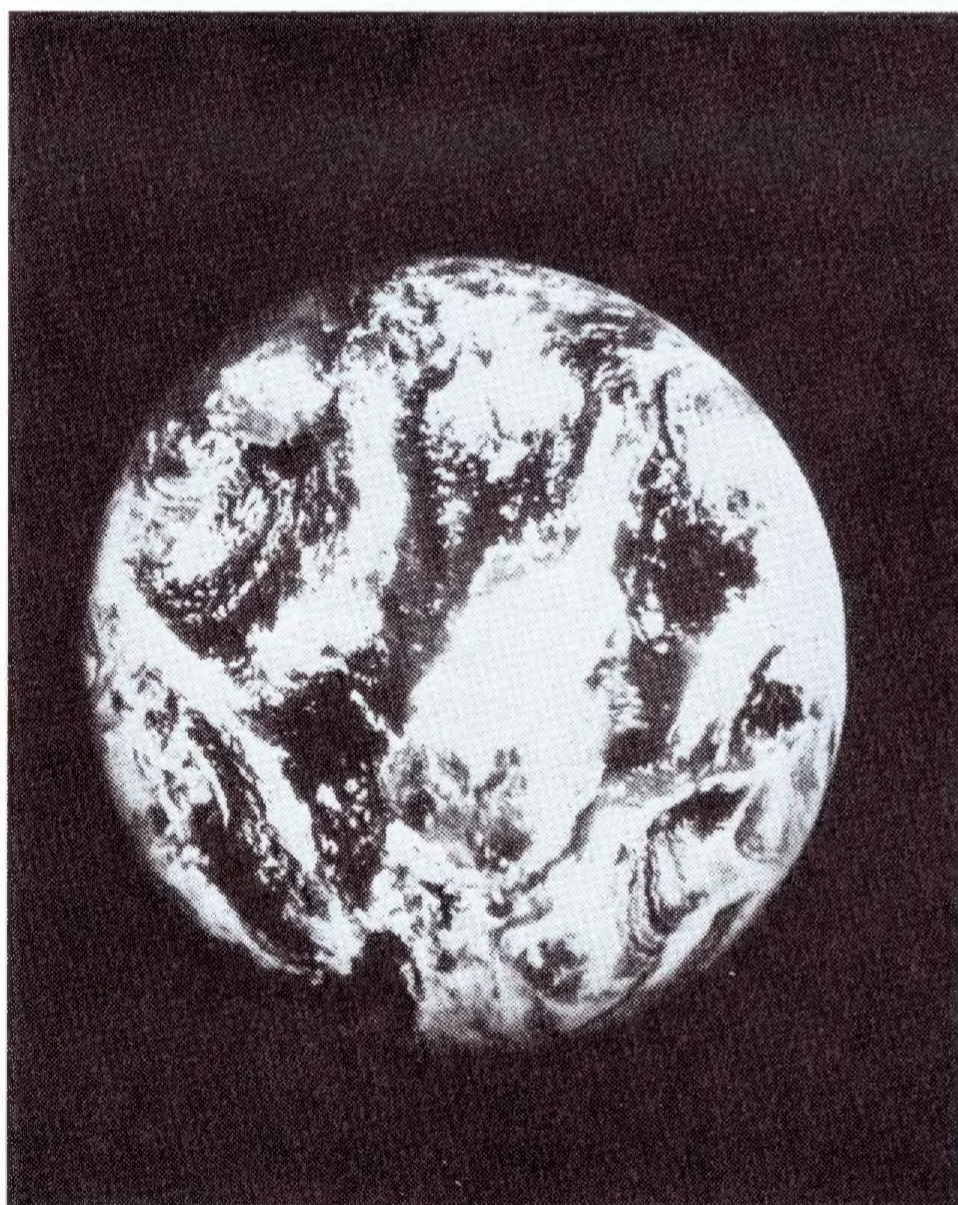
In an exciting return engagement, award winning Emerald Web presents a three evening concert series of space music in the Morrison Planetarium on May 1, 2, and

3 at 8:00 p.m. Bob Stohl and Kat Epple perform on flutes and synthesizers to create ethereal music perfectly suited to the unique star-filled environment of the planetarium. Laser effects, provided by Laserium, complement the music with gossamer veils of color and startling patterns of light. Included in the program will be selections from Emerald Web's latest release, "Traces of Time," as well as some of their more popular compositions from previous releases.

Admission is \$8 for members and \$10 for non-members. To purchase tickets, send a self-addressed, stamped envelope to the Morrison Planetarium, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118. For more information, call (415)750-7129.

Lecture

Ozone Depletion in Polar Atmospheres May 2 7:00 p.m.



Recently there has been major concern expressed by scientists and environmentalists over the rapid degeneration of the earth's ozone layer. Ozone is the natural shield that protects the earth from biologically destructive ultra-violet radiation, and its depletion will have serious global repercussions. In 1985, a hole in the ozone layer was discovered over the Antarctic

and in 1987, the Antarctic Ozone Expedition was formed to investigate. Dr. O. Brian Toon, a NASA Ames scientist and Academy Fellow, participated in the expedition, and will be at the Academy of Sciences on Tuesday, May 2 at 7:00 p.m., in the Morrison Auditorium. In this lecture presented by the Academy's Adult Education Department, Dr. Toon will discuss his flight through the hole in the Antarctic ozone and will share information about the 1989 Airborne Arctic Stratospheric Expedition based in Norway. Dr. Toon will discuss the theories concerning ozone depletion, how scientists are testing the theories, and the controversy surrounding this unfolding phenomenon. Tickets for this lecture are \$8 for members and \$10 for non-members. To purchase tickets, send a check and self-addressed, stamped envelope to the Adult Education Office, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118. For more information, call (415)750-7100.

Planetarium Concert Coming Soon to a Galaxy Near You April 11 & 12 7:00 p.m.



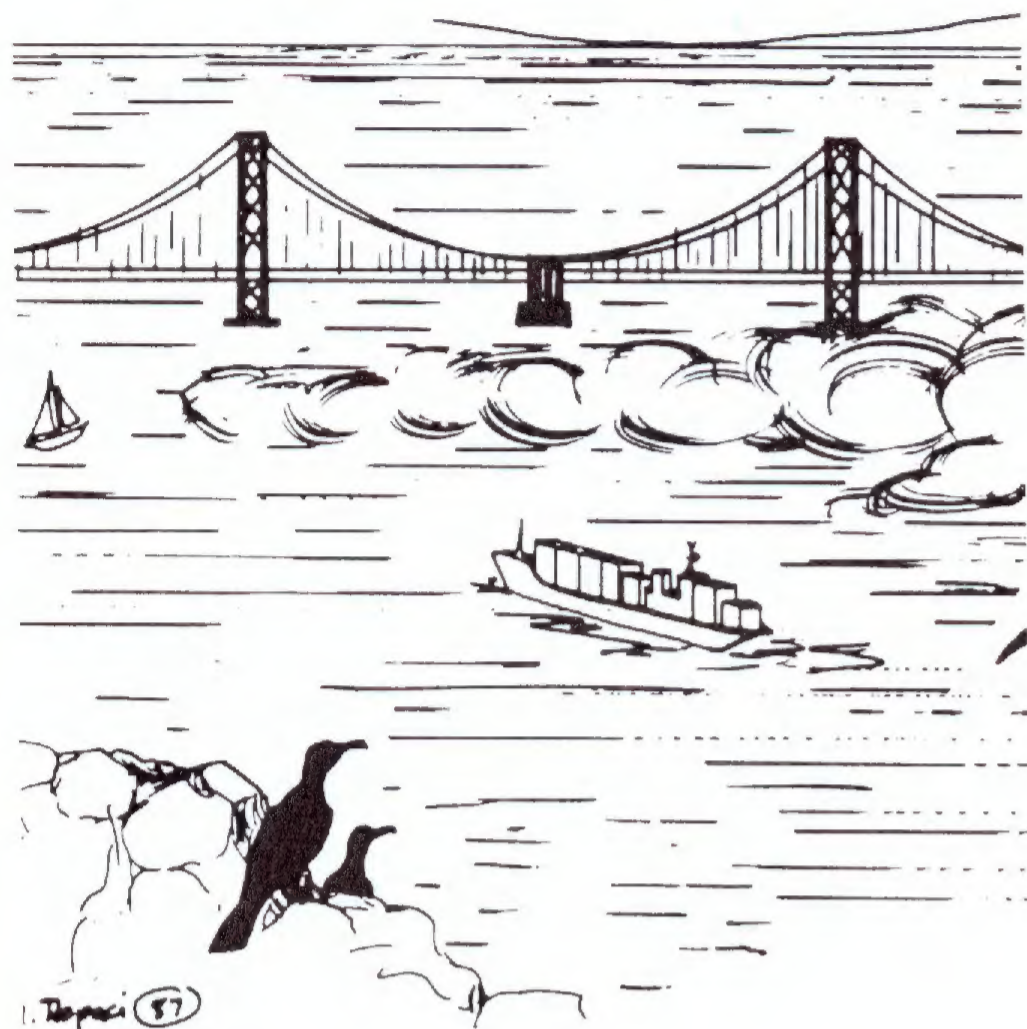
David Auerbach

David Auerbach, improvisational master of rare instruments, will present "Stellar Improvisations," an all-original program especially written for the excellent acoustics of the Morrison Planetarium on Tuesday, April 11 and Wednesday, April 12. The program begins at 7:00 p.m. with refreshments and wine tasting featuring Domaine Chandon Brut. At 8:00 p.m., sit back and experience the music of two dozen handmade instruments that span five continents and thousands of years. Included are winds, strings and percussion, dulcimers and harps, Asian and African instruments and exotic flutes and drums.

Tickets for this unique event are \$10 for members and \$12 for non-members. To purchase your tickets, send a self-addressed, stamped envelope to the Morrison Planetarium, Golden Gate Park, San Francisco, CA 94118. For more information, call (415) 750-7129.

State Of The Bay Conference

April 29



On Saturday, April 29, 1989, the State of the Bay Conference will be held at the Holiday Inn Hotel in San Francisco from 9:00 a.m. until 5:00 p.m. Sponsored by the Oceanic Society, San Francisco Bay Chapter, and co-sponsored in part by the Academy, this year's theme is "A Vision for the Future," and will focus upon the issues and concerns we face in relation to San Francisco Bay as we move into the 21st century.

Bay Area community leaders and decision makers from the environmental field, industry, trade, recreation and government will address several critical issues, including toxic waste. Participants will focus upon their goals, contributions and commitment to the future of the Bay and how their vision will be generated into reality. William Penn Mott, Director of the National Park Service, will be the keynote speaker. In addition to afternoon workshops, there will be an environmental award presented to the business or organization who made the greatest contribution to the Bay in 1988.

Tickets for the State of the Bay Conference are \$40 per person. Lunch is available for pre-registered participants and costs \$12. Pre-registration must be received no later than April 26. For registration information, please call (415) 441-5970.

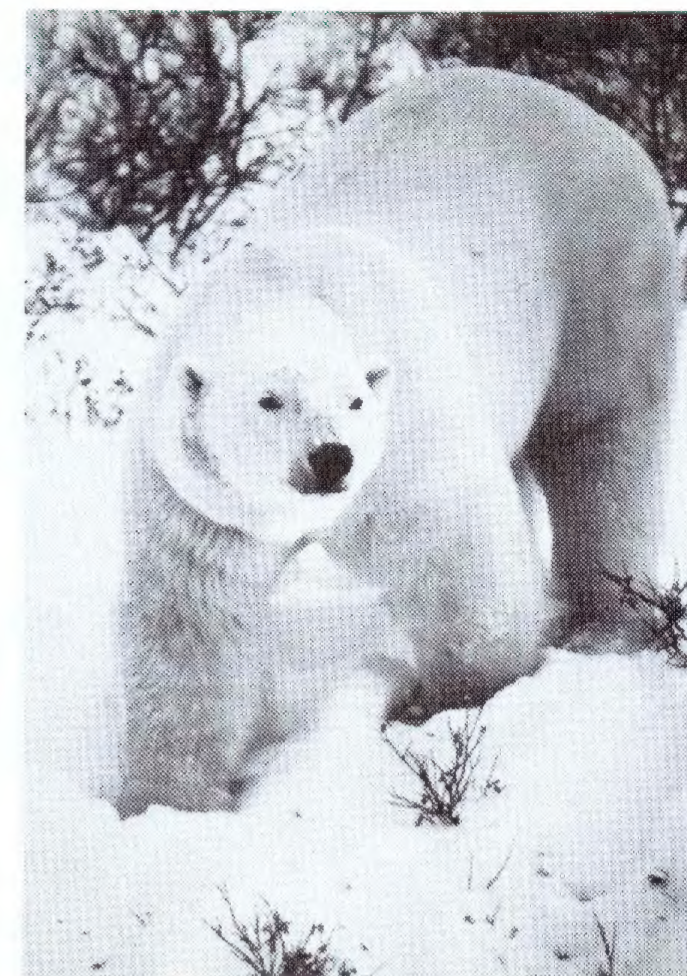
Academy Expedition Greenland and the Canadian Arctic

July 26-August 9

Greenland and the Arctic evoke images of forbidding cold and miles of icy desolation. During the summer months, however, these regions are transformed into a land of rich and stark beauty.

The wildlife-rich Canadian Arctic and the spectacular southwest coast of Greenland are our cruising destinations. Here, during the summer months, the ice pack loosens its grasp, and a flurry of breeding activity takes over. As we ply the icy waters under a mid-night sun, we search for ringed seals and walrus, narwhal, and a host of seabirds including kitt-wake, fulmar, and thick-billed murre.

Sponsored by the California Academy of Sciences from July 26-August 9, this exciting tour will be led by Dr. James C. Kelley, President of the California Academy of Sciences and Dean of Science and Engineering at San Francisco State University. Dr. Kelley is an oceanographer with



Bob Wilson

an extensive knowledge of the history of exploration of the oceans, particularly the high Arctic. The *World Discoverer* is uncommonly luxurious, offering comforts and amenities that contrast dramatically with the wild beauty of the regions we explore. Each cabin has an outside view and individual climate control. All this is complemented by an intimate ship-board atmosphere where friendships quickly develop. Depending upon choice of cabin, costs for the cruise range from \$3,951 to \$8,145 with an additional \$800 estimated air fare which is subject to change. For more information or to make reservations, call (415) 750-7222.

Explore the World on Academy Expeditions

Let an Academy scientist lead you to a foreign shore! The destination might be almost anywhere on the globe, and your leader will offer special insights to the world around you. Academy Expeditions in 1989 offer a busy schedule of wild and wonderful tours all over the world.

The Silk Road
April 30-May 24
Leader: Nancy Pickford

Mongolia and Siberia
June 8-July 1 Filled -
Waiting list only

Foods of France
June 17-July 2
Leader: Narsai David

*Greenland and the
Canadian Arctic*
July 26-August 9
Leader: Dr. James Kelley

Canada: Prairies and Peaks
August 2-13
Leader: Jacques Gauthier

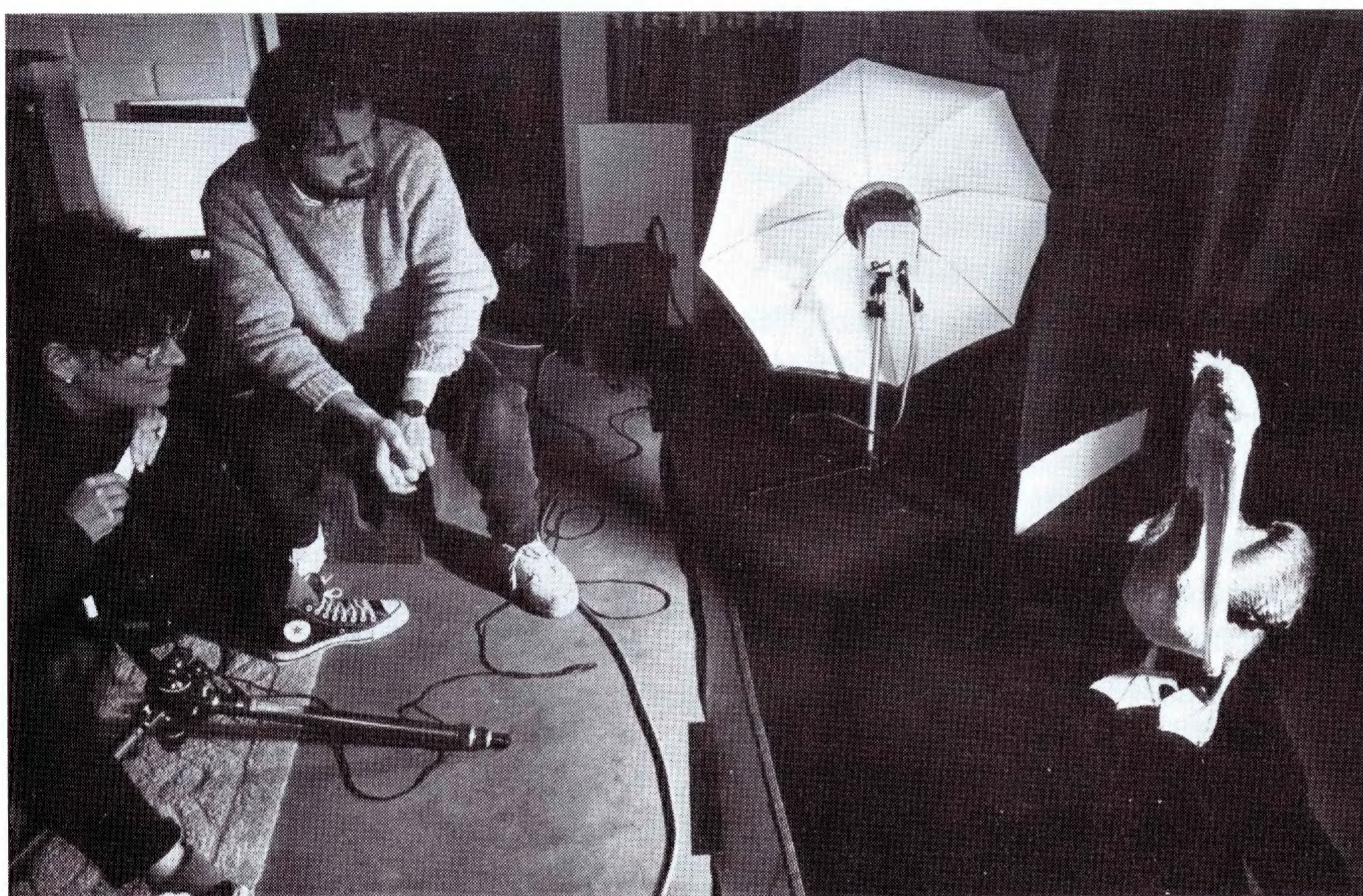
*Exploring Alaska's
Coastal Wilderness*
August 2-12
Leader: Dr. David Kavanaugh

*Caravans of Central Asia:
Samarkind, Tashkent, Bukhara*
September 9-22

*New Zealand, Tasmania,
and Australia*
September 27-October 17
Leader: Dr. Frank Talbot

For information on Academy expeditions, call the Academy's Travel Office at (415)750-7222.

Free First Wednesday—April 5



Kelly Cash

Susan Middleton and her assistant, David Liittschwager, photograph a brown Pelican.

The tenuous existence of California's wildlife and habitat is the focus of this popular monthly event. Beginning at 7:30 p.m., Susan Middleton, Chair of the Academy's photography department will share her experiences photographing endangered California wildlife for her exhibit, "Sliding Toward Extinction: The Vanishing Wildlife of California." This exhibit, which runs through May 21, is co-sponsored by the California Academy of Sciences and the California Nature Conservancy. To make an already popular event more special, the Academy has extended its evening hours to 8:45 p.m. and offers extra events and performances for your enjoyment.

Start your evening at the

Waterhole Bar with live music by classical guitarist Dan Maya in African Hall beginning at 5:00 p.m. Surprises await new visitors and "regulars" alike in a highlight tour of the Academy. Covering the major features of the Academy's permanent and special exhibit halls, this guided docent tour is approximately one hour in length and begins in Cowell Hall at 6:30 p.m. For those of you in the mood for a more musical evening, there will be a special presentation at 8:00 p.m. in the Morrison Planetarium. Experience less-familiar recorded symphonic works along with a few familiar favorites under the celestial skies and unparalleled acoustics of the Planetarium dome.

New Academy Benefactors

Benefactors of the Academy are individuals, corporations and foundations whose cumulative giving has exceeded \$50,000. We are pleased to thank these five new Benefactors and add their names to our permanent Benefactor plaque located to the left of

Wild California as you enter from Cowell Hall.

Mrs. Betsy Rietz Dingwell
Food Technology Foundation
Mr. William Fries II
Mr. and Mrs. Roderick Jones
Mr. and Mrs. Paul Wythes

The Eastwood Associates

A Planned Gift Program is now available for Academy Members. While planned giving as a means of estate planning is a relatively new and increasingly popular form of philanthropy, the Academy has a long tradition of estate gifts. These gifts, have created the Steinhart Aquarium, Wattis Hall of Human Cultures, and established the Junior Academy—in addition to creating a perpetual Endowment Fund. The Academy will recognize donors of planned gifts at the time they make their commitment through membership in the Eastwood Associates. Jeffery Meyer, Chairman of the Board of Trustees, commented, "This program has been designed to make it easier for Academy Members to take advantage of the income and tax benefits of planned gifts and make a lasting gift to the Academy. You don't have to be rich to contribute to the heritage of the Academy, and you can preserve an income for life at the same time."

For information about the planned gift program, wills, or Eastwood membership, please contact the Development Office at 750-7216 or use the coupon below.

TO: The Eastwood Associates
California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118

FROM:

Name

Address

Phone Number

- Please send me membership information in the Eastwood Associates.
- I have already provided for the Academy through my will or other estate plan.
- I would like information regarding the benefits of planned giving.

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April at the Academy

Continuing exhibitions:

- “Sliding Toward Extinction: The Vanishing Wildlife of California” through May 21.
- “Gorilla” through April 30
- “Pedro Gonzalez: Wildlife Illustrations” through June 18
- Great White Shark in the Steinhart Aquarium

- 1 Traditional Arts—Peruvian dance, 1:00 p.m.
- 8 Science Fair opens
- 11 Planetarium Concert, 7:00 p.m.
- 12 Planetarium Concert, 7:00 p.m.
- 12 Members’ Meeting “Frogs, Hormones and Paraguay,” 2:00 and 7:30 p.m.
- 12 Science Fair closes
- 13 Members’ Meeting, 7:30 p.m.
- 15 Traditional Arts—Cambodian dance, 1:00 p.m.
- 22 Traditional Arts—Yugoslavian folk music
- 26 Young Audiences—Banana Slug Band, 1:00 p.m.
- 29 Traditional Arts—Ancient Scandinavian symbols
- 29 State of the Bay Conference

Springtime at the Academy Store!



David Gabriel

Choose from a variety of shake & scatter seed kits for your garden, including “Saladini,” a new seed mixture of unusual garden salad ingredients. Also available are: Native American Wildflowers, Cutting Garden, Songbird Meadow, and more. Then bring the springtime indoors with one of a stunning collection of Redonte Botanical Prints now available at the Academy Store.

Looking Ahead to May

- 1, 2 and 3 Planetarium Concert—Emerald Web
- 2 Lecture—Ozone Depletion in Polar Atmospheres
- 6, 13, 20 and 27 Traditional Arts—Festival of Cambodian Cuisine
- 17 and 18 Members’ Meetings—A Naturalist in the Land of Genghis Khan