The ACADEMY California Academy of Sciences NEWSLETTER February 1990

Members' Meetings

"In Search of Beetles in 'The Land of the Unexpected': Papua New Guinea"

Wednesday, February 14 2:00 & 7:30 p.m. Thursday, February 15 7:30 p.m.

The verdant forests and high mountains of Papua New Guinea provide the optimal environment for more than 700 species of carabid, or ground beetles. Collecting and identifying specimens of individual ground beetle species is an essential part of biotic inventory research, according to Dr. David Kavanaugh, Curator of Entomology, who studies some of the more than 40,000 species in the family Carabidae. Last spring, Dr. Kavanaugh and two other entomologists—Dr. Norman Penny, Collection Manager of the Academy's Entomology Department and Academy Fellow Dr. George Ball of the University of Alberta spent two months slogging through swamps, hacking through tropical rainforests and scaling the peaks of the four mountain ranges of Madang Province. With fellowships from the Christensen Research Institute, these intrepid scientists traveled by plane, helicopter and on foot to remote areas to inventory the ground beetles indigenous to that province. Travel to these areas required the approval of native villagers and their assistance as guides and field assistants. Communication with villagers was somewhat complicated by language and cultural differences. There are 750 separate and distinct language groups in New Guinea. To facilitate communication among the islanders, three national languages are recognized,



Dr. George Ball climbing in the alpine zone, Finisterre Range

including the most widely spoken dialect, Pidgin. Unfortunately, for research purposes, there is no word in Pidgin for beetle. In addition, Dr. Kavanaugh learned that the native people make no distinction between different kinds of insects, instead lumping beetles, spiders, worms and other creatures into one group, calling them *lik* lik banang, or "little animals." This meant that it was necessary to employ other, more creative means by which to communicate objectives and instructions to native hosts, guides and collectors.

Join Dr. Kavanaugh on Wednesday, February 14 and again on Thursday, February 15 when he presents a lecture and slide show highlighting this extraordinary adventure, "In Search of Beetles in 'The Land of the Unexpected': Papua New Guinea."

The Academy Store will be open before and after the February evening meetings.

The Vanishing Desert March 3 – June 2



Desert Hare

One of the largest unbroken sections of wilderness remaining in the continental United States, the California Desert, is in peril. A new exhibit at the Academy describes the beauty and natural diversity of the desert with the hope of inspiring greater social consciousness of this fragile ecosystem. The exhibit features photomurals of the unique desert archipelago systems (such as dunes, playas, springs and mountains) and graphic panels that depict escalating human impacts on the desert environment. Low-impact desert use and beneficial effects of restoration and protection efforts are emphasized. Interactive displays, the Desert at Night and Lowland Desert, feature slide-up panels that reveal hidden desert inhabitants typically camouflaged or nocturnal. The Vanishing Desert will be on display in the Academy's Hohfeld Hall from March 3 to June 2. For more information on the exhibit, please call 750-7142.



Desert Bighorn Sheep

Lecture

Star Wars and Maya Merchants at Cacaxtla

Monday, February 12 7:30 p.m.

Since their discovery in 1975, the spectacular pre-Columbian murals of Cacaxtla have been found to rival the world-famous Maya "Bonampak" murals both in state of preservation and importance. Dating to the Epiclassic Period after the fall of Teotihuacan, these murals exhibit a unique mixture of motifs and styles reflecting influences from Teotihuacan, Oaxaca, Xochicalco, the Gulf Coast, and most significantly, the Maya area. Central themes involve the association of warfare and blood sacrifice with rain and fertility. During 1987 and 1988, brilliant new murals were discovered at Cacaxtla in two locations south of the "Plaza Norte." On Monday, February 12, John B. Carlson, Director of the Center for Archaeoastronomy will give a presentation about these recently-discovered murals in Cacaxtla, Mexico. This lecture



will be a preview of an article about these recent discoveries that will appear in the March edition of National Geographic Magazine.

Tickets for this lecture are \$3 for members and \$5 for non-members. To order tickets, please use the convenient order form. For more information, call (415)750-7217.

TICKET ORDER FORM

Star Wars & Maya Merchants at Cacaxtla

Name
Address
City Zip
Daytime phone
Enclosed is a check payable to the California Academy of Sciences for
member tickets at \$3
guest tickets at \$5
Please send this form, your check and a self-addressed, stamped

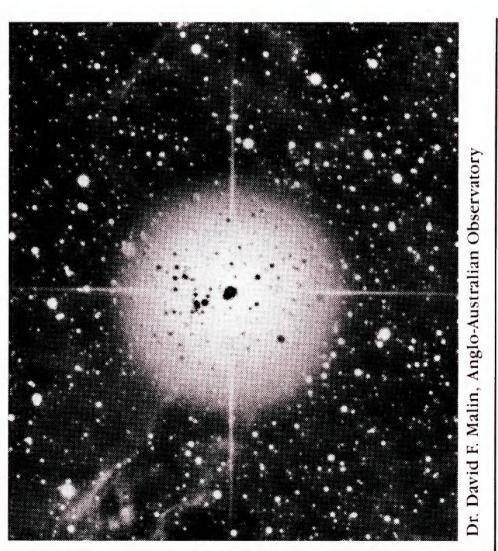
envelope to:

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

No refunds/No exchanges

Lecture

Supernova 1987A: Cosmic Fireworks Tuesday, February 13 7:30 p.m.



SN 1987A and its precursor

Supernovae - exploding stars - are the most energetic phenomena known, aside from the creation of the universe itself. On February 23, 1987, light from a supernova in

the Large Magellanic Cloud reached the Earth. This supernova, named SN 1987A, was the brightest one in nearly 400 years and had a monumental impact upon the modern study of supernovae.

On February 13, Morrison Planetarium's "Exploring the Universe" series presents Dr. Alex Filippenko, Associate Professor, Department of Astronomy, U.C. Berkeley, who will describe the ways in which SN 1987A differed from other supernovae and will show what we have learned from it during the past three years.

Future presentations in the series are:

March 6 — "Stellar Graveyards: The Death of Stars," with Dr. Susan Lea;

April 3 — "A New Generation of Space Exploration: Into the 21st Century," with Charles E. Kohlhase;

May 8 — "From Antarctica to Mars: The Quest for Life," with Dr. Chris McKay.

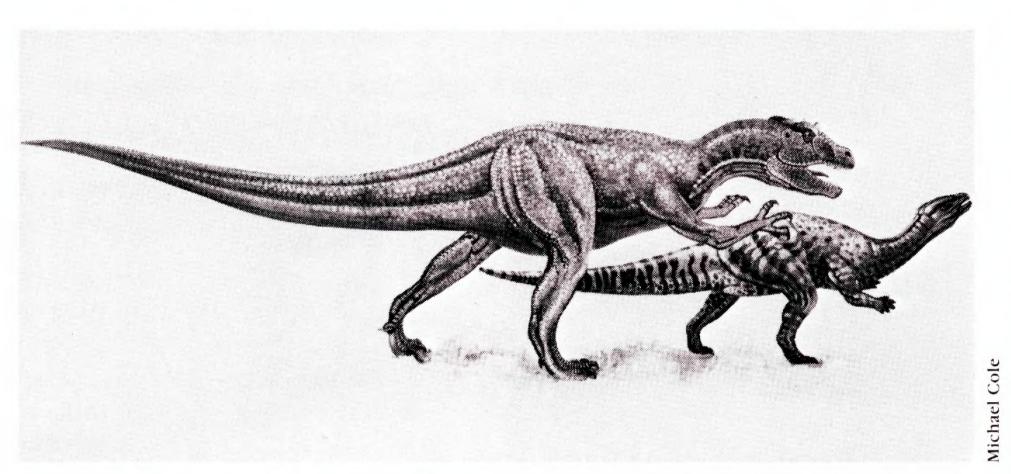
This free series is made possible through the generosity of the Benjamin D. Dean Endowment Fund. All programs take place in the Morrison Planetarium and begin at 7:30 p.m. Free tickets may be obtained by sending a self-addressed, stamped envelope to "The Universe," Morrison Planetarium, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118.

For more information on ticket availability, call the "Universe" line at (415)750-7129.

Lecture

The California Academy of Sciences proudly presents The Claire Matzger Lilienthal Distinguished Lecturer Series—Dr. Jack R. Horner "Dinosaur Behavior and Growth"

Wednesday, March 28, 1990 7:30 p.m.



Allosaurus chasing down a Camptosaurus in a scene we would have witnessed 140 million years ago.

Dr. Jack Horner, Curator of Paleontology at the Museum of the Rockies, is renowned as an authority on dinosaur behavior. As this year's Lilienthal Lecturer, Dr. Horner will share his knowledge of "Dinosaur Behavior and Growth," explaining how paleontologists interpret fossils in regard to dinosaur behavior. He will also be discussing dinosaur nests, eggs and young; the growth rate of dinosaurs; retard growth and what it means behavioristically. Dr. Horner

has been a research assistant at Princeton University, a museum scientist at the American Museum of Natural History in New York and is currently an Assistant Professor of Geology at Montana State University. He was awarded an Honorary Doctorate of Science from the University of Montana in 1986. To order tickets, please use the convenient order form below. For more information, call (415)750-7217.

Ticket Order Form — Lilienthal Lecture, March 28

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Address	
City	Zip
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Enclosed is a che California Academ	ck payable to the ny of Sciences for:
mem	ber tickets at \$4

guest tickets at \$5

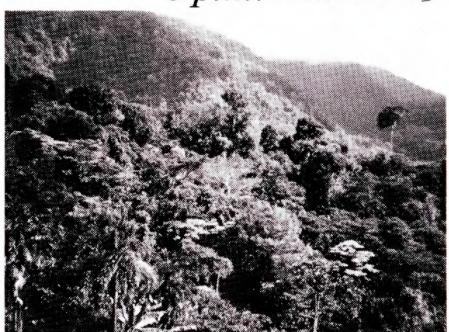
Please send this form, your check and a <u>self-addressed</u>, stamped envelope to: Lilienthal Lecture

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

No refunds/No exchanges

The New Look of Amazone

6 p.m.- March 15



Hermès of Paris, The Rainforest Alliance and the California Academy of Sciences request the pleasure of your company to help us celebrate the new look of Amazone from Hermès Perfums on Thursday, March the fifteenth from 6 to 8 p.m. at the Academy. Champagne and hors d'oeuvres from the bounty of the rainforest will be served. For reservations please send a check payable to the California Academy of Sciences for \$75 per person to Ida Brown & Associates, 2110 Leavenworth Street, San Francisco, CA 94133. No tickets will be issued, reservations will be held at the door. Proceeds from this special evening will benefit The Rainforest Alliance and the Academy. For further information please call Ida Brown at (415)673-2201.



Young Audiences

Sunday, February 25 1:00 p.m.

With major funding from the McKesson Foundation and Grants for the Arts, Young Audiences presents an exciting series of performing arts programs for children, taking place one Sunday each month in Wattis Hall of Human Cultures. Lots of laughs and creative participation are in store as talented musician Gary Lapow dazzles children with his unique compositions. For more information, call (415)750-7142.

Travel the World in 1990 on Academy Expeditions

Visit exotic places, taste ethnic foods and experience other cultures on Academy tours. Our travelers enjoy exciting, fun-filled days in locations all over the world learning about the inspiring world of nature from our lecturers. Here are this year's offerings:

Baja California March 4-11 Lecturer: Dr. Jim Kelley

Springtime Gardens of England May 9-26 Lecturer: Dr. Dennis Breedlove

Indonesia: Secret Islands
East of Bali
June 3-20
Lecturers: Dr. John McCosker and
Dr. Stephen Jay Gould

Treasures of Pre-Columbian Mexico June 26-July 10 Lecturer: Dr. John B. Carlson

In the Wake of the Vikings: Bergen to Reykjavik July 26-August 10

Alaska and the Queen Charlotte Islands September 9-23 Lecturer: Dr. David Kavanaugh

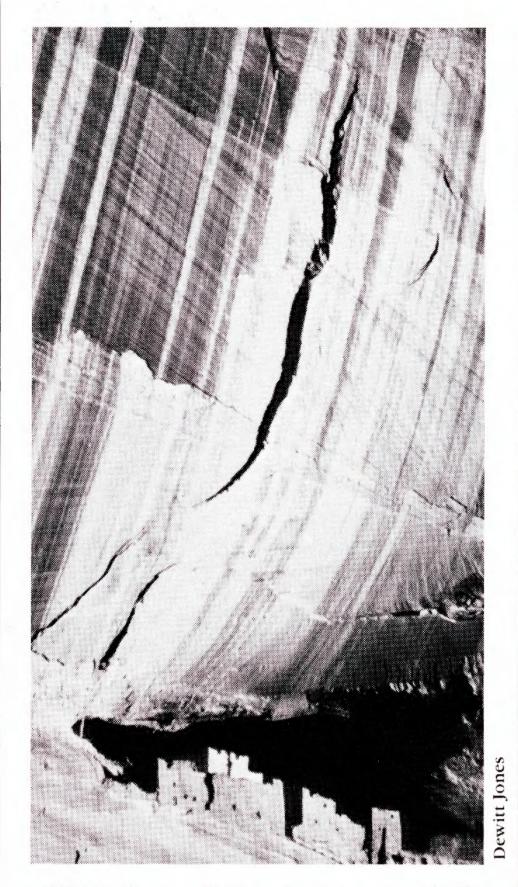
Fall in Vermont September

Pakistan and India September 23-October 17 Lecturer: Nancy Pickford

Brazil and Argentina November

For more information about these exciting expeditions, call the Academy's Travel Office at (415)750-7222.

Visit the Canyons of the Ancient Southwest



White House Ruin, Canyon de Chelly

In a very special part of the American Southwest, nature has sculpted hundreds of palatial alcoves beneath massive cliffs and carved rugged, lonely and barren landscapes. More than a thousand years ago, the ancient Anasazi tamed and farmed the canyons, building their dwellings under the overhanging cliffs and their massive villages against a backdrop of sandstone walls. Two of the most scenic and important canyon systems are the destination of the Academy's Adult Education trips this spring. Dr. Linda Cordell will accompany other scholars in leading a six-day trip to Canyon de Chelly. Dr. R. Gwinn Vivian, of the Arizona State Museum, will head another five-day tour to Chaco Canyon and spectacular Chacoan outlying sites. The two trips are sequential so that Academy members can participate in one or both.

The well-known archaeological sites of Canyon de Chelly have names that echo their mystery and beauty: Mummy Cave, Antelope

House, White House Ruin, Massacre Cave. The canyon is the site of more than a hundred ancient villages that were occupied by the Anasazi between A.D. 350 and 1400. We will discover ruined villages, fields and the artistic legacy in dozens of rock art panels. Astronomical expert Von Del Chamberlain will help us explore the ancient star ceilings of the cliff dwellers. Four hundred years after the Anasazi left the rugged Canyon de Chelly, Navajo people moved into the canyon to farm and graze their sheep. Like the Anasazi, they inscribed and painted their vision on sandstone walls. We will learn the Navajo history of the canyon from Harry Walters of the Navajo Community College at Tsaille, Arizona and from our Navajo host, David Wilson.

Chaco Canyon was also occupied by the Anasazi before 1300. On a dry and barren plain, they built some of the most impressive stone villages of ancient America. Walls up to four or five stories high, great ceremonial rooms and majestic plazas are the hallmarks of the sites we call Pueblo Bonito, Chetro Keti, Pueblo del Arroyo and others. Archaeologist R. Gwinn Vivian, one of the most knowledgeable of Chaco scholars, has devoted much of the past 20 years to understanding the remnants of these once vibrant Anasazi communities. On this tour, Dr. Vivian will enhance our understanding of Chaco by exploring the ruins of the outlying villages that are tied to Chaco by ancient roads and similarities in material culture remains.

Canyon de Chelly
June 2-8
Price \$595 (does not include airfare)

Chaco Canyon
June 9-13
Price \$545 (does not include airfare)

For more information about these tours, please call (415)750-7098.

Traditional Arts for February

Travel the world and experience other cultures without leaving home! Traditional Arts programs introduce visitors to the far corners of the world every Saturday at 1:00 p.m. in Wattis Hall of Human Cultures. These programs are made possible through a generous gift from the Paul L. and Phyllis Wattis Foundation. For more information, call (415)750-7142.

February 3—Sally Gati will show her film, "Indian Actors' Workshop," followed by a discussion with Michael Smith, member of the Lakota tribe and Director of the American Indian Film Festival.

February 10—Sarah Douglas demonstrates the skills of English smocking—embroidery techniques originally used to embellish the protective clothing of farm workers. (The programs listed above were rescheduled due to the October earthquake.)

February 17—The Chinese New Year festivities, which started January 27, last for two weeks—one day for each of the zodiac animals. Bryant Fong and the San Francisco Wushu Troupe celebrate the Year of the Horse with a Lion Dance performance accompanied by drums, cymbals, and gongs.

February 24—The Westwind Folk Ensemble returns to the Academy with a dance selection from their newest repertoire. Focusing on regional American dance, the program includes the New England whalers' hornpipe with a capella sea shanties, dances from the Kentucky Appalachians and the Texas Plains, Cajun Mardi Gras rituals from Louisiana, and contemporary square dance.



Lecture

Lyme Disease: An Old Plague in California?

Wednesday, February 28 7:30 p.m.



tobert S. Lane

The Western Fence Lizard, important bost of immature Western Black-Legged Ticks

Lyme disease is caused by a spirochete, a type of helical bacterium that is currently the most commonly reported infectious disease among those that are transmitted to people by ticks (or other insects) in California and throughout the United States. Recent circumstantial evidence suggests that the disease may have been present in California long before human cases were first recognized.

On Wednesday, February 28, Dr. Robert S. Lane, an Associate Professor of Entomology at the University of California at Berkeley and an Academy Fellow, will present a lecture about Lyme Disease. Dr. Lane has spent 19 years studying pestiferous insects and

ticks and several disease agents transmitted by them to humans. In his lecture, Dr. Lane will focus on Lyme disease in this state—where it occurs, how it is maintained in nature and how it may be contracted, diagnosed, treated and prevented. He will also discuss some of his principal research findings concerning the relationship of ticks and their vertebrate hosts, bacteria and environmental factors.

Tickets for this lecture are \$3 for members and \$5 for non-members. To order tickets, please use the convenient ticket order form below. For more information, call (415)750-7217.

Ticket Order Form — Lyme Disease: An Old Plague in California?

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Address	
City	Zip
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men	nber tickets at \$3

guest tickets at \$5

Please send this form, your check and a <u>self-addressed</u>, stamped <u>envelope</u> to:

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

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0015-177(514) San Francisco, California 94118-4599 Golden Gate Park



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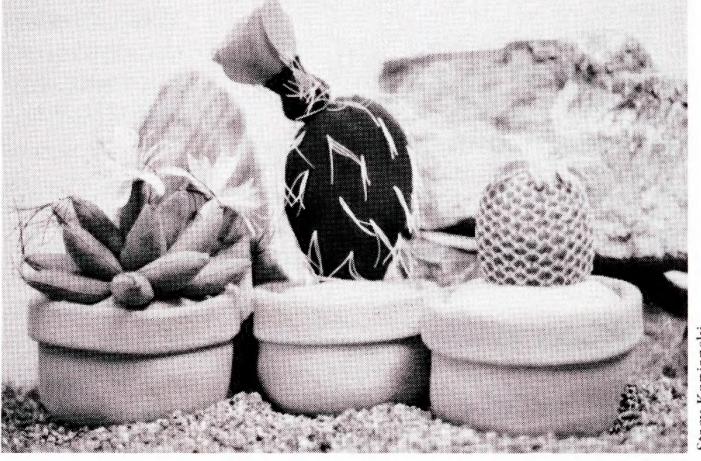
At the Academy in February

- 1 Lecture: Gender and Age Roles in Ladakh, 7:30 p.m.
- Traditional Arts—Native American Film, 1:00 p.m.
- 10 Traditional Arts—English Smocking, 1:00 p.m.
- 12 Lecture: "Star Wars & Maya Merchants," 7:30 p.m.
- 13 Lecture: "Supernova 1987A: Cosmic Fireworks," 7:30 p.m.
- 14 Members' Meeting, "In Search of Beetles," 2:00 and 7:30 p.m.
- 15 Members' Meeting, 7:30 p.m.
- 17 Traditional Arts—Chinese New Year Festivities, 1:00 p.m.
- 24 Traditional Arts—Westwind Folk Ensemble, 1:00 p.m.
- 25 Young Audiences—Gary Lapow, 1:00 p.m.
- 28 Lecture: "Lyme Disease" 7:30 p.m.

Coming Up In March

- 3 New Exhibit, Vanishing Deserts Opens
- 3 Bounty of the Bay, 9:00 a.m.

Spine-Tingling Fabric Flora from the Academy Store



This month, add a fanciful specimen from the desert Southwest to your interior landscape. Artist Jean Davis of Albuquerque, New Mexico, creates these potted cloth cacti to wear as pins or as large, free-standing decorative plants. Each soft sculpture is modeled after a distinct cactus species and signed by the artist. Celebrate the Southwest with a cactus that never needs water, is not prickly and is always in bloom.