

## April Meetings

### Dates & Times

Matinee, 2:30 p.m., Wednesday  
April 8, 1981

Evenings, 8:00 p.m., Wednesday and  
Thursday, April 8 and 9, 1981

### Place

May Treat Morrison Auditorium

### Speaker

Dr. Bruce Bolt

### Subject

"What Will Happen in the Next 1906  
Earthquake?"

April is the 75th anniversary of the great earthquake that devastated the city of San Francisco in 1906. Most of the damage was done when a fierce fire swept through the city leaving it in smoldering ruins. What would happen in the modern city of San Francisco if a catastrophe of the same intensity or larger occurred?

Join Dr. Bruce Bolt, Director of the Seismographic Station, Department of Geology and Geophysics, Berkeley, for his timely lecture on the next earthquake in the Bay Area. He will discuss the prediction and possibilities of another large 'quake and will describe what can be done to minimize both the risk and the damage.

Dr. Bolt, who has lectured and taught extensively in Europe, China, Japan, and Australia, serves on several geological and seismic commissions and is a Fellow of the California Academy of Sciences.

As usual your membership card will admit you through the main entrance at Cowell Hall or Wattis Hall entrances for the matinee. Please be prepared to show your card once more at the auditorium door for the matinee program.

## Special Exhibits

Crab pots, herring nets and salmon boats are part of the color and romance of the bay area, and in a beautiful exhibit opening April 19 at the Academy entitled, **The Fishing Fleet: Changing Times, Changing Faces**, you can share the excitement of this important aspect of San Francisco's history.

Vivid color photos taken by Marie De Santis, (a commercial fisherwoman herself!) portray the joy of a healthy catch, and the frustrations of a tangled net; the hard work of net mending, (almost a lost art), and the camaraderie of the fishing fleet. Also on display to help tell the commercial fishing story are nets, traps and pots and even an old-world skiff.

See this **Newsletter** for details on a companion symposium on fisheries entitled **Man and the Sea: Our Marine Resources**.

**The Fishing Fleet** will be on display in Hohfeld Gallery I through the summer.

The Wattis Gallery now houses a new permanent installation entitled **Preservation of the Past** from the collections of the Academy's anthropology department. The four sections include: the paintings of Awa Tsireh and the pottery of Maria from the Elkus collection; Peruvian textiles from the Rietz collection; Hawaiian artifacts — mostly fish hooks — from the Ostheimer collection; and mortars and pestles from the Gould collection. All are displayed with photographs and explanatory text.



**Warbonnet:  
Crow,  
Montana  
from the  
Feather Arts  
Exhibit.**

## Morrison Planetarium

Continuing exhibits include **Exploring the Deep Frontier: The Adventure of Man in the Sea**, extended through September 7; **Feather Arts: Beauty, Wealth, and Spirit from Five Continents**, extended through May 17; **Mirounga**, through April 5; **Western Wildflowers, Weeds and Grasses**, through June 25; and **Reflections on Alaska**, through August 2.

**The Last Question**, which is based on a short story by Isaac Asimov, will give you a surprise answer to the ultimate energy crisis. Enjoy this exciting planetarium show at the following times: Monday through Friday at 2:00 p.m., Wednesday and Thursday at 7:30 p.m., and Saturday and Sunday at 12:30, 2:00 and 3:30 p.m. Holiday schedule April 13 through 17 at 11:00 a.m., 12:30, 2:00 and 3:30 p.m.

**Exploring the Skies of the Season**, a tour of the current night sky over San Francisco, can be seen at 11:00 a.m. each Saturday and Sunday. Please use your planetarium passes for free admission to both of these shows.

## Light Shows

Enjoy the two light energy concerts, featuring laser animation and multi-media projections. Showtimes are:

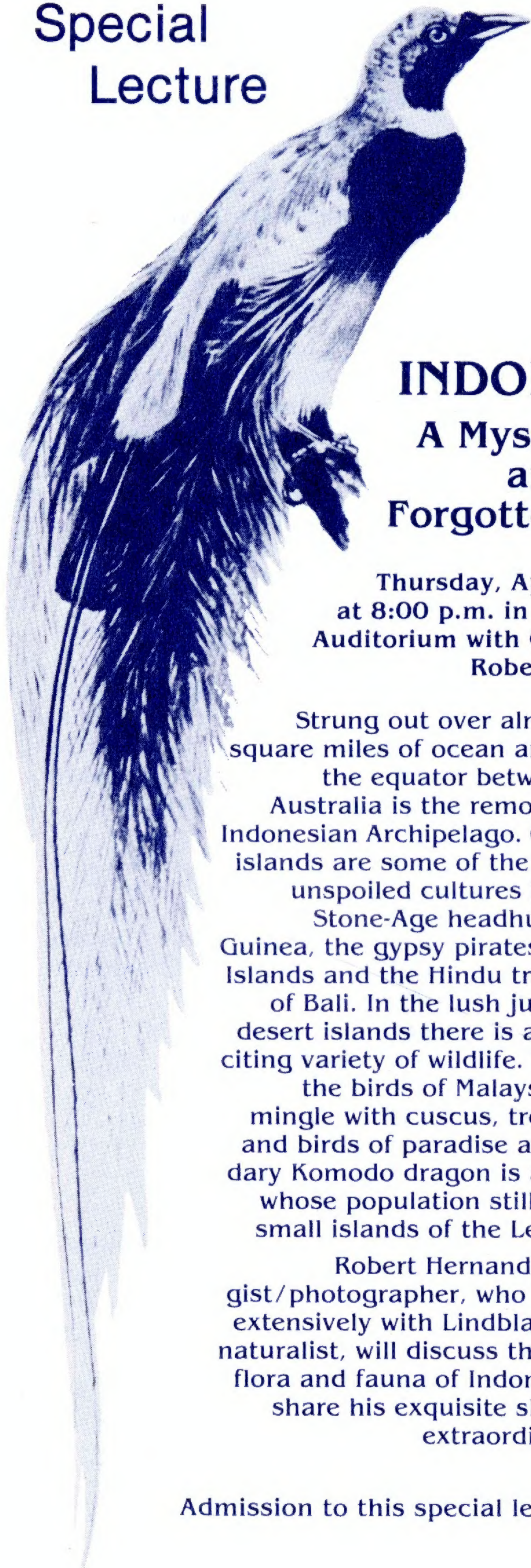
**Lights Fantastic:** Friday at 7:30 p.m.  
Saturday and Sunday  
at 5:00 and 7:30 p.m.

**Rock Fantasy:** Thursday and Sunday  
at 9:00 p.m.  
Friday and Saturday  
at 9:00 and 10:30 p.m.

Admission is \$3.50 for adults for all performances and \$1.50 for seniors (65 and over) and children under 10. (\$1.75 on Friday and Saturday). Tickets are available in advance through BASS outlets or at the Academy box-office one-half hour before showtime. For Light Show information, call 387-6300 or 6301. For BASS outlets call 835-3849.

**Please Note:** This is **not** a regular planetarium show, **nor** are your planetarium passes usable for this attraction.

## Special Lecture



### INDONESIA: A Mysterious and Forgotten World

Thursday, April 23, 1981  
at 8:00 p.m. in the Morrison  
Auditorium with Ornithologist  
Robert Hernandez

Strung out over almost 800,000 square miles of ocean and straddling the equator between Asia and Australia is the remote and exotic Indonesian Archipelago. On its 13,677 islands are some of the world's most unspoiled cultures including the Stone-Age headhunters of New Guinea, the gypsy pirates of the Spice Islands and the Hindu trance-dancers of Bali. In the lush jungles and on desert islands there is an equally exciting variety of wildlife. The deer and the birds of Malaysia blend and mingle with cuscus, tree kangaroos and birds of paradise and the legendary Komodo dragon is a living fossil whose population still roams a few small islands of the Lesser Sundas.

Robert Hernandez, ornithologist/photographer, who has travelled extensively with Lindblad Travel as a naturalist, will discuss the fascinating flora and fauna of Indonesia and will share his exquisite slides of these extraordinary islands.

Admission to this special lecture is free.

## Inside the Academy

Dr. Frank Almeda, Jr., has been appointed to fill the Decker and Martha McAllister Chair of Botany at the Academy, it was recently announced. Almeda's specialty is the classification and study of the reproductive biology of the tropical flowering plants called Melastomataceae, a large family most closely related to our own evening primroses. The Decker and Martha McAllister Chair of Botany is a fully endowed position created in late 1980 by Mr. and Mrs. McAllister of Hillsborough.

Students from nine Bay Area counties will be competing again in the Annual Science Fair this Spring. Their projects will be on display to the public, after the awards ceremony, from noon on April 4 through 5:00 p.m. Wednesday, April 8, in North American and Simson African Halls and African Annex. Be sure not to miss this look at the creativity of the Bay Area's youth.

### Junior Academy Field Trips

This April the Junior Academy is offering special holiday field trips — one for Junior Academy members and their families and three for students 9-18 years of age.

#### Angel Island April 18

Join us and ferry across the bay to scenic Angel Island. There will be time to explore trails on your own after a tour of the island on the tram. Bring a picnic lunch and plan to spend the day. Open to Junior Academy members and their families.

#### Pepperwood Ranch April 21

See how a variety of coastal habitats respond to spring. The day will be spent at the Academy's nature preserve in Sonoma county observing patterns in nature involving plants and animals. Age 9-18 years.

#### Big Basin Redwoods State Park April 16 & 23

Observe a portion of the coast redwood forest, and study the redwood community while hiking the trails in the area. A hot-dog cookout will follow. Age 9-18 years.

#### Monterey Bay Sea Otters April 14

A scenic drive and informative presentation of the area. Age 9-18.

For times, cost and further information please call the Junior Academy for a brochure at 221-5100.

### Man and The Sea: Our Marine Resources A SYMPOSIUM

Saturday, April 25 9:30 a.m. — 4:00 p.m.  
In the Morrison Auditorium

San Francisco Bay has a rich heritage in fish and fisheries — yet it has changed dramatically. Pressing energy problems and changing demand are currently forcing a reevaluation of this historic industry. Join resource management officials, scientists, commercial fishermen and interested citizens in a one-day symposium studying the present assets and future trends in this most valuable industry.

#### Program and Speakers

- 9:30 a.m. **The Ocean: A Diverse Resource**  
Charles Fullerton, Director of California Fish and Game Department
- 10:00 a.m. **History and Modern Trends**  
Dr. Michael Orbach, Co-Director of Coastal Marine Resources, University of California at Santa Cruz
- 10:30 a.m. Break
- 10:45 a.m. **San Francisco Fisheries**  
Andrea Katz, fishery scientist
- 11:15 a.m. **A Wholesaler's View**  
Hugh Reilly, President of Horizon Shipping & Trading Corporation
- 11:45 a.m. Lunch
- 12:45 p.m. **Developing New Fisheries Resources**  
Dr. William Jensen, Director, West Coast Fisheries Development Foundation, Portland
- 1:15 p.m. **Management of Fisheries**  
John Baxter, Manager of Fisheries, California Fish and Game Department
- 1:45 p.m. **The Fisherman's Future**  
Paul Woods, commercial fisherman
- 2:15 p.m. Break
- 2:30 p.m. Film: "The Old Man and The Sea"

To pre-register for **Man and the Sea**, please send a check made out to the California Academy of Sciences for \$5 (members) or \$7 (non-members), to the Education & Travel Department, Man and the Sea, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118. Tickets will be available at the door.  
No refunds/no exchanges.

**Nature Photography**

Class Sessions: April 8, 15, 22 and May 6  
7 - 9:30 p.m.

Field Trips: April 18 and 26

Monte Hartman, whose photos "Western Wildflowers, Weeds and Grasses" are now on exhibit at the Academy, will instruct this course in the class and in the field. Come and learn the techniques of interpreting nature with your camera from an expert!

**The Natural History of Coastal California**

April 24 - 28

Dr. Stan Williams will lead members southward by bus to Santa Barbara. Highlights will include Point Lobos, Big Sur and Hearst Castle, the Santa Barbara Botanical Gardens and Natural History Museum and a cruise to the Channel Islands. Cost is \$585 from San Francisco. For information, call Gulliver's Travels at 346-4400.

**Canyonlands Nature Photography Expedition**

May 29 - June 7

Ernest Braun, well-known photographer, author and teacher, will lead members on a photographic expedition to some of the most scenic areas in the United States. Participants will camp in comfort as they photograph the splendors of Bryce Canyon National Park, Capitol Reef National Monument, and Zion National Park. Cost is \$890 plus air. For information, please call Nature Expeditions International at (415) 494-6572.

**Pueblo Country I**

June 5 - 14, wait-list only

**Alaska**

June 6 - 21

Jacqueline Schonewald will lead members on our popular annual tour to the great State of Alaska. A cruise to the Columbia Glacier, several Days in Mt. McKinley National Park, a visit to the "Valley of Ten Thousand Smokes" and some time in Glacier Bay are but a few of the high points of this tour. Cost is \$2201 for land and \$416 for air at current G.I.T. rates. For information, call Siemer & Hand, Ltd. at (415) 788-7186.

**Indonesian Cruising Expeditions**

Departure Dates: June 12

July 15

July 24

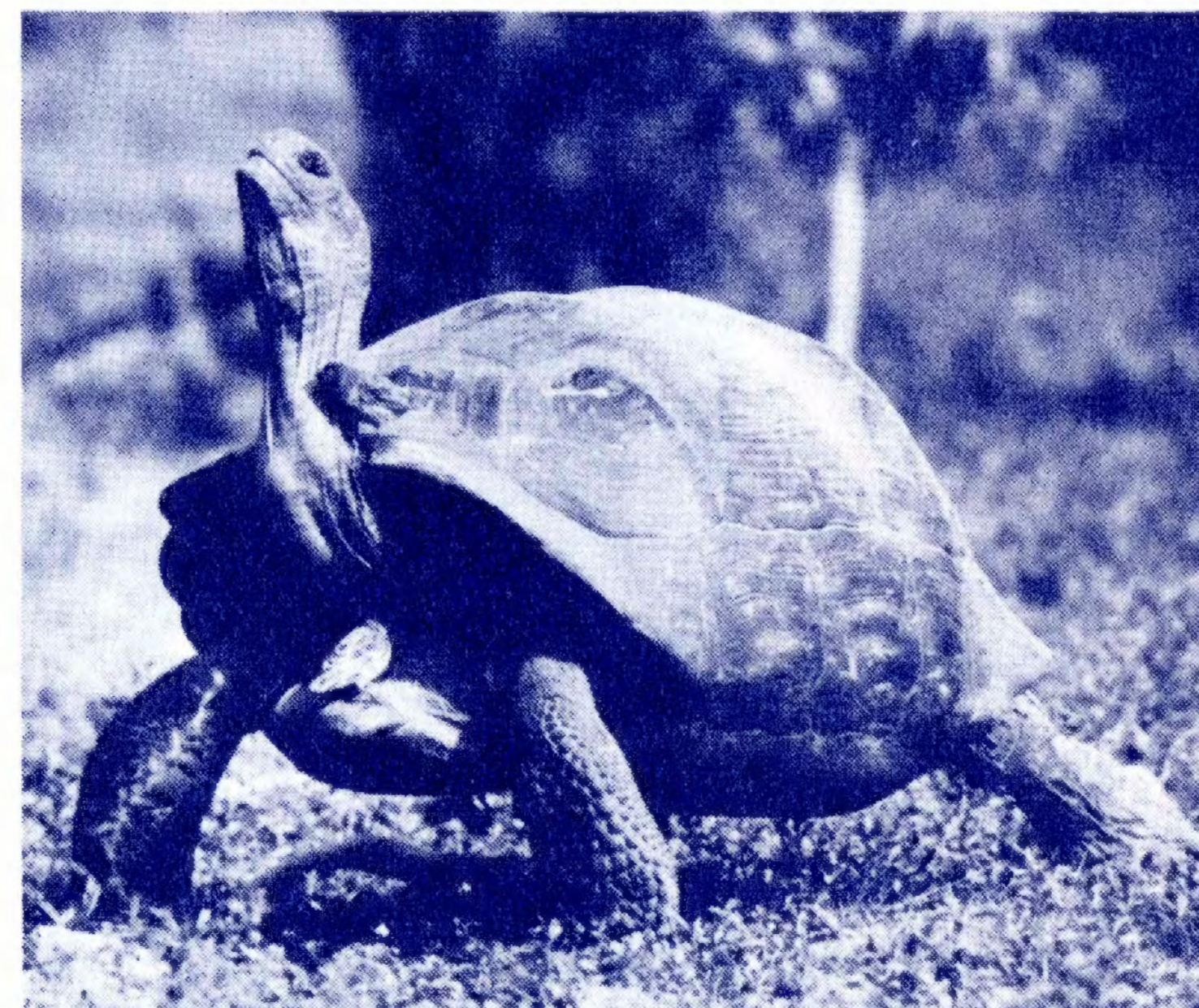
August 11

The Indonesian Archipelago, one of the most exotic and scenic areas in the world, straddles the equator between Asia and Australia. Bali, Komodo, and Papua New Guinea are but a few of the exciting ports-of-call as Academy members sail through this fascinating chain of islands aboard the **Lindblad Explorer**. A number of departure dates are offered. Costs range from \$4580 to \$10,040 for the cruise portion of the trip. Air costs depend upon the departure date selected. For information and a brochure, call the Academy Travel Office at (415) 221-5100.

**The Galapagos Islands**

July 15 - 29

Come aboard the **M.V. Santa Cruz** on our annual tour to those "living laboratories of evolution" . . . the Galapagos Islands, with the guidance of Dr. Sylvia Earle. Lindblad Travel is offering a ten-percent discount on a limited number of cabins to Academy members. Costs range from \$1890 - \$3040 for land/cruise arrangements and \$863 for air at current G.I.T. rates. For information, call the Academy Travel Office at (415) 221-5100.



Galapagos resident

**Zambezi Safari**

July 27 - August 15

Dr. Lawrence Swan will lead members to Zambia and Zimbabwe along the Zambezi River on a fabulous safari adventure. Game drives, river trips, and guided treks highlight our exploration of the Luangwa Valley, Kafue National Park, Victoria Falls and Salisbury, the capital city of Zimbabwe. An optional extension to Botswana's Okavango Delta and Chobe National Park is also available. Cost is \$2040 for land and \$1720 for air at current rates. Botswana extension is \$695 additional. For information, call the Academy Travel Office at (415) 221-5100.

**National Parks Tour II**

September 12 - 20

Mr. Charles Chesterman will lead members on a geological exploration of several of our national parks. Geologic history will be easily viewed and understood in the settings of Bryce Canyon National Park, Zion National Park and the magnificent Grand Canyon. For information call Gulliver's Travels at (415) 346-4400.

**Baja California Overland**

November 7 - 14

Annetta Carter leads one of our most popular annual tours to the beautiful Baja California Peninsula. Members will travel by bus as they explore the fascinating history and natural history of this area. A one-week cruise by boat through the Sea of Cortez is available for those who wish to continue their Mexican adventure. For information, please call the Academy Travel Office, at (415) 221-5100.

**Coral Sea Cruising Expedition**

November 15 - December 13

Dr. John McCosker will lead members on a spectacular cruise aboard the **Lindblad Explorer** to Australia's Great Barrier Reef. Wild, remote coral islands — untouched by man — are the homes for a variety of wildlife including abundant sea birds and over 2000 species of fishes. This trip is co-sponsored with the Oceanic Society. Costs range from \$4910 - \$8320 for the cruise. Air is \$2093 at current G.I.T. rates. For a brochure, call the Academy Travel Office at (415) 221-5100.

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