

the L.S.B. Leakey Foundation NEWS

NUMBER 10

SPRING 1978

THE 1978 LOUIS LEAKEY MEMORIAL LECTURES FOCUS ON "THE ROOTS OF HUMANITY"

In the spirit of open inquiry and interdisciplinary sharing, five internationally acclaimed authorities will probe current questions in the light of our expanding knowledge of past, present, and future.

FOUR SAN DIEGO INSTITUTIONS COOPERATE

The Leakey Foundation in cooperation with the San Diego Natural History Museum, the Zoological Society of San Diego, the San Diego Museum of Man, and the University of California, San Diego University Extension, will present a public symposium on human origins on Sat., March 4, at the San Diego Town and Country Conference Center, 500 Hotel Circle North. In a day-long series of lectures, followed by a panel discussion, scientists Mary Leakey, Carl Sagan, Bernard Campbell, David Hamburg, and Shirley Strum will review current finds and interpretations in the search for human origins. Ticket information is available from Leakey offices: (714) 239-7779 or (213) 449-0507. Registration: \$35. Full time students: \$25.

FIVE INTERNATIONAL SCIENTISTS PARTICIPATE

Speakers will explore man's evolutionary context and his biological and behavioral debts to the rest of the animal kingdom. Anthropologists Campbell and Strum will begin with perspectives on the human and pre-human past drawn from the study of primates ancient and modern. Psychiatrist Hamburg will show how parallels between human and chimpanzee psychobiology suggest a great antiquity for many human traits. Dr. Leakey will reconstruct the archeological environment in East Africa between 1 and 4 million years ago, and will recount some of her most recent discoveries at Olduvai and Laetoli, including the oldest reliably dated human remains. Astro-physicist, Dr. Carl Sagan will conclude with speculations on future prospects for man and evolution, and on the probabilities that the same biophysical processes that led to intelligent life may have occurred in other solar systems.

SAN DIEGO SYMPOSIUM COMMITTEE MEMBERS

The symposium was organized under the guidance of Foundation Trustee Barbara Newsom Pelosi, whose Leakey Foundation committee included Mmes.



Dr. Bernard Campbell



Dr. Shirley Strum



Dr. D. A. Hamburg



Dr. Mary D. Leakey

SAN DIEGO PROGRAM TO FEATURE LEAKEY, SAGAN, HAMBURG, CAMPBELL, AND STRUM



Dr. Carl Sagan

Frank M. Woods, Arnold Travis, Messrs. Gordon Getty and Lawrence Barker. Mayor Pete Wilson will serve as Honorary Chairman for the San Diego Committee which includes Foundation Trustee Ed N. Harrison, Mmes. Henry Hedges, Margot W. Marsh, Farley Marks O'Brien, Mr. and Mrs. Alexander C. Ridland, Messrs. Robert J. Wilkie and F. A. Phineas Spencer.

Committee members representing the San Diego cooperating organizations include Charles L. Bieler, H. Sheldon Campbell, Dr. Martin Chamberlain, J. Dallas Clark, Dr. H. Trevor Colbourn, John B. Davis, Pauline desGranges, Lowell E. English, E. Miles Harvey, Dr. Carl L. Hubbs, Dr. Author E. Hughes, Dr. Jack Kimbrough, Chancellor William D. McEl-

roy, Burt F. Raynes, Thomas W. Sefton, Richard Silberman, and Mrs. Gerald Warren.

ACADEMIC CREDIT OFFERED BY U.C.S.D. EXTENSION

The University Extension, University of California, San Diego, will offer credit for attendance at the Symposium and the fulfillment of their requirements for the course. For more information call (714) 452-3400.

Dr. Bernard Campbell:

THE ECOLOGICAL, BIOLOGICAL AND BEHAVIORAL PERSPECTIVES ON THE FAMILY OF MAN.

Dr. Campbell is adjunct Professor of Anthropology at the University of California, Los Angeles, and has been a visiting lecturer at Cambridge and Harvard Universities. Leader of the Lake Rezaieyeh Expedition to Iran, he has also taken part in research and teaching in East and South Africa.

Dr. Shirley Strum:

PRIMATE LINKS WITH EARLY MAN STUDIES.

Dr. Strum is Assistant Professor of Anthropology at the University of California, San Diego, and Director of the Gilgil Baboon Project in Kenya, where a troop of 100 wild baboons has been under continuous observation for the past 7 years. She is one of the first primatologists to shatter the myth that baboon society is male-dominated.

Dr. David A. Hamburg:

ANCIENT MAN IN THE TWENTIETH CENTURY.

Dr. Hamburg is President of the Institute of Medicine, National Academy of Sciences, and serves as Vice-Chairman of the Leakey Foundation Science and Grants Committee. He is internationally known for his studies of stress and coping and adaptation, and for studies on the biological basis and development of aggressive behavior.

Dr. Mary D. Leakey:

EAST AFRICAN EVIDENCES FOR THE ORIGINS OF HUMAN CULTURE.

World authority on stone tools, Dr. Leakey is the daughter of landscape painter, Erskine E. Nicol, and spent most of her childhood in southern France where she first became interested in prehistory. Since her marriage to the late Louis Leakey in 1936, she has worked exclusively on African prehistory, with particular regard to Olduvai Gorge, Tanzania.

Continued on page 8

the L.S.B. leakey foundation

The L.S.B. Leakey Foundation was established in 1968 by a group of eminent scientists and informed laymen who recognized a critical need to strengthen financial support for new multidisciplinary research into man's origins, his evolving nature and his environmental future. It was named in honor of the man who had become known as "the Darwin of pre-history," Dr. Louis S.B. Leakey.

The Foundation sponsors.

- International research programs related to the biological and cultural development of mankind.

- Long-term primate research projects which may help us to understand how we evolved as a species.

- The training and education of students in these fields.

- Conferences, publications of scientific papers, and educational programs designed to disseminate knowledge relevant to man's changing view of his place in nature.

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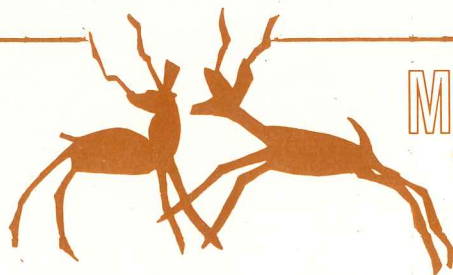
The L.S.B. Leakey Foundation is a public foundation. All contributions are tax-deductible as provided by law.

the L.S.B. leakey foundation news

Editor: Janice Seaman

Research: Joan Travis

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MEMO FROM THE PRESIDENT

One of our goals for our second decade is to expand the number of cities which are foci of Leakey activities. We are strongly established in Los Angeles and San Francisco. London is benefiting from our autumn programs there and from the strong leadership of Fleur Cowles and Bernard Campbell.

In other cities we have individual volunteers of great talent and enthusiasm. But we need a core of people who can organize symposia such as our San Diego venture with help from our small professional staff; launch school programs such as Kaye Jamison has done so well in Los Angeles; and discover the fine mix between science and fun. FUN?

Recently in Charleston, South Carolina, where our newest Trustee, Dielle Fleischmann Seignious (her husband, Lt. General George Seignious, II, is President of The Citadel) is launching a Leakey program, I was asked how the Foundation is able to attract so many talented volunteers. Was it devotion to archeology or to primatology or to the memory of Louis Leakey?

"Some or none of the above." was my reply.

The most important ingredient may be the good times—don't nicitate—people have in being part of the Leakey Foundation. True, it is educational. True, the goals are worthy. But a psychologist who observed the Foundation commented on the collegial congeniality of those involved.

It is not a factor you will find in a scientific footnote, and it has little relation to the paperwork characteristic of wealthy foundations who spend out of dividends and not, like ourselves, from what Trustees, Fellows, and Friends contribute every year.

In a city where we are not established one way to begin is through a lecture arranged by Joan Travis. You saw Joan comment articulately on the PBS network presentation of the "Legacy of L.S.B. Leakey." With lectures are often private dinners mixing interested laypeople and scientists. Symposia can follow.

We have nuclei in Chicago, Boston, Washington, Tucson, Denver and Philadelphia (including our good friends, the Steinbrights, in Norristown) and we would like to hear from interested individuals in or near these cities.

Friendships are the cement that holds the Leakey Foundation together; dedication is what makes it grow and succeed. And fun! Please call me at (213) 795-6811 or write to me if you would like to join the team.

Ned Munger

GOODALL AND JOHANSON

VISIT SWEET BRIAR

Through the cooperation of the Leakey Foundation, Dr. Donald C. Johanson presented a winter term lecture course at Sweet Briar College, Virginia. Johanson's course, as well as a visit this spring by Dr. Jane Goodall and her husband, Derek Bryceson, is made possible by a generous grant from Mr. and Mrs. John A. Ewald, Jr., whose interest in archeology and anthropology prompted them to become involved in bringing Internationally recognized scholars to the Sweet Briar campus.



Mrs. John A. Ewald, Jr. (Jane Roseberry, Sweet Briar '52) whose gift brings noted anthropologists to Sweet Briar College.

CALENDAR

April 23, Dr. Jane Goodall, Cranbrook Institute
Bloomfield Hills, Michigan
IN THE SHADOW OF MAN

April 28, Dr. Jane Goodall, Washington Park
Zoological Gardens, Portland, Oregon

CHIMPANZEE CHILDHOOD, DEVELOPMENT AND ADOLESCENCE

May 5, Dr. Donald Johanson, California
Lutheran College, Thousand Oaks, Ca.

EARLY MAN IN THE AFAR TRIANGLE, ETHIOPIA.

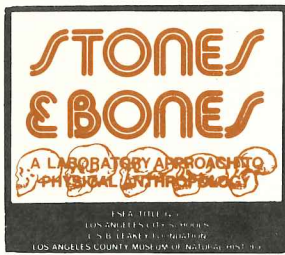
NEW FELLOWS

The Leakey Foundation is proud to welcome 4 new fellows to its membership roster.

They are: Mr. and Mrs. John L. Bradley, Hillsborough, Ca.; Mr. Gordon F. Hampton, San Marino, Ca.; Dr. Peter Keller, Los Angeles, Ca.; and Mr. and Mrs. Warren Meyerhoff, Culver City, Ca.

Fellows of the Foundation now total 280 members.

**PALEOANTHROPOLOGY PROJECT
BEGINS
TEACHER TRAINING PROGRAM**



This logo represents a synthesis of the talents and cooperative efforts of the L. S. B. Leakey Foundation, the Los Angeles City Unified School District and the Los Angeles County Museum of Natural History.

The Paleoanthropology project, in preparation for over a year, was outlined for the Foundation's Trustees and members of the Science and Grants Committee at their annual meeting in England, September 14, 1977.

Trustee and co-innovator of the program, Mrs. Max K. Jamison, announced that a grant of approximately \$99,000 has been provided under the Elementary and Secondary Education Act, Title IV C which funds pilot education programs. She thanked Drs. F. Clark Howell, Bernard Campbell, Sherwood Washburn, and Philip Tobias for their continuing assistance, and Drs. Irvn DeVore, Paul MacLean and David Hamburg for their early support and encouragement. Mrs. Jamison also pointed out that the knowledge and expertise of Los Angeles School District's Dr. Seymour Sitkoff, Project Director, and Gerald Garner, Milton Anisman, Program Coordinator, and staff members, George Benares and Paul Lund, are key factors in the success of the program, the first of its kind to receive major funding in a large metropolitan school district.

WORKSHOPS HELD AT PAGE MUSEUM

The first staff training seminars were held December 5th and 6th at the George C. Page Museum in Los Angeles, where 60 biology teachers and principals from the twelve senior high schools participated in training workshops. Representatives of the Leakey Foundation, the Museum of Natural History, the Los Angeles City School's Instructional Planning staff, and Robert Rowe, Consultant to the State Department of Education, also attended.

Mr. Norman Rossell, Assistant Superintendent, Instructional Planning Division, Los Angeles City School District, addressing those present, commended the fruitful collaboration between the District, the Foundation and the Museum.

Mrs. Jamison introduced seminar leaders, Drs. F. Clark Howell and Garniss Curtis, University of California, Berkeley, and Dr. Gail Kennedy and Ph.D. candidate, Janice Austin, University of California, Los Angeles, who led the two-day training sessions.

The purpose of the seminar was to develop a background in physical anthropology for the teachers, and to describe the new laboratory materials which will facilitate the incorporation of the study of

paleoanthropology into the present biology curriculum.

Many replicas of skeletal and dental castings of man and the great apes, and casts of major fossil specimens will be used for comparative study. In conjunction with the new project, a casting program has been established at the Los Angeles County Museum of Natural History under the direction of Dr. William B. Lee, Curator of Anthropology and Fellow of the Foundation. With the help of the Leakey Foundation, Dr. Lee has received generous cooperation from museums and institutions throughout the world including: the University of Pennsylvania, Musée de l'Homme, Paris; Transvaal Museum, Pretoria; National Museums of Kenya and the British Museum of Natural History.

Multi-media study aids and reference

booklets are in preparation and tapes of the L. S. B. Leakey Foundation's symposia and lectures are being previewed for later use. Los Angeles City School Science Centers will assist in the packaging of modular anthropology teaching kits for distribution to each classroom involved in this stimulating learning experience. Some eight hundred students will participate in the first year and it is anticipated that the program will develop additional teaching aids during 1978 and 1979.

Participants in the seminars acclaimed the high standards set by the sponsors of the pilot project, which Leakey Foundation Trustees hope may serve as a living tribute to the memory of Louis Leakey's profound belief in the importance of education and his lifelong dedication to the training and guidance of young students.

REPORT FROM THE FIELD

PALEOANTHROPOLOGICAL RESEARCH IN BURMA

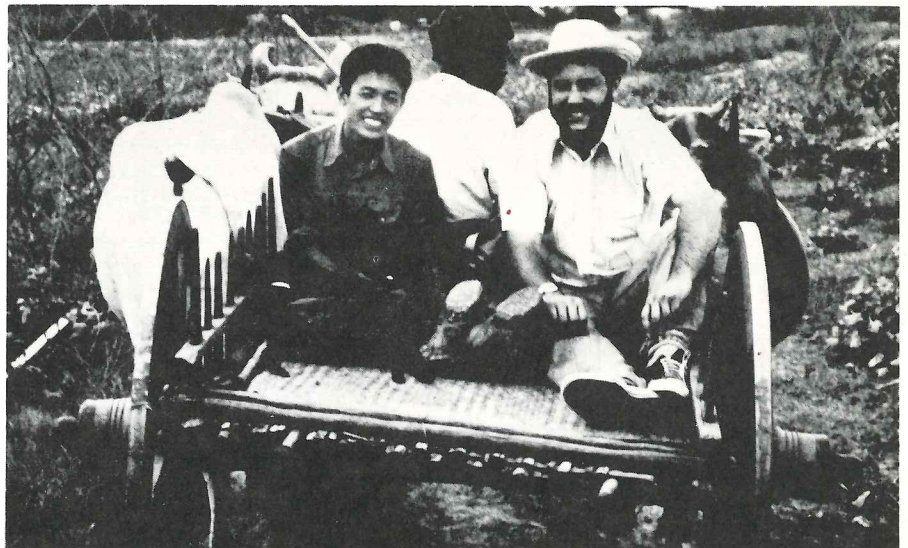
Russell Clochon, 29, now completing his Ph.D. in physical anthropology at the University of California, Berkeley, has worked on several paleoanthropological projects in Africa. A grant from the Leakey Foundation enabled him to organize an expedition to Burma in collaboration with Dr. D. E. Savage (U.C. Berkeley Department of Paleontology).

In March 1975 as part of a research tour of Asia, I visited the Socialist Republic of the Union of Burma. During my brief 7-day stay I met with Burmese governmental and university officials and visited Plio-Pleistocene fossiliferous sites. I had long been interested in the development of a paleoanthropological research expedition on the Asian continent because of the many earlier discoveries of *Homo erectus* in China and Java. Asia also holds the potential for recovery of additional remains of the probable human ancestor *Ramapithecus* and of the enigmatic giant ape *Gigantopithecus*. Burma presents the ideal geographic region to undertake such an expedition. Burma lies

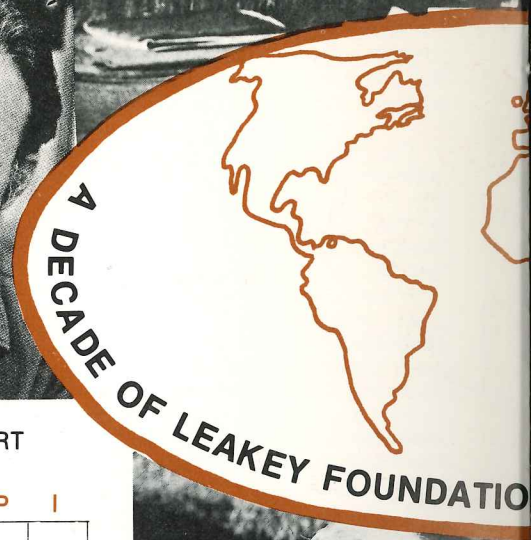
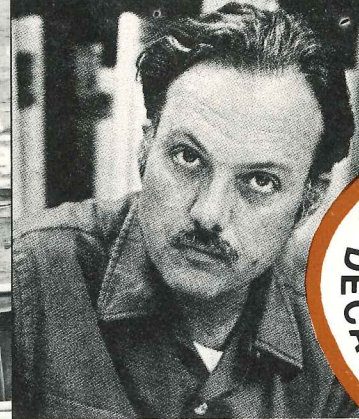
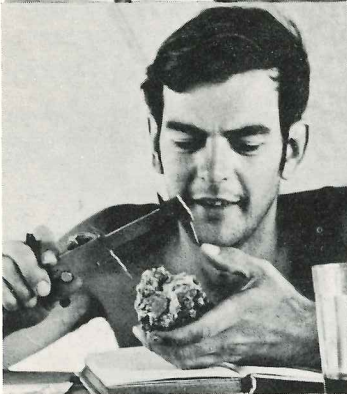
approximately midway between China, India and Java and has fossiliferous sediments which span a time range from the late Pleistocene back through the Miocene and to even earlier epochs. Since my short visit in 1975, the potential for exciting discoveries in Burma has been heightened by the discoveries at separate localities in Southern China (less than 250 miles from Burma) of hominid teeth now dated at 1.7 million years old and of three nearly complete *Ramapithecus* mandibles.

Upon my return to the U.S.A., I discussed plans for a long-term expedition with Dr. Donald Savage of the University of California Museum of Paleontology, and we agreed to collaborate. Dr. Savage specializes in the earlier phases of primate evolution and was anxious to study the Eocene sediments of Burma which have yielded the only known remains of *Amphipithecus* and *Pondaundia*. These two fossil primates are thought to represent the earlier common ancestral stock of the Anthropoidea - the super-family

Continued on page 6



Russell Clochon and Tin Mawn Oo (Burmese geologist) in upper Burma ride in the back of an ox cart transporting a fossil elephant upper jaw recovered near the Irrawaddy River from lower Pleistocene deposits. It is from sediments representing this time range that the first fossils of early man in Burma are likely to be found.



COUNTRY TOTAL GRANTS

SO. AMERICA

Peru 700
Venezuela 2,000

NO. AMERICA

Canada 2,000
U.S.A. 283,263

EURASIA

England 4,520
France 10,616
Burma 6,200
China 1,000
India 3,850
Indonesia 57,838
Israel 35,172
Iran 73,741
Java 2,000
Pakistan 1,200
Thailand 5,250

AFRICA

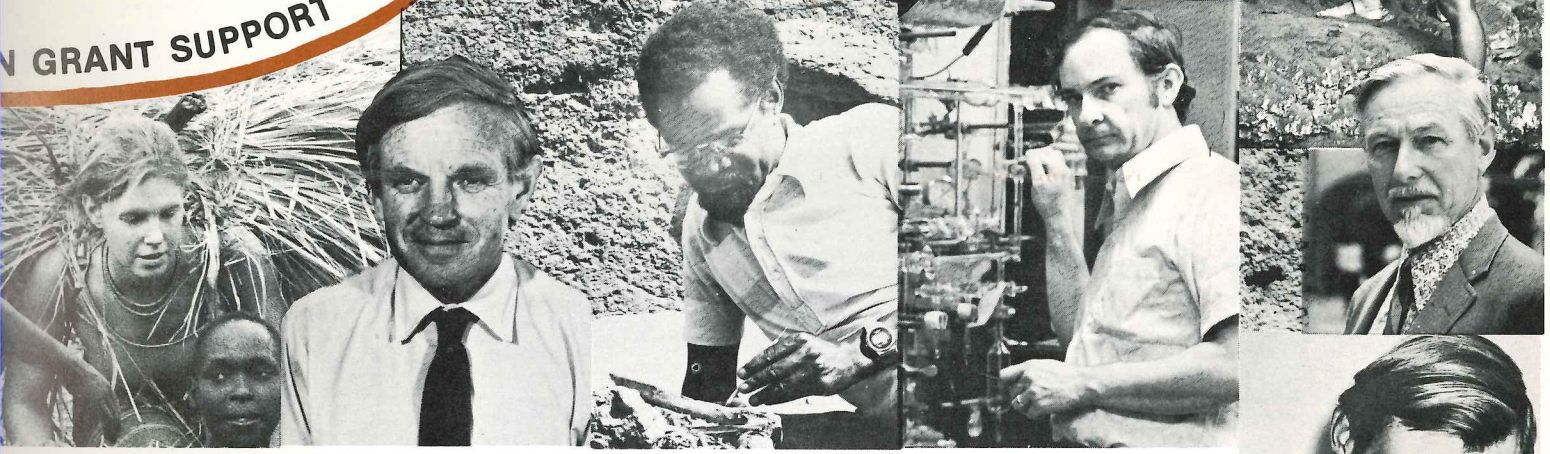
Cameroun 7,500
Ethiopia 59,005
Ghana 2,481
Kenya 408,621
Libya 29,900
Malawi 3,710
Morocco 1,000
Rhodesia 3,000
Rwanda 14,194
Senegal 4,300
So. Africa 4,769
Tanzania 234,116
TOTAL \$1,261,946

FIELDS OF SUPPORT

	EM	PS	CA	ED	CP	I
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	120	80	9	10	31	20

EM = EARLY MAN STUDIES PS = PRIMATE STUDIES
CA = CULTURAL ANTHROPOLOGY ED = SCHOLARSHIPS
CP = CONFERENCES/PUBLICATIONS I = INSTITUTIONS





Over the past 10 years, the Leakey Foundation has allocated over \$1,250,000 to 270 research programs in 26 countries on 5 continents.

YOUR MEMBERSHIP DOLLARS AT WORK: How many grantees can you identify?
 Dr. Ofer Bar-Yosef, Dr. Vilem Bishof, Dr. John R. F. Bower, Birté Galdikas-Brindamour,
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 lor, Dr. Judith Van Couvering.

KEY IN NEXT ISSUE.



6 REPORT FROM THE FIELD

(Continued from page 3)

grouping of monkeys, apes and man. Dr. Savage's interests in early primate evolution complemented my own in human evolution. We were most fortunate to receive funding from the L. S. B. Leakey Foundation, the Smithsonian Foreign Currency Program and the U.C. Museum of Paleontology.

We departed March 1977 via Hong Kong where I spent two days browsing through Chinese drugstores in search of fossil teeth from the People's Republic of China. These fossils (called "dragon's teeth" by the Chinese) are ground up and used as medicines. About thirty years ago, Dr. Ralph von Koenigswald had also searched the Hong Kong drug stores and discovered the first teeth of *Gigantopithecus*. My search uncovered no primate teeth but I did leave with more than twenty five fossil teeth representing at least ten different mammalian taxa.

Arriving in Rangoon we checked in with the American Embassy. In a socialist country such as Burma, all communications with the government have to pass through official channels. The American Embassy had to act as a liaison whenever we wished to speak to ministers or officials. During the first two weeks, we met continually with Burmese governmental and university personnel and with the staff of the American Embassy and U.S. Information Service. Together we drafted a research proposal for a cooperative Burmese-American four year paleo-anthropological/paleontological/geological project which was then submitted to the Burmese Cabinet for approval. Without the continuing assistance, advice and direction of the U.S. State Department officials in Rangoon, we would never have gotten the Burma project off to such a good beginning.

Field Work

Once our affairs in Rangoon had been completed, we were allowed to make a series of reconnaissance visits to many of the localities we were planning to study in detail at a later time. These exploratory trips occupied our time for most of the next two months. We set up a base of operations centered in Mandalay where I once again met Tin Maung Oo, a Burmese geology student who had acted as a guide during my 1975 visit. Tin introduced us to members of the Mandalay Arts and Sciences University who would be participating in the project in the future. With their geological knowledge of the area we were able to plan a series of reconnaissance tours that would take us over much of central Burma.

The first sites we visited were located on the opposite side of the Irrawaddy River from Mandalay, north of Sagaing village. We had to reach these sites each day by dug-out canoe and motor boat since there were no roads. In our first day of collecting, we located a series of grey mudstones which produced abundant fossil wood and a lower Pleistocene fauna consisting of elephantine and stegodontine proboscideans, rhinoceri, antelopes, bovines, and anthracotheres. Nearly a week was spent prospecting in this area with the aid of Helmut de Terra's (1938) field notes.

Our next trip took us 100 miles north of



Donald Savage and Tin Maung Oo prospect in upper Miocene deposits near the town of Monywa in upper Burma. The fossils recovered from this site are similar to those found in the important primate-bearing Siwalik sediments of India and Pakistan.

Mandalay to an area reported to contain evidence of interbedded volcanics in Pliocene-Pleistocene sediments. We went via Jeep (WW II vintage), canoe, and river paddleboat. The first night was spent in a Buddhist monastery near the village of Kabwet. There we were lulled to sleep by the prayer chants of the novice monks. The next morning the village headman (through Tin) told us that we were the first Americans to ever visit Kabwet. We spent several days exploring this area but unfortunately found very little other than fossil wood. All of the volcanic flows in the area proved to be ancient basement rock. We would have liked to proceed further to the north and east, but since we were already within 100 miles of the Chinese border, we judged it politically expedient to return to Mandalay.

On our next reconnaissance trip we journeyed about 75 miles to the west of Mandalay to the area around Monywa. We were most fortunate to have the field notes of Mandalay University geologist U Ba Maw. During Ba Maw's mapping efforts in this region, he had located several concentrations of vertebrate fossils. One locality yielded what he considered to be an upper and lower jaw of a fossil hominid. Dr. Savage, with the help of local geology students, picked a suitable place and within an hour, had located a brown gritstone lens which yielded an upper Miocene fauna of oysters, turtles, crocodiles, gomphotheriids (c.f. *Pentalophodon*), rhinoceri and tragulid artiodactyls. The next day, we located a vesicular basalt flow which was mapped as an interbedded volcanic lying stratigraphically above our gritstone locality. It was our judgement, that the flow was the result of a late intrusion rather than concurrent with sediment deposition.

The story regarding the discovery near Monywa of fossil hominid upper and lower jaws deserves further elaboration. It seems that in 1971 Ba Maw found the specimens along with some fauna while doing some geological mapping in a remote area. Since Ba Maw had been trained as a classical geologist he had little

interest in collecting fossils. He did, however, recognize the human-like affinities of the specimens and excitedly showed them to a local village shaman. Since they had been found near the shaman's village he thought they were the remains of his distant ancestors and had special magical powers. At the shaman's request, Ba Maw left the hominid specimens in his care.

We were able to locate the wandering village guide and we persuaded him to take us to the village where Ba Maw had left the hominid specimens six years earlier. After a ten mile hike into the back country, we found the village but were shocked to hear that the shaman had died a few years earlier and that all his possession (including the hominid specimens) had been buried along with him!

After completing several more fossil-hunting excursions around Mandalay, Dr. Savage and I decided to shift our research efforts southward. We booked onto a river steamer for a grueling 15 hour, 150 mile ride down the Irrawaddy River to the ancient city of Pagan. From there, we drove 100 miles eastward in order to explore the area around Mt. Popa, a giant extinct volcano and the mythical home of the King Cobra. Popa is a sort of Buddhist "resort" community to which many Burmese make a pilgrimage. They all come to visit a spectacular monastery which is constructed on the top of a 300 foot high volcanic pipe with sheer vertical sides. It can only be reached by an exhausting 30 minute climb up a series of ladders and near-vertical stairs.

On Popa's southwest flank we discovered a series of fossiliferous brown sandstones directly overlying a grey lithic tuff over 20' thick. These sandstones produced a fauna consisting of bovine and antelope artiodactyls (nearly 100 specimens) and the remains of a large carnivore (possibly a bear). Perhaps the most exciting discovery made at this locality was a series of chert artifacts and flakes which were associated with the fauna. Based upon our preliminary studies of the fauna, we feel that this locality is mid-

Continued on page 8

LEAKEY FOUNDATION SUPPORTERS ARE INVOLVED...

IN CONFERENCES



Booktable at Spring Conference,
L to r: Trudie Ralphs, James Stewart, Renata VanVoorhis, Ida May Humphreys



Open air workshop at Getty Museum

IN PUBLIC LECTURES

"Three Primates" lecture, Jane Goodall, Dian Fossey, Biruté Galdikas-Brindamour. California Institute of Technology



IN FILM PREVIEWS



IN SYMPOSIA

London Symposium,
L to r: Dr. Bernard Campbell, Dr. Phillip V. Tobias, Dr. Glynn Daniel, Miss Fleur Cowles, Dr. F. Clark Howell, Dr. Paul MacLean, Mrs. Vanne Goodall.

Security Pacific National Bank, World Headquarters. "Legacy of L.S.B. Leakey."

L to r: Ole Saitoti, Allen O'Brien, Joan Travis, George Jagels.

ARE YOU A MEMBER OF THE LEAKEY FOUNDATION?

Your annual membership \$25 or more) entitles you to the following privileges:

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- The pleasure of knowing that every penny of your membership dollar directly supports the grant research programs of the Foundation.

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My check for \$_____ payable to the Leakey Foundation is enclosed.

Bill Me

Check one: New Membership Membership Renewal

Gift Books

- Year of the Gorilla*, George Schaller
- By the Evidence*, Louis Leakey
- Leakey's Luck*, Sonia Cole
- The Quest for Man*, ed, Vanne Goodall
- Hunter and His Art*, J&I Rudner

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

I wish to designate my contribution to the following research projects:

All contributions are tax-deductible as provided by law.
MAIL TO: L.S.B. Leakey Foundation, Foundation Center, 206-85
Pasadena, Calif. 91125

8 REPORT FROM THE FIELD

(Continued from page 7)

dle to upper Pleistocene in age but when the tuff samples we collected have been subjected to K/A dating, we should be able to refine this estimate.

After a one-week stay in Pagan and further prospecting along the Irrawaddy River, we decided to return to Rangoon to again deal with the political aspects of the project.

Since our 70 day entry visa would soon expire and our research funds were beginning to run low, Dr. Savage decided that he would return to Berkeley and take care of academic matters. The final locality reconnaissance trip I planned to make in Burma was to the Shan Plateau. This region was to have been one of our prime research areas but the presence of anti-government insurgents in many areas of the Shan severely limited our movement. The Shan highlands are a series of Paleozoic limestones which are continuous with the Yunnan highlands of southern China. It is from the caves and fissure fills in the limestones of the Yunnan highlands that many of the important Chinese *Gigantopithecus*, *Ramapithecus* and early *Homo* specimens have been recovered. Since de Terra's 1937/1938 expedition to Burma had reported the discovery of fossil vertebrates in the caves and fissures of the Shan Plateau it was logical to begin a survey in those parts of the Shan to which we had access.

The trip up to the Shan Plateau was truly a breathtaking experience. The road we travelled was part of the original "Burma Road" of WW II. Periodically the lush greenness of the forest was interrupted by brilliant flame trees aglow with crimson blossoms, tangled vines covered with large lavender flowers and multicolored birds and butterflies. As I peered through the lush forest cover and tangled vines, I imagined how this area might have looked one million years ago when *Gigantopithecus* and *Ailuropoda* (giant panda) must have roamed the Shan. If there was ever a modern analogy for the paleoenvironmental setting, this was one. However, it will take a great deal more survey in areas less vegetated than this area of the Shan in order to obtain adequate paleontological samples.

The trip down from the Shan Plateau back into the Irrawaddy Valley was reminiscent of trips I have made down the escarpment into Kenya's Great Rift Valley.

I only hope this analogy will be carried further and that Burma's fossil potential will prove as great as that of the Great Rift Valley of Africa.

Throughout our stay in Burma, faculty and staff of the Mandalay and Rangoon Arts and Sciences Universities as well as U.S. State Department officials have been very cooperative and helpful. Naturally, the continuation of our project will depend on a broad base of support from both the academic community and the Burmese government. We have every hope that this support will continue, especially with the easing of Burma's "isolationist" attitude and the continual warning of relations between S.E. Asia and the United States since the end of the Vietnam Era.

Our preliminary field work in Burma has demonstrated great potential for recovery of complete paleontological samples in datable context. Burma's central location and record of continuous volcanic activity throughout the last 20 million years of Earth history combine to give this country great paleoanthropological potential. When absolute (potassium-argon) dates on faunal samples from Burma are determined, the information can be used to correlate and date many of the important (and as yet undated) paleoanthropological finds made recently in Pakistan, southern China, and Indonesia, as well as those made in the earlier part of this century in Java, India and northern China. As I reflect on the successes of this past field season, I feel that we are on the threshold of many great discoveries in Burma, some of which could provide answers to the vexing question of human origins itself.

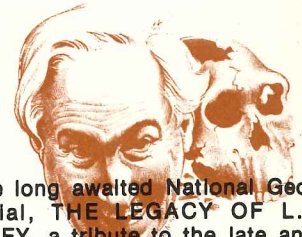
SAN DIEGO PROGRAM

(Continued from page 1)

Dr. Carl Sagan:

MAN AND THE COSMOS.

Dr. Sagan is Director, Laboratory for Planetary Studies, and David Duncan Professor of Astronomy and Space Sciences at Cornell University where he also serves as Associate Director of the Center for Radiophysics and Space Research. His principal research activities are in the physics and chemistry of planetary atmospheres and surfaces, in space vehicle exploration of the planets, and in the origin of life on Earth.



The long awaited National Geographic Special, **THE LEGACY OF L. S. B. LEAKEY**, a tribute to the late anthropologist who discovered man's African ancestry, aired on national public television on January 9. Co-produced by the National Geographic Society and WQED/Pittsburgh with a grant from Gulf Oil Corporation, the retrospective examines Leakey's pioneering work and continuing impact upon anthropological research.

In preparation for the film's debut, Leakey Foundation Trustees hosted special press previews. Trustee Jeffrey R. Short, Jr., hosted a dinner and screening at the Chicago Academy of Sciences for media and local Leakey supporters. In Pasadena, Trustees invited press and Fellows to a screening at the California Institute of Technology. In San Diego, the film was shown at the Zoological Society, where leaders of the San Diego Natural History Museum, the Museum of Man and the University of California, Extension Division, joined media representatives for the preview.

The retelling of this monumental story received enthusiastic acclaim from critics and wide response from the prime-T.V. audience. Leakey's irrepressible spirit continues to inspire young disciples to follow him in "walking backwards through time" in the search for humanity's past.

TWO DAY SYMPOSIUM TO BE HELD IN EUREKA

Humboldt State University and College of the Redwoods in cooperation with the L. S. B. Leakey Foundation will present a two-day Symposium entitled **HUMAN ORIGINS** in Eureka, California, March 30 and 31, 1978.

Speakers will include Dr. Bernard Campbell, who will also serve as moderator for the program, Robert Ardrey, Biruté Galdikas-Brindamour, and Dr. Glynn Isaac.

For more information, please write to: Dr. Andrew G. Vangelatos, College of the Redwoods, Eureka, California 95501.



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