

the L.S.B. Leakey Foundation NEWS

NUMBER 7

WINTER 1977

OBSERVATIONS FROM GOMBE

By Jane Goodall

(Dr. Goodall is currently in Dar es Salaam, Tanzania, continuing her 16-year study of chimpanzees, the longest known and most thorough research ever made of that species in the wild. She will be visiting the U.S. this April for a Leakey Foundation lecture tour.)

Dar es Salaam, October, 1976 — There is some new and exciting information to share with members of the L.S.B. Leakey Foundation.

On the night of June 29, Fifi gave birth to a healthy son, named Frodo. In an attempt to actually witness the birth, our staff had continuously followed Fifi for over a month. During moonlit nights a watch had sometimes even been made as she lay in her nest. But in fact, the birth was not observed. Little Frodo was seen the first thing in the morning. Fifi's first born son, Freud, was in the nest with his mother and new brother early in the morning. Whether or not he had been there during labor and delivery we shall never know. Subsequently, Freud almost always slept in his own nest during the night, although on a few occasions during July and August he joined Fifi in hers.

For the first two months Freud paid little attention to Frodo — just occasionally grooming him during a session with Fifi. But when I visited Gombe in early September, Freud was beginning to show more interest in his brother, reaching out to play with him or pat him on the head. Fifi responded by tickling Freud and thus distracting him.

We followed Fifi not only for the month prior to Frodo's birth, but also for the month after. These long days of constant observations will yield invaluable information concerning the ranging and association patterns of a female during pregnancy and when coping with a newborn baby. This data is currently being analyzed.



Dr. Goodall and friend

Fifi seems to be carrying on in the tradition of her mother, Flo. Two offspring of the same sex in succession is unusual in the Gombe chimpanzee community. Yet it seems that a male stands an excellent chance of rising to the top of the male hierarchy when he has a brother to support him. Given Fifi's own high ranking status and Freud's exuberance and precocity, we can expect that one of these two brothers will become alpha male of the community in the future.

Killing and Cannibalism

There is also some distressing news to share. The young female Gilka, has just lost another (possibly her fourth) infant. Once she became pregnant but the outcome was unknown — either a miscarriage or a live infant which died (or was killed) early in its life. Her next baby (a male) lived for three weeks and mysteriously vanished. Her third (a female) was seized by adult female Passion, in August 1975. To our horror, Passion deliberately killed the baby and, with her family, spent the next five hours feeding on the body (see *Leakey Foundation News, Fall, 1976, Great Apes Supplement*). This was the only instance of infant killing *within* the community which we had recorded, although there had been two occasions when males had killed the infants of *stranger* females. Again, cannibalism had occurred.

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MAN IS "THE DANGER IN ENDANGERED" SIR PETER SCOTT WARNS LEAKEY GROUP



Sir Peter Scott

Calling man "the danger in endangered," internationally-known conservationist Sir Peter Scott opened his talk before a capacity crowd of 320 Leakey Foundation fellows, members and friends by warning that, "He (man) causes most of the danger to the survival of species including himself . . . I think that vast disasters will overtake mankind . . . unless we look much further into the future . . . and put long-term benefit for all mankind against short term advantage for some."

"Man makes his home on the planet but he doesn't, I believe, possess it. It belongs to all living creatures, the totality we call nature," he added.

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SCIENCE AND GRANTS COMMITTEE EXPANDS: ADDS FIVE NEW MEMBERS



W.W. Bishop



Bernard Campbell



Murray Gell-Mann



Paul MacLean



Sherwood Washburn

Five noted scientists have accepted the invitation to serve as Leakey Foundation trustees and will join the Foundation's science and grants committee beginning in 1977. They are: geologist W.W. Bishop, anthropologist Bernard Campbell, Nobel laureate-physicist Murray Gell-Mann, neurophysiologist Paul MacLean and anthropologist Sherwood Washburn.

This brings to 20 the number of distinguished scientists now serving as trustees on this eminent committee. The committee reviews all Foundation grant programs.

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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 multi-disciplined 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, publication 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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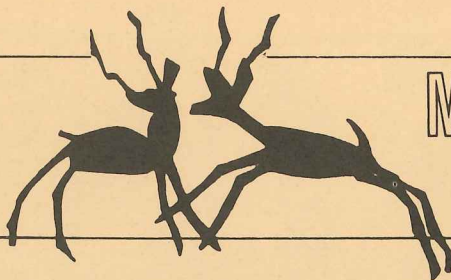
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the L.S.B. leakey foundation news

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MEMO FROM THE PRESIDENT

Carl Sagan, in his enthusiastically received Leakey lecture that opened the 1977 season in Pasadena, before a standing-room house of 1,200 in Caltech's Beckman Auditorium, emphasized how little, if at all, human brains have improved their capacity in the last 100,000 years. What has grown in explosive fashion, Carl went on, is what he called extra-somatic knowledge.

This knowledge explosion outside the body takes many forms. It includes occasional supplements to this newsletter, tapes of Leakey lectures and scientific publications we support. We have just joined with the Royal Society in Britain to share publication costs of a multi-colored geological map of the Olorgesailie site in Kenya, first excavated by Louis and Mary Leakey. A book on the site by Professor Glynn Isaac of Berkeley will be published by the University of Chicago Press with financial help from this Foundation.

As extra-somatic keys to science proliferate, it is increasingly difficult for reporters to gain sufficient background in complex subjects to be able to report lucidly and accurately. Many scientists complain that too often coverage of scientific developments has a taurine taint. Carl Sagan answered numerous questions at our Fellows' reception about the validity of Erich von Daniken's "CHARIOTS OF THE GODS" and about UFOs, which he scorned as correctly named — unidentified.

Three years ago we collaborated in a science writing fellowship. The recipient Boyce Rensberger, who is now covering science for *The New York Times*, has testified to the value of his year of digging in depth into African archeology.

We would like to fund an annual fellowship for science writers in our fields of interest. Fortunately, this has struck a welcome note with the Crane-Rogers Foundation in New York, which has 50 years of experience running uniquely successful fellowship programs.

Peter Bird Martin, a senior editor of Time, Inc., and a Crane-Rogers trustee, volunteered to spend three sabbatical months crossing the country to see if our two foundations have a viable concept. We have had a positive response from editors and scientists, and now seek special funding to launch the program. It is the goal of the two foundations to enable selected science writers to significantly improve their understanding and coverage, to the end that lay people concerned with archeology, primatology, and conservation will be better served.

Cordially,

Ned Munger

Edwin S. Munger

1976 ANNUAL MEETING REVIEWS FOUNDATION PROGRESS

Summary reports from all major committee chairpersons as well as plans and prospects for 1977 symposia, lectures and fellows programs were part of the agenda at the annual meeting of the L.S.B. Leakey Foundation held December 4 in Pasadena, Ca.

Reviewing Foundation grant allocations during 1976, Dr. F. Clark Howell, co-chairman of the science and grants committee, noted that the number of applications had increased considerably and that a healthy diversity of research projects was represented in the applications. 1976 grants assisted a number of congresses and conferences around the world and included ecological and conservation studies. 66 grant applications were approved in 1976 and a record total of \$244,184 awarded.

Gordon P. Getty, co-chairman of the development committee reported that the newly formed corporate appeal committee will begin its work in February. This new program, developed by trustee Mason Phelps makes use of a special corporate presentation portfolio and correlated audio-visual materials, and will be used to encourage financial support from the business community.

Joan Travis, treasurer, pointed out that

since Louis Leakey's death in 1972 — "our growth is an affirmation of all worthwhile projects and ideals inspired by Dr. Leakey." She went on to report that general fund contributions were expected to exceed \$180,000 in 1976.

Kaye Jamison, chairman of the fellows program, reported that the Fellows Day Conference and the Endangered Species dinner had brought 29 new fellows into the Foundation. She praised the volunteer efforts of the newly formed Leakey Associates whose active participation has been a key ingredient in this successful season.

Barbara Pelosi reported that symposia programs in San Diego, Denver and London, England were under consideration for 1977-8.

1976 lecture programs, summarized by Joan Travis, exceeded all previous years in terms of attendance figures and number of speakers. 1977 is expected to be an even better year, she said. A special international lecture committee for the Foundation was named by president Edwin S. Munger. It will include: trustees Dr. Melvin Payne, Dr. F. Clark Howell, Fleur Cowles, Gordon P. Getty, Kay Woods, and Tita Caldwell. Mrs. Travis is chairperson.

SIR PETER SCOTT

Continued from page 1

The speech was the highlight of a dinner program "Endangered Species: Man and His World" sponsored by the L.S.B. Leakey Foundation in Beverly Hills, Ca., December 3.

Sir Peter, who is vice president of the World Wildlife Fund and chairman of the Survival Service Commission, International Union for the Conservation of Nature and Natural Resources, went on to say that the existence of some 1,032 vertebrate species ranging from animals to fish and 20,000 plants is currently threatened . . . while tropical forests are disappearing now "at the rate of 50 acres a minute . . . day and night."

"But," Sir Peter reminded his audience, "only in the last three centuries has man's impact on the earth begun seriously to threaten its other life forms. And only in the last half century has man begun to threaten the life support systems of the planet.

"In the past couple of hundred years man has increased the rate of species extinction to four times the natural rate before mankind came onto the scene. Some scientists think that a factor of 12 times, or even 16 times would be nearer the mark. The world is losing much of its rich diversity of animals and plants mainly through ignorance and apathy," he continued.

Sir Peter called for leadership from the voluntary sector rather than from governments. "Bad habits need to be reformed on an international scale," he said, "through a global conservation movement to combat public ignorance and apathy."

"I believe we have to stop trying to maximize everything and go in for more optimizing. We have to find not polluting more satisfying than polluting and not being wasteful of resources more elegant than being wasteful. We have to favor energy resources likely to be environmentally more clean, and technologies that do least harm to the natural world. In short, we have to inculcate a much greater reverence for our planet. We have to stop destroying before we've destroyed the last of anything," he concluded.

DINNER GUESTS GIVE KEYNOTER A STANDING OVATION

Obviously deeply moved by his provocative comments (see article, page 1), more than 300 trustees, fellows, members and friends of the Leakey Foundation gave conservationist Sir Peter Scott a standing ovation following his keynote address at the special black-tie dinner in his honor sponsored by the Foundation on December 3. It was the highlight of an evening program dedicated to the subject: "Endangered Species: Man and His World."

Introducing Sir Peter was James Stewart, the distinguished actor and fellow of the Foundation who served as master of ceremonies for the evening.

Greeting Foundation guests with president Edwin S. Munger were dinner co-chairpersons Kaye Jamison and George D. Jagels; and Joan Travis, program chairperson for the evening. Members of the Leakey Associates served on the dinner committee.

Among friends, members and fellows attending were many from throughout the U.S. and Europe. In addition, many new fellows were there attending their first Foundation event.

The following photo report gives some of the highlights of that eventful evening.



Trustee Kaye Jamison (1), who co-chaired the dinner, at the podium with keynote speaker Sir Peter Scott and Lady Scott.



Enjoying a chat (l to r) fellow Jimmy Stewart, the evening's MC with Mrs. Edwin S. Munger and Mrs. J.C. Schwartzbach who served on the dinner committee.



Out-of-towners (l) Robinson McIlvaine, vp, African Wildlife Leadership Foundation, trustees Dr. and Mrs. Harold Coolidge.



A conversation before dinner (l to r) vp Joan Travis, trustee Fleur Cowles, board chairman George Jagels and vp Gordon Getty.



Fellows Mr. and Mrs. R. Stanton Avery with Dr. F. Clark Howell (center) chairman, science and grants committee.



Guest Orville McGoon with Leakey Associates Mrs. Kenneth Leventhal (center) and Mrs. Brawner Ralphs.

FOUNDATION OFFICERS FOR 1977

At the December annual meeting, Dr. Edwin S. Munger was re-elected president of the L.S.B. Leakey Foundation, a post he has held since 1971.

At the same time, George D. Jagels, vice president of the Foundation was named chairman of the board of trustees. Mr. Jagels is the first trustee to hold this new board position.

Re-elected to another one-year term as vice presidents are: Robert M. Beck and Gordon P. Getty. Mrs. Arnold Travis, former treasurer, also was named a vice president.

Continuing in the post of secretary of the board is Lawrence Barker, Jr.

Newly elected treasurer is Coleman Morton.

Dr. F. Clark Howell continues as chairman of the science and grants committee. Co-chairman is Dr. David A. Hamburg.

Chairing other major committees for 1977 are: Mason Phelps and Gordon P. Getty, development; George D. Jagels and Coleman Morton, finance; Mrs. Ronald Pelosi, symposia; Mrs. Arnold Travis, lectures, cassettes, films; Mrs. Max K. Jamison, national fellows program.

NEW FELLOWS

The Leakey Foundation is proud to welcome 14 new fellows to its membership roster.

They are: Mrs. Barbara Barthel, Irvine, Ca.; Mr. Grant Corby, Jr., Orange, Ca.; Mr. and Mrs. H.W. Dougherty, Los Angeles, Ca.; Mrs. I.W. Eisenberg, Pasadena, Ca.; Mr. and Mrs. Calvin Fox, Los Angeles, Ca.; Mr. William P.C. Hudson, Floresville, Tex.; Mr. Michael T. Jamison, Toluca Lake, Ca.; Mrs. Robert Kemp, San Marino, Ca.; Ms. Cynthia Warrick Kemper, Malibu, Ca.; Mr. and Mrs. Thomas O'Connor, Pebble Beach, Ca.; Mr. and Mrs. Walter J. Sullivan, Jr., San Francisco, Ca.; Mr. and Mrs. Henry J. Tenaglia, Los Angeles, Ca.; Mr. and Mrs. George B. Turpin, San Marino, Ca.; Mrs. Blanche Whittey, Redwood City, Ca.

Fellows of the Foundation now total 266 members.

PROFILE

GEORGE D. JAGELS
Rancher, Lawyer, Philanthropist
Chairman of the Board of Trustees



George D. Jagels

Mention George Jagels to any of his colleagues at the L.S.B. Leakey Foundation, and it will almost surely bring an immediate, admiring response. You hear words like consistent, positive, constructive, keen wit, gentle, generous, marvelous clarity. Meeting the man, you know it is all true — and more.

Though he would be the last to admit it, rancher, lawyer, philanthropist George Jagels has been a great catalyst and inspiration to the Leakey Foundation from the moment he became a fellow and trustee in January, 1970. It happened soon after his first meeting with Dr. Louis Leakey at a dinner party with friends in Pasadena.

"I had always had a keen interest in science and evolution in school. Louis renewed that interest for me," he tells you of that initial meeting.

George quickly became deeply involved and dedicated to the Foundation. In September, 1971, he was elected to the executive committee. Always supportive and committed to its early fundraising activities, he was named co-chairman of the development committee in December, 1972.

That was a lucky day for the Leakey Foundation. During this 3-year tenure and through his consistent and solid leadership, development committee activities grew and prospered. Then in 1975, upon his urging, encouragement and own hard work, it exceeded all previous fund-raising records with \$450,000 in gifts and pledges within just six months — enabling the Foundation to reach the full and critically needed \$1 million of trustee Robert Beck's matching pledge. "It was a great accomplishment — a milestone for the Foundation," a colleague recalls.

A native Californian, Mr. Jagels has an AB from Stanford (1929) and a law degree from Harvard (1932). He has also received two honorary LL.D. degrees from MacMurray College (1969) and from Claremont Graduate School (1971).

Today, at 68, he divides his working time between ranching, investments and real estate. But in the past, he has engaged in varied business activities including cattle ranching in California, coal mining in Montana, uranium reduction in Utah, oil production in Peru. Also for nine years he was an associate and partner of Gibson, Dunn & Crutcher, Lawyers.

During World War II, he served for about six months in the Office of the Under Secretary of the Navy; participated in a number of invasions in the south and central Pacific and in 1943-44 was Commanding Officer of a LST, receiving a promotion to the rank of Commander just before the end of the war.

Among his many philanthropic interests, he serves as vice chairman, board of fellows, Claremont University Center; vice chairman, board of directors, Caltech Associates; member, Stanford University Libraries visiting committee; member, board of overseers, Huntington Library, Art Gallery and Botanical Gardens. Mr. Jagels has also served in various capacities for United Way and Community Chest in Los Angeles County and is a trustee of

several foundations.

His wife Maggie, equally committed to philanthropic activities, is a trustee of Loyola-Marymount University and has been actively involved in fund-raising for Children's Hospital of Los Angeles and the Los Angeles Orphanage. "But her own activities have never prevented her helping on the educational and charitable institutions with which I have been connected," says Mr. Jagels. Obviously, the Leakey Foundation is no exception — Maggie is a familiar and enthusiastic participant at almost all Leakey Foundation lectures, symposia, and dinners. She is also a member of the Leakey Associates which plans many of the Foundation's special events.

Of his children: Edward R. is a deputy district attorney in Kern County, Ca.; George D., Jr. is a general partner of Woodland Farms, Ltd., the family business and a Ph.D. candidate at Claremont Graduate School; Jeffrey F. is at the University of Southern California and Jean Elise attends Stanford University. All are Leakey Foundation fellows.

Mr. Jagels' hobbies include tennis, hunting with bird dogs, and travel. In 1976 he visited Egypt, Costa Rica, Mexico, the Greek Islands, Iran, India, Afghanistan and even found time to shoot the rapids of the Colorado River for a week with four geologist friends this past summer.

Still, science and evolution continue to be consistent and consuming interests.

How does he evaluate his long involvement in the Foundation?

"It's been a thrilling experience," he says without hesitation. "We've made many close, personal friends. Why, Maggie was once looking through a list of the world's major paleoanthropologists and remarked, 'my God, we know most of them by their first names!' That in itself," says Mr. Jagels, "is an inspiration."

How does he feel about the future and the potential of the Foundation?

"When Louis died I didn't know how we could continue — no one expected the enthusiasm to remain. We had two great surprises: 1) that such a foundation could be started, and 2) that the momentum of this could swell into the proportions it has. I think it has succeeded because of a lot of enthusiasm and hard work from gifted volunteers and the growing awareness of the public through our lectures and educational programs.

"Today this Foundation is a connecting link with development in the field of human origins and the lay public. I don't see the Foundation ever becoming the sole source of any specific scientific funding but rather, more importantly, that it lead the way by our approval and the vast investigative power of our science and grants committee so that other foundations and interested groups will follow and share in the responsibility for urgently needed research," says Mr. Jagels with conviction.

He also firmly believes that as a policy,

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notes

Fleur Cowles showed trustees preliminary plans for the commemorative volume on Dr. Louis S.B. Leakey during her visit here this December from London, England. Miss Cowles and Foundation vice president Joan Travis are editing some 50 remembrances about the late Dr. Leakey written by his associates, colleagues, and friends. The volume will offer many unique insights into Dr. Leakey's character and achievements.

Publication date is expected to be announced early in 1977.

We are delighted to report the birth of a boy, Binti Paul, to Biruté and Rod Brindamour on October 17, 1976 in Jakarta, Indonesia. Mother: Biruté Galdikas-Brindamour, who continued her research on the wild orangutan in the jungles of Indonesia until just weeks before the birth, is doing just fine. Father: Rod Brindamour is OK, too and justly proud. At this writing, all three are back in the field and have been since December. They will return this spring for a scheduled Leakey Foundation U.S. lecture tour.

A new laboratory of physical anthropology was dedicated at the Cleveland Museum of Natural History this past December. The laboratory will eventually house the world-famous Hamann-Todd primate skeletal collection and be the center for all early-man research presently being conducted by Donald C. Johanson, its curator and a Leakey Foundation grantee.

The pilot program to provide the first laboratory approach to the study of anthropology at the secondary school level in the Los Angeles City school system, launched with support from the Leakey Foundation and directed by trustee Mrs. Max K. Jamison, was approved by the Los Angeles Board of Education this January. It is now pending ESEA federal funding.



Grantee Diane Gifford at Lake Turkana, Kenya this past summer. Her research goal: to locate, study and permanently mark as many formerly studied carcasses (predominantly zebra and topi) as possible for a taphonomy study she is preparing. This zebra, Ms. Gifford tells us, was obligingly killed by a lion during her stay.

THE LECTURE CIRCUIT

20 cities around the U.S. will have special Leakey Foundation lecture events in the first half of 1977

MAJOR ANTHROPOLOGISTS HIGHLIGHT UCLA-LEAKEY LECTURE PROGRAM

Richard E. Leakey, who received practical training in paleontology from his parents, Drs. Louis S.B. and Mary D. Leakey, and whose own discoveries have revised previously held theories about the development of early man — will appear in Royce Hall at the University of California, Los Angeles, February 26 as part of the "IN SEARCH OF MAN" series of lectures co-sponsored by the Foundation and the UCLA Committee on Public Lectures. His subject: "MAN: A NEW PERSPECTIVE FROM KENYA" will assess seven years work at East Lake Turkana, Kenya and update such recent finds as *Homo erectus* — a Peking Man look-alike dated one million years older!

Mary D. Leakey will appear March 9. Last fall, Dr. Leakey discovered the oldest reliably dated remains of man's ancient ancestors. The site was Laetoli, some 25 miles south of the famed Olduvai Gorge. Both these regions as well as a promising new site, will be discussed in Dr. Leakey's upcoming lecture.

Ethologist Dr. Jane Goodall concludes the series on May 4. Her long-term studies of wild chimpanzees at Gombe have strengthened her conviction that ongoing accumulation of observational data may provide insight into man's own social behavior. "DOMINANCE AND AGGRESSION IN CHIMPANZEES" is the topic.

CALTECH-LEAKEY SERIES NEARLY SOLD OUT

Series tickets to the Leakey Foundation-California Institute of Technology annual "NEW PERSPECTIVES IN SEARCH OF MAN" lectures were nearly sold out as this issue went to press in mid-February. The last two events on the schedule feature archeologists Mary D. Leakey and ethologist Jane Goodall. Both women will be returning from their respective study sites in Tanzania to report their latest findings.

Dr. Leakey, will appear March 8. Jane Goodall is scheduled to speak on May 3.

A SAN FRANCISCO SERIES TO BEGIN ON MARCH 3

Donald C. Johanson, Joseph Campbell, Biruté Galdikas-Brindamour and Richard M. Eakin are the keynote speakers in a series of four Thursday-night lectures to be co-sponsored by the California Academy of Sciences and the Leakey Foundation this spring in San Francisco. Dr. F. Clark Howell, who is both a trustee of the Academy and of the Leakey Foundation, will act as moderator for each event.

Dr. Johanson, who will appear March 3, discovered the 3.5 million year old skeletal remains of "Lucy", the first known hominid in that time range, and in the fall of 1975, unearthed the skulls, hand and thigh bones of a group of man-like creatures dated at 3.75 million years old, the first "group" of this kind ever found. His talk, "EARLY MAN IN ETHIOPIA" will detail his

CALENDAR OF LEAKEY LECTURE EVENTS 1977

February 25	Bernard Campbell, "THE EVOLUTION OF HUMAN SEXUALITY"	Museum of Man, San Diego, Ca.
	Richard Leakey, "EXCITING NEW EARLY MAN DISCOVERIES IN EAST AFRICA"	University of California Santa Barbara, Ca.
February 26	Richard Leakey, "MAN: A NEW PERSPECTIVE FROM KENYA"	University of California Los Angeles, Ca.
March 3	Donald C. Johanson, "EARLY MAN IN ETHIOPIA"	California Academy of Sciences, San Francisco, Ca.
March 8	Mary D. Leakey, "REMAINS OF EARLY MAN IN TANZANIA"	California Institute of Technology, Pasadena, Ca.
March 9	Mary D. Leakey, "EARLY HOMINIDS IN EAST AFRICA"	University of California, Los Angeles, Ca.
March 11	Bernard Campbell, "THE EVOLUTION OF HUMAN SEXUALITY"	San Francisco Zoological Society, San Francisco, Ca.
March 23	F. Clark Howell, "UNRAVELLING THE DISTANT HUMAN PAST"	Claremont College, Claremont, Ca.
March 25	F. Clark Howell, "THE RISE AND DECLINE OF THE NEANDERTALS"	Museum of Man, San Diego, Ca.
March 31	Joseph Campbell, "THE ARCHEOLOGY OF MYTH"	California Academy of Sciences, San Francisco, Ca.
April 14	Biruté and Rod Brindamour, "ORANGUTANS: INDONESIA'S PEOPLE OF THE FOREST"	Simon Fraser University, Burnaby, B.C., Canada
April 18	F. Clark Howell, "UNRAVELLING THE DISTANT HUMAN PAST"	Portland State University, Portland, Ore.
April 19	Biruté and Rod Brindamour, "ORANGUTANS: INDONESIA'S PEOPLE OF THE FOREST"	Maturango Museum, China Lake, Ridgecrest, Ca.
April 21	Jane Goodall, "THE FEMALE IN CHIMPANZEE SOCIETY"	New York Zoological Society New York, N.Y.
	Biruté and Rod Brindamour, "ORANGUTANS: INDONESIA'S PEOPLE OF THE FOREST"	California Academy of Sciences, San Francisco, Ca.
April 22	Biruté and Rod Brindamour, "ORANGUTANS: INDONESIA'S PEOPLE OF THE FOREST"	California State College, Stanislas, Turlock, Ca.
April 23	Jane Goodall, "IN THE SHADOW OF MAN"	West Palm Beach Museum, West Palm Beach, Fla.
April 25	Jane Goodall, "IN THE SHADOW OF MAN"	Kenyon College, Gambier, O.
April 26	Jane Goodall, "IN THE SHADOW OF MAN"	Drake University, Des Moines, Ia.
	Derek Bryceson, "AFRICAN LEADERSHIP: PERSONALITIES AND CHALLENGES"	Drake University, Des Moines, Ia.
April 27	Jane Goodall, "IN THE SHADOW OF MAN"	Texas A&M University, College Station, Tex.
	Biruté and Rod Brindamour, "ORANGUTANS: INDONESIA'S PEOPLE OF THE FOREST"	University of California, Santa Barbara, Ca.
April 28	Jane Goodall, "IN THE SHADOW OF MAN"	School of American Research, Santa Fe, N.M.
April 29	Jane Goodall (lecture title to be announced)	Fermi National Accelerator Laboratory Colloquium, Batavia, Ill.
May 2	Jane Goodall (lecture title to be announced)	University of San Diego, Alcalá Park, San Diego, Ca.
May 3	Jane Goodall, "THE FEMALE IN CHIMPANZEE SOCIETY"	California Institute of Technology, Pasadena, Ca.
May 4	Jane Goodall, "DOMINANCE AND AGGRESSION IN CHIMPANZEES"	University of California, Los Angeles, Ca.
May 5	Jane Goodall (lecture title to be announced)	Loma Linda University, Riverside, Ca.
May 6	Jane Goodall (lecture title to be announced)	University of California, Santa Barbara, Ca.
	F. Clark Howell, "PREDATORS IN THE WORLD OF EARLY HOMINIDS"	San Francisco Zoological Society, San Francisco, Ca.
May 19	Richard Eakin as Charles Darwin, "GLIMPSES OF MY LIFE'S WORK"	California Academy of Sciences, San Francisco, Ca.

most recent field work in the Afar triangle of Ethiopia and his new findings this past winter.

Joseph Campbell is scheduled to talk on "THE ARCHEOLOGY OF MYTH" on March 31, a subject for which he is internationally known. Mr. Campbell will explore new perspectives that have opened in the fields of religion, mythology and philosophy as a result of man's search for his origins.

Biruté Galdikas-Brindamour and her husband Rod are expected to update past research with the latest findings in their study of the wild orangutan. This project, now in

its sixth year, was initiated by Dr. Louis Leakey one year before his death in 1972. The Brindamours will speak on April 21.

Dr. Richard A. Eakin, in a unique and highly acclaimed lecture presentation, scheduled for May 19, will portray Charles Darwin. Using the words, dress and manners of those times and with his own carefully researched script, he will present "GLIMPSES OF MY LIFE'S WORK", a study of Darwin and his achievements. Dr. Eakin is chairman of the zoology department at the University of California, Berkeley.

Grant SPOTLIGHT

The grant program of the Leakey Foundation, under the guidance of 20 eminent scientists who make up the Foundation's science and grants committee, depends largely upon public support for its success. Membership in the Foundation and all special contributions directly assist vital international research into man's origins, his behavior and his survival. Won't you help? Send your contribution today!

It is interesting to take a look back at the grant program of the Foundation for 1976. The record, we think, is significant for a Foundation that is only nine years old.

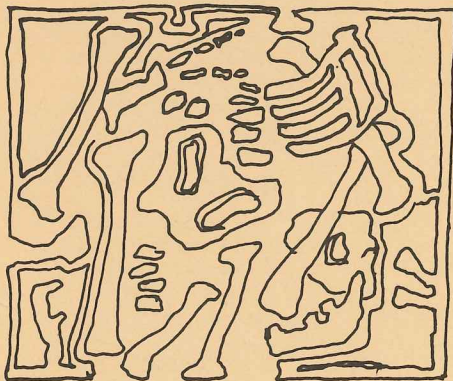
More than 66 grants were approved and a total of \$244,184 awarded this year. They ranged from primate studies to early man research, from congresses and conferences to publications and educational materials, from anthropological studies to ecological and conservation projects.

Grant support has grown impressively. In 1972, for example, only 16 grants were funded — all of them either early man studies or primate research. In 1976 the general grant budget was up 26% above 1975 and nearly three times greater than the grant budget allocated in 1972.

We are proud of this growth and progress. Without generous donors and a dedicated, active membership, it could not have been accomplished.

Now, as we enter, 1977, more than 26 grants have already won the approval of our science and grants committee. That is the largest number of grants allocated by the Foundation at any one time. The following will give you a sampling of their scope and significance.

EARLY MAN RESEARCH



Clifford J. Jolly \$1,900 needed
Fossil Survey, Addis Ababa, Ethiopia

In conjunction with D.L. Cramer and G.C. Conroy, Dr. Jolly, professor of anthropology, New York University, is requesting grant support for a four-week survey in Addis Ababa, Ethiopia to prepare and describe a collection of primate fossils from a variety of localities in the lower Awash Valley. Material includes specimens recovered under the auspices of the

Rift Valley Research Mission Expedition during the 1976 season.

Among the fossil finds is a significant hominid skeletal discovery made at Bodo, a site in the Afar area of Ethiopia.

The hominid fossil consists of a palate with alveoli but no tooth crowns, most of the face including nasal bones and one zygoma, both orbits and brow ridges, and the beginning of the forehead. It was discovered in two perfectly fitting pieces, broken through the preserved turbinal bones, each laying on the surface of a one-meter thick sand and gravel layer that contains numerous Acheulean artifacts and the bones of many hippos, pigs, antelope, and a scattering of other fauna. Other cranial fragments were found scattered between the two larger pieces, and some have been fitted together to give a start on the reconstruction of the brain case. The specimen is well mineralized and beautifully preserved.

All agree that it represents genus *Homo*, but whether it is *Homo erectus* or *Homo sapiens* must still be determined.

Dr. Jolly began his first-hand examination and analysis in January.

F. Clark Howell \$15,000 needed
Paleoanthropological Research,
Sahabi Region, Libya

Paleontological discoveries made by Italian workers in the 1930's demonstrate that preserved in the Sahabi area of north central Libya are abundant and extremely complete remains of fossil vertebrates from a 10 to 5 million year B.P. time range — a time range virtually unknown on the African continent.

Intensive field work has never been undertaken in the area, and only recently has it been cleared of World War II land-mines and anti-personnel devices.

Dr. Howell, leader of the proposed international research project, is planning on a reconnaissance of the area by N.T. Boaz (University of California, Berkeley) and a full scale investigation of this important fossil locality in conjunction with an international consortium of scientists including representatives from Libya and Germany.

The project will be initiated in 1977 by systematic geological and geophysical research prior to extensive paleobiological studies in 1978.

J.W.K. Harris \$4,000 needed
Paleoanthropological Study,
Chesowanja, Kenya

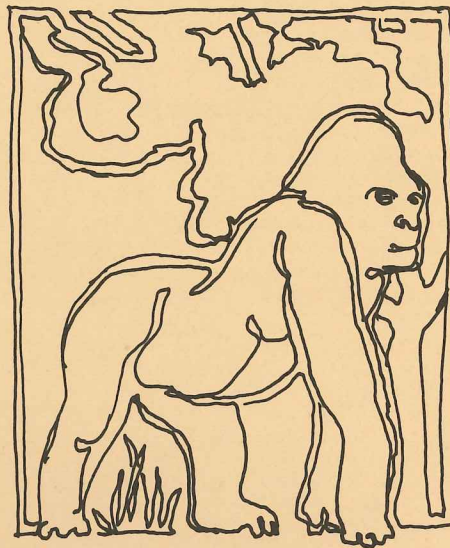
Dr. Harris, currently research fellow at the Leakey Memorial Institute in Kenya, is requesting funding to initiate small scale paleoanthropological investigations in exposures of the Chemoigut Formation (Lower Pleistocene Age) and the Chesowanja Formation (Early Middle Pleistocene Age) at Chesowanja, which is east of Lake Baringo, Kenya. Carefully controlled excavations will be carried out where localized concentrations of surface stone artifacts and faunal remains, including early hominid specimens, have been located.

An important aspect of the study is to understand early hominid adaptive behavior from the reconstruction of the local topographic and ecological setting of the sites in relation to the broader paleo-environmental context.

Field operations will be followed by laboratory analysis and description of

stone artifacts and associated remains recovered. Comparative studies of Oldowan and Acheulean assemblages will be made. These methods may enable scientists to place the Chesowanja site in "cultural-historical" perspective, and by studying the paleogeographical and paleoecological settings of these sites, to make comparisons with other well-documented sites in East Africa.

PRIMATE STUDIES



Debre Hamburger \$4,000
Gorilla Behavior Study,
Karisoke Research Center, Rwanda

Ms. Hamburger, a research assistant at the Stanford Outdoor Primate Facility, proposes to study the development of social behavior in wild mountain gorillas with Dr. Dian Fossey at Karisoke Research Center, Rwanda. During her one-year field study she will gather quantitative data to provide a basis for statistical analysis. Her studies relate to behavior changes in adolescent males.

By using methodology developed at Stanford and the Gombe Research Center, Ms. Hamburger will compare the chimpanzee studies with her new field observations to determine if similar behavioral changes are evident in gorillas.

Such a cross species comparison has not been attempted before.

Elizabeth R. McCown \$1,000 needed
Mountain Gorilla Skeletal
Specimen Study

At the instigation of Dian Fossey, Ms. McCown proposes to undertake a general metrical/anatomical and biological study of gorilla skeletons collected from the Virunga Mountains. This collection, unique because of the documentation and the scarcity of mountain gorillas, will be gathered at the Smithsonian Institution and a comprehensive analysis undertaken including measurements, evaluation of pathological conditions, photography, comparisons between specimens.

Future potential research includes comparative skeletal studies between mountain and lowland gorillas.

Ms. McCown is a physical anthropologist whose principal interest is comparative anatomy of primates. She is a doctoral candidate at the University of

Berkeley and co-editor (with Glynn L.I. Isaac) of "HUMAN ORIGINS, LOUIS LEAKEY AND THE EAST AFRICAN EVIDENCE", published in 1976.

S.C. Gaulin \$2,000 needed
Diet/Feeding of *Alouatta* (Howler) Monkeys

Mr. Gaulin, now at Harvard, proposes a nine-month analysis of chemical and ecological variables as possible predictors of dietary choice among two species of howler monkeys.

The study will be based on primate dietary choice literature as well as data collected during a three-year field study by Mr. Gaulin and an associate, M.J. Konner, under a grant by the National Science Foundation.

Howler monkeys are expected to be of particular interest to the student of human origins since large-bodied members of both lineages — humans and howlers — have experienced similar selection pressures in their feeding adaptations.

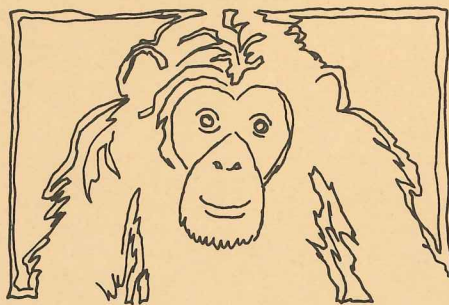
Amy Lowen \$4,000 needed
Comparative Analysis of Cercopithecoid Hindlimbs

Ms. Lowen proposes to study and photograph modern and fossil monkey osteological collections which are housed in the U.S., Europe and Africa.

A graduate student at Case Western Reserve University and a research assistant, Cleveland Museum of Natural History, Ms. Lowen has as her research objective a comparative and functional analysis of the fossil primates of southern and eastern Africa.

The major focus will entail analysis of recently discovered fossil primates from the Afar depression, the site of the International Afar Research Expedition, co-directed by Donald C. Johanson. The specimens, derived from deposits of approximately three million years of age, must be returned to Ethiopia in early 1977.

In order to accomplish this, a description of the diagnostic characteristics of the hindlimb of living arboreal and terrestrial Old World monkeys will be undertaken. Using modern cercopithecoids as a morphological model, comparisons will be made with fossil cercopithecoids.



Vilém Bishof \$1,500 needed
Chimpanzee Study, Niokolo-Koba National Park, Senegal

Mr. Bishof will observe wild chimpanzees in Niokolo-Koba National Park. These apes have never been previously studied and it is Mr. Bishof's premise that the relatively poor vegetative surroundings of the Sudanese park savannah which are believed to fulfill only the minimum dietary requirements of the chimpanzee, may be proof of the high degree of adaptability of the species. He is being funded in part by The Society for the Protection of the Environment and Nature, Prague, Czechoslovakia.

Dr. Bishof will begin his research early in 1977 and will collect for further laboratory analysis parasitological samples and documentation regarding distribution and migration patterns.

CONFERENCES



Brian D. Hayden \$2,000 needed
Lithic Use-Wear Conference, Simon Fraser University, British Columbia

Because the systematic study of stone tool uses, especially via the traces of damage and abrasion, is so new and so diversified, it is considered crucial at this

point in time to bring major researchers in the field together in order to establish research guidelines, parameters, definitions and standards.

A series of workshops is planned in which no papers will be read. Symposia will focus on eliminating specific problem areas and pursuing consensus solutions. Another goal of the conference will be an intensive assessment and explicit enumeration of principles firmly established in use-wear studies so far, as well as avenues of research with high immediate potential. Because the conference will provide a basis for identifying past activities and materials used in tool making, the results will be of paramount importance in reconstructing and understanding the evolution of man, his activities, his technology and how his technology has interacted with his environment. The subject spans a time depth of several million years, leading up to the present in some parts of the world.

Scheduled to be held March 16-20, 1977, it will include some 50 participants from throughout the world.

PROFILE
Continued from page 4

the Foundation use only income from its endowment fund for operating expenses — so that all solicited funds go directly and totally to grant programs. In this connection, he has on numerous occasions, specifically earmarked part of his own personal donations to the Foundation for overhead. And as one Leakey trustee tells us, has always admonished that "every penny of contribution income go for the direct support of the grant program!"

Of his friendship with Louis Leakey, he says: "The reason we were drawn to him was not only that he could quicken one's interest in so many subjects, but in large part because such subjects were presented without condescension. He had the gift of simplicity which is a precious possession of the great."

Frankly, we might say much the same about George Jagels. Stable, steady, cool and decisive, his leadership continues to be an inspiration to the Foundation. In December 1976, George Jagels was unanimously elected the Foundation's first chairman of the board of trustees.

WE NEED YOUR HELP . . .

Since 1968, the L.S.B. Leakey Foundation has been assisting the massive and ever increasing effort to understand how and why man evolved. Our grants have provided "seed money" for important research and emergency funding to insure the continuity of crucial projects. With the help of generous donors and members, and the recommendations of the science and grants committee, the Foundation has disbursed over \$1 million in support of the search for man's origins, the quest to understand his behavior and the urgent need to safeguard his survival.

BE A PART OF THIS GREAT EFFORT . . . JOIN THE LEAKEY FOUNDATION NOW!

Membership in the Leakey Foundation includes a year's subscription to the L.S.B. Leakey Foundation News, a 10% discount on books and cassettes, special invitations to lectures, receptions and symposia, the opportunity to designate your contribution to a specific research project, and a special gift book premium.

YES, I WANT TO HELP . . .

My check for \$ _____ payable to the LEAKEY FOUNDATION is enclosed.

Please check one: New Membership Renewal

MEMBERSHIP CATEGORIES:

- \$15 Student
- \$25 Friend *African Genesis, Robert Ardrey*
- \$100 Contributor *By the Evidence, Louis Leakey*
- \$250 Associate *Leakey's Luck, Sonia Cole*
- \$1,000 Fellow *The Quest for Man, edited by Vanne Goodall*
- \$5,000 Benefactor *The Hunter and His Art, Jalmar and Ione Rudner*

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I WISH TO DESIGNATE MY CONTRIBUTION TO THE FOLLOWING RESEARCH PROJECT:

Contributions to the Foundation are tax-deductible as provided by law.
MAIL TO: L.S.B. Leakey Foundation, Foundation Center 206-85, Pasadena, CA. 91125

Continued from page 1

At the end of August Gilka again gave birth — to a healthy son. Three weeks later Passion, aided by her 11-year-old daughter Pom, attacked Gilka. Pom seized the baby, ran off with him and bit deliberately into his forehead, killing him instantly. Again, the family spent the next few hours feeding on the body. Of interest was the fact that another female approached, stared for several minutes at the scene of cannibalism, picked up a scrap of meat, sniffed it and then threw it away and vigorously wiped her fingers on the tree trunk.

I am at a total loss to explain this brutal behavior, but now suspect that other infants which have mysteriously disappeared in the first month, may have suffered a similar fate. It would explain why young mothers usually try to keep up with adult males when their infants are very small. Somehow we must try to find out the reasons for such bizarre incidents — yet we are loath to see any further repetitions. All information on infant killing in wild chimpanzees has now been written up and submitted for publication.

Concerning Male Supremacy

Other interesting behaviors at Gombe concern the struggle for supremacy between the males. Since the disappearance and presumed death of his elder brother (Faben), Figan has been having an increasingly difficult time in maintaining alpha status. There are three other males who rank just below Figan — Evered, Satan and the younger Sherry. Individually Figan can dominate all three. He can also hold his own against any two of them. But on several occasions during the year all three have ganged up on him: at such times Figan lost his nerve, started to cry and scream, and ran away. So far the three have done no more than display in unison, wildly and vigorously, pursuing Figan along the ground and up into trees. However, whilst the spectacle of the three males displaying in unison, waving branches, is certainly successful in intimidating Figan, it seems strange that the three have not so far pressed home their advantage. Perhaps none of them dares to actually launch a physical attack, despite the fact that Figan seems so terrified.

Baboon Life Detailed

The study of the three baboon troops

also continues to yield fascinating information about the population dynamics, family structure and male transfer between troops. Two prime young males transferred within a week of each other: Fred from Camp troop into Beach troop, and Quisqualis from Beach into Camp. Within six months, each of these males was judged top ranking male of his new troop (based on the fact that each was able to supplant every other male in feeding or resting contexts, and each was able to consort with females without difficulty). The most recent event in this drama is the transfer of the usurped alpha male from Camp troop (Gangster) into Beach troop. We eagerly await new developments.

There was one rather touching incident. In 1968, a middle-aged male, David, transferred into Beach troop together with an adult female, Black Tulip — the only female known to have moved between troops at Gombe. By July this year, both were very old. When I last saw them in August, they were unable to climb trees to sleep at night, but remained huddled together on the ground. Later that month old David died and two weeks later Black Tulip. They left, as they came, together.

SCIENCE AND GRANTS COMMITTEE

Continued from page 1

Bishop to Head Museum at Yale

Dr. W.W. Bishop is currently head of the department of geology at Queen Mary College, University of London, but is moving to Yale University as director, the Peabody Museum of Natural History and professor of geology, beginning July 1, 1977. He has participated in major archeological investigations in East Africa over the past 20 years including research on problems of continental geology, the East African Rift and environments of early man. He has served on the faculties of leading universities in England and Scotland and from 1962 to 1965 was director of the National Museum and lecturer at the University of East Africa, Uganda.

Campbell: A Master of Many Disciplines

Dr. Bernard Campbell is a physical anthropologist — one of a select group who integrates knowledge from several disciplines. After taking an honors degree in zoology, botany and chemistry at Cambridge, and a diploma in anthropology, Dr. Campbell received a Ph.D. at Cambridge in primate taxonomy. He is now adjunct professor of anthropology at the University of California, Los Angeles and is head of the Lake Rezaiyeh, Iran archeological research expedition. He has been visiting lecturer in anthropology at

Cambridge and Harvard Universities and has taken part in research and teaching in East and South Africa. Two books by Dr. Campbell, "HUMANKIND EMERGING" and "HUMAN EVOLUTION" have received wide acclaim.

Gell-Mann: Nobel Laureate

Dr. Murray Gell-Mann, recipient of the 1969 Nobel Prize in physics for his work on the theory of elementary particles, has been a member of the California Institute of Technology faculty since 1955.

Dr. Gell-Mann is a member of the National Academy of Sciences, vice president of the American Academy of Arts and Sciences and chairman of its western center as well as a fellow of the American Physical Society. He has served as a member of the President's Science Advisory Committee and is now a citizen regent of the Smithsonian Institution and chairman of the board of the Aspen Center for Physics.

He was named a full professor at Caltech in 1956 and in 1967 was appointed Robert Andrews Millikan Professor of theoretical physics.

MacLean Specializes in Brain Research

Dr. Paul MacLean is chief of the Laboratory of Brain Evolution and Behavior, the National Institute of Mental Health, Bethesda, Md. He is a graduate of Yale College (1935) and the Yale University School of Medicine (1940). He has been a

research scientist at the National Institute of Mental Health since 1957 where he has continued his investigations on brain mechanisms underlying genetically constituted behavior and emotional behavior. His theory of three evolutionary brain formations: reptilian, paleomammalian and neomammalian into a triune human brain with an amalgamation of three mentalities, may account for many human predicaments and is the focus of his current research.

Renowned Authority on Primate Behavior

Dr. Sherwood Washburn is professor of anthropology at the University of California, Berkeley and one of the world's foremost authorities on primate behavior. He has been president of the American Anthropological Association and the American Association of Physical Anthropologists, as well as vice president of the Society for the Study of Evolution. He is a member of the National Academy of Sciences.

His field work was done in Ceylon, Thailand, Borneo, East Africa and South Africa. The long-term objective of his program is the understanding of human evolution based on the study of social behavior, particularly communication in monkeys and apes, the study of locomotion, and the study of the skull. His most recent publications have been on primate behavior and aggression and conflict in primates.



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