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In the Field

The Bulletin of The Field Museum

May/June 1995



Members' Night
May 5

MASTERS OF THE NIGHT
THE TRUE STORY OF
BATS

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In the Field

The Bulletin of The Field Museum

May/June 1995

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The Field Museum
Exploring
The Earth And Its
People

Field Museum scientists study bats and their environments in many parts of the world.

5-8

A complete schedule of May/June events, including lectures, films, and cultural performances.

11

Fascinating facts about bats. Without bat pollinators, the plant that produces tequila loses fertility.

VOLUNTEER HONORS

Field Museum volunteers are honored for extraordinary service at the annual recognition dinner. The Searle Award for 20 years of service was presented to Peter Gayford, Anthropology.

Page 9



THE TRUE STORY OF

Masters of the Night: The True Story of Bats" brings the mystery surrounding bats out of the dark when it opens Saturday, June 17 at The Field Museum. The exhibition dispels popular misconceptions about bats, describes their ecological importance, explores Field Museum bat research and collections, and gives visitors an appreciation of the wonders of the bat world. Special effects, multi-sensory interactive displays, a Gothic castle, and recreated environments such as caves and rain forests present bats in mythic and real-life settings.

"Masters of the Night" will give our visitors a greater understanding and appreciation for bats and the vital role of research and collections in the conservation of these endangered creatures," said Museum President Willard L. Boyd.

Merlin D. Tuttle, Ph.D., founder of Austin-based Bat Conservation International (BCI), serves as scientific consultant. BCI is recognized as the international leader in conservation and education initiatives that protect bats and their habitats.

An extraordinary Neo-Gothic portal opens the way into the exhibit for a view of the world as a bat sees it: upside-down. An 18th-century bat enthusiast walks visitors through centuries of mythic representations of bats by different cultures, all presented upside-down.

A transitional area with bat portrait photography and giant-screen video introduces bats in the real world as diverse, beneficial mammals with fascinating habits and extraordinary abilities. Visitors can discover how similar bat and human anatomies really are by flexing a giant mechanical wing.

The exhibit then takes visitors through a recreated Field Museum curator's office. Here they can discover the international bat research projects currently underway at the Museum and the crucial roles bats play in ecosystems. Specimens of extinct and endangered bat species, bat

BATS

MASTERS OF THE NIGHT

skulls and bones, and touchable models of oversized bat heads will all be on display.

Visitors then enter the bat's world. A rain forest setting provides a realistic look at where bats live and what they look like. A variety of hands-on displays relate to the evening activities of bats such as echolocation (sonar abilities), pollination, and feeding. For example, in a demonstration of echolocation, visitors can use a joystick to maneuver a bat model in search of food using lasers to simulate sonar.

Roosting habits, hibernation, flight, and other behaviors are depicted through interactive displays and exhibitry in a recreated cave. Children can crawl through the cave or hang like a bat. They can even see a colony of live neotropical fruit bats from the Dominican Republic, on loan from Brookfield Zoo.

Finally, through special effects, the simulat-

ed emergence of millions of bats from the cave gives visitors a rare look at nocturnal creatures as they depart on their nightly search for food.

The Field Museum is among 22 North American venues scheduled to host one of two identical exhibits over the next three and a half years.

American Airlines is the promotional partner for "Masters of the Night: The True Story of Bats" at The Field Museum.

Varied Programs

A full summer of bat programs is scheduled to complement the exhibition. On opening weekend, visitors will see first-hand how Field Museum scientists prepare bat specimens for research and collections. "How Scientists Study Bats" will run every weekend through September 4 from 10 a.m. to 3 p.m. Other bat programs include Shadow Puppets, Origami Bats, Bat Houses, and a comparison of local bat species.

Bats will also be featured in a lecture by Dr. Tuttle; field trips; a workshop; seminar; behind-the-scenes tour; and a family overnight. Call The Field Museum Education Department at (312) 322-8854 for a free *Field Guide* brochure with a complete listing of all educational programs.

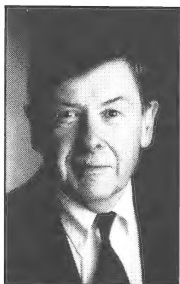
Exhibit & Museum Admission

Admission to "Masters of the Night" is \$3.00 with general admission and \$1 for Field Museum members. Advance tickets can be purchased by calling Ticketmaster at (312) 902-1500. Tickets can also be purchased at any Ticketmaster center including Carson Pirie Scott, Rose Records, Sound Warehouse, Tower Records, and Hot Tix.

Two young boys examine a life-size reproduction of one of the world's biggest bats, the grey-headed flying fox.



WORKING WITH OTHERS



By Willard L. Boyd
President, The Field Museum

The Museum's mission statement, in a section titled "Linkages: Working With Others," commits us to collaborate with a network of institutions, organizations, and individuals close to home and around the world in order to strengthen our programs of research and public learning. This growing network now extends from local schools and parks to universities, museums, and cultural and conservation groups on every continent.

Over one hundred years ago The Field Museum entered into partnership with the Chicago Park District. Museums in parks were considered an integral part of urban park development. Parks were conceived as places of learning as well as nature and recreation. Today The Field Museum and the other museums in Chicago's parks are citywide educational centers for people of all ages and backgrounds.

One of the major ways in which The Field Museum works with others is to lend. Last year we lent nearly 43,000 objects to educational institutions. In the 1920s our Harris Extension was established to lend material to schools to augment their science, humanities, and arts curricula.

Our growing relationship with the University of Chicago through the Committee on Evolutionary Biology puts our city in the forefront of this field. We are working actively to strengthen our relationships with the University of Illinois at Chicago in both anthropology and biology. Recently, the Illinois Board of Higher Education approved the granting of the Ph.D. in anthropology by UIC because of its relationship with The Field Museum. We are working with other area universities and schools to provide science education for minority and women students.

A collaborative program with the Brookfield Zoo and the University of Illinois at Chicago is establishing Chicago as one of the world's most important centers for training con-

servation biologists. Here at home we are a founding member of a new consortium known as the Chicago Regional Biodiversity Partnership. Its purpose is to develop "broad-based understanding of the global and local significance of the Chicago region's biodiversity and support for its long-term protection, restoration, and stewardship in order to enrich the quality of life of the citizens in the region, foster a sustainable relationship with the natural world, and promote the protection of the natural heritage of this area." This partnership includes 35 organizations, among them the Chicago Park District, the Chicago Department of Environment, the metropolitan county forest preserves, state and federal agencies, conservation groups, arboretums, botanical gardens, zoos, and biologically oriented museums.

At the national level we have joined with eight other museums to form NatureNet. With a consortium grant from the U. S. Department of Commerce, we are moving to develop and implement a plan to computerize the North American biological holdings of the participating institutions, which include the Philadelphia Academy of Science, the Bishop Museum (Honolulu), the New York Botanical Gardens, the Los Angeles County Museum of Natural History, the Carnegie Museum of Natural History (Pittsburgh), the American Museum of Natural History (New York City), the Missouri Botanical Gardens (St. Louis), the California Academy of Sciences, and The Field Museum.

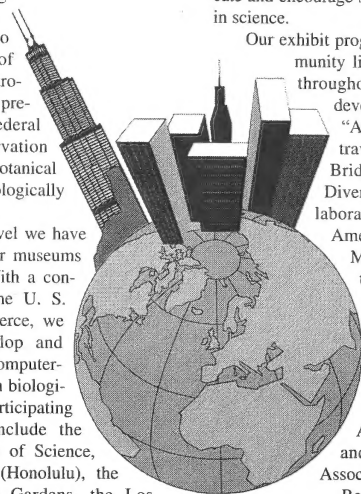
Our public learning programs are increasingly linked with others. Working with the Chicago Park District we are providing summer programs in the parks for day campers and weekend family programs involving our science

and education staff. NatureConnections was established several years ago between the Chicago Public Library and environmentally focused museums to infuse environmental education into libraries and encourage library patrons to use and visit museums. Pursuing a long tradition of teacher training, we are currently working with schools, museums, Argonne National Laboratory, and Bill Kurtis's *New Explorers* public television series on the Science Explorers Program, which aims to create and use science curricular materials that both educate and encourage students to consider careers in science.

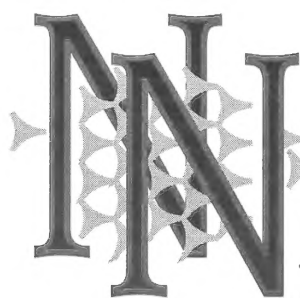
Our exhibit program is incorporating community linkages. Forums were held throughout the city to assist in developing the content for our "Africa" exhibit. The recent traveling exhibits "Kids Bridge" and "Strength and Diversity" involved close collaboration with the Japanese American Historical Society, Mujeres Latinas en Accion, the Polish Museum, the Korean American Association of Chicago, the Ruiz Belvis Cultural Center, the Hellenic Museum and Cultural Center, the Chinese American Service League, and the Nigerian National Association.

Recently we have received grants from the National Endowment for the Humanities and the John Nuveen Company for community dialogues concerning cultural diversity in America. These discussions will connect museum and university anthropologists with community groups.

The Field Museum clearly understands that its effectiveness will be expanded by teaming up with others. In this way we will be more efficient and effective in all that we seek to do. Working with others is key to our future.



Introducing . . .



The Nature Network!

Get behind the scenes at The Field Museum and meet the men and women whose research and conservation activities have changed our understanding of the natural world and the ways we respond to the ecological crisis. Members of this new Museum friends group,

The Nature Network, will learn about the world-wide impact of medicinal plants; discuss the pros and cons of saving isolated habitats; explore layers of the earth to explain our past and predict our future.

This new group will spotlight and encourage support for the environmental role of The Field Museum, locally and globally. There will be Museum-

based programs and field trips underscoring the Museum's commitment to the Chicago community and the world.

The kickoff event for The Nature Network will be **Sunday, July 19. Join us for brunch** with naturalist Merlin Tuttle of Bat Conservation International and bat experts from the Museum's Division of Mammals. Dr. Tuttle will give a public slide-lecture on bats following the brunch.

If you are interested in the complexities of nature and want to get a closer look at the environmental and conservation programs of The Field Museum, call (312) 322-8881 for full details. Join a group that will make a difference in understanding the natural world — the Nature Network.

In the Field

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The Field Museum
Exploring
The Earth And Its
People

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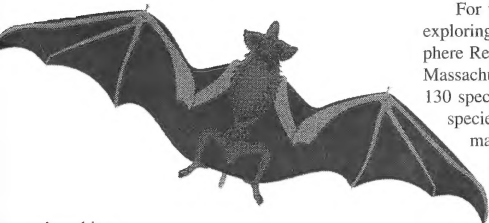
FIELD MUSEUM BAT RESEARCH

Scientific research has helped to dispel many of the common myths about bats: for example, that all bats suck blood, are blind, and fly into your hair just to give you a fright. Much of our knowledge about bats — their odd physical characteristics, their ecological importance, and the incredible variety of species in the wild — has come from museum collections and the researchers who work with them.

Museum collections bring together in one place information on bats of all species, shapes, and sizes from around the world — from nectar-eating bats with long noses like a hummingbird's beak to pugnosed vampire bats that really do drink blood. At The Field Museum alone, there are more than 40,000 bat specimens representing over 800 different species, including some that are now extinct.

To help visitors understand the importance of bat research and collections at The Field Museum, a walk-through replica of a curator's office has been added to the traveling exhibit "Masters of the Night: The True Story of Bats."

When an animal dies in the wild, nearly every part of it is consumed by other creatures. That same principle — "waste not, want not" — can be applied to museum collections. "We save everything we can," says Bill Stanley, collection manager of mammals. "The more details saved, the better. We even pick up dead bats that might be found on the sidewalk because



they hit a window. Such specimens are very valuable in helping us to understand these magnificent creatures."

As an example of how much information can be gleaned from one animal, the curator's office in the exhibit will include a display of everything researchers were able to preserve from one bat.

The most obvious items are the bat's skull, skeleton, and skin, which is usually stuffed and preserved. The bat's gastrointestinal tract, preserved in a small bottle of alcohol, can help researchers learn what the animal ate and what kinds of parasites lived in its gut.

Also preserved are specimens of parasites such as fleas and hair-follicle mites found in the bat's fur. Scientists have discovered that many parasites are associated with specific mammal species, and have evolved over time along with that species. "There's a scientist in Michigan who's finding new families of mites from our specimens," says Stanley. "Family" here refers to a taxonomic grouping that includes one or more genera each of which in turn includes one or more species.

A tube of the bat's tissue was also collected for biochemical analyses. An analysis of the tissue sample can tell scientists about the structure of the DNA and proteins in the bat's cells, which can be used to compare species. Tissue may be useful in the future for other analyses such as an examination of pollutants in the bat's system.

Other items on display will be research or field notes with detailed information on how the specimen was found; a cast of the animal's brain that maps out the location of cranial arteries and

nerves; and dental molds, which allow scientists to study the bat's dental characteristics without destroying the jaw. Other visual tools are a color photograph of the specimen, a scientific illustration, and a scanning electron microscope photograph of the skull.

One of the oddest items collected from the bat is its penis bone, known as a baculum. Certain mammals, including bats, have a bone in their penis that can actually be used to tell species apart due to variations in its shape.

"With some of these specimens, we don't even know yet how they might be used," says Stanley. "The exhibit is designed to show visitors that museum collections are much more than stuffed animals."

Hundreds of scientists use The Field Museum's collections each year. "It's like a library," says Stanley. "If someone wants to compare a species of bat found in Australia with another discovered elsewhere, they can 'check out' a specimen or other information available in our collections to test their hypotheses."

Bruce Patterson, curator of mammals at The Field Museum, and Larry Heaney, associate curator of mammals, both have international research projects underway involving bats.

Why is bat research so important? "Because bats play crucial roles in ecosystems that we're just beginning to understand, such as the rain forest," says Patterson. Also, from an evolutionary standpoint, "this is the only group of mammals that has invaded the air, and they've been dramatically successful at doing it."

For the past ten years, Patterson has been exploring the diversity of bats in the Manu Biosphere Reserve of Peru, a park about the size of Massachusetts that may be home to as many as 130 species of bats. "There are twice as many species of bats in this one park than there are mammal species of all kinds in the state of Illinois," says Patterson.

The project in Peru is an international collaboration that began in 1980. Since then, Field Museum scientists have been working closely with researchers from the University of San Marcos in Lima to record the distributions of bird and mammal species in the Biosphere Reserve.

Patterson and the local scientists are surveying bat populations in the park for several reasons. One is to document which bats are most abundant, and where. Another is to understand how so many diverse groups of bats manage to coexist. And finally, the researchers hope to learn more about the important ecological roles that bats play in the rain forest.

Scientists know that fruit-eating bats are the most numerous and diverse group in the rain forest, depending on specific kinds of plants for survival — and helping trees and other plants to spread their seeds.

"These bats act like little Johnny Appleseeds," says Patterson. "They eat the fruit and then deposit the seeds in other parts of the forest. The farther a seed gets from a tree, the better are its chances of propagating."

Bats have evolved to inhabit a wide diversity of habitats. Because they are so finely adapted to very specific habitats, bats are very sensitive environmental indicators. An environmental change can wreak havoc on an individual species.

For example, Patterson says, an insect-eating bat from the Amazon called *Micronycteris megalotis* virtually disappears when there is any logging activity in the area. "It's like the miner's canary," says Patterson. Deforestation is, in fact, the single most serious threat to bat survival in the New World tropics.

"All bats are related, but there is an incredible variety within the group," says Stanley.

"Adaptations in bats seem to be more pronounced than in other mammals."

The smallest bat in the world is the bumblebee bat from Thailand, which may be the world's smallest mammal. It's about the size of a large bumblebee and weighs about two grams, or one fiftieth of an ounce. One of the largest bats in the world is the *Acerodon* from Indonesia. It's about the size of a cat and has a wingspan of four to five feet.



Smithsonian Institution via World Wide Web

Larry Heaney, associate curator of mammals, studies the evolution and natural history of fruit bats in the Philippines. He has discovered a new species of bat and has documented the extinction of another. His project is vital to the conservation of bats in the Philippines and, like Patterson's study, would not be possible without assistance from local scientists.

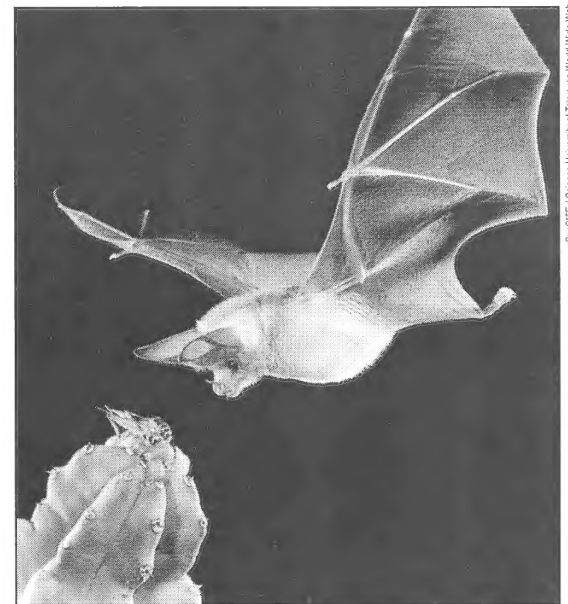
Among his projects, Heaney has documented patterns of bat abundance and evolution on islands of different sizes. Not only does this help in the conservation of bats, it explains some of the evolutionary processes that occur in the natural world. Heaney has also recently helped develop a conservation training program involving international biologists.

If the world's diverse populations of bats are to be preserved, international collaboration among scientists is essential.

"Ultimately, the responsibility for conservation of tropical diversity falls on the people who live in those countries with the most biodiversity," says Patterson. "It's our responsibility to help train and learn from the generation of biologists that will lead their countries to make wise decisions about those resources."

Above: In repose, bats appear to be hanging upside down. For a bat, of course, it's right-side up.

Below: An insect feeding on a cactus is itself about to become a meal for this unerring predator.



SunSITE / Science University of Toyko via World Wide Web

SUSAN WEBB NAMED MEMBERSHIP MANAGER



Ron Dorfman

Susan Webb, former director of development at the DuSable Museum of African American History, has been named membership manager of The Field Museum. It's a homecoming of sorts, she says: "I grew up in this museum. My family used The Field Museum and the Art Institute as our most frequent forms of weekend recreation."

Webb is a graduate of Simmons College in Boston and has an MBA from Howard University in Washington, D.C., which she earned while working in the Office of Fellowships and Grants of the Smithsonian Institution. She later worked as a surveys specialist in the marketing department of the American National Bank in Chicago.

At the DuSable Museum, she focused on increasing membership and attendance of families with children. At The Field Museum, she says, the biggest membership gap is among

NEIGHBORS DAY • SATURDAY, MAY 20

The Field Museum will host its first Neighbors Day Saturday, May 20 from 10 a.m. to 2 p.m. This open house will feature lots of fun hands-on activities for the entire family including music and dance performances. Guests can visit a Tahitian marketplace, a royal palace in Africa, and the Pawnee Earth Lodge; hike through the Nature Walk; see the world's largest mounted dinosaur; and experience a Kenyan wildlife research station. Guests will be admitted free of charge when they present a Neighbors Day pass, which can be obtained by calling the Community Outreach Office at (312) 922-9410, ext. 363.

young adults without children, and Webb hopes to offer programs that will attract them.

Webb continues to be associated with the Smithsonian as a grant reviewer for the Institute of Museum Services and a task force member of the National African American Museum Project.

She succeeds Marilyn Cahill, who left The Field Museum to become assistant director for membership, marketing, and public relations of the Chicago Council on Foreign Relations.

GREEN & GROWING

A group of youngsters checks out the Cook County Forest Preserve District's display at the Fourth Annual Green and Growing Fair. At rear in this photo, John Wagner, biology specialist in the Museum's Education Department, does a show-and-tell on plants. The Fair was held at the Museum April 1-3, coincident with the 25th anniversary of Earth Day.



Ron Dorfman

44th Annual Members' Night May 5

The Field Museum throws open all its doors for the 44th annual Members' Night on May 5, from 5 p.m. to 10 p.m. Once again, Museum members and friends will have the rare opportunity to glimpse the behind-the-scenes world of those who carry on the Field's outstanding traditions of research and education. Every inch of the Museum will be open for exploration.

Museum anthropologists, zoologists, geologists, and botanists will be on hand to share their research with Museum members. This year's roster of exciting programs includes: "Fishes of Tropical Coral Reefs"; "The Diversity of Hoofed Mammals"; "So You Think You Know Rhinos"; and "Web Feats: The Virtual Field Museum on World Wide Web."

You can talk with Museum preparators, exhibit designers, and others who turn scientific information into exciting and informational exhibits that educate and entertain millions of visitors each year. Participate in hands-on demonstrations and workshops where you can make paper bat puppets in anticipation of this summer's new exhibit "Masters of the Night," learn fossil rubbing and how to mount a plant specimen, and find out what a curator's day is like.

Members may bring their families and two guests. Simply present your membership card or Members' Night invitation at any Museum entrance for admission. McDonald's and Picnic in the Field restaurants will be open until 9:30 and the lower level vending area will be open until the Museum closes at 10. Soft drinks and cocktails will be available for purchase at selected sites.

Parking is free in the Museum and Soldiers' Field lots, and shuttle bus service will run every 20 minutes between the Museum and the Canal Street entrances of Union and North-western stations, and at State and Washington, Michigan and Washington, Adams and Michigan, and Balbo and Michigan. All buses will be marked "Field Museum." The Museum is wheelchair accessible, at the West Door.

Just in time for Members' Night and Springtime's major gift occasions

The Museum Store's

Amber Trunk Show

An exciting array of the latest design creations including insect enclosure amber

• earrings • pendants • necklaces • bracelets • Ideal for Mother's

Day, graduation, engagement and wedding gifts

as well as the newest

in men's amber

jewelry for

Father's

Day

Designer Elizabeth Ford will be on hand and will be happy to discuss ideas for custom design possibilities with you.

Friday, May 5

Members' Night

5 p.m. - 9:45 p.m.

Saturday & Sunday, May 6 - 7

10 a.m. - 4:45 p.m.

The Amber Trunk Show is in the Main Store only.

As always, Museum members receive a 10% discount on all purchases.

THE STORES OF THE FIELD MUSEUM

CALENDAR OF EVENTS

Masters of the Night: The True Story of Bats" is a touring exhibit featuring special effects, interactive displays, a Gothic castle with an upside-down gallery, and a recreated cave and rain forest. Live bats and a recreated Field Museum curator's office have been added to the exhibit for its installation here.

The exhibit opens June 17 and runs through September 4. It was developed by BBH Exhibits, Inc. working with Dr. Merlin Tuttle of Bat Conservation International and an advisory council that included Carrie Hageman of The Field Museum and other museum experts from around the nation.

"Masters of the Night" is a fun learning experience that dispels myths about bats, describes their ecological importance, explores bat research and collections at The Field Museum, and provides an understanding of one of the world's most misunderstood animals.

Among the highlights:

- **The upside-down myth gallery**

A neo-Gothic portal leads into the home of an 18th-century bat enthusiast, with examples of historic bat art, folklore and myth — all displayed upside down.

- **A Field Museum curator's office**

The recreated office highlights bat research and collections at the Museum and features specimens of extinct and newly discovered species, bat skulls and bones, and models of oversized bat heads.

- **Interactive rain forest**

Includes hands-on activities relating to echolocation (sonar ability), pollination, feeding, flight, and conservation.

- **Interactive cave**

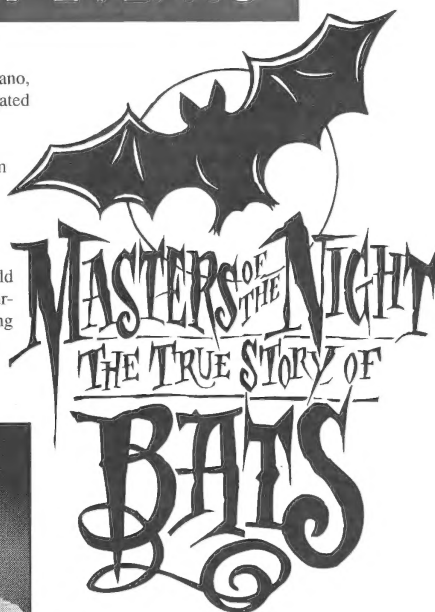
The entrance simulates daytime, the exit dusk. Illuminates real-life behaviors such as roosting

and hibernation, and features bat fossils, guano, hands-on sensory activities, and the simulated emergence of bats from the cave at dusk.

- **Live bats**

A colony of live neotropical fruit bats from the Dominican Republic is presented in a recreated cave setting. The bats are on loan from the Brookfield Zoo.

Admission to "Masters of the Night" is \$3 with general admission, and \$1 for Field Museum members. Tickets can also be purchased at any Ticketmaster center including Carson Pirie Scott, Rose Records, Sound Warehouse, Tower Records, and Hot Tix



Giant bat ears, nearly 20 times actual size, give visitors the sensation of hearing the way a bat hears. A bat's own sonar system, called echolocation, uses sound as sight to help it navigate in nighttime flight.

American Airlines is the promotional partner for "Masters of the Night: The True Story of Bats" at The Field Museum.

FIELD MUSEUM
THE SMART WAY TO HAVE FUN.

LAURA GILPIN: PHOTOGRAPHS OF THE SOUTHWEST

In photography, where an increasing demand for technically-minded composition has influenced how photographs look and feel, emotion in print has become a secondary attribute. Placing emotion into a photograph is nearly impossible, capturing emotion on film perhaps even harder. In The Field Museum's current photography exhibit, "Laura Gilpin: Photographs of the Southwest," one sees a successful combination of both detail and emotion.

Laura Gilpin (1891-1979) began taking photos as a young woman growing up in Colorado. Her experience at the Clarence H. White School of Photography not only began her professional career but also taught her a sense of mood in photography. A chance happening in 1930 — Gilpin and her companion, Elizabeth Forster, ran out of gas in a remote section of a Navajo reservation — sparked her interest in and formed an early bond with the Navajo people. Forster stayed at the reservation as a nurse and was often visited by the intrigued photographer Gilpin.

Gilpin's interest in the Navajo people was immediate, and many of her photographs of the Navajo were taken before 1940. But with the tribulations of the Depression and World War II Gilpin's work in the Southwest was put on hold while she did more commercial work. By 1949, however, Gilpin had published three chronicles of her work of the Southwest.

Then 1950 came and Gilpin went back to the Navajo reservation to join Forster and continue her work with the people there. Times had changed since her photographs like *Camera Study at Acoma Pueblo* (1939), and Gilpin was forced to catch up with the new ideas while cap-

turing what she had missed in the post-war era. Eighteen years later, Gilpin published *The Enduring Navajo* (1968), a collection of her works around the Red Rock area.

Through her work Gilpin proved a photograph could evoke an emotion. Even in *White Sands* (1945), a photo of rippled dunes, an amazing calm is both captured and implied. Her love of the Southwest is the common bond of her photographs. This love helps to explain her ability to work closely with the Navajos and portray them not as an unhappy people but as a strong, enduring community.

Laura Gilpin: Photographs of the Southwest" is on display in the South Gallery through May 21. As inspiring as they are educational, these photographs will certainly give back what they once captured. This exhibition was organized by the Museum of Fine Arts, Museum of New Mexico, and is circulated through TREX: Traveling Exhibitions Program of the Museum of New Mexico.



Camera Study at Acoma Pueblo (1939).

5/2 Tuesday
Library Friends

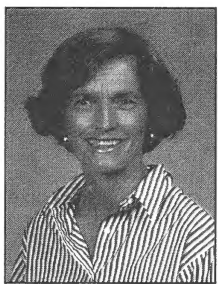
Join Friends of the Field Museum Library for a look at selected books of interesting provenance in the Mary W. Runnells Rare Book Room. This program is a tribute to the collectors who have ultimately, and sometimes unwittingly, contributed to the Library collections. Reception at 5:30 p.m., program at 6 p.m. Open to Library Friends only. For membership information, call Katherine Reay at (312) 322-8874.

5/5 Friday
Members' Night

5 - 10 p.m. The doors are flung open for the 44th annual Members' Night. Educational fun for the whole family.

5/6 Saturday
Lecture: America in the Arab World

1:30 p.m., James Simpson Theatre. Ann Zwicker Kerr, author of *Come with Me from Lebanon: An American Family Odyssey* and widow of the murdered president of the American University of Beirut, speaks on "The Arab Affair: America's Cultural Engagement in the Arab World." The program is free, and will be followed by a book-signing.



5/13 Saturday
Sashes and Belts

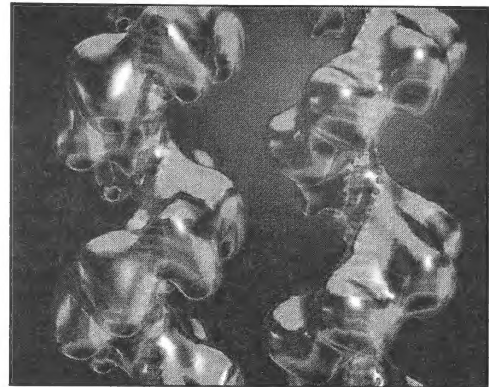
10 a.m. - 4 p.m. The Iroquois, Winnebago, Sauk and Fox used finger weaving techniques to create belts, garters, and sashes. During this workshop for adults, students will see examples in the exhibits and make their own finger weaving sample as they learn about the unique qualities of this weaving technique. Cost is \$40 (\$35 members). Registration is required; call (312) 322-8854.

5/14 Sunday
Raices del Ande

1 p.m. Raices del Ande performs traditional South American music based on Quechua and Aymara cultures of the Andes. Wind and percussion instruments are joined by the stringed instruments introduced by Spaniards in the 16th century. Free with Museum admission.

5/18 Thursday
Founders' Council

Founders' Council Award of Merit Dinner honoring James Dewey Watson, Ph.D., co-discoverer of the structure of DNA. By invitation only. For information about the Founders' Council or the Award of Merit Dinner, please call (312) 322-8868.



Edward Engeman / U. of Minnesota via World Wide Web

5/20 Saturday
Collections Committee

1 p.m. - 3 p.m. Join the Collections Committee for a storeroom tour of the Museum's African collections with Bennet Bronson, chair of the anthropology department, and Chap Kusimba, assistant curator. This behind-the-scenes tour is open to Collections Committee members only. For membership information, call Katherine Reay at (312) 322-8874.

5/21 Sunday
Indonesian Festival

10:30 a.m. - 3 p.m. Celebrate the arts of Indonesia! Featured are a gamelan orchestra, traditional Indonesian dancing, and a seldom seen form of indigenous martial art (Pencak Silak). Free with Museum admission. For more information, call (312) 922-9410, ext. 497.

5/28 Sunday
Apollo Chorus

1 p.m. The acclaimed Apollo Chorus comes to The Field Museum. "Carmina Burana" celebrates the European choral tradition with 12th-century songs of drinking, love, and nature. Stanley Field Hall. Free with Museum admission.

6/9 Friday
Charles Darwin

6:30 - 8:30 p.m. Families, join Dr. John Wagner in the persona of Charles Darwin (in Victorian attire, of course), to visit several exhibits at Field Museum that explain principles based on Darwin's theories. For adults and children in grades 6 and up. Cost is \$9 per participant (\$7 members). Registration required; call (312) 322-8854.

6/10-11 Saturday and Sunday
Overnight Field Trip

Travel back in time on this new overnight trip to Dickson and Cahokia Mounds to learn about the legacy of the early residents of the Illinois Valley and the archaeological research being done to uncover the past. Cost is \$160 (\$140 members). Registration is required; call (312)322-8854 for an itinerary or for more information.

6/16 Friday
Centennial Club

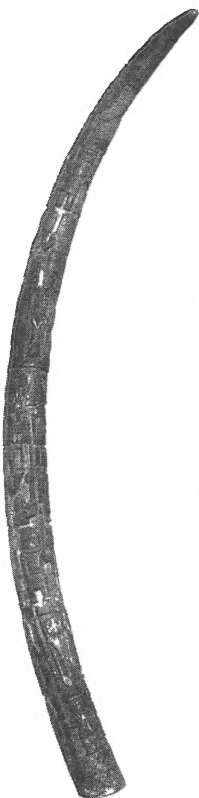
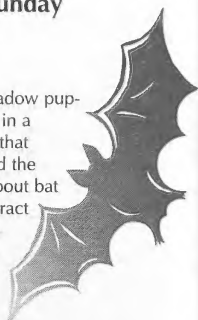
2 - 4 p.m. Centennial Club reception and preview of "Masters of the Night: The True Story of Bats." By invitation only for members of 30 years or longer.

6/17 Saturday
Exhibit Opens: Bats

"Masters of the Night: The True Story of Bats" features simulated environments, interactive displays, and a colony of live bats. Through September 4. Tickets are \$3 (\$1 members) with regular Museum admission.

6/17-18 Saturday and Sunday
Go Batty!

Families can make shadow puppet bats and take part in a shadow puppet show that teaches about bats and the environment. Learn about bat houses and how to attract bats to your neighborhood. Watch as a scientist prepares a bat specimen for the Museum. All free with Museum admission.



Carved ivory tusk from Benin. See Collections Committee, May 20.

FEATURED LECTURES

AMAZONIAN INDIANS FROM PREHISTORY TO THE PRESENT

Amazonia continues to be the center of debate regarding the impact of the tropical rain forest environment on indigenous cultural development. Contrary to the belief that adaptations were necessarily limited because of poor soil, dense vegetation, and the rarely obtainable game, the floodplains of Amazonia were one of the richest habitats for preindustrial humans.

Anna Roosevelt, Ph.D., curator of archaeology, will present a slide-illustrated lecture based on the book she edited — *Amazonian Indians from Prehistory to the Present: Anthropological Perspectives* — and to which she contributed the article "Amazonian Anthropology: Strategy for a New Synthesis." She will highlight the changing relationships of human societies, religion, and ecology during the 12,000 years that indigenous people have lived in Amazonia. The book examines the transformation of indigenous peoples as a result of their interaction with Western civilization and presents an integrated view of Amazonia studies. The book will be available for purchase and signing after the lecture. Thursday, June 1 at 6:30 p.m. Tickets are \$7 (\$5 members).

NATURAL AND HUMAN-INDUCED CHANGE IN MADAGASCAR

The island of Madagascar supports countless species of plants and animals found nowhere else. As part of a three-day scientific symposium convening at The Field Museum, the keynote addresses on Friday evening, June 2 will pro-

vide a broad overview of the cultures, biodiversity, and conservation efforts in Madagascar for a general public audience. Jean-Aime Rakotoarisoa will address the cultural history of Madagascar, presenting the changing perceptions of the Malagasy on their own culture. Based on his continuing excavations of newly discovered sites, Elwyn Simons will speak on the distribution, diversity and extinction of sub-fossil lemurs. The evening will conclude with Patricia Wright discussing integrated conservation development projects in Madagascar, illustrated with examples drawn from her own work in biology and sociology at Ranomafana National Park. Friday, June 2 at 7 p.m. The fee is \$7 (\$5 members).

For a brochure describing the technical sessions of this symposium, call Jodi Sedlock at (312) 922-9410, ext. 256.

THE AMAZING WORLD OF BATS

Save the date for Sunday, July 16 at 2 p.m. when Merlin Tuttle, Ph.D., founder and executive director of Bat Conservation International, visits the Field Museum in conjunction with the traveling exhibit, "Masters of the Night: the True Story of Bats." For more than 30 years, Dr. Tuttle has been studying and photographing hundreds of bat species. A book signing will take place from 12:45 - 1:45 p.m. Members of The Field Museum and Bat Conservation International can receive free tickets; general admission is \$5. Preregistration is required.

For more information about getting tickets for our featured lectures, call (312) 322-8854.



MAY - AUGUST FIELD GUIDE AVAILABLE

The Chicago Waterways boat trip, a nocturnally themed Family Overnight, a seminar on bats in culture and a lecture by bat expert, Dr. Merlin Tuttle are just a few of the summer offerings you can find in the May - August, Programs for Adults and Children brochure. If you have not received a copy in the mail and would like one, please call (312) 322-8854. See the May/June Events page for selected program highlights.

PREMIERE OF 'PICTURE BRIDE'

The Field Museum is co-sponsoring the Chicago Asian American Film Festival's premiere of Kayo Hatto's *Picture Bride* Saturday, May 6 at 7 p.m. with the Festival's sponsor, the Asian American Institute.

Inspired by the true stories of Hawaii's pioneers during the early years of the century, *Picture Bride* is the story of Riyo, a spirited young Japanese woman who ventures to Hawaii as a "picture bride." In her attempt to leave behind a troubled past in Japan, Riyo exchanges photographs and letters with Matsuji, a Japanese sugarcane worker, and a marriage is arranged. Upon her arrival in Hawaii, Riyo discovers that her new husband bears little resemblance to the handsome young man in the photo. Her new world is not the paradise she expected; plantation life is grueling.

Distributed by Miramax Films, "Picture Bride" is the first American feature film to pay tribute to the remarkable group of Asian

American pioneers who ventured to Hawaii to work in the sugarcane fields. "Picture Bride" is one of the first full-length dramatic feature films by an Asian American woman director, Kayo Hatto. Following the film, the director and a member of the cast will field questions and share insights on making the movie. Light refreshments will be served. Tickets are \$25 (\$22 for members, students and seniors). For ticket information, call (312) 322-8854.



Kayo Hatto directing *Picture Bride* in Hawaii

Become a Member of The Field Museum and receive these benefits:

- Free general admission
- Free priority admission to "Life Over Time"
- Priority admission to special exhibits
- Free coat checking and strollers
- Invitation to Members' Night
- Free subscription to *In the Field*
- 10% discount at all Museum stores
- 10% discount at Picnic in the Field
- 13-month wall calendar featuring exhibit photographs
- Reduced subscription prices on selected magazines
- Opportunity to receive the Museum's annual report
- Use of our 250,000-volume natural history library
- Discount on classes, field trips, and seminars for adults and children
- Members-only tour program
- Opportunity to attend the annual children's Holiday Tea
- Children's "dinosaur" birthday card

MEMBERSHIP APPLICATION

New Members only. This is not a renewal form.

Please enroll me as a Member of The Field Museum

Name _____

Address _____

City _____

State ____ Zip _____

Home phone _____

Business phone _____

GIFT APPLICATION FOR

Name _____

Address _____

City _____

State ____ Zip _____

Home phone _____

Business phone _____

GIFT FROM

Name _____

Address _____

City _____

State ____ Zip _____

Home phone _____

Business phone _____

MEMBERSHIP CATEGORIES

- Individual — one year \$35 / two years \$65
- Family — one year \$45 / two years \$85 (Includes two adults, children and grandchildren 18 and under.)
- Student/Senior — one year \$25 (Individual only. Copy of I.D. required.)
- Field Contributor — \$100 - \$249
- Field Adventurer — \$250 - \$499
- Field Naturalist — \$500 - \$999
- Field Explorer — \$1,000 - \$1,499
- All benefits of a family membership — and more
- Founders' Council — \$1,500

Send form to:
The Field Museum, Roosevelt Road at Lake Shore Drive, Chicago, Illinois 60605

VISITOR PROGRAMS

Monday, May 1

11 am & 2pm **Highlights of The Field Museum** tour. Visit some of the exhibits which make this Museum one of the world's greatest. Find out the stories behind the exhibits.

Wednesday, May 3

11 am & 2pm **Highlights of The Field Museum** tour

Thursday, May 4

11 am & 2pm **Highlights of The Field Museum** tour

Friday, May 5

11 am & 1pm **Highlights of The Field Museum** tour

Saturday, May 6

9am-1:30pm **African Metals** activity. Learn about the ancient African art of metallurgy.

11am **Highlights of The Field Museum** tour

Sunday, May 7

1pm **Human Origins** activity. Discover the theories, evidence and myths about our origins and the Great Rift Valley of Africa.

Monday, May 8

11 am & 2pm **Highlights of The Field Museum** tour

Wednesday, May 10

11 am & 2pm **Highlights of The Field Museum** tour

Thursday, May 11

11 am & 2pm **Highlights of The Field Museum** tour

Friday, May 12

11am & 1pm **Highlights of The Field Museum** tour

Saturday, May 13

11am & 1pm **Highlights of The Field Museum** tour
11 & 11:30 am **Stories From Around the World**. Gather around as our storyteller transports you to other lands and times.

Sunday, May 14

1pm **Raices del Ande** performs tradition Andean music using wind and percussion instruments.

Monday, May 15

11 am & 1pm **Highlights of The Field Museum** tour

Wednesday, May 17

11 am & 2pm **Highlights of The Field Museum** tour

Thursday, May 18

11am & 2pm **Highlights of The Field Museum** tour

Friday, May 19

11am & 1pm **Highlights of The Field Museum** tour

Saturday, May 20

10am-2pm **Neighbors' Day**
11am **Highlights of The Field Museum** tour

Sunday, May 21

Indonesian Festival Day
noon **Martial Arts** demonstration
1pm **Gamelan Orchestra and Indonesian Dance** performance
2:30pm **Indonesian Martial Arts** lecture

Monday, May 22

11 am & 2pm **Highlights of The Field Museum** tour

Tuesday, May 23

10am-noon **Arthrocart** activity. Look at living arachnids, insects and other arthropods.
1pm-2pm **Arthrocart** activity

Wednesday, May 24

11 am & 2pm **Highlights of The Field Museum** tour

Thursday, May 25

11am 2pm **Highlights of The Field Museum** tour

Friday, May 26

11 am & 1pm **Highlights of The Field Museum** tour

Saturday, May 27

10am-noon **Arthrocart** activity. Look at living arachnids, insects and other arthropods.
11 & 11:30 am **Stories From Around the World**
1pm **Highlights of The Field Museum** tour
1pm-2pm **Arthrocart** activity. Look at living arachnids, insects and other arthropods.

Sunday, May 28

1pm **Apollo Chorus** performs "Carmina Burana".

Monday, May 29

11 am & 2pm **Highlights of The Field Museum** tour

Tuesday, May 30

10am-noon **Arthrocart** activity
1pm-2pm **Arthrocart** activity

Wednesday, May 31

11 am & 2pm **Highlights of The Field Museum** tour

Thursday, June 1

11 am & 2pm **Highlights of The Field Museum** tour

Saturday, June 3

9am-1:30pm **Horns and Antlers** activity. Find out the differences between horns and antlers.

Tuesday, June 6

10am-noon **Arthrocart** activity. Look at living arachnids, insects and other arthropods.
1pm-2pm **Arthrocart** activity

Saturday, June 10

11 & 11:30 am **Stories From Around the World**

Tuesday, June 13

10am-noon **Arthrocart** activity. Look at living arachnids, insects and other arthropods.
1pm-2pm **Arthrocart** activity

Saturday, June 17

10am-3pm **How Scientists Study Bats** demonstration. Watch as bat specimens are prepared for the Field Museum collection.
10am-4pm **Bat Shadow Puppets** activity. Make a shadow puppet bat then take part in a puppet show.
10am-3pm **Bat Houses** demonstration. See an array of bat houses and learn how you can attract these insect-eaters to your neighborhood.

Sunday, June 18

10am-3pm **How Scientists Study Bats** demonstration. Watch as bat specimens are prepared for the Field Museum collection.
10am-4pm **Bat Shadow Puppets** activity. Make a shadow puppet bat then take part in a puppet show.
10am-3pm **Bat Houses** demonstration. See an array of bat houses and learn how you can attract these insect-eaters to your neighborhood.

Tuesday, June 20

10am-noon **Arthrocart** activity
1pm-2pm **Arthrocart** activity

Saturday, June 24

9am-noon **Adinkra** activity. Stamp a traditional design from Ghana that represents an African proverb.
10am-4pm **Bat Shadow Puppets** activity. Make a shadow puppet bat then take part in a puppet show.
noon-3pm **How Scientists Study Bats** demonstration. Watch as bat specimens are prepared for the Field Museum collection.

Sunday, June 25

1-3pm **African Puzzle Map** activity. Identify African countries on a giant floor map.
10am-4pm **Bat Shadow Puppets** activity
noon-3pm **How Scientists Study Bats** demonstration

Tuesday, June 27

10am-noon **Arthrocart** activity
1pm-2pm **Arthrocart** activity

Daniel F. & Ada L. Rice Wildlife Research Station

Learn more about the animal kingdom through videos, computer programs, books and activity boxes. Open daily 10am-4:30pm

Webber Resource Center — Native Cultures of the Americas

Use books, videos, tribal newspapers and activity boxes to learn more about native peoples. Open daily 10am-4:30pm

Africa Resource Center

Books, periodicals and videos complement the Africa exhibit. Open daily 10am-4:30pm

Place for Wonder

Touchable objects let you investigate fossils, shells, rocks, plants, and items of daily life in Mexico. Weekdays: 12:30-4:30pm
Weekends: 10am-4:30 pm

Pawnee Earth Lodge

Visit a home of mid-19th century Pawnee people. Learn about these Native Americans and their traditional life on the Plains. Weekdays: 1pm program
Saturdays: Free ticketed programs at 11, 12, 2 & 3
Sundays: 10am-4:30 pm open house

Ruatepupuke: a Maori Meeting House

This treasured meeting house provides an opportunity for you to learn more about the Maori people and their life in New Zealand. Open 10am-4:30 daily

Indonesian Cultural Festival, May 21



MAY IS COMMUNITY MONTH AT THE FIELD MUSEUM!

In May the Museum focuses on some of the many traditions that contribute to the cultural life of Chicago.

Music of South America

On Mother's Day, May 14, Raices del Ande share their pride in American culture and history as they perform music of their Andean ancestors — traditional, auctotono, and New Song. The music is based on the Quechua and Aymara cultures that constituted the Inca empire. In addition to the wind and percussion instruments of the native American peoples, the group features stringed instruments which evolved from the Spanish musical influence.

Gamelan, Dance, and Martial Arts of Indonesia

The Indonesian community presents an Indonesian Cultural Festival at the Museum on Sunday, May 21. A gamelan orchestra, Indonesian dance, and Indonesian martial arts are featured. This is a unique opportunity to see and learn about a rare form of Indonesian martial art, Pencak Silat. Until recently, this form of martial art has been kept secret and passed down through generations of guerilla fighters and students. Originally from the island of Sumatra, today each Indonesian island, village, and tribe has its own version of this beautiful art. The performance at the Museum will characterize a West Javan style, Pukulan Cimanbe Pusaka. A demonstration/lecture by Jeff Davidsen will explain the history and development of this art form.

The Indonesian gamelan orchestra was first heard in Chicago during the World's Fair in 1893, and instruments from that original gamelan are part of The Field Museum's permanent collections. The Friends of the Gamelan will perform on the instruments which comprise the gamelan — metal gongs, flutes, gambangs (similar to a xylophone), double-ended drums, redabs (a two-stringed instrument played like a cello) and the angklung, a West Javan instrument made of various lengths of bamboo tubes. Several traditional dances will be performed, each a jewel of Indonesian culture. The day's events are sponsored by the Consulate General of the Republic of Indonesia in Chicago, the Friends of the Gamelan, and the Indonesian American Association of the Midwest.

Chicago's Apollo Chorus

On Sunday, May 28, the acclaimed Apollo Chorus will ring out in Stanley Field Hall. This celebration of medieval European music and verse features the drinking songs and tributes to love and nature of the Goliard poets. The Apollo Music Club was formed in 1872 after the Great Chicago Fire to help lift an oppressed city's spirit. For over a century the Apollo, an all-volunteer chorus, has performed at historic Chicago events — including the 1893 World's Fair. The Chorus includes Chicago-area residents from many backgrounds, who are united in their love of choral music.

A SALUTE TO VOLUNTEERS

By Anita Morgan
Searle Volunteer Coordinator

The Field Museum honored its 1994 volunteers on March 28 at a dinner marking the twenty-seventh year of the volunteer program. Begun in 1968 with a force of 30, the program now includes more than 450 volunteers.

At a buffet dinner in Stanley Field Hall celebrating the volunteers' accomplishments, President Willard L. Boyd and Trustee Judy Block commended them for a job well done. Boyd presented awards to volunteers who contributed 400 hours or more to the Museum, and to volunteers who have been in service for ten and fifteen years. The Searle Award for Twenty Years of Service was given to Peter Gayford of the Department of Anthropology — an engraved crystal box from Tiffany's.

Of varied backgrounds and ages, volunteers play a vital role in the life of the Museum, working with paid staff to meet the growing demands for effective programming in research, collections, and public learning. With their diverse talents and interests, many volunteers assist with collection management in loans and accessions, translate manuscripts, work with objects and specimens, and do data entry, fossil preparation, conserva-

tion, cataloguing, library work, and label writing.

In the Education Department, volunteers work in the public areas of the Museum to help visitors in the resource centers; they demonstrate hands-on activities, give highlight tours, and conduct programs in the Pawnee Earth Lodge and the Maori Meeting House. To accommodate the thousands of schoolchildren who visit the Museum annually, Education volunteers give tours through the exhibit halls. In the newest exhibit, "Life Over Time," volunteers are stationed throughout to answer questions and point out objects.

In 1994, Field Museum volunteers contributed more than 67,000 hours of service, equivalent to 37 full-time employees. The success of the program is evident in the generous contribution of time and interest by volunteers, and the Museum's offering of opportunities to utilize their existing skills and learn new ones.



Diane Alexander White / GNS7464, 20

SPECIAL ANNIVERSARIES

Twenty Years

(Searle Award for Twenty Years)
Peter Gayford, Anthropology

Fifteen Years

Sophie Ann Brunner, Zoology
Marianne Schenker, Education
David Walker, Zoology

Ten Years

Jean Baldwin-Herbert, Education
Carolyn Brna, Education
Irene Broede, Education and Geology
Millicent Drower, Education
Ingrid Fauci, Zoology
Phyllis Ginardi, Education
Mattie Harris, Education
Mary Jo Lucas-Healy, Education
Britta Mather, Education
Selwyn Mather, Botany and Education
Barbara Milott, Education
Daniel Snyder, Botany

Museum Trustee Judy Block addressed the Volunteer Recognition Dinner:

"Your input has solved problems, improved systems, and created a spirit and sense of order in our Museum that cannot be equaled anywhere. In these times, when all family members work, when our society is so mobile, and when there are so many diversions for our attention, a committed and long-standing volunteer is becoming a rarer and rarer thing. We feel blessed to have such an interested, skilled, and loyal army of people to serve our Museum so well."

At left, Education Department anthropology specialist Maureen Ransom (right) with "Africa" exhibit volunteers Charles Grantham (standing), and Annie Campbell (seated right). Ms. Campbell's guest is Edna Kennedy.

SEARLE AWARD TO ANTHRO VOLUNTEER

When he was eight years old, says Peter Gayford, his mother took him to The Field Museum and he remembers thinking he would like to work there one day. On March 28, Gayford received the Searle Award for twenty years of service as a Museum volunteer.

For the past ten years, under the direction of Bennet Bronson, chair of the Department of Anthropology and curator of Asian archaeology and ethnology, Gayford has worked on identifying and cataloguing the McCormick Theological Collection — objects collected around the world by Presbyterian missionaries between 1850 and 1910. The collection contains belts, clothing, shoes, pottery, animal skins, gambling devices, astrological instruments, rubbings, scrolls, funerary and religious articles, and more. Gayford's favorite find is a Crusader-type sword from the Sudan. The blade is engraved with a Moslem prayer and its scabbard is made of a crocodile.

Prior to working as a volunteer at The Field Museum, Gayford was an aircraft mechanic in the Marine Corps. In 1974 he graduated from the University of Illinois at Chicago with a degree in anthropology. Now married with four

sons, he has worked professionally as an aircraft mechanic since 1966, the past eleven years at United Air Lines. He also is a substitute teacher at the Maine Township High Schools in Park Ridge and Des Plaines.

Beginning in 1974, Gayford worked as a Museum volunteer on Alice Schneider's *Catalogue of Chinese Rubbings from Field Museum*. He assisted in research, proof-read the Chinese and English text, and helped with photography and many other tasks associated with the publication. Describing what has been called "one of the largest and finest collections of rubbings in the western world," the catalogue had been begun by Berthold Laufer early in the century and was published in November 1981.

Among Gayford's many contributions is an article written for the *Bulletin* (September 1981) on Giovanni Belzoni, the "King of the Tomb Robbers." (Belzoni was responsible for acquiring much of the colossal and resplendent Egyptian treasures displayed at The British Museum.) In preparation for the King Tut exhibit, Gayford helped survey and relocate the Museum's Egyptian artifacts, with collection manager Joyce Korbecki and University of Chicago Egyptologists. With Donald Whitcomb and his team of graduate students, Gayford assisted in research on the Egyptian, Kish, and Sasanian collections.

President Boyd (right) presents a gift from Tiffany to Peter Gayford in recognition of 20 years as a Museum volunteer.



Diane Alexander White / GNS7464, 28

Volunteers With The Most Hours In 1994 (400 Or More)

Name	Hours	Department and Supervisor
Lawrence Levin	865	Education, Wendy Herder Exhibits, Howard Bezin
George Wolnak	836	Education, Peter Laraba Exhibits, Howard Bezin
John McConnell	746	Geology, Gregory Buckley
Fui Lian Inger	614	Zoology, Robert Inger
Walter Laffer	613	Geology, Clarita Nunez
Halina Goldsmith	560	Education, Mary Ann Bloom
Rosemary Kalin	544	Education, Mara Cosillo-Starr
Paul Brinkman	540	Geology, Olivier Rieppel
Sophie Ann Brunner	538	Zoology, Alan Resetar and Harold Voris
Irene Broede	519	Education, Peter Laraba Geology, Lance Grande and William Simpson
Robert Brunner	519	Zoology, Alan Resetar and Kevin Swagel
Mildred Frank	515	Education, Mary Ann Bloom and Mara Cosillo-Starr
Margaret Martling	505	Botany, William Burger
Madu Bedarinwa	504	Education, Maureen Ransom
Joan Slotnick	495	Geology, Clarita Nunez
Robert Gowland	486	Anthropology, Christine Gross Library, Kenneth Grabowski
Carolyn Moore	477	Anthropology, Bennet Bronson
Leonore Levit	475	Education, Wendy Herder
Armand Littman	464	Zoology, John Slapcinsky
Dennis Kinzig	447	Education, Peter Laraba
Grace Takata	434	Education, Peter Laraba and John Wagner
Dodie Baumgarten	433	Anthropology, Bennet Bronson
Jack MacDonald	430	Anthropology, Robert Welsch
LaVerna Evans	423	Education, Maureen Ransom
Beth Spencer	420	Education, Mary Ann Bloom, Peter Laraba, and Maureen Ransom
Britta Mather	400	Education, Mary Ann Bloom
Robert Spieler	400	Education, Maureen Ransom

NEW ZEALAND PRIME MINISTER VISITS THE MARAE



Diane Alexander White / GN87462.10

In a welcoming ceremony March 29 on the marae of Ruatēpupuke II, the Museum's refurbished Maori meeting house, Mary Ann Bloom, anthropology specialist in the Department of Education, greets a delegation of New Zealand officials (at left in the photo) led by the Prime Minister, J.B. Bolger. Opposite are the tangata whenua, Ruatēpupuke's "home team" of Museum representatives. Also among the visitors was John Wood, New Zealand's ambassador to the United States. The group was on a trade mission in the Midwest.

Below, Bloom describes Ruatēpupuke's interior elements to the Prime Minister and his wife, Helen.



Diane Alexander White / GN87462.13

MAPPA REGNI BOHEMIAE



Diane Alexander White / GN87457.14

Patricia Alice Jirka and her husband, Dr. Frank J. Jirka, Jr., of Barrington Hills, Illinois, pose in front of an extraordinary eight-by-nine-foot map of the Kingdom of Bohemia donated to the Field Museum Library in 1929 by Mrs. Jirka's grandfather, Joseph L. Voborsky. The engraved map by Capt. Johann Christoph Müller, dated 1720, is one of only two known extant copies. The Jirkas were guests at a March 21 reception sponsored by Friends of the Field Museum Library.

Benjamin Williams, librarian of special collections (at right in bottom photo), is joined by Library staff members Janeen Devine, Michele Calhoun, and Ken Grabowski.



John Wernstein / GN87456.6A

SEARLE LOUNGE DEDICATION

President Boyd points out a display explaining the role of private individuals in building the Museum's collections to William L. Searle, a Museum trustee. The display and related materials are in the Searle Lounge on the north mezzanine overlooking Stanley Field Hall. The

visitor lounge was made possible by a gift from Searle and his wife, Sally, in an effort to encourage volunteerism and other active participation in the Museum. The Searle family, including the grandsons in the photo, attended a reception in the Rice Wildlife Research Station and toured "Life Over Time."



Diane Alexander White / GN87458.11

COLLECTIONS COMMITTEE RECEPTION

Chap Kusimba, assistant curator of African archaeology and ethnology (left), talks with Alaka Wali (center), visiting associate curator of anthropology and director of the Museum's Center for Cultural Understanding and Change, and Wali's husband, Richard Hubbard, during a Collections Committee reception in the Founders' Room February 15. Kusimba gave a lecture on his research in East Africa.



Diane Alexander White / GN87442.4

AMAZING BAT TRIVIA

Fishing bats have echolocation so sophisticated that they can detect a minnow's fin as fine as a human hair, protruding only two millimeters above a pond's surface.

The world's smallest mammal is the bumblebee bat of Thailand, weighing less than a penny.

Giant flying foxes that live in Indonesia have wingspans of nearly six feet.

The common little brown bat of North America is the world's longest-lived mammal for its size, with a life span sometimes exceeding 32 years.

Mexican free-tailed bats sometimes fly up to two miles high to feed or to catch tail-winds that carry them over long distances at speeds of more than 60 miles per hour.

The pallid bat of western North America is immune to the stings of scorpions and even the seven-inch centipedes upon which it feeds.

African heart-nosed bats can hear the footsteps of a beetle walking on sand from a distance of more than six feet.

Red bats, which live in tree foliage throughout most of North America, can withstand body temperatures as low as 23 degrees F. during winter hibernation.

Tiny woolly bats of West Africa live in the large webs of colonial spiders.

The Honduran white bat is snow white with a yellow nose and ears. It cuts large leaves to make "tents" that protect its small colonies from jungle rains.

Frog-eating bats distinguish edible from poisonous frogs by listening to the mating calls of male frogs. Frogs counter by hiding and using short, difficult-to-locate calls.

Vampire bats adopt orphans and have been known to risk their lives to share food with less fortunate roost-mates.

Male epauleted bats have pouches in their shoulders that contain large, showy patches of white fur, which they flash during courtship to attract mates.

Mother Mexican free-tailed bats find and nurse their own young, even in huge confines where many millions of babies cluster at up to 500 per square foot.

IMPORTANT BAT FACTS

Nearly 1,000 kinds of bats account for almost a quarter of all mammal species, and most are highly beneficial.

A single little brown bat can catch 600 mosquitoes in just one hour.

A colony of 150 big brown bats can protect local farmers from up to 18 million or more rootworms each summer.

The 20 million Mexican free-tails from Bracken Cave, Texas, eat 250 tons of insects nightly.

Tropical bats are key elements in rain forest ecosystems, which rely on them to pollinate flowers and disperse seeds for countless trees and shrubs.

In the wild, important agricultural plants, from bananas, breadfruit and mangoes to cashews, dates, and figs rely on bats for pollination and seed dispersal.

Tequila is produced from agave plants whose seed production drops to 1/3,000th of their normal production without bat pollinators.

Desert ecosystems rely on nectar-feeding bats as primary pollinators of giant cacti, including the famous organ pipe and saguaro of Arizona.

Bat droppings in caves support whole ecosystems of unique organisms, including bacteria useful in detoxifying wastes, improving detergents and producing gasohol and antibiotics.

An anticoagulant from vampire bat saliva may soon be used to treat human heart patients.

Contrary to popular misconceptions, bats are not blind, do not become entailed in human hair, and seldom transmit disease to other animals or humans.

All mammals can contract rabies; however, even the less than half of 1% of bats that do, normally bite only in self-defense and pose little threat to people who do not handle them.



The darkened interior of a kid-sized, recreated cave in "Masters of the Night" reveals several clusters of California long-eared bats. Some bat species roost in clusters to achieve their optimum body temperature.

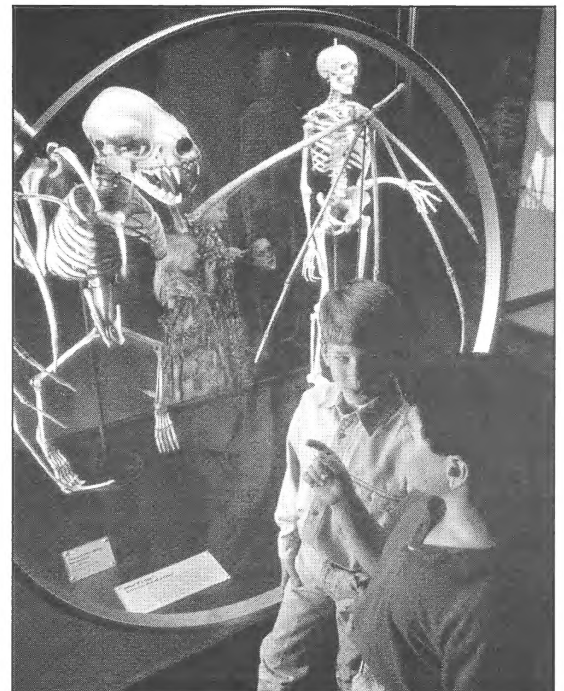
Bats are exceptionally vulnerable to extinction, in part because they are the slowest reproducing mammals on earth for their size. Most females produce only one young a year.

Nearly 40% of American bat species are threatened or endangered. Around the world, many more are declining at alarming rates.

Loss of bats increases demand for chemical pesticides, can jeopardize whole ecosystems of other animal and plant species, and can harm human economies.

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In "Masters of the Night" a giant magnifying glass appears to enlarge a fascinating mammalian characteristic of the bat — its anatomical similarity to a human. A human-size bat skeleton alongside a human skeleton presents the striking resemblance.





FIELD MUSEUM TOURS

312/322-8862

Your guide on this fabulous tour through the ancient past and contemporary culture of Amazonia is Dr. Anna C. Roosevelt, curator of archaeology at The Field Museum. Dr. Roosevelt has been excavating in the region for twenty years, and has found a world near the mouth of the Amazon far more complex than our traditional notions of Indian culture and rain-forest ecology would allow.

In Manaus, we'll visit the famous National Amazon Research Institute, see tropical forest research stations, and talk with some of Brazil's leading ecologists. Aboard the M/V *Desafio*, a luxurious, specially outfitted river cruiser, we'll spend six days on the Rio Negro, visiting the Anavilhanas Islands and the colonial city of Barcelos.

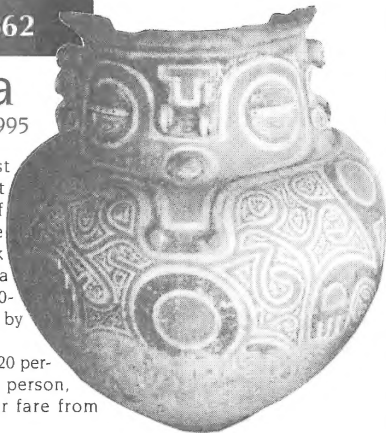
In Santerém, Dr. Roosevelt will take us to her pottery site and other digs in the area. We'll tour historic Taperinha

Amazonia

September 1 - 13, 1995

Plantation, a rain forest reserve, and verdant springs before setting off for picturesque Monte Alegre and the nearby rock painting sites, including a picnic lunch at an 11,000-year-old cave discovered by Dr. Roosevelt.

The tour is limited to 20 persons. Cost is \$5,800 per person, including round-trip air fare from Chicago.



THE RUSSIAN WATERWAYS

From Moscow to St. Petersburg • July 25 - August 7, 1995

Travel from the commercial city of Moscow for 12 days to the Russian cultural Mecca of St. Petersburg by way of the Russian waterways. We'll stop at Zagorsk and visit three basilicas, enjoy sightseeing guided by our ship company, and learn about the areas with our own resident lecturer. All along the rivers, we'll explore some of the most culturally rich parts of Russia. In St. Petersburg we'll spend four days exploring the Pavlovsk Palace, the Theater of the Czars in the Winter Palace, and the exciting "Hidden Treasures of the Hermitage" exhibit of art captured from German museums during World War II. Cost of the excursion is \$4,765, main deck, including round-trip air fare from Chicago.

Natural Sciences Seminar • Alsace, France

September 17 - 25, 1995

From our base in the town of Ottrott, nestled in a hollow of the Vosges Mountains and surrounded by forests, orchards, and vineyards, we'll spend mornings in seminars on interesting regional topics and afternoons exploring the natural beauty and historic treasures of the area. On a full-day excursion to nearby Strasbourg,

we'll visit Notre Dame Cathedral, the Ethnic Alsatian Museum, and the gardens of the Institut Botanique, among other sites. Our guide is Dr. Thomas Lammers, assistant curator of botany at The Field Museum.

Cost is \$2,545 per person, including round-trip air fare from Chicago.

Cruising through Provence aboard the M.S. Cezanne • Sept. 19 - Oct. 1, 1995