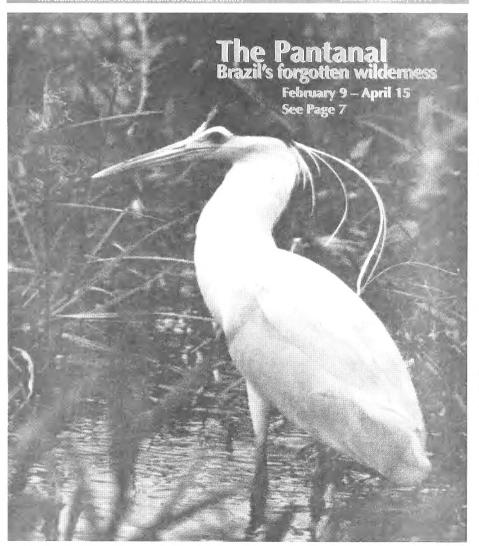
aH

Im the Field

The Bulletin of the Field Museum of Natural History

January (Enhances 180)





In the Field

The Bulletin of the Field Museum of Natural History

January/February 1991

3

The Museum reaches out to reconnect with Chicagoans of many cultures.

4

Field Museum opens its first off-site retail venture, a 2,200-square-foot shop at Ford City. 5

The 1991 African Heritage Festival expands with more attractions for family visitors. 8

Lunch in a cave? On a Museum tour to Turkey, V.P. Willard White ponders the improbabilities.



IMPACT OF GULF CRISIS ON ARCHAEOLOGY

At least six U.S. archaeological projects in Iraq, along with others in Kuwait, Jordan, and Iran, have been put on hold. Field Museum's collections from the area, like the incised clam shell at left, provide a fertile field for sedentary excavations.

Story on Page 11

FLORIDA'S VANISHING SCRUBLAND

By John W. Fitzpatrick Division of Birds

ext time you're in Florida with some time to explore, try a drive on one of the smaller, two-lane roads that cross the peninsula from one coast to the other. The drive takes less than four hours unless, like me, you have trouble driving through beautiful natural areas without stopping for some closer looks. I recommend State Highway 70, which connects Fort Pierce (on the Atlantic) with Sarasota (on the Gulf). Not coincidentally, this beautiful road passes very close to my new home.

If you've never made this drive before, and even if you have, be on the lookout for some wild sides of Florida that few Americans know. Some of the species you'll see are among the most seriously endangered in all of the United States. All along the way, prepare also to see a subtropical paradise in transition, for this unique peninsula has become the fastest growing center of human population in the country. Paradise, we are learning too quickly, is fragile and fleeting.

I had known this beautiful, tragic

I had known this beautiful, tragic landscape for nearly 20 years as a visiting stu-

dent, and then as a Field Museum curator studying the unique social habitats of the Florida Scrub Jay This endangered bird and its embattled habitat finally drew me away from a comfortable and productive life in Chicago last year. Now, as director of a major ecological research station, I am immersed in a microcosm of global conflicts between human development and environmental health. Florida's ecological deterioration locked into permanent



Florida Scrub Jay with one of 8,000 acorns it will stash away for the winter. A typical individual will consume half of them.

of unplanned and unfettered human development. Make your drive into wild Florida soon, for it may be gone completely before you get another chance.

Florida scrub and the Lake Wales Ridge

Florida was sculpted by the oceans. Global changes in sea level periodically inundated much of the present-day peninsula, leaving ancient seashores scattered about the landscape after the seas retreated. The biggest of these inundations happened two to three million years ago, swallowing up the land almost completely. At its high point the sea deposited enormous sand dunes hundreds of feet high along a narrow strip down the center of the peninsula. A series of sand bars and islands was created, isolated from the continent by miles of shallow ocean. The retreating sea left these huge piles of sand as Florida's most distinctive geologic feature, known today as the "Lake Wales Ridge." The Ridge is interspersed with hundreds of sinkhole lakes, reflecting the decaying

Not surprisingly the lakes, in turn, invited people. Away from the coasts, the largest centers of human settlement in Florida are on the Ridge.

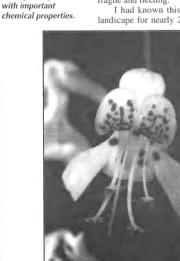
Watch for these sandy hills exactly halfway along your drive across Florida. You'll pick them out easily, because they are the only appreciable rises in an otherwise flat landscape that was once the ocean floor. As you "emerge

from the ocean" onto the dunes you will see the vegetation change instantly, from prairie ranchland and cabbage palms below to mostly citrus groves up on the Ridge. Keep a sharp eye here, because the Ridge is only a few miles wide. Amid the groves and mobile home parks, it is still possible to glimpse one of America's rarest native habitats — Florida scrub — and its flagship bird, the Florida Scrub Jay.

Over the millenia since these dunes were deposited, hundreds of plant and animal species adapted to porous, nutrient-starved soils of almost purewhite sand. Today the desert-like habitat is dominated by an enchanting "dwarf forest" of woody perennials including several oaks, a hickory, a pine, and a peculiar aromatic shrub called rosemary (not the source of the common spice). Virtually all these plants, and many of the animals that live among them, occur nowhere else in the world. Because of its unique history, this ancient Ridge persists as one of the most distinctive centers of biological endemism in North America. The fauna includes Florida's only endemic bird, a relict mouse, a burrow ing tortoise, numerous other reptiles found nowhere else (including legless

lizards that "swim" through the sand), and a hundred species of insects, spiders, and millipedes restricted to the scrub. The plants are equally rich in spectacular endemics, which flourish in some of the poorest and driest soils on earth. Many of the plants possess unique chemical defenses against hords of local insect herbivores. One such plant, the Lake Placid Scrub Mint, recently was found to possess a previously undiscovered, powerful insect repellent.

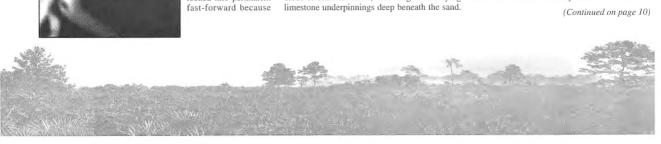
Unfortunately, this potentially useful reservoir of genetic information may never be tapped. The enchantment of the scrub and its menagerie of unusual creatures may persist only in photographs, for Florida scrub of the Lake Wales Ridge has become one of the rarest and most critically endangered ecosystems in all of North America. No fewer than 33 plant species restricted to the scrub are listed or are under review for listing by state and federal endangered species agencies. Several of these are not protected anywhere, and are critically close to extinction. The Florida Scrub Jay is not far behind.



The Lake Placid

endangered species

scrub mint, an



A CULTURAL CROSSROADS



By Willard L. Boyd

President, Field Museum of Natural History

he Field Museum is a center of learning about differences and similarities in the world's physical environments and human cultures. Our collections are drawn from all over the world and represent the natural and cultural patrimony of many peoples, and we recognize that we hold these collections in trust for future generations worldwide. Our irreplaceable collections are the basis of continuing study of the evolution of ecological and social patterns on our planet. Foreign scholars regularly visit or borrow from our collections. Field Museum curators are engaged in active research programs that take them regularly to different parts of the world.

From its inception the Field Museum has recognized its fundamental responsibility to provide public learning about the world's environments and cultures to the people of Chicago, of Illinois, and of the central United States. As our community becomes increasingly diverse, the Museum has a special opportunity to be a community center of learning. Because of our diverse collections, research, and public programs, Field Museum is a cultural crossroads.

Since the 1920s, with the development of the Harris Educational Loan Center, the Museum has sought to reach out to the community through neighborhood schools. Today, that effort has redoubled, using other neighborhood institutions in Chicago and environmental and cultural organizations throughout Illinois.

As a cultural crossroads, we encounter diverse views about the environment and culture. But we also see similar approaches by all people to environmental and cultural problems. Fortunately, we live in a time of increasing

openness in learning. That openness, whether in Eastern Europe or Chicago, is an opportunity to be seized, not feared. Openness does not necessarily mean lower standards orcultural relativity. Closed societies have the most to fear on that score. Open societies are places where ideas can be tested continually without fear and new views can be scrutinized and adopted if they have merit.

How we look at nature changes over time as we can see, for example, by changing theories of plate tectonics. How we look at ourselves and others also changes over time.

Our Centennial Directions self-study defined our mission as a multicultural center of learning. We are committed to being open among ourselves and with the diverse publics we serve — such as the cultural groups associated with our collections whether living in Africa, Asia, South America, or Chicago. Accordingly, we are broadening our consultation with Native American groups throughout the United States, and when our curators are in the field they help local communities build collections of natural and cultural specimens.

At the Museum itself, we are doing more than opening the bronze doors to the public each day. Greater understanding is an institutional goal that starts at the front door with our reorganized Department of Visitor Services. Our exhibits and other educational programs are increasingly multicultural and involve people of many backgrounds in planning, teaching, and performing.

Situated at this cultural crossroads, we at the Field Museum have a special responsibility to foster mutual understanding and respect among cultures, which is best accomplished by people knowing people as well as ideas. We have much to learn from each other.

LETTERS

Ye been a high school science teacher for the past twenty years, *directly* as a result of visiting the Field Museum.

As a young child, I never had any strong focus or goal in life until my sixth grade teacher, Mrs. herron (I think that's how she spelled it) of Taft School in Joliet, took our class on a field trip to Field Museum. A wonderful world that I didn't know existed opened up to me that day when I looked in pre-adolescent awe at real mummies, dinosaur fossils, and the seemingly endless halls of mounted animals in their diorama habitats. The elephants in Stanley Field Hall were beautiful and timeless to an

ERRATA

The November/December issue of *In the Field* contained several errors:

- Because of an editing error, the sedimentation that would result from the experiment described in "The Record in the Rocks" (page 8) was given in reverse order: The carbon deposits would be on top and the small stones on the bottom.
- Because of a production error, the byline and dateline were dropped from "Ecological Puzzle in Borneo" (page 9). The article was by Robert F. Inger, curator of amphibians and reptiles, writing from Mendolong, Malaysia on August 23, 1990.
- The journal cited in the article "Economic Botany" (page 9) as The Herbalist is properly called *The Herbarist*.

 In the notes on curators (page 3), the
- In the notes on curators (page 3), the notices of new appointments in the department of zoology should have specified that Dr. Bieler and Dr. Voight were appointed as assistant curators.
- The obituary notice (page 3) for Donald W. Lathrap misspelled his name.

We regret the errors.

eleven-year-old's eyes. The marble and classical architecture of the Museum building itself made me feel like I was privileged to be visiting someplace special....

I've spent the last twenty years teaching high-school biology, human anatomy, and general-science courses — with plenty of hands-on experiences for my students: I believe that a science education requires frequent lab experiments, natural-science specimens for examination, and museum and outdoor field trips to excite students' curiosity. In all of my classrooms, first in Chicago, then in Los Angeles, I've always maintained a healthy colony of live mice, pet fish, and assorted reptiles. Rocks, eashells, living and preserved plants, and plenty of 35mm slide shows rounded out my repertoire as an entertaining but informative schoolteacher charged with the deep responsibility of instilling an interest and love of nature in the minds of the kids entrusted to my care.

Lately I've spent more time writing than teaching, with several books on stamp and coin collecting and many freelance newspaper articles under my belt, but I'll never forget the enchantment and wonder which that Field Museum trip with my sixth-grade class sparked in me.

I like the old format of the *Bulletin* better than the current "newspaper" style *In the Field* because I think that a great museum should have a publication of lasting printing quality and of

the highest production standards. Terra, published by the Los Angeles County Natural History Museum, and Natural History, long published by the American Museum in New York City are worthy of permanent hard-cover binding for library reference. Maybe the Field Museum's membership publication could be issued quarterly with bettery printing quality to offset the less frequent publishing schedule.

BARRY KRAUSE Van Nuys, Calif.

as thrilled to receive the 1991 Calendar in today's mail. . . . Not one visitor to my kitchen has failed to admire/comment on it and inquire where it was purchased!

Have enjoyed the Field Museum for many years — at first with my parents and schoolmates, next with my daughter, and now with a six-year-old granddaughter... [and] wanted to take a moment to e xpress four generations of gratitude (Mom's 90 but remembers you well) for providing Chicago with a fabulous treasure.

The Calendar is not only beautiful but a wonderfully utilitarian membership benefit. Thank you and each of the monthly sponsors very much.

Ramona, Nowanna, and Gabriella Santelli and Mrs. Tina Cammarata

In the Field

January/February 1991 Vol. 62, No.1

> Editor: Ron Dorfman

Art Director: Shi Yung

In the Field (ISSN #1051-4546) is published bimonthly by Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago II. 60605-2496. Copyright © 1991 Field Museum of Natural History. Subscriptions Scip annually, \$3.00 for schools. Museum membership includes in the Field subscription. Opinions expressed by authors are their own and do not necessarily reflect policy of Field Museum. Unsolitated manuscripts are velcome. Meson phone (312) 925-940. Notification of address schange should include address table and should be sent to Membership Department. POSTMASTER. Send address changes to In the Field, Field Museum of Natural History, Second class postage paid at Chicago, Illinoid

OUTREACH PROGRAM TARGETS CITY NEIGHBORHOODS

By Ron Dorfman Editor, In the Field

ibraries, community centers, schools, and Park District fieldhouses will host long-term, monthly Field Museum programs on world cultures and natural history, starting in February.

The community institutions are located in eight Chicago neighborhoods with large African-American, Hispanic, or Asian populations — neighborhoods that have been the object of special attention by the Museum's Commu-

nity Outreach Program.

For the past two years, Outreach staff members have been visiting dozens of sites in the eight neighborhoods to present spot programs consisting of a fifteen- or twenty-minute lecture/discussion, a display of objects from the Museum's Harris Educational Loan Center, and a craft project, using everyday materials, in which the participants make facsimiles of the objects, such as masks or jewelry.

The neighborhoods involved are Engle-

The neighborhoods involved are Englewood, West Englewood, Auburn-Gresham, South Shore, the Near West Side, South Chicago, the Lower West Side (Pilsen), and Armour Square (Chinatown). Native American organizations outside these neighborhoods have also taken part. Participants have included all

age groups.

According to Outreach coordinator Jessie Thymes, the new program of in-depth presentations will provide all participants with a cross-cultural learning experience and will be flexible enough that presenters can devote as many sessions to a given culture as will command interest. The zoology, biology, and geology associated with a regional culture will also be included.

A similar project will be conducted in the Museum with about 60 parents of children enrolled in Child-Parent Centers in the public schools of the eightneighborhoods. Those who successfully complete the one-year course will be honored at a recognition dinner and given family memberships in the Museum for the following year.

A hoped-for outcome, Thymes said, is that there would be some "conversions" so that parents could replicate the program in their schools and communities, with assistance from the Museum's educational loan center.

A longer-range goal is to convert more people from the target neighborhoods into avid museum-goers.

About 6,000 people have participated in Outreach Program workshops during the past two years, and Thymes said her experience indicates that people in these communities "feel a basic need to learn more about their own cultures, but they're also interested in learning about other cultures."

Chicago then and now

In the 1890s, when the Field Museum was being organized, Chicago had just over a million people, and the vast majority of them were of Irish, British, German, or Scandinavian heritage. The 1890 census counted only 14,271 native-born African-Americans (1.3 percent), 33 people from various parts of Africa, 14 Native Americans, 46 Pacific Islanders, about 1,000 Chinese and other Asians, and about 100 people from Mexico and Central America. In all, less than two percent of the population was associated with the "exotic" lands from which the Museum's ethnographic collections would be drawn.

The 1990 numbers aren't in yet, but it's obvious the population mix is very different. Of the city's three million people, nearly half are African-Americans, and there are significant African and Afro-Caribbean communities; another 20 percent or more are of Mexican, Puerto Rican, or other Hispanic descent; about eight percent trace their roots to Asia or the Pacific islands; and there is a substantial Native American community in the city.

Clearly, the Museum's collections and exhibits have become increasingly useful potentially useful, at least -Chicagoans who may wish to explore their own and their neighbors' ethnic heritage. The Museum collections do not, after all, include objects representing the cultures of the city's early immigrants - the cultures of northern Europe, Britain, and Ireland. But there are many items on display from Africa, Asia, the Pacific, Mexico and Central America, and from the Native American nations of North America.

Nevertheless, current city residents do not come to the Museum in anything like the numbers one might expect. So, building on nearly 80 years of experience with the Harris Educational Loan Center and

Chicago-area schools, the Museum's Department of Education organized the Community Outreach Program in 1988 to take the Museum to the people, in churches, community centers, and other comfortable gathering places as well as in the schools. In addition, on Neighbors Night residents of the eight target neighborhoods are invited to the Museum to roam the exhibits, talk with Museum curators about their work, participate in crafts of many cultures, and enjoy music, dance, and foods from around the world. The first Neighbors Night was held in 1989 with



Jessie Thymes, coordinator of the Community Outreach Program, leads a workshop on African rhythms at the Englewood Messiah Lutheran Center.

professionals will result in a mini-exhibit, on the theme of Mexican and Mexican-American Day of the Dead observances, scheduled for Webber Resource Center October 4 to December 1.

City and suburban schoolchildren of all races have an even wider compass in the Africa Project, which is developing the Museum's major new exhibit on Africa, scheduled to open in 1993. Thirty students recruited from fifthgrade classrooms two years ago will stay with the project until they are tenth-graders — when, having helped develop the exhibit, they will function

as weekend docents and exhibit guides for both school groups and adults. In the course of their museology lessons, they're also learning to understand people who seem "foreign," including one another.

The Africa Project demonstrated some other innovative ways in which the Museum can involve the community. As part of its initial research for the exhibit. project staff went out on street corners and other locations, includ-

ing Stanley Field Hall, to ask people what they knew, or thought they knew, about Africa, and what they would like to know. The Project also organized neighborhood meetings to solicit input and produced a weekly cable television call-in program featuring African nationals living in the Chicago area.

Another way in which the Museum reaches out into the community is by cooperating with smaller, ethnic-oriented institutions that wish to make use of Field Museum's more extensive collections in their own exhibits. In recent months the Museum has lent collections of modern Mexican ceramics and Central American textiles to the Mexican Fine Arts Center Museum and of North American Indian objects to the Mitchell Indian Museum.



Field Museum intern Huei-Min Chern demonstrates Chinese calligraphy on Neighbors Night.

1,400 guests; the 1990 event last September drew 2,500.

The Museum's Department of Education organizes similar activities for ¿Celebración! and for the African Heritage Festival, annual events that explore the history and cultures of Hispanic America and of Africa and the African diaspora. Originally designed to support the Chicago Public Schools curriculum, the African festival — which takes place in February, in observance of Black History Month — now includes a variety of programs for family visitors. (See schedule, page 5.)

Maureen Herencia, the Department's subject matter specialist in anthropology, also teaches a special museology course for gifted junior-high-school students with limited English proficiency. Of the 20 students from ten schools enrolled in the course, Herencia said, 80 percent had never been to the Field Museum before, and 30 percent had never ventured outside their home communities. Their weekly sessions with curators, exhibit developers, and other museum

ART FROM THE BOONE COLLECTION ON EXHIBIT AT DEPAUL UNIVERSITY

ifty exquisite works of Japanese art from the Field Museum's Boone Collection, most of them never before exhibited, will be shown at the DePaul Art Gallery, 802 W. Belden, Chicago, January 7 to March 15.

March 15.

The exhibit, titled "Legend in Japan," concentrates on the theme of popular myth in the Edo (1615-1868), Meiji (1868-1912), and Taisho (1912-26) periods. In addition to paintings, it includes printed books and small metal, ivory, and wood objects, selected from among the 3,500 art works and artifacts collected by Gilbert and Catherine Boone during their residence in Japan in the 1950s.

The depiction, over four centuries, of legendary heroes, gods, and demons provides rare, fascinating insights into the psyche and spirit of the Japanese people.

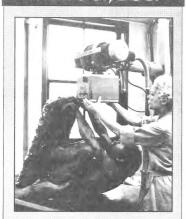
Several public lectures will be given during the exhibit. The opening lecture, "Domesticating the Nether World: Terrifying Visions in Later Japanese Art," will be given by James Ulak, associate curator of Japanese art at the Art Institute of Chicago, at 6 p.m. January 17 in The Commons, 2324 N. Fremont St. The lecture will be followed by a reception in the atrium of McGaw Hall adjacent to the Gallery.

The Gallery is open 10 a.m. to 4 p.m. weekdays. The exhibit and all events are free and open to the public. For more information, call (312) 362-6763.



Demon and demon queller: At left, a detail from Hyakki Yako Zu (Night Parade of 100 Demons), a handscroll dated 1918 [#266010]. Above, Shoki, the Demon Queller (detail of a hanging scroll), by Odake Etsudo (1868-1931). [#266037]

WHAT'S UP, DOC?



Winners of the "What's Up, Doc?" contest for the most interesting guess as to the happening pictured above are Pat and Koji Yaguchi of Crystal Lake, Illinois, for this late 20th-Century illumination:

What's Up, Doc?

"Surf's up, Dude, what else??!!!"

From the beginning, man has engaged in discovering or inventing activities for sport and for entertainment. (There had to be more than picking berries or hunting!)

What we have is the world's first surfer hanging ten on his surfrock, immortally preserved thanks to that California sun and salty Pacific splash. It must be noted, however, that surfing was originally a land sport. Unfortunately, our surfer got caught in an earthquake measuring 9.0 on the Richter Scale, and fell between the dividing continents into the water.

For so enlightening us, Pat and Koji get a copy of *The Greenpeace Book of Dolphins*. And while we hadn't offered more than one prize, we feel compelled to give some recognition to Mrs. John Vredenburgh of Vero Beach, Florida, who composed the most efficient entry, in the form of a caption.

"Now Sir, you must let go of the board for your proctoscopy."

MEMBERS' NEWS AND NOTES

NEW BENEFIT FOR MEMBERS

Members of Field Museum can now subscribe to a variety of natural history and related publications at substantial discounts. Order forms are included with brochures being sent to members, but can also be obtained from the Museum's Membership Department (312-922-9410, ext. 453). Members may order subscriptions at the special reduced rates through November 30, 1991.

Publications available are: African Arts, American Forest, American Indian Art, Americas, Bird Watchers' Digest, Chicago, China Today, Discover, Lake Superior Magazine, Lapidary Journal, National Parks, Native Peoples, Natural History, Outside, The Sciences, and Scientific American.

WINNERS OF MEMBERS-ONLY PACIFIC TRIPS

Winners of the Members' previews sweepstakes drawings from the opening of Pacific Spirits" were Patti Helfand of Glencoe, who won the trip for two to New Zealand, and Deloris Del Finklea, who won the trip for two to Hawaii. The prizes were sponsored by United Vacations and United Airlines, "Field Museum's Official Airline for Traveling the Pacific."

EDUCATION VOLUNTEERS SOUGHT

A variety of challenging and rewarding volunteer opportunities await both weekday and weekend volunteers in the Museum's Department of Education. Winter training sessions will be held on Thursdays, January 24, 31, and February 7 from 6 pm to 9 pm and on Saturday, February 16, from 9 am to 3 pm. Contact the Coordinator of Museum Volunteers at (312) 922-9410, ext. 360 to register.

Training sessions will prepare new volunteers to lead Museum tours and facilitate hands-on hall activities. The training sessions will include a basic introduction to the fields of geology, an thropology, and biology, with emphasis on Field Museum exhibits. Topics include dinosaurs, fossils, Native American cultures, animal habitats, endangered and threatened species, the bounty of plants, and the Webber Resource Center.

OPENING NIGHT

Museum store in Ford City mall



Helen Cooper, manager of the Museum's satellite store at the Ford City shopping mall, at the opening in November. The store, with more than 2,200 square feet of floor space, offers books, toys, clothing, jewelry, and art from many cultures, and will also host a variety of educational events and entertainment programs throughout the year.

Ford City, at 76th Street and Cicero Avenue, is Chicago's largest shopping mall, and has recently undergone a multi-million-dollar renovation. The Museum joins 25 retailers in "The Connection," the mall's lower-level arcade.

CALENDAR OF EVENTS

DIGGIN' OUT BONES



FIELD MUSEUM THE SMART WAY TO HAVE FUN.

How did we get that dinosaur bone to Field Museum? Come see for vourself as Steve McCarroll, fossil vertebrate preparator, removes the field jacket and matrix from the leg bone of a hadrosaur that last walked the earth 75 million years ago. The bone, collected by Elmer Riggs in 1922, will be worked on every Saturday from January 5 to May 25, between 11:30 a.m. and 4:30 p.m.

AFRICAN HERITAGE FESTIVAL IN FEBRUARY

A monthlong festival of African and African-American educational and cultural activities marks the Museum's observance of Black History Month in February. Most programs are free with regular Museum admission but there is a \$12 charge for the children's workshops on February 2, 16, and 17, which require pre-regisration. Advance registration is also required for school groups attending the School Festivals on February 7 and 20.

The February 2 children's workshop will focus on African drums and rhythms. The workshop on February 16 is on African folk tales, and on the 17th the workshop topic is

African masks and stories.

Featured in the School Festival programs will be programs on the meaning and tradition of Kwanzaa, Ashanti symbols and their meaning, West African traditions expressed in dance, South African music, and more. Blues harmonica star Billy Branch will present a spe cial program on the history of the blues, but seating is limited to the first registrants.

Among the free programs open to the public are the Baba Alabi Ayinla Royal Afrikan Puppet Theatre; the Patches of Freedom Ensemble of Lake View High School; the Najwa Dance Corps (pictured above); and a musical play, Brotha "A" to Sista "B," presented by Mark Williams and the Cultural Messengers.

The full schedule is given below. For more information, call (312) 322-8854. For information on the School Festivals, call (312) 922-9410, ext. 351.

SATURDAY, FEBRUARY 2:

Tina Fung Holder: Kente Cloth and the Art of Weaving 11:00 - 1:00

Douglas Ewart : Bamboo Flute Music 1:00 pm Gideon Alorwoyie: Drumming & Dancing 3:00 pm

SUNDAY, FEBRUARY 3:

11:00 - 1:00 Tina Fung Holder

Kente Cloth and the Art of Weaving Douglas Ewart: Bamboo Flute Music 1:00 pm 2:30 pm 3:00 pm Greater Holy Temple Choir: Gospel music Gideon Alorwoyie: Drumminp & Dancinp

FRIDAY, FEBRUARY 8:

Shanta: Folktales & Music 10:30 am 11:00 pm Eli Hoenai: African Rhythms

SATURDAY, FEBRUARY 9:

Lucille Graham: African Jewelry Janet Russel: Egyptian Hieroglyphs Eli Hoenai: African Rhythms 12:00 - 2:00 1:00 pm 3:00 Shanta: Folktales & Music

SUNDAY, FEBRUARY 10:

Lucille Graham: African Jewelry Eli Hoenai: African Rhythms 1-3 pm 1:00 pm 2:00 pm Shanta: Folktales & Music Bethel Gospel Tabernacie Young People's Per 3 pm formance: West African dances & songs

FRIDAY, FEBRUARY 15:

Mark Williams & the Cultural Messengers Brotha "A" to Sistah "Z" 11:30 am Prince Ravanna Bey: Drumming

SATU RDAY, FEB RUARY 16: 11:00 am Baba Alabi Ayinla: Royal Afrika Puppet Theater Maxine Gulley: Quilting Demonstration
Darlene Blackburn: Traditional African Dances

SUNDAY, FEBRUARY 17:

Whitney Young High School Concert Choir: 2:30 pm 3:00 pm Darlene Blackburn: Traditional African Dances

FRIDAY, FEBRUARY 22:

10:30 an

Shanta: Folktales and Music Henry Huff: Music for the Harp

SATURDAY, FEBRUARY 23: 11:00 am Naiwa Dance Corps performs:

"Mandingo Wedding" & "Toucolour Suite"
Musa Mosley: Drumming and Drum Making
Henry Huff: Music for the Harp 1:00 pm 3:00 pm

SUNDAY, FEBRUARY 24:

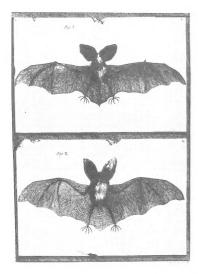
David Philpot: African Staff Carving LakeView High School performance: "Patches of Freedom" 2:00 pm Henry Huff & the Mbira Ensemble: 3:00 pm

Music for the Harp and the Mbira (thumb piano).

All programs are free with general Museum admission



Najwa Dance Corps choreographs West African traditions. including "Mandingo Wedding" and "Toucoulor Suite" for African Heritage Festival audiences



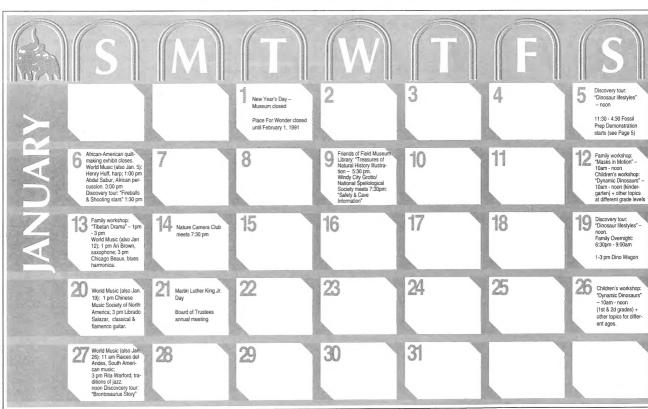
1/9 BOOK LOOK

Friends of the Field Museum Library will meet at 5:30 pm for a program on "Treasures of Natural History Illustration." The bat here was drawn by Richard Bradley for his 1721 opus *Philosophical Account of the Works of Nature.*

1/20 CLASSIC, MAN

Librado Salazar plays classical and flamenco guitar at 3 pm. Every Saturday and Sunday the World Music Festival brings performers from many cultures to the Museum. The recital is free with regular Museum admission.





2/9 THE PANTANAL

Brazil's Pantanal region is one of the world's least known natural wonders. Lying between Brazil and Bolivia, this grassy plain annually becomes an immense swamp the size of Wyoming as it is deluged with runoff from the Andes. More than 600 species of birds, jaguars, giant river otters and anteaters, virtually millions of caimans (relatives of the crocodile) and other reptiles inhabit this lush floodplain. The painted heron pictured here keeps an eye out for fish while wading in one of the area's many marshes.

"The Pantanal: Brazil's Forgotten Wilderness" is a documentary exhibition featuring color photographs by Vic Banks and descriptive text on this special region. Film footage of President Theodore Roosevelt's visit to the Pantanal in 1914 adds historical interest to the exhibition, which will run through April 15.





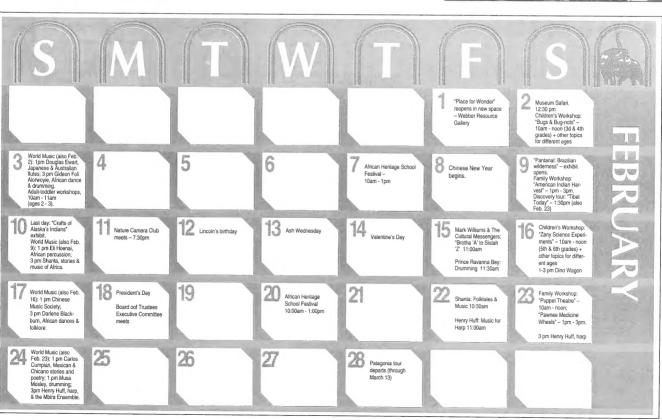
2/15

ROOTS OF SOUL

Prince Ravanna Bey (above) and Darlene Blackburn (right) are among the featured performers in the Museum's month-long African Heritage Festival. For the complete schedule, see page 5.

2/16 - 17





TURKEY TIMES

By Willard E. White

The Imperial

Justinian in

532 A.D., is

Cistern, built by

the engineering

marvel which

the Byzantine

capital.

Vice President, Development and External Affairs

day six of the Museum's Turkey tour Nullifer Iris - tour leader, translator, classical scholar, and our keeper for sixteen days in Turkey - tempts us with a vision of a land unlike anything we've seen, a surreal place of turreted towers, palisades, and multicolored ravines, naturally eroded from tufa, a soft volcanic stone thrown up eons ago in central Anatolia. Iris paints a seductive picture. then embellishes it with stories from Turkey's extraordinary past. By 400 A.D., these colorful valleys sheltered Christians who sculpted houses, monasteries, and frescoed churches

from the soft rock, then tunneled underground for protection from periodic raids, building a labyrinth of connected communities

the Emperor In the Goreme Petrified Valley alone, 365 churches and thousands of openings into cliff dwellings remain as striking evidence to ten centuries of habitation. We pick our way along rocky ledges into chapels shaped like made life the basilicas of Constantinople. Under a blue sky — dare I say Byzantine blue? possible in - we bring this dreamscape into focus, using our cameras to document the unbelievable. Lunch in a cave? Anything seems possible. The Ataman

Restaurant is part of a terraced inn carved into rock face. As we enjoy a course of appetizers and the warmth of a wood fire, I'm not certain whether our dining room extends into or out of the rock

Twenty-two Field Museum members, all

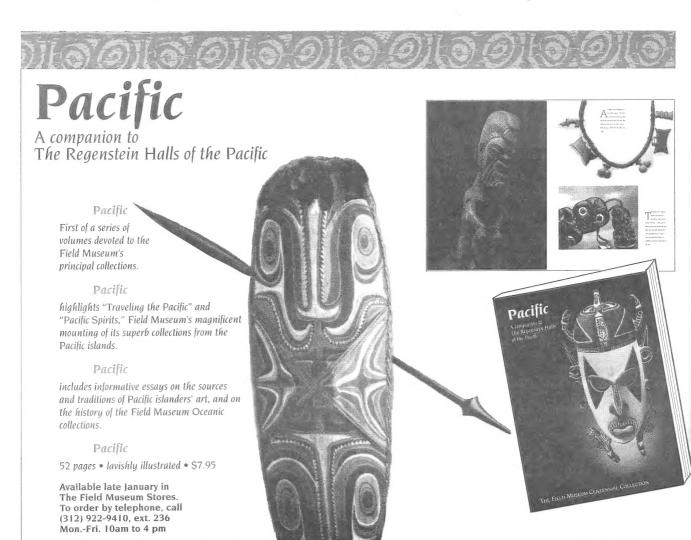
seasoned travelers, are touring Turkey together, eager to experience the land which is the crossroads and cultural meeting ground between Asia and Europe. No one is daunted by the proximity to Iraq and the expanding Mideast crisis. Iris reveals Turkey to us slowly and expertly, dramatizing the unexpected. Even the routine sights of Istanbul, the ones we expected Hagia Sophia, the Blue Mosque, Topkapi - are marvels, unique in their time and place. However, amid all the mosques, monuments and palaces, the greatest surprise is totally hidden from view, something as practical and as magical as plumbing.

The Imperial Cistern, built by Emperor Justinian in 532 A.D. to collect water for his palace and walled city, is the engineering marvel which made life possible in the Byzantine capital. Hundreds of columns from earlier Hellenistic temples support a groin-vaulted roof over the cistern. Aqueducts feed the cistern from northern lakes. Rising from a vast reflecting pool of water, the illuminated columns and ceiling appear to stretch into infinity. We explore infinity, at least the renovated part of the cistern (about one-third of the total) on boardwalks placed through the forest of columns. Music, very operatic music, follows us. Dinner in a cistern? În Îstanbul it's possible. A popular restaurant operates in another deep cistern, also an engineering marvel of Justinian's time, which is now dry and warm and lit with pyramids of candles. We comment on the Roman ingenuity which brought water from lakes near the Black Sea to sixth century Constantinople. How sad this system no longer feeds fresh water into a parched Istanbul, a city whose exploding population has far outstretched its resources.

The days pass and we begin to see Turkey more and more through Turkish eyes. Iris leads us and educates us gradually in the history and politics of Turkey, past and present. We view artifacts of earliest civilizations, Hittite and Phrygian, in the wonderful Museum of Ancient Anatolian Civilization (Ankara). We walk the partially excavated streets of Ephesus, Pergamon, Aphrodisias, and Perge, vivid reminders of Greek and Roman dominance in Asia Minor. Later came the Christian Byzantine era and the Moslem Ottoman Empire, slow to expire in its capital astride Asia and Europe. Religions intermingled in what was, at least for several centuries in Anatolia, a multi-ethnic and multireligious society, held together by Greek language and culture. We begin to see a continuous thread in religious practices devoted to the early Hittite mother goddess who reappears as Artemis and Diana and Isis. Visiting the shrine of the Virgin Mary, whose last dwelling stands on a hilltop above Ephesus, we learn that modern Turks - Turkey is ninetynine percent Moslem - also revere Mary as the embodiment of motherhood. Should I be surprised?

One night in Cappadocia, the area where nature created its own fantasy museum, I learn a dance under a nighttime sky matted with stars Outside a club miles from any town, modern Turks and tourists link bodies in a chain and dance around and around a bonfire as tall as the night. We have invented a dance of no name and no nation, propelled by drumbeats out into the suddenly cold night, drawn to the roaring fire. The sky and the landscape seem as old as the universe. That night I realize the land will endure. It will host generations to come.

Our farewell party in Istanbul is a tribute to the Field Museum, a dinner in a palace on the Bosphorus, hosted by proud owners who collect Ottoman porcelains, each piece perfection. As we prepare to leave, Nullifer Iris gives me a souvenir of the visit. It is a figurine, a small Hittite mother goddess no more than four inches tall.



SACRED MOUNTAINS, MAGIC MASKS

While most educational programs in the Museum are free with regular admission and require no registration, some special events, workshops, lectures, and performances carry a fee and must be signed up for in advance. Herewith a sampler of such programs through early March. For more information on any of these programs, call (312) 322-8854 between 9 am and 4 pm.

Chicago Mask Ensemble

"Tales From Around The World"

Allow your imagination to transport you to West Africa, Egypt, and a Hopi village. Colorful masks and dancing bring characters to life. Join us for an evening of visual and performing arts, when the Chicago Mask Ensemble presents "Tales from Around the World." The audience will have the opportunity to see the masks on display after the performance.

PP91101 \$10 Adult PP91101 \$7 Children (16 and under) Saturday, March 9, 1991 7:00 p.m.

Family Overnights

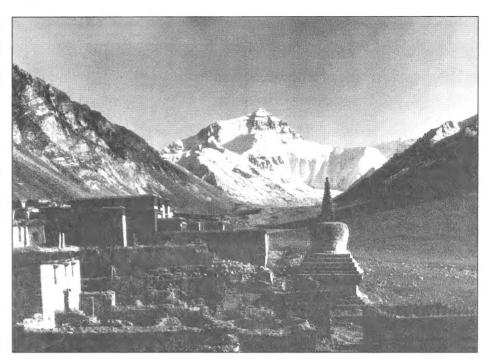
Don't miss the fun when Field Museum presents Family Overnights! Families take part in a variety of special participatory activities, night owl programs, an evening snack, and a wake-up breakfast. Overnights are designed for families with children in grades 1 through 5. Children must be accompanied by an adult. Participants provide their own sleeping bags and pillows. Sleeping is dormitory style in one of the Museum exhibit halls. Come and experience Field Museum in a way you've never known before.

CCON002, 6:30 p.m. Saturday, January 19, 1991 until 9:00 a.m. Sunday, January 20, 1991. CCON006, 6:30 p.m. Saturday, April 20, 1991 until 9:00 a.m. Sunday, April 21, 1991 \$30 Adults, \$25 Children

Workshops

Workshops on Tyrannosaurus Rex, Tadpoles and Frogs, Panda Bears, Archaeology, Masks, Yaks and Yurts, Folktales, Zany Science Experiments, Puppets, Kites and more, are available for the whole family. For further information or a brochure please call Field Museum's Education Department.

- · Adult/Toddler Workshops
- Children's WorkshopsFamily Workshops
- Family Workshops
 Parent Workshops
- Family Field Trips



Qomolangma, known in the West as Mt. Everest, viewed from the Rongbuk Monastery in Tibet.

Lecture

Sacred Mountains of the World Edwin Bernbaum, Research Associate, University of California

Mount Olympus in Greece, Mounts Sinai and Zion in the Middle East, Mount Fuji in Japan, Kilimanjaro in Africa, and the San Francisco Peaks in Arizona are some of the world's most soul-stirring natural panoramas. Edwin Bernbaum, a scholar of Asian studies, specializing in comparative religion and mythology, presents a slide-illustrated lecture on his latest book, Sacred Mountains of the World. His lecture addresses the symbolism of sacred mountains in religion, mythology, literature and the arts.

LL91000 \$5 (\$3 members) Saturday, March 16, 1991 2:00 p.m.

Registration Form Name			For office use only:	Date received:	Date mailed
			Membership #		
Address			City	State	Zip
Telephone: Daytime			Evening:		
Program No.	Program Nar	ne	# Members	# Nonmembers	Amount
☐ Scholarship requested ☐ Check enclosed				1	
☐ AMEX	☐ VISA	☐ MasterCard	☐ Discover	(Check one)	
Card #		Expiration dat	e:	Signature	

FROM THE FIELD

SCRUB JAY ...

continued from page 1

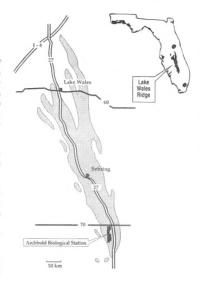
Scrub Jays abound in many habitats of western North America, but exist east of the Great Plains only in central Florida. Here they are found only in patches of stunted oak scrubs that are periodically burned. The Florida Scrub Jay is a distinct biological species, as shown recently by genetic studies carried out in the Field Museum's biochemical laboratory by A Townsend Peterson, graduate student at the University of Chicago. In contrast to its western relatives, the "Florida Jay" (its old name) breeds in cooperative family units containing a breeding pair and its non-breeding offspring from preceding breeding seasons. These older offspring help defend the territory, defend against predators, and even bring food to the nestlings and fledglings sired by the breeding pair

True cooperation is rare among birds. Its presence in the Florida Scrub Jay raises a theoretical question: in a Darwinian world of competition and selfishness, how does apparent 'altruism" evolve in animal social systems? Since 1969 this and many other biological questions have been studied intensively by Dr. Glen E. Woolfenden and myself, working cooperatively at the Archbold Biological Station, near Lake Placid, Florida. A book we published in 1984 (The Florida Scrub Jay: Demography of a Cooperative-Breeding Bird, Princeton University Press) spells out our main conclusions. including important implications for the survival of the species: 1) The Florida Scrub Jay is specially adapted for life in a habitat that is rare and patchy. 2) All available habitat is defended year-round by long-lived territorial pairs, leaving little room for offspring to secure their own breeding space. 3) Delaying dispersal to live in a family group is the most effective way for young jays to earn a breeding space; by doing so they may eventually inherit all or part of their parents' territory. 4) The jays' seemingly cooperative social behavior is in part a selfish adaptation to living in a crowded, highly competitive environment.

The Florida Scrub Jay's ecological specialization stems partly from its dependence on acorns. Each jay separately buries about 8,000 acorns every fall, digging up about half of them during the ensuing winter when insect food is scarce. In addition, jays can live only in open scrub habitat that has burned within the preceding 10-20 years. These extreme specializations also characterize many other members of the scrub community, both animal and plant Unfortunately, the world over, specialized com-munities such as these are notorious for not being able to adjust to the rapid changes brought about by humans.

The problem

The scrub in Florida is disappearing. It is naturally limited to a few sandy ridges, so there was never very much of it to begin with. More important, the well-drained sandy soils have long been prized by humans for citrus cultiva-tion and home construction, so scrub has been cleared for human use for nearly a century Moreover, extremely cold winters in recent ears killed citrus groves throughout northern Florida, forcing accelerated conversion of scrub



into new groves on the more southerly Lake Wales Ridge. Explosive growth in Florida's human population places ever-increasing demands on any unprotected area of native habitat suitable for housing.

Today, only about ten percent of the original scrub habitat remains in its native condition on the Ridge. Much of this is partially degraded, platted and subdivided for imminent sale, or charted for citrus conversion. The rate of loss of the existing parcels makes it clear that before the year 2000, scrub will be gone except in a few areas that were acquired specifically for habitat protection. A whole array of endangered species face the very real threat of extinction.

Paradoxically, conservation efforts in Florida continue to focus on wetlands, for which the state is more famous, despite the fact that virtually all endangered species in the state rely on upland, rather than wetland, habitats. Even ecologically minded vacationers traveling through Florida tend to look past these rare, fragile ecosystems and search instead for the scenic riverways, lush forests, and marshes featured on most tourist brochures

When you stop to peer at the scrub along your drive, kneel down and take it in at its proper, elfin scale. Its startling beauty reveals

ARCHBOLD BIOLOGICAL STATION

Archbold Biological Station is a non-profit, independent foundation dedicated to long-term ecological research and conservation, founded in 1941 by Richard Archbold, aviator and explorer. The Station's 4,800 acre natural preserve is the largest and most diverse tract of protected scrub on the Lake Wales Ridge, for which it was designated a National Natural Landmark in 1987. The Station's numerous research programs encompass topics of local regional, and worldwide concern. In addition to basic research areas, a recently established a program in agroecology has direct application to many pressing environmental issues across Florida. The Station is a clearinghouse for information on the upland ecosystems of Florida, and supports the growing efforts to inventory, interpret, and protect these globally unique communities

itself best from close-up.

The solution

The Lake Wales Ridge scrubs are beginning to attact national attention because of their extraordinary concentration of unique and endangered species. The endearing Florida Scrub Jay has enjoyed a spate of recent publicity as its numbers dwindle, in part because of our deep understanding of its biological dependence upon a rare and special habitat. The jay is a classic example of a "flagship species" in con-servation: a highly visible, popular species whose decline attracts attention to an entire ecosystem in need of protection.

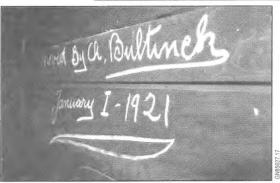
It is not too late to save Florida's upland systems, but saving them requires coordination among biologists, land planners, politicians, taxpayers, and fund-raisers. Archbold Biological Station is playing an expanded role in this challenging effort, working closely with state agencies and other private groups such as The Nature Conservancy. Ultimately, the answer is to identify and protect a network of viable habitat tracts, close enough together to permit all the specialized animal and plant species to colonize at least occasionally between them. Our pri-mary research on the Florida Scrub Jay continues to provide valuable data and insights, helping to refine and direct what this ultimate preserve network should look like. The good news about the Lake Wales Ridge is that it can be rescued, and with it some of America's most ancient and specialized organisms. But, the rescue will not happen on its own.

Why Florida?

The beautiful Florida Scrub Jay and its ecosystem brought me to Florida year after year in pursuit of basic research questions in ecology and animal demography. Their continued disappearance finally induced my family and me to move to Florida and take an active role in local conservation, at an outstanding intellectual center. Biologists no longer can study the native ecology of the earth in a vacuum. Moreover, they need not travel to remote parts of the planet to experience the worst environmental problems. Ecosystems right here in our own precious back yard are on the verge of collapse. Florida is America's playground, yet it is an ecologically crucial crossroads to the tropics. We decry the loss of tropical rainforests, yet we still are doing too little to stem the loss of even rarer habitats that lie under our own political and moral control.

As I drove across this magnificent, shattered peninsula year after year while commuting from Chicago, I kept asking myself the following fundamental questions: Do we know enough about the ecosystems around us to define their tolerance limits? If so, can we not design their salvation? I have become convinced that if we cannot answer ves to both questions for our own Florida, then the more politically and economically complex issues around the rest of the globe indeed may be beyond reach. It is impossible to recover Eden. But, it might still be possible to rescue its components, and to continue learning from them about our world.

With a careful eye, you can still imagine Eden as you take your drive across Florida. With enough attention to them now, you can preserve those images and interactions permanently.



ASSISTED MIGRATION

With several major exhibits in preparation simultaneously - Animal Kingdom, Africa, and Life Over Time - many familiar displays are being displaced. Museum staff members who moved a seabird case recently discovered the identity of a predecessor: The case was marked on the back, "Moved by Ch. Bultinek January I - 1921," which was when Field Museum moved into the current building from the Columbian Exposition

site on the South Side.

The 1990 movers, in case later archivists are interested, were: on the truck in the photo at right, Michael Paha; directly behind the truck, Mary Jo Huck; holding the rope, Susan Phillips; at the rear of the case, Larry Degand. In the photo at far right, the man in the dark plaid shirt is Eric Pfeiffer.

Photos by John Weinstein

Gulf Crisis

ARCHAEOLOGISTS TURN TO MUSEUM RESEARCH

By David S. Reese

Research Associate, Department of Anthropology

s Cap Sease and I have previously recounted in these pages ("Excavating the Holy City of Nippur," July/August 1990), we participated in the early 1990 University of Chicago excavation season in southern Iraq. Last year there were five American archaeological expeditions in Iraq, including teams from the University of California, Berkeley; the State University of New York Campuses at Stony Brook and Albany; New York University; and another group from the University of Chicago. Fortunately for us and our colleagues, no foreign expeditions were in the field in August, and so the invasion of Kuwait by Iraq did not provide any archaeological "guests" for Mr. Hussein.

The director of the new American research institute in Baghdad and his wife were traveling in Turkey at the time of the invasion. Another of my colleagues is chief advisor to the Kuwait National Museum; she spends half her time in Kuwait and half in the Philadelphia area, and luckily was in the U.S. when Kuwait was annexed, though she's now obviously out of a job.

Quite apart from the military and political implications of the Gulf crisis, it has major ramifications for scholarship.

All of the American projects in Iraq in 1990 intended to return for further excavations. The Nippur team reconditioned its excavation house and planned to have at least five more seasons. Needless to say, they will not be returning to the field this January. Last winter various American scholars devoted much time and effort to selecting choice archaeological objects from the Iraq museum in Baghdad for a traveling show to be seen in various American cities, including Chicago. This exhibition will now be delayed, if not cancelled.

Amman, the capital of Jordan, is is certainly suffering financially because of the situation in the Gulf. Archaeology there is also a casualty. A team from Arizona State University in Tempe was to begin excavation at a prehistoric cave site in southern Jordan in September; this has been put on hold, as have all other foreign excavations and surveys. The permanent American research institute in Amman, the American Center of Oriental Research, is still open, but few scholars are using its archaeological library, laboratories, computers, and other resources.

Because all archaeological research in Iraq, Kuwait, Jordan, and Iran is suspended for the time being, archaeologists devote the time they would be excavating in these countries to other pursuits, such as working on excavation records, conducting library research, writing reports, or studying previously excavated objects that are now in American and European museums.

In the past, scholars working in Near Eastern countries were allowed to take substantial collections from their excavations back to their home institution as their division of the finds. This is how Field Museum received a major collection from its 1922–33 joint excavation, with Oxford University's Ashmolean Museum, at the nearby sites of Kish and Jemdet Nasr in southern Iraq. The excavated objects were divided between Chicago, Oxford, and Baghdad.

Unfortunately, Field
Museum has none of the wonderful
objects from these Iraqi sites on display; all are
in storage in the Museum's Department of
Anthropology. Much of the material remains
unstudied and unpublished.

When I came to the Museum in 1985 and began to study the shells that had been excavated at Kish, I was surprised and delighted to

discover a previously unknown engraved *Tridacna* (giant clam shell) in the collection. The Oxford division of the Kish finds also produced one of these ritual objects, obviously from a different shell, which was described in a 1964 journal article. The Field Museum shell is of such interest that I published an article on it in 1988 in the Journal of Near Eastern Studies.

Photographs of this unique piece are shown here. The exterior (Fig. 1) shows feathers of the wing of a Winged Being, lotus blossom, and the cross-hatched hindquarters and upper ends of both legs of an animal that might be a deer. The interior decoration (Fig. 2) is of cross-hatched triangles, thin undecorated triangles, and alternating lotus blossoms and buds.

We know that these items date to the middle or late 7th Century B.C. If this were an art museum, our piece would be on public display (like others on display in the Metropolitan Museum in New York, the British Museum in London, the National Museum in Athens, the Staatliche Museen in Berlin, etc.).

Similarly, I am in the process of writing a monograph on the bone evidence for the distribution of the elephant in the ancient Near East (their range once included parts of Iran, Iraq, Syria, Lebanon, and Turkey). For some time I have been trying to track down a bone, said to be a femur, dating to around 1500 B.C., from the archaeological site of Chatal Hüyük in the Syrian 'Amuq (now part of the Hatay province of Turkey). This bone was excavated in the mid-1930s by a University of Chicago team, and was thought by many to have been left in the Near East or disposed of long ago. However, earlier this year, I found the bone — actually a humerus — in our own Department of Geology (vertebrate paleontology), mixed in with animal bones

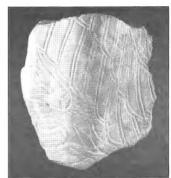


Fig. 1

Fig. 2



from other Near Eastern archaeological sites.

Because archaeological research projects are for the time being suspended in Iraq and neighboring countries, archaeologists have the opportunity to study the museum collections from older excavations. Recently Field Museum had a visit from Prof. Hidea Fujii of Kokokishan University in Tokyo, who examined our collection from Kish. Early this year we will have a visit from Dr. Roger J. Matthews, formerly of the British Archaeological Expedition to Iraq in Baghdad, but now living in England. He will study the Museum's collections from Jemdet Nasr, where he resumed British excavations in the late 1980s.

Not all of the treasures of the Field Museum are on display. Many more are known only to the curators of these collections and to the scholars who conduct research on them. For this reason we continue to "excavate" and study our own collections. At the moment it is much safer to stay at home, and there is still so very much to learn.





GN85626.3



Tropical tranquility, with nature in charge

The Galapagos Islands March 15 - 26, 1991 Aboard the Santa Cruz

Join us for a relaxing exploration of the unique flora and fauna of the Galapagos, some of which have survived nearly unchanged since prehistoric times. Only small groups are allowed on the trails; passengers are transported from ship to shore in pangas, rubberized motor launches. After each invigorating day, return to the comfort of the 90-passenger Santa

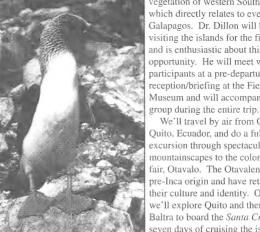
Dr. Dillon has spent nearly two decades studying

Cruz to enjoy wonderful meals and discuss the day's

observations with fellow passengers and the tour

leader, the distinguished Field Museum botanist





Latin American flora His recent research focuses on the effects of the El Nino phenomenon on the vegetation of western South America, which directly relates to events in the Galapagos. Dr. Dillon will be visiting the islands for the first time and is enthusiastic about this opportunity. He will meet with the participants at a pre-departure reception/briefing at the Field Museum and will accompany the tour

We'll travel by air from Chicago to Quito, Ecuador, and do a full-day excursion through spectacular mountainscapes to the colorful Indian fair, Otavalo. The Otavalenos are of pre-Inca origin and have retained their culture and identity. On Sunday we'll explore Quito and then fly to Baltra to board the Santa Cruz for seven days of cruising the islands of

Bartoleme, Tower, Isabela, Fernandina, North Seymour, Hood, Florena, Santa Cruz, Plaza, and James.

Tour cost per person, including air fare from Chicago, is \$3,495 (main deck) or \$3,842 (boat deck). A deposit of \$500 per person will reserve your space.

Patagonia, Cape Horn, and the Falklands

with optional extension to Easter Island

February 28 to March 13, 1991 Aboard the Illiria

We still have space for you to join us as we visit this spectacular region of more than 1,000 islands and rugged mountains with dramatic waterfalls plunging down steep cliffs. Leader: Dr. Scott M. Lanyon, chairman of the Museum's Department of Zoology and head of the Division of Birds. Cruise and land fares: \$3,695 to \$4,845.

Please request information on these 1991 tour programs:

- * Colorado River rafting through the Grand Canyon: May 24 June 2
- * Kenya I: August 31 September 15.
- * Kenya/Tanzania: September 14-29
- * India (travel maharaja-style): October 25 November 13
- * Thailand: November 8-24

Michael Dillon.