

International Programs of Chicago's Field Museum

A Brief Overview

Prepared by The Field Museum

Overview

Many people know The Field Museum for its renowned exhibitions and programs that attract close to two million visitors each year, including nearly 330,000 students. Yet few are aware that the Museum is home to 170 resident scientists who work in more than 75 countries on global issues ranging from anthropology to biology to environmental conservation.

The Field Museum is truly an international institution that has been at the forefront of scientific exploration and discovery for more than a century. Through worldwide expeditions and exchanges, the Museum has amassed a vast collection and established itself as one of the world's preeminent institutions for research in botany, environmental science, geology, paleontology, zoology, and anthropology.

The Museum's significance to Chicago residents, the nation, and the international scientific community lies in its mission of utilizing its resources to increase public understanding and scientific knowledge of the world's biological and cultural diversity.

Museum Collections—A Global Resource

The Field Museum's extensive collections of natural items and cultural artifacts from around the world are a storehouse of information, documenting the diversity of life on Earth. The Museum's collections began with cultural artifacts and natural science specimens on display at the 1893 Columbian Exposition and have grown to more than 22 million objects—one of the largest records of cultural and biological diversity in the world.

At any one time, only one percent of these collections are on display for the public; the others are housed behind-the-scenes and are actively used for research purposes by scientists around the globe. These collections form the backbone for nearly all of the Museum's scientific endeavors. They help scientists identify new species, document evolutionary change, and protect endangered species and habitats. They shed light on the past and help scientists address the challenges of today and the future.

Collections-Based Research

To date, scientists have described only 2 to 15 percent of all estimated species on Earth. This astounding statistic underscores just how little we know about the natural world.

Collections-based research plays a crucial role in bridging the gap between the richness of life and our understanding of it. Scientists use the Museum's natural science collections for baseline data as they investigate changes over time in particular species and examine factors that contribute to habitat damage and loss.

Many of The Field Museum's biological collections come from scientists who go out into the field to document or "inventory" diversity at a given site or in a given region. In a **Comprehensive Biological Inventory**, teams of scientists spend months at a time conducting exhaustive studies of a particular place. These researchers typically return year after year to record rare and ephemeral species and to ensure that the data gathered is as accurate as possible.

- Field Museum biologist Dr. Steve Goodman has discovered 25 species new to science while working the past 15 years in Madagascar—identified as one of the world's "biodiversity hot spots" for its richly diverse and highly threatened environment.
- Botanist Dr. Michael Dillon has a genus (*Dillandia*) and a scientific journal (*Dillonia*) named after him due to his more than 20 years of research on the flora of Peru.

Similarly, the Museum's anthropology collections provide a basis for understanding changes in cultures over time. These collections further reveal the amazing diversity among societies and offer insights into the relationship between people and their environments. Through collections-based research and fieldwork, Museum scientists have dramatically altered our perception of how human cultures develop and evolve.

- The exciting excavations of Field Museum anthropologist Dr. Anne Underhill and her colleagues in northern China may challenge notions of how early culture developed in this region.
- Anthropology Department Chair Dr. Gary Feinman and his research team shed new light on the Zapotec culture when they discovered a 1,500-year-

old tomb while excavating a palace-like residence in Oaxaca, Mexico.

Advanced academic training of university students and scholars is an important part of The Field Museum's work abroad. Through supervising research projects and teaching in a variety of workshops, classes, and fieldwork programs, Field Museum scientists are training a new generation of scientists in the countries in which they work.

- Dr. Steve Goodman has trained more than 50 Master's and Ph.D. students while working for the past 15 years in Madagascar.
- Dr. John Bates, Chair of The Field Museum's Zoology Department, is currently directing a major biodiversity program in the Congo that focuses on training of in-country scientists. Dr. Bates and his Congolese partners recently reopened an extraordinary research center that had been established by the Belgians during colonial times.

Conservation Training and Action

In light of the rapid loss of natural diversity worldwide, the Museum in recent years has applied its scientific expertise towards conservation training and action. In 1994, the Museum created the center for Environmental and Conservation Programs (ECP). Through partnerships with research institutions, conservation organizations, local communities, and government agencies, ECP catalyzes science-based action for conservation in many forms:

- **Educational programs** that involve citizen scientists in monitoring programs;
- **Rapid Color Guides** that facilitate plant and animal identification in the field;
- **Rapid Biological Inventories** that help policy makers effectively allocate scarce resources;
- **Management plans** that help local residents implement strategies to guarantee the long-term viability of protected areas; and
- **Social inventories**—done in conjunction with the Museum's Center for Cultural Understanding and Change (CCUC)—that pinpoint opportunities for capacity building.

The results of these efforts speak for themselves:

- Using data from a Rapid Biological Inventory, Museum conservation scientists worked to establish *Parque Nacional Cordillera Azul* in Peru in 2001. The Park protects a pristine area of Andean forests that is bigger than the state of Connecticut and is extraordinarily rich in biological diversity.
- On January 30, 2002, Ecuador's Ministry of Environment declared the new *Reserva Ecológica Cofan de Mermejo* based on recommendations made by a Field Museum Rapid Biological Inventory completed in summer 2001.

Museum scientists and environmental educators remain actively involved in both Peru and Ecuador, developing conservation management plans and working to engage local communities in these conservation efforts.

Where Can You Go to Learn More?

The Field Museum's website provides a wealth of information about its programs around the world. Included below are a few relevant web links:

The Field Museum homepage
www.fieldmuseum.org

Biodiversity and Conservation: The Web of Life
www.fieldmuseum.org/biodiversity

Parque Nacional Cordillera Azul in Peru
www.fieldmuseum.org/cordilleraazul

Rapid Biological Inventories
www.fieldmuseum.org/research_collections/ecp/ecp_sites/rapidinventories

Expeditions with Field Museum Scientists
www.fieldmuseum.org/expeditions

Collaborations in the Congo
www.fieldmuseum.org/congo

Tanzanian Mammal Key
www.fieldmuseum.org/tanzania

Vanishing Treasures of the Philippine Rain Forest
www.fieldmuseum.org/vanishing_treasures

Man-Eating Lions of Tsavo
www.fieldmuseum.org/exhibits/exhibit_sites/tsavo

Field Museum Africa Programs
www.fieldmuseum.org/exhibits/exhibit_sites/africa

Mammals, Birds and Parasites in Manu, Peru
www.fieldmuseum.org/manu