# Florida Museum g/ Natural History

Annual Report 2006-2007



#### ENVIRONMENTAL NOTES

1116211 / 8

This publication was designed to minimize its environmental footprint through tesponsible choices in paper and printing.

The cover and inside text is printed on 100 percent recycled paper with a minimum of 30 percent post consume fiber. The paper was munifactured with a chloring-free process and used no new trees. The printer, Storter Childs Printing Co. is certified by the Forest Stewardship Council and the Rainforest Alliance.

## Natural History

#### This report was produced by:

Florida Museum of Natural History Marketing and Public Relations PO Box 112710 Gainesville, FL 32611-2710

Editor: Paul Ramey, APR pramey@flmnh.ufl.edu

Editorial Assistant: Aga Tomkowiak

Contributing Editors: Elise LeCompte Sharon Thomas Photography: Delene Beeland George Burgess Michael Dion Florida Program for Shark Research John Friel Jeff Gage John Jernigan Machel Malay Heok Hee Ng Sean Roberts George Ryschkewitsch Jim Toomey Mary Warrick Eric Zamora

Design: Leah Parchinski

Printing: StorterChilds Printing Co.

## Florida Museum of Natural History Annual Report 2006-2007

"The Florida Museum of Natural History is Florida's state museum of natural history, dedicated to understanding, preserving and interpreting biological diversity and cultural heritage."



## A Message From the Director

## The Florida Museum: Long in the Tooth (and proud of it)

In 2006 the University of Florida celebrated 100 years in Gainesville. A century ago UF opened its doors at its present location where it began educating university students, playing college football and laying the foundation for what has become one of the largest and finest public universities in the nation.

Perhaps overlooked in the campus centennial celebrations was the fact that the Florida Museum of Natural History also marked its 100<sup>th</sup> anniversary in Gainesville in 2006. The natural history collections and displays that formed the backbone of the early



Museum had a late 19<sup>th</sup>-century origin at the Florida Agricultural College in nearby Lake City. When that institution closed its doors in 1905, the collections were transferred to UF in 1906.

After arriving in Gainesville, the collections were initially displayed in Thomas Hall (a dormitory) until they could be moved into the first real home to the Museum, Science Hall (now Flint Hall), in 1910. The first Museum director, Thompson Van Hyning, was hired in 1914 and in 1917 the Florida Legislature designated the Florida State Museum as Florida's official museum of natural history.

This 2006-2007 Annual Report features some wonderful photographs from the Museum's early years. A brief outline of our institutional history is also included in these pages courtesy of Darcie MacMahon, Head of Exhibits and unofficial museum historian.

As we enter our second century in Gainesville, it's particularly satisfying for me to observe the growth and vibrancy of the Museum. Today we are an institution with a \$20 million budget, 28 million specimens in our scientific collections and more than 200 full- and part-time employees on the payroll. But more importantly, we remain committed to our mission of preserving, understanding and interpreting the natural and cultural worlds, a mission just as relevant in this century as in the last.

If celebrating 100 successful years qualifies the Florida Museum as "long-in-the-tooth," we accept the title with pride. Alternatively, the huge shark teeth from our collections shown on the cover of this report, and the photos inside of our award-winning traveling exhibit, *Megalodon: Largest Shark that Ever Lived*, suggest we earned it.

Dough

## Collections and Research

Vigorous growth of the Florida Museum's research and curatorial activities helped the collections increase to more than 28 million objects. The majority of these specimens are housed in Dickinson Hall along with the associated field notes, photographs, databases and libraries that enhance their irreplaceable scientific value.

The Museum brought in more than \$3.6 million in new and continuing multi-year grants to support research, collections, curation and education. Museum research focuses on studies of DNA, anatomy, ecology and behavior, and the evolution of plants, animals, and human cultures. While the Museum's primary research and collections strengths are focused in Florida, the southeastern United States and the Caribbean, the programs span the globe. Most of the collections of plants, animals, fossils and artifacts rank among the top 10 in the United States, if not in the world.



## 2006-2007 Collections and Research Highlights



#### **ARCHAEOLOGY AND ETHNOGRAPHY**

#### **Caribbean Archaeology**

- Research focused on human modification of local landscapes to develop a comprehensive understanding of Caribbean prehistory.
- Wrote first comprehensive survey of Caribbean archaeology.
- Conducted excavations and assisted with exhibit development for the Clifton Heritage Park in the Bahamas.
- Continued expansion of Bullen Library, the most comprehensive library of Caribbean archaeology in the world.
- William Keegan appeared on *Digging for the Truth*, *Atlantis: New Revelations* on The History Channel.

#### **Environmental Archaeology**

- Research focused on human impact on the environment as over-exploitation of terrestrial and marine environments and the socio-economics of natural resource control in complex societies based on archaeological data from sites in Guatemala, Mexico and Honduras.
- Investigated methods in recovery and interpretation of environmental archaeology data, as part of the *Proyecto Zooarqueologico del Area Maya* project.
- Conducted research on ethnographic/ethnohistoric ritual animal caching in the highlands of Guatemala.
- Continued collections rehabilitation project for St. Catherines Island pacloenvironmental collections.
- Analyzed stable oxygen isotopes of modern and archaeological oyster shells to determine season of oyster collection at the St. Catherines Island prehistoric shell ring.
- Developed new staining technique for the study of growth increments in fish otoliths to interpret season of fish catch at archaeological sites.
- Acquired systematic zooarchaeological collections from Motul de San Jose, Trinidad and Guatemala.

#### Ethnography

- Continued curation of the Native Amazonian ethnographic collection, with emphasis on the elaborate featherwork headdresses, masks and costumes.
- Received donation of rare Native Amazonian feathered hammock.





#### Florida Archaeology

- Received grant to rehabilitate the Pincland Collection, an internationally significant systematic collection from a major Calusa Indian town site.
- Completed reforestation project to plant more than 900 native trees at the Randell Research Center.
- Continued architectural renovation of historic Gill House, administrative center for the Randell Research Center.
- Began digital imaging of Bullen Projectile Point Type Collection for publication on the Museum's web site.
- Initiated five-county public outreach program in connection with the Florida Public Archaeology Network.
- Developed archaeological displays for the Paynes Prairie Preserve State Park Primitive Arts Festival.
- William Marquardt served on the advisory committee for the state-sponsored Trail of Florida's Native American Heritage.
- Ann Cordell received a Museum-sponsored staff enrichment grant for her petrographic research on Weeden Island ceramics.

#### Florida Archaeology research included:

- Paleoclimatic geochemistry of clam shells and catfish otoliths from the Pineland archaeological complex.
- Petrographic analysis of Weeden Island pottery from the McKeithen site and other northwest Florida sites.
- Archaeological monitoring of the Ficke Garden site, located on the University of Florida campus.
- Research on Florida's prehistoric dugout canoes.
- Archaeological and archival research on Seminole and Spanish missions.
- Documentary research on 18<sup>th-</sup> and 19<sup>th</sup>-century Cuban fishing practices in southwest Florida, including emergence of "Spanish Indians" through Creek Indian and Cuban fishermen interaction and intermarriage.

#### Latin American Archaeology

- Continued study of Mayapan censers to determine chronology, iconography and external connections on Postclassic censer traditions across Mesoamerica.
- Conducted research on Postclassic Central Mexico and Yucatan with a focus on astronomy, seasonality and the biological world.

#### Spanish Colonial Archaeology

- Completed excavations and data recovery at the Fountain of Youth Park, site of Pedro Mendez's campsite.
- Synthesized contact period archaeological data from three major Caribbean historic sites: En Bas Saline, Haiti; Concepcion de la Vega and La Isabela, Dominican Republic.
- Kathleen Deagan served on the state-appointed Task Force on the Future of St. Augustine's Historic Resources and Structures.
- Deagan appointed by the National Advisory Council on Historic Preservation to the National Park Service Task Force on "Determining What is Important for Revision of the 1966 Historic Preservation Act." Served as appointed delegate to the National Park Service "Preserve America" summit.

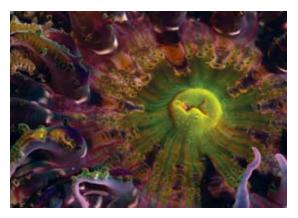
#### BOTANY

#### Herbarium

- Researched the systematics of Maxillariinae (Orchidaceae).
- Continued research on the phylogentic study of subfamilial and tribal relationships in Orchidaceae using molecular and morphological data.
- Studied chemical attraction of pollinators to floral rewards, including floral fragrances and pheromone mimics.
- Created web-accessible database with digitized images of type specimens, poisonous plants, edible and medicinal plants, and vascular plants in the collection for use by the scientific community and public.
- Conducted floral inventory of Kanapaha Botanical Gardens.
- Initiated project to systematically "barcode" every species of plants in Florida using DNA.

#### Molecular Systematics and Evolutionary Genetics Laboratory

- Research focused on questions of angiosperm phylogeny, patterns and genetics of floral evolution, patterns and processes of gene and genome evolution and phylogeography.
- Studied conservation genetics of several rare species on the Lake Wales Ridge, Fla.
- Continued integration of new plant samples into the frozen DNA and tissue collection in the Museum's Genetic Resources Repository.
- Worked with MorphBank developers to expand database for plant images and in-situ gene hybridization images.
  - Collaborated with the Botanical Society of America to provide educational K-12 materials from *Deep Time: A* 
    - Comprehensive Phylogenetic Tree of Living and Fossil Angiosperms and The Floral Genome project.
      - Pam Soltis named UF Faculty Achievement Recognition honoree.
        - Soltis selected as Phi Beta Kappa Visiting Scholar.



#### Paleobotany

- Research continued on the world's first flower from China, and new discoveries of early angiosperms from Brazil.
- Studied the Mystery Cone, an ancient angiosperm from Brazil.
- Continued investigations of fossil plant deposits from the Bahamas, Germany, Japan, Peru, Tennessee and the Western United States.
- Participated in the National Evolutionary Synthesis Center-sponsored panel to develop a comprehensive database for Northern Hemisphere plant lineages. The project will provide a new synthetic theory of Northern Hemisphere biogeography to help illuminate past episodes of global change.
- David Dilcher appointed Honorary Professor at Jilin University, China, and Honorary Associate in Paleobotany at the Cleveland Museum of Natural History.
- Dilcher listed in *Who's Who in America* and *Who's Who in Science and Engineering.*
- Dilcher awarded the Botanical Society of America Centennial Award and the Award of Changbaishan Friendship by the Government of Jilin Province, China.
- Dilcher featured in NOVA's The First Flower.
- Steve Manchester named Research Associate at the Cleveland Museum of Natural History and the University of California Museum of Paleontology.

### INVERTEBRATE ZOOLOGY

#### Malacology

- · Continued marine biodiversity inventory of Oceania.
- Continued research to illuminate distribution and origin of marine biodiversity in tropical reef systems and to document evolution and biogeography of marine invertebrates worldwide.
- Described new species of snails from Mexico and Florida, and three new species of snails from New Guinea.
- Described biodiversity of terrestrial snails in New Guinea to explore the development of the island's high biodiversity.
- Entered enough specimens to make the collections database the world's largest source of online data in Malacology with more than 400,000 entries representing several million specimens.
- Gustav Paulay awarded UF Foundation Research Professorship.



#### Invertebrate Paleontology

- Conducted paleontological resource surveys on Guantanamo Bay Naval Station, Cuba. Documented and collected well-preserved fossils from numerous Late Pleistocene sites found on the base.
- Conducted paleoenvironmental studies on giant oysters from a Pliocene formation on Curacao, Netherlands Antilles.
- Researched systematics of a new sea star discovered in Eocene deposits near Newberry, Fla., snails from the Late Eocene Ocala Limestone in Florida and giant marine snails from Eocene deposits in Florida and Jamaica.
- Collected and documented remains of Florida Eocene crabs from numerous underground caves.
- Researched the Little Ice Age climate in Florida as recorded in shell growth and longevity of ancient coquina clams, and studied shell growth and seasonality as recorded in shells of prehistoric hard clams.
- Continued participation in National Science Foundation-sponsored collaborative project with the University of South Florida to provide undergraduate research experiences.

### **MUSEUM STUDIES**

- Studied impact of Native American encounters on natural history, especially accounts of 16<sup>th</sup>century Neotropics and management of commercial deer hunting in the 18<sup>th</sup>-century Southeast.
- Created *New World Harvest*, a teachers manual for the University of Florida Center of International Studies.



### VERTEBRATE ZOOLOGY

#### Herpetology

- Investigated turtle population conservation relative to water quality in Missouri and the Santa Fe River, Fla.
- Continued research on the ecology of cottonmouths at their northern range.
- Continued research on the reproduction, distribution, ecological status and impact of introduced exotic reptiles in south Florida, including boa constrictors and pythons, the Texas horned toad, Green iguana and African rainbow lizard.
- Studied the genetic diversity of the Eastern Indigo snake in Florida and southeastern Georgia.
- Described a new species of gecko from Pakistan.
- Began development of a distributed information network of North American herpetological databases (Herpnet).
- Curator and former Museum Director F. Wayne King retired in February and was appointed curator emeritus.
- Richard Franz received UF President's Award for 25 years of service to the Katherine Ordway Preserve.

## The Katherine Ordway Chair in Ecosystem Conservation

- Continued research on effects of urbanization on community ecology and population dynamics of birds in Florida.
- Documented retaliatory "mafia" behavior by cowbirds to induce host acceptance of parasitic eggs.
- Studied migrant bird communities in the West Indies.
- Researched factors underlying elevational distributions of birds in the Andes.
- Conducted comparative studies of fossil and modern bird communities in Venezuela.
- Studied habitat selection in Amazonian birds.

#### Ichthyology

- Added specimens from 55 countries, including China, Indonesia, Mexico, Tanzania and the United States to the Museum's fish collection.
- Began revision of Peterson Field Guide to Freshwater Fishes of North America.
- Continued National Science Foundation research project
   All Catfish Species Inventory, including describing seven new
   catfishes and revising taxonomy of certain Asian catfishes.
- Developed chromosome specific paints to study variability and evolution in fishes.
- Studied speciation and effects of hybridization in pickerels.
- Conducted survey of genetic variation in Florida freshwater fishes.
- Developed Taxonomic Information on Catfishes web site, which provides descriptions, identification keys and distributional information for hundreds of species of North and South American, African and Asian catfishes.





#### Florida Program for Shark Research

- Monitored, documented, evaluated and reported on shark attacks and other shark/human interactions on worldwide basis through Florida Museum International Shark Attack File.
- Involved in international conservation of sharks and rays through the International Union for the Conservation of Nature Shark Specialist Group and other initiatives.
- Collaborated on federal fishery management plans for U.S. East Coast sharks.
- Conducted *Project Shark Awareness* and *Sawfish in Peril* educational programs and workshops for teachers and science educators throughout Florida, discussing shark and sawfish biology, fisheries and conservation.
- New species of latern shark, *Etmopterus* burgessi, named after George Burgess.

## Florida Program for Shark Research research included:

- Fishery independent sampling of commercially exploited sharks.
- Studies of the age, growth and reproduction of commercially important sharks.
- Movement and migration studies of ecologically important elasmobranchs, including bull sharks and skates in the Indian River Lagoon, Fla.
- Monitored elasmobranch nursery and pupping areas in the eastern Gulf of Mexico.
- Fatty acid analysis for elasmobranch diet reconstruction.
- Studied life history and morphology of commercially exploited skate and ray species.
- Developed age-structured simulation model for the dusky shark.

#### Mammalogy

- Continued work on *BioCorder* project, a biodiversity inventory tracking system.
- Continued research on parasitic lice of primates and rates of evolution.
- Studied lice as markers of human evolutionary history.
- Continued research on Florida panthers, including the use of stable isotopes and Harris lines to assess the health and diet of endangered Florida Panthers.

#### Ornithology

- Researched biogeography and systematics of birds in the Americas, across five regions and time periods.
- Studied Miocene, Pleistocene and Holocene birds from the Thomas Farm site, Fla., northern Mexico and southwestern United States, the Bahamian Archipelago, Trinidad and Tobago, and tar seeps in northern Venezuela.
- Conducted research focused on resolving the deep nodes in Avian phylogeny.
- Studied the diversity and habitats of wintering Neotropical migrant birds on St. John, U.S. Virgin Islands.
- Continued research on human-influenced extinction of bird populations worldwide.
- Received donation of 20 original avian sketches and final plates painted in the 1960s by the late Arthur Singer.
- Collaborated on a Museum exhibit on Ivory-billed woodpeckers.
- David Steadman named UF Faculty Achievement Recognition honoree.

#### Vertebrate Paleontology



- Continued collaboration on The Crazy Mountains Basin Project: Composition, Diversity and Evolution of Paleocene mammalian faunas.
- Continued work on collaborative project to document biotic change in response to rapid, largescale global warming.
- Continued investigation of the origin and early evolution of primates, including discovery of the world's most primitive primate skeleton.
- Continued research on the first vertebrates and plants from a neotropical rainforest in northern Colombia.
- Studied Pliocene vertebrates from Florida.
- Continued excavations at Haile 7G vertebrate site.
- Continued research on macroevolution and geochemistry of Cenozoic giant sharks.
- Researched Eocene-Oligocene mammals and climate change.
- Initiated research on Miocene mammals from Panama and Cenozoic mammals along the Panama Canal.
- Continued research on fossil tortoises in Florida, Nebraska, Kansas, Oklahoma and the Bahamas.
- Refined the age of the late Neogene terror bird by analysis of rare earth elements.

#### **Genetic Resources Repository**

- Installed cryogenic freezer to store Museum's genetic resources—currently more than 5,000 samples of plants, birds, amphibians, reptiles and fishes.
- Developed database to manage source specimens and their genetic information.
- Launched web site to publicize the Museum's genetic resource holdings and to facilitate data dissemination to the global scientific community.

## **Teaching:**

#### **Courses:**

ANG 3141	Development of World Civilizations, 3 credits			
ANG 4930	Caribbean Archaeology, 3 credits			
ANG 6718	Material Culture in Historical Archaeology,			
	3 credits			
ANG 6905	Individual Studies in Anthropology, 15 credits			
ANG 6910	Supervised Research, 3 credits			
ANG 6915	Research Projects in Social, Cultural and			
	Applied Anthropology, 3 credits			
ANG 6945	Internship in Anthropology, 6 credits			
ANG 6971	Research for Master's Thesis, 15 credits			
ANG 7979	Advanced Research, 8 credits			
ANG 7980	Research for Doctoral Dissertation, 49 credits			
ANT 4905	Individual Research in Anthropology, 45 credits			
ANT 4907	Research Projects in Anthropology, 3 credits			
ARE 6973	Museum Studies, Individual Project in Lieu of			
	Thesis, 9 credits			
ARH 6941	Supervised Internship in Museum Studies, 3 credits			
BOT 4905	Individual Studies in Botany, 2 credits			
BOT 5115	Paleobotany, 6 credits			
BOT 5625	Plant Geography, 2 credits			
BOT 6935	Molecular Systematics, 4 credits			
BOT 6935	Population Genetics, 2 credits			
BOT 6910	Individual Studies in Botany, 9 credits			
BOT 6927	Systematics Journal Club, 2 credits			
BOT 6971	Research for Master's Thesis, 2 credits			
BOT 7979	Advanced Research, 4 credits			
BOT 7980	Research for Doctoral Dissertation, 1 credit			
ENY 6934	,			
GLY 4905	Insect Biogeography, 2 credits			
	Individual Work in Geological Sciences, 1 credit			
GLY 5786L	Topics in Field Geology-Florida, Vertebrate Paleontology I, 4 credits			
GLY 6905	Advanced Research, 5 credits			
GLY 6971	Research for Master's Thesis, 19 credits			
IDH 4905	Honors Individual Work, 6 credits			
WIS 6971	Research for Master's Thesis, 9 credits			
ZOO 2203C	Invertebrate Zoology, 4 credits			
ZOO 4905	Individual Studies in Zoology, 11 credits			
ZOO 4926	Herpetology, 4 credits			
ZOO 4926	Insect Biogeography, 2 credits			
ZOO 4926	Seminar in Zoology, 1 credit			
	Ichthyology, 5 credits			
ZOO 6905	Individual Studies in Zoology, 4 credits			
ZOO 6927	Avian Anatomy and Specimen Preparation,			
200.001	3 credits			
ZOO 6927	Avian Systematics and Biogeography, 4 credtis			
ZOO 6927	Herpetology, 4 credits			
ZOO 6927	Reef Coral Taxonomy, 1 credit			
ZOO 6927	Vertebrate Macroevolution and Development, 3 credits			
ZOO 6971	Research for Master's Thesis, 2 credits			
ZOO 7979	Advanced Research, 30 credits			
ZOO 7980	Research for Doctoral Dissertation, 23 credits			
	Committees Served: 193			
Graduate Committees Chaired: 65				
Independent Studies: 82				
University of Florida Scholars:				
Jonathan Saunders, mentor Thomas Emmel, Ph.D.				
John Stoetzel, mentor Irv Quitmyer				

## **Research Locations:**

#### Florida

Alachua, Bradford, Brevard, Broward, Calhoun, Charlotte, Citrus, Collier, Columbia, Dade, De Soto, Hendry, Highlands, Hillsborough, Lafayette, Lee, Levy, Manatee, Marion, Monroe, Nassau, Palm Beach, Polk, St. Johns, Sarasota, Seminole, Suwannee, Walton

#### **Other States**

Alabama, Connecticut, Delaware, Georgia, Hawaii, Illinois, Indiana, Kentucky, Maine, Massachusetts, Michigan, Missouri, Montana, Nebraska, New York, North Carolina, South Carolina, Tennessee, Texas, Wyoming

#### International

Africa, Asia, Bahamas, Belize, Bolivia, Brazil, Canada, China, Columbia, Cuba, Dominica, Ecuador, French Polynesia, Guatemala, India, Jamaica, Mexico, Netherlands Antilles, New Guinea, Pakistan, Panama, Peru, Puerto Rico, Russia, Spain, Sumatra, Virgin Islands, Venezuela

۱ در

### Grants

Florida Museum of Natural History faculty and staff managed a total of more than \$4.5 million in new and ongoing multi-year grants and contracts during 2006-07. Of these projects, more than \$3.67 million came from the Collections and Research Division, while more than \$865,000 came from Exhibits and Public Programs.

## Faculty and staff received a total of 32 new grants totaling more than \$2.28 million from the following institutions:

American Museum of Natural History American Orchid Society Florida Department of State National Foundation on Arts and Humanities National Science Foundation Southwest Florida Community Foundation U.S. Department of Commerce U.S. Department of Interior

## McGuire Center for Lepidoptera and Biodiversity

The McGuire Center for Lepidoptera and Biodiversity continued to acquire major private and public collections of butterfly and moth specimens as well as scientific library materials from around the world, and continues to house one of the world's largest Lepidoptera collections.



#### **Highlights:**

- Worked with Museum administration to take operational control of the Butterfly Rainforest exhibit.
- Established the Florida Biodiversity Foundation, a non-profit support organization to receive future revenue for the McGuire Center and Museum from the sale of a specialty Florida license tag with a Miami Blue butterfly image and message to help save Florida's biological heritage.
- Conservation activities included continued captive propagation of thousands of Miami Blue butterflies at the Museum and their release in various sites across south Florida to try to re-establish this endangered species in the wild.
- Curators and graduate students traveled to numerous countries as far away as Japan to collect new species, add specimens to the McGuire Center collections, conduct research and attend scientific meetings and conferences.

### The Florida Museum at 100

This year (2006) marked the centennial of the Florida Museum on the University of Florida campus. Such a big number inspires reflection on humble beginnings and the Museum's evolution into the national powerhouse it is today.

Although not officially chartered by state law until 1917, the Museum had a much earlier identity. Professors first assembled collections as a teaching resource in 1891 at Florida Agricultural College in Lake City. The collections grew, but the school closed in 1905. In 1906, the collections were transferred to the new University of



Florida Museum Exhibits Director Darcie MacMahon interviews former Museum Director J.C. Dickinson, 90, at his home. (2006)

Florida campus, and thus began the Museum. Displayed first in dormitory Thomas Hall, the collections moved to the basement of Science Hall (later named Flint Hall) in 1910. The first Museum director, Thompson Van Hyning, came on board in 1914. The Museum was open to the public and scientists used the collections. Growth led to a 1937 move off campus to the Seagle Building in downtown Gainesville, where generations of school children enjoyed the displays.

Additional collections growth led to a new building back on campus when Dickinson Hall became the Museum's home in 1971. In 1998, a new Education and Exhibition Center (Powell Hall) allowed the Museum to expand its public presence. This expansion continued in 2004 with the opening of the McGuire Center for Lepidoptera and Biodiversity and its Butterfly Rainforest living exhibit. Today the Museum is nationally and internationally recognized for its research and public education programs.



## **Exhibits and Public Programs**

The Florida Museum launched a new traveling exhibit initiative to reach national audiences and continued active temporary exhibition and education programs. More than 214,000 individuals visited the Florida Museum last year, and outreach programs touched more than 37,000 people.

## **Traveling Exhibits**

After years of focusing resources on new permanent exhibitions, this year the Museum reinvigorated its traveling exhibition program. The Museum added the impressive new *Megalodon* exhibition to the roster and is planning additional exhibits to further showcase Museum collections and research for state and national audiences.

Other current traveling exhibitions include: TUSKS! Ice Age Mammoths and Mastodons, Journal of Light: A Photographer's Search for the Soul of Florida, and Fort Mose: Colonial America's Black Fortress of Freedom.

*Megalodon: Largest Shark that Ever Lived* opened in Gainesville in June and will travel throughout Florida and the United States in coming years. Based on Florida Museum research, the exhibit was funded in part by a \$75,000 National Science Foundation grant. Visitors enter the 5,000-square-foot exhibit through the jaws of a 60-foot-long *Megalodon* sculpture and begin to learn about the evolution, biology and misconceptions of this enormous prehistoric shark that once cruised all the world's oceans. Museum scientists and artists collaborated to produce this state-of-the-art exhibit, which is popular among visitors.

## Awards

Association of



Museums awarded its top prize for publications design to the Museum's Director's Dinner Invitation, designed by lead graphic designer Elecia Crumpton. This prestigious award places the Florida Museum in the top tier of design excellence among national colleagues.



## **Temporary Exhibits**

The 6,000-square-foot changing gallery showcases rotating exhibitions to present current science, engage returning visitors and attract new and diverse audiences. This year's portfolio was one of the most diverse yet.

- Summer at the Museum was filled with quilts. Specially made for the exhibition *Quilting Natural Florida*, these works of art celebrated Florida's flora, fauna and landscapes, and delighted visitors with a unique blend of art and science.
- Dinosaurs dominated the fall as *Hatching the Past: the Great Dinosaur Egg Hunt* showcased dinosaur eggs and nests from all over the globe. Created by the Stone Company, the exhibit presented new discoveries about dinosaur reproduction and introduced some of the fascinating people and science behind these discoveries.
- *Tibet: Mountains and Valleys, Castles and Tents* attracted more seniors and university students to the Museum. This 4,000-square-foot exhibit from the Newark Museum presented some of its renowned collection of historical and archival treasures of Tibetan culture, considered the finest in the Western Hemisphere.

In the Galleria the Museum hosted smaller temporary exhibits created in-house.

- Early in the year, *The Everglades Series* oil paintings and drawings by well-known artist Jerry Cutler – highlighted his work as Artist in Residence at Everglades National Park.
- Illustrating the Wonders of Tropical Biodiversity showcased UF graduate student Camila Pizano's scientific illustrations of Latin American biota.
- The majestic sandhill crane was the centerpiece of Diane Farris's popular exhibit of photography and mixed media *In the Open: Sandhill Crane Studies*.
- To celebrate an international African Studies conference, the Museum hosted *African Pathways to Urbanism* – archaeologist Peter Schmidt's photographic study of ancient urban centers in the Horn of Africa.

- In April, the Museum opened a temporary exhibit of seven study paintings and a self-portrait by renowned paleo-artist Charles R. Knight (1874-1953) in the Hall of Florida Fossils. Knight completed the paintings, on temporary loan from his granddaughter Rhoda Knight Kalt of New York, nearly a century ago as studies for some of his famous large murals.
- As the year drew to a close, the Museum opened its own *Megalodon* exhibit. Shark and fossil enthusiasts rallied around the exhibit opening and excited crowds poured in to explore this ancient beast's story. This summer kick-off nearly doubled last year's summer attendance.



Other temporary exhibitions included the ninth annual *Trashformations* – high school and college student art made from recycled material. In the Children's Natural History Gallery, several exhibitions of Alachua County student artwork explored the themes of our temporary exhibits.

The Florida Museum also was one of 30 museums nationwide to show the film "Flock of Dodos: The Evolution-Intelligent Design Circus" on Darwin Day in honor of the anniversary of Charles Darwin's birthday on Feb. 12, 1809. The free screening at the Harn Museum of Art played to a packed house and was followed by a discussion led by Frederick Gregory of the UF Department of History and Florida Museum Vertebrate Paleontology Curator Bruce MacFadden.



## Public Programs

## **Educational Programming**

More than 83,000 visitors participated in an array of educational programming during 2006-07 and Museum outreach programs reached nearly 37,000. These programs include curriculumbased tours for students, home school classes, teacher workshops, weekday and weekend classes for children, summer camps, adult workshops, outreach programs to schools and community centers and other public events.

Museum education programs focus on collection strengths and staff expertise, and are developed in response to needs articulated by our various audiences. Underpinning these objectives are the central notions that the Museum's education initiatives should engage diverse audiences and promote understanding of the processes and findings of science, specifically natural history. The Museum's education programs bridge our scientific research, fieldwork and collections to the public's interest and concern for Florida's past and future natural environments and cultural heritage. Through the financial support of the Cultural Support Grants, the Florida Museum was able to hire one full- and several part-time staff to develop, produce and implement a wide variety of programming.

More than 35,600 adults and children participated in public programming at the Museum. These activities included summer camps, adult workshops and classes, field trips, lectures, weekend and school holiday classes for kids, and a preschool program for tots and parents. Adult classes ranged from Sunday afternoon lectures to workshops on butterfly photography, native gardening, and quilting. Museum Nights expanded to include themed programming such as Starry Nights, Can You Dig It? and Day of the Dead through partnerships with the UF departments of Astronomy and Geological Sciences, as well as the Center for International Studies and the Mexican-American Student Organization. These programs were very successful and drew from 370 -1,100 visitors per evening. Wigglers and Walkers and the Let's Explore Science Series continued to grow in popularity and a new field camp program was successfully piloted for fifth- and sixth-grade students.

The Museum's public programs also included annual and special events such as Collectors Day, Earth Day, Trashformations and Family Days at each exhibition opening. Attendance at these events ranged from 500 to more than 3,000 visitors per event. On Oct. 14-15, the Florida Museum hosted its first Butterfly Festival, reaching about 5,000 visitors from around the country. During the summer, the Museum unveiled its newly designed Discovery Room that includes new exhibit components as well as the usual artifacts, materials and activities that encourage family interaction and fun. Specific programming was developed and offered each week.





## Financial Assistance Programs

The Florida Museum strives to make its exhibits and programs accessible to all visitors, regardless of socioeconomic status. While general admission to the Museum is free, there is an admission charge for the living Butterfly Rainforest exhibit. In an effort to make this exhibit and our fee-based programs accessible to everyone, we have developed several assistance funds to offset the fees. The Museum actively solicits contributions from individuals, corporations and foundations for the exclusive purpose of offering these programs. Along with free admission and two assistance funds, the Museum's Special Events (exhibit openings, *Museum Nights*, Discovery Room and family days) are always free and open to the general public.

### Volunteers

The Volunteer Program at the Museum continues to grow and expand alongside attendance and programming. Nearly 625 volunteers provided 23,542 hours to the Museum this past year. The newest program for middle and high-school students - Junior Volunteers - increased from 70 to 115 students. These JVs are trained to work as interpreters in the Discovery Room, at Discovery Carts stationed throughout the Museum, and as classroom assistants during kids classes and summer camps. All Museum volunteers participate in enrichment programs held throughout the year. These include training sessions on the permanent and temporary exhibits as well as effective techniques for engaging students in learning through objects and exhibits. From docents who work with visiting school groups to individuals working behind-the-scenes in research and collections, volunteers provide a wealth of knowledge, expertise and time to the institution and its visitors. Docents Jaime and Ada Irizarry received the annual Florida Museum James Pope Cheney Volunteer of the Year Award for their combined 13 years (more than 1,000 hours) of hard work and dedication.

## School Programs

More than 47,400 pre-k through 12<sup>th</sup>-grade students participated in educational programming either at the Museum or through Inquiry Box outreach presentations at their schools. On-site programs included docentled guided tours of permanent and temporary exhibit galleries, four-week home school programs and Outdoor Naturalist programs such as *Eye on Insects* utilizing the UF Natural Area Teaching Laboratory south of the Museum. Expansion of the Inquiry Box outreach program included the addition of three new topics – *Butterflies and Moths, Geology of Florida* and *Florida's Fossils* – as well as the revision of existing materials and activities for the other boxes.



## Office of Museum Technology

#### **Departmental Review**

Recommendations from an independent audit included increased staff, improved service to the Museum, better communication between OMT and Museum administration, and OMT participation in all strategic planning. The head of information technology was invited to join the Museum Administrative Committee.

#### Major projects included:

- Going "live" with the TAM retail point of sale system for the Museum gift shops.
- Continuation of the Lepidoptera collection database project.
- Began database project for the new Genetic Resources collection.
- Began moving the Museum's network infrastructure onto UF's central "wallplate" system.
- Converted the Florida Museum's Herpetology and Malacology/Invertebrate Zoology databases into formats that allow worldwide access.
- Added the Ornithology collection database to the Museum's web site, allowing it to be searched by the public.
- Installed various servers and e-mail and other software upgrades.
- Answered 1,757 help-desk requests.

## Marketing & Public Relations

The Marketing and Public Relations Department, including Photography and Media Services, continues to increase its assistance to internal and external audiences. This includes support for the Museum's temporary and traveling exhibits programs, fulfilling audio-visual and other equipment requests in Powell and McGuire Halls, and providing photography and other public relations services throughout the Museum.

#### Highlights include:

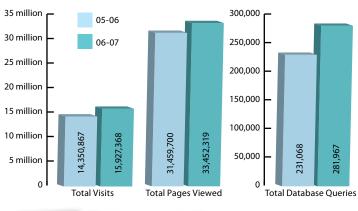
- Fulfilled more than 1,700 information requests from journalists and other internal and external audiences.
- Planned and coordinated 33 media visits.

#### Web site activity

Florida Museum web site use continues to increase, with nearly 16 million visits last year. The site has more than 30,000 pages, with more than 40 contributors.

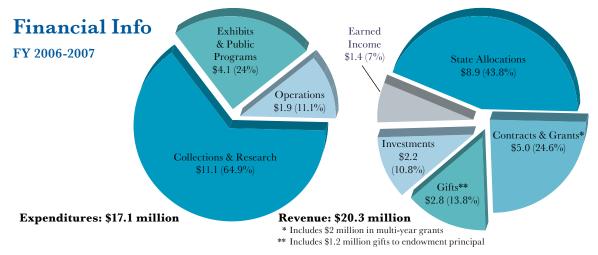
Total visits - 15,927,368	Total unique visitors - 7,240,609
Average visit length - 12:11	Total database queries - 281,967

#### Web site use continues to climb...





- Produced 101 press releases and media advisories and 105 advertisements in newspapers, magazines and other publications for various Museum programs, activities and events.
- Received and tracked more than 870 media hits for the Museum, with a readership of more than 90 million.
- Coordinated and produced the Museum's four pages for 10 issues of *Natural History* magazine.
- Distributed Museum brochures at more than 600 locations on interstates 4, 10, 75 and 275 and on U.S. 19 throughout Central and North Central Florida as well as in AAA offices across the state and at all Florida Turnpike service plazas and Florida welcome centers.



## **Center for Informal Science Education**

New funding for the Museum's Center for Informal Science Education allowed continued implementation of Marvelous Explorations through Science and Stories in Alachua and Marion counties, and piloting of Project Butterfly WINGS: Winning Investigative Network for Great Science throughout the 4-H Southern Region.

#### **Highlights**:

- The Administration for Children and Families awarded a \$361,869 Head Start Innovation and Improvement Projects year two implementation grant for An Innovative Science-based Head Start Literacy Curriculum: Expansion and Evaluation of Marvelous Explorations through Science and Stories in Marion County. A collaborative project with Childhood Development Services, Inc. of Marion County, Marion County Public Library System, Silver River Museum and Environmental Education Center, and Marion County Public Schools, the program is a science-centered early childhood curriculum with nine monthly, sequential units. Each unit includes a teacher's guide, science tools and materials, children's books and other media, and materials for children to take home and share with their families. The program provides teacher training and structured opportunities for family engagement.
- A Community Agency Partnership Program Grant of \$57,499 from the Alachua County Board of County Commissioners provided funding to continue implementation of *Marvelous Explorations* through Science and Stories in 36 Head Start classrooms in Alachua County. Partners are the School Board of Alachua County Head Start/School Readiness and Alachua County Library District/Youth Services. The program was recognized during the August 2006 School Board meeting for receiving the National Head Start Family Literacy Award and Head Start Region IV Family Literacy Award.





- Project Butterfly WINGS: Winning Investigative Network for Great Science, an informal science education program for 4-H youth ages 9 to 13, completed a three-year pilot project in 12 southern states. A final evaluation of the project shows WINGS changes the way youth think about science, engages youth in a meaningful way with nature, fosters interest in science, and promotes teamwork and social connections. WINGS, developed by the Museum in collaboration with UF's Institute of Food and Agricultural Sciences Extension and funded in part by a grant from the National Science Foundation, uses butterfly investigations to develop science inquiry and life skills. WINGS participants explore the outdoors through guided inquiry, learn to identify common butterflies, and contribute to science by tracking butterflies and sharing their results online as part of a citizen science initiative. WINGS was conditionally accepted as a National 4-H Curriculum.
- The Center for Informal Science Education, McGuire Center, IFAS Extension, and Exhibits and Public Programs completed the Florida Wildflowers and Butterflies Project. The project includes the Florida Wildflower and Butterfly Garden west of the Museum, the Life Cycles in Your ida WildR Garden exhibit located in the Butterfly Rainforest Gallery, a new web site, www.flmnh.ufl.edu/wildflower, and color brochures featuring photographs and information about 50 native wildflowers and butterflies. Funding for this project was provided in part by the State of Florida and the Florida Wildflower Foundation, Inc. with proceeds from the state wildflower specialty license plate.

### **Development**

Private gifts have helped build the Florida Museum into the largest collections-based museum in the southeastern United States and the fifthlargest natural history museum nationwide in terms of collection size. The extraordinary growth of the last 10 years in new facilities, research and programs would not have been possible without the generosity of private donors who believe in the importance of understanding and preserving life on earth.

The Florida Museum will need to build upon its solid donor base to continue research in conservation biology, earth science and cultural heritage and archaeology, and to maintain public exhibitions and programs that advance science education for the public. The following fundraising priorities focus on endowment growth and facilities and will allow the Museum to best serve its local, state and national audiences.

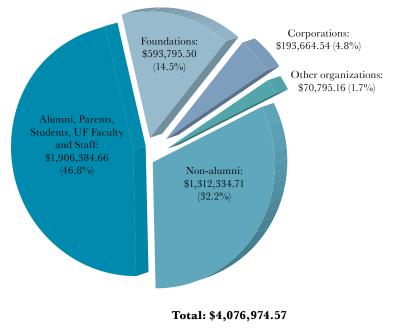
- Endowments to support faculty, students, research and collections. Private funding for endowments creates permanent, reliable sources of revenue for the Museum's expanding collections and research programs. Chairs, professorships, and fellowships allow the Museum to attract the best and brightest faculty and students who conduct cutting-edge science.
- Endowments to support exhibitions and programs. The Florida Museum hosts national traveling exhibitions of the highest quality in addition to creating its own. *Megalodon: Largest Shark that Ever Lived* is one example that showcases Museum faculty research and exhibit design. Endowed funds to support these programs ensure the Museum will continue to offer visitors outstanding educational opportunities.
- New facilities. Demand for education classes, summer camps and preview lectures is well beyond Powell Hall's current capacity. Likewise, Dickinson Hall has reached maximum capacity for faculty and student research space and collections storage. To provide additional space for programs and a growing audience for public science education, and to adequately house all research and collections activities under one roof, the Florida Museum has identified two facilities needs: an addition to Powell Hall that includes an auditorium, classroom, design studios, storage and administrative spaces; and a research and collections building adjacent to Powell and McGuire Halls.



The Florida Museum has made significant progress this year toward building its endowments and collections. An extraordinary pledge of \$1.5 million will establish the Jon L. and Beverly A. Thompson Chair in Invertebrate Paleontology. Ken and Linda McGurn made a \$500,000 gift to name the McGurn Director's Endowment, which supports the highest priorities of the Museum director. Both of these generous gifts are eligible for state matching, thus increasing their impact and benefit. Dr. William W. McGuire donated a rare and remarkable collection of 3,000 Birdwing butterflies, some of the largest and most beautiful in the world. These and all other gifts received in the past year contribute to the Museum's success in scientific research and public education.

## **Private Support**

#### FY 2006-07 Gifts and Pledges



## Honor Roll of Donors 2006-2007

#### GIFTS OF \$500,000 OR MORE

Dr. William W. McGuire (G) Linda & Ken McGurn

GIFTS OF \$100,000 OR MORE

Pepsi Bottling Group (G)

#### GIFTS OF \$50,000 OR MORE

Mr. Charles T. Jeremiah (G) Mr. Harry V. Ozols (G) Dr. Gary N. Ross (G)

#### GIFTS OF \$25,000 OR MORE

Dr. Clifford J. Jeremiah (G) Dr. Michael P. Jeremiah (G) John W. & Peggy B. Kirkpatrick (\*) Mr. Paul Singer (G)

#### GIFTS OF \$10,000 OR MORE

Alachua County Board of County Commissioners Dr. John J. Bowe (G) Children's Museum of the South Gladys G. Cofrin Charles H. & Wanda N. Denny Disney Wildlife Conservation Fund Elizabeth Ordway Dunn Foundation Inc. Florida Biodiversity Foundation, Inc. Gainesville Community Foundation Historic St. Augustine Research Institute Dr. James L. Nation (G) David & Judy Nutting M. Jack & Sandra J. Ohanian (\*) Mr. Jim Shull (G) Jon L. & Beverly A. Thompson James K. & Lori M. Toomey United Business Systems (G) Woodland Park Zoological Society

#### **GIFTS OF \$5,000 OR MORE**

Francis & Miranda Childress Foundation, Inc. John & Gretchen Coyle (R) Charles B. Edwards (R) Lewis S. & Frances C. Lee Dr. Madelyn M. Lockhart Paul F. & Ella Warren Miller (R) I. W. Nixon Pamphalon Foundation, Inc. (C) Jeffrey M. Siegal Dr. Mark J. Simon (G) Michael Toomey (G) Marie R. & W.H. Tuck, Jr. (C) Robert A. Wells, Jr. (R)

**GIFTS OF \$2500 OR MORE** 

Clark & Carolyn Adams Foundation

Richard A. Anderson (G) Association for Tropical Lepidoptera David & Jacklyn Challoner (\*, C) Dr. Charles V. Covell, Jr. (G) Mr. Tom Dooley (G) Philip & Barbara Emmer (\*) F.A.O. Schwarz Family Foundation Irving L. Finkelstein Sam H. & Deborah L. Goforth (\*) Richard & Mary Ann Green (C) Marvin & Peggy Gresham Holbrook Travel, Inc. Frank & Betsy Karel (C) Paul & Leslie Klein (\*) David & Claudia Ladensohn Lucky Break Wishbone Corporation Terry & Carol Mullane (\*) Bruce O'Hara (G) Dr. Floyd W. Preston (G) Richard T. & Jean W. Smith C. Frederick & Aase B. Thompson Foundation (\*) Toomey Foundation for the

Natural Sciences Wachovia Foundation William & Victoria Winterer (R)

#### **GIFTS OF \$1,000 OR MORE**

Virginia L. Amsler (R) Lawrence & Carol Aten (R) **BBI** Construction Management Paul G. Benedum, Jr. (R) Kenneth & Laura Berns (C) David Brown & Carolyn Takeda-Brown (C) Harvey Budd & Ilene Silverman (\*) Chris & Gayle Bundschu (R) Jane W. Burnette (C) Joseph & Virginia Cauthen David & Marion Colburn (C) William W. Coleman Nathan S. Collier Charles & Elizabeth Covell Carol A. Crevasse Joshua C. & Sally Dickinson III (\*, C) Ehrhart Family Foundation Dr. Thomas C. Emmel (G) Florida Paleontological Society, Inc. Leonard & Libby Furlow (\*) Peter & Lisa Gearen Anina Hills Glaize (R) Margaret Goforth Giovanna Holbrook Harriett P. Hulbert Informal Education Products Ltd. Christopher M. James Douglas & Sheila Jones (\*) Helen R. Kiefer Dr. Thomas W. Klein (G) Bogdan & Dorothy Korszen Judy L. Locascio (\*) J. Bernard & Christine Machen

William Marquardt & Karen Jo Walker (\*, R) Mark W. Meisel & Anna-Lisa Paul (C) Merrill Lynch & Co. Foundation, Inc. Lee & Jacqueline Miller (\*) Geoffrey & Ann Moore (\*) Michael & Becky Moulton Joyce C. Mutz (R) Mr. & Mrs. Nicholas G. Penniman IV (R) Annette Perry (\*, C) Torrance C. Raymond Davis & Judi Rembert Foundation, Inc. Marshall E. Rinker, Sr., Foundation Inc. Eric & Jennifer Scott Jon & Beverly Sensbach (\*, C, R) Robert & Beverly Singer (\*) Jack & Eileen Smith (C) Robert B. Spangenberg (C) Tropic Star of Pine Island, Inc. (R) John & Deborah Usher (\*) Paul D. Vartanian Thomas E. & The Hon. Martha C. Warner (C) Lisa Wasshausen & Jamie Grooms (\*, C) Victor Yellen & Arlene Huszar (\*) Ron & Patricia Zollars

#### **GIFTS OF \$500 OR MORE**

Campus USA Credit Union Donald A. Cyzewski (R) Roland & Joyce Daniels (\*) L. Nick Davis & Sergio Marentes Diamond Tours, Inc. Joshua C. & Sally D. Dickinson Eva A. Dimitrov & James C. Betz (C) Michael M. Dion Paul & Polly Doughty Betty A. Dunckel (\*) Lammot duPont (R) Shari A. Ellis & Alan D. Kroll (C) Marc A. Gale (C) Greater Pine Island Chamber of Commerce (R) C. Hager & Sons Hinge Manufacturing Co. (R) Robert D. & Lynne W. Holt (C) Richard J. & Rebecca S. Howard Hyundai Lincoln Mercury of Gainesville **IBM** Corporation I.M.C.O., Inc. Robert T. & Donna M. Ing (C) Roman Janos & Brandon Fulton (\*) Dennis & Caridad Lee (\*) Robert A. & Phyllis F. Levitt Mary S. May (C) F. Jack McCombs (C) Michael E. McNulty (C) Jeffrey & A. Darlene Novak (\*) Paul A. & Susan P. Robell (C) Arlan L. & Edith K. Rosenbloom (C)

Phyllis M. Rosier (C) Kirk A. & Mary K. Ruth (\*) Nancy W. Schultz Sear Family Foundation (R) Graig & Kris Shaak (\*, R) Dwight D. & Susan M. Sipprelle (R) Douglas L. Smith & Elizabeth A Davis (C) Stephen D. & Susan L. Tutko (R) Wallace T. Ward III

#### **GIFTS OF \$250 OR MORE**

Archaeological Consultants, Inc. (R) Jerry J. & Sandra A. Berger (\*) Jon & Martie C. Berger (\*) Peter A. & Sally S. Bergsten (R) D. Michael & Judy E. Blachly (\*) Roger T. & Claudia H. Brill H. Jane Brockmann & Thomas D. Rider (\*) John W. & Clotiel M. Caffey (\*) Donald & Cecillia A. Caton (\*) Patrick T. & Cynthia R. Cimino (\*) Camille Coffman & Deborah Fussell (\*) Margaret Colburn & Gilbert Ray Cauthon III (\*) Ann S. Cordell (\*, R) Richard B. & Catherine A. Crandall (\*) J. Lee & Barbara K. Dockery (\*) Angela J. Enzweiler & Alexander Shatas (\*) Janie M. Fouke (\*) John R. & Lin S. Fox (R) Paul E. & Mary Ellen Funderburk Ira H. & Gerri E. Gessner (\*) Elise H. Gresham (D) Donna L. Haas Dale Cowles Henderson Charles I. & Bobbie Lee Holden (\*) John I. & Caren Hollenbeck Martin O. & Carol A. Huegel (\*) Professor E.L. Roy Hunt (\*) Kenni W. James & Thomas M. Pinckard (\*) David A. & Lee Anne Keough Malcolm C. & Susan King Dudley P. & Carole A. Kircher (R) Kenneth B. & Suzanne R. Kirkpatrick (\*) Raymond A. & Carolyn H. Larue (\*) Christopher M. & Holly A. Leber (\*) Norman S. & Roslyn F. Levy (\*) Judy F. Lew & Mark L. Brantly (\*) Judy Locascio Insurance Agency, Inc. (\*) Ralph L. & Bronia L. Lowenstein (\*) Edwin C. & Aubrey S. Lunsford, Jr. (\*) Robert D. & Sarah M. Manley (\*) Edward M. Mastandrea Lee May Robert G. & Joelen K. Merkel Robert H. & Margaret R. Milbrath Gary J. & Ellen L. Miller (\*)

Rodney R. & Marjorie J. Million (\*) Max A. Nickerson June M. Nogle (\*) Northwestern Mutual Foundation, Inc. William D. & Sandra T. Olinger John A. & Lynne M. Paeno (R) Stephen J. Pearton & Cammy R. Abernathy (\*) Edward Petkus (\*) Stephen A. & Susanne D. Rappenecker (\*) Charles L. & Anne D. Reynolds, Jr. (R) Angelo P. & Bonnie C. Schiralli Gilbert R. & Mary F. Sessi James O. & Jane C. Shimeall (\*) Sharon & Joseph Thomas (\*) Michael & Heidi M. Toomey (\*) George F. & Marilyn L. Tubb (\*) Wilse B. Webb (\*) Neil L. & Mary A. White (\*) Norris H. Williams & Nancy Fraser-Williams (\*, R) Thomas W. & Tammy Garner Wright (\*)

#### **GIFTS OF \$150 OR MORE**

Jane Elizabeth Adair & Albert R. Matheny III (\*) Steven G. & Jane Ann Adams Nicholas M. & Ashley A. Banks (\*) Alan J. Barnes & Gail K. Ellison (\*) Bonita Springs Elementary School (R) William E. & Marsha Brant (\*) Shi Anne Breedlove (\*) Myron A. & Louise W. Brown (\*) Robin C. & Jan Brown (R) Joseph P. Brinton III (R) Robert A. & Kathryn W. (D) Bryan (\*) Joseph-Joel M. Buchanan (\*) Mary Coates & Michel A. Lynch (\*) Samuel O. & Betty J. Colgate (\*) Melvin C. & Dorothy R. Dace Christy M. & Harry H. Daugherty, Jr. George & Dusty Davies Mrs. Lou W. Delaney (\*) Virginia J. & Richard E. Dolder, Sr. (\*) Ernest M. & Ruth S. Dumas (\*, R) Ian & Susan B. Duvenhage (\*) Keith M. & Alison F. Dvorchik (\*) Carolyn Y. Eastwood Donald V. & Mary Lou Eitzman (\*) David H. & Jean R. Evans (\*) Myron Fisher (\*) Nathon O. Folland & Angel Kwolek-Folland (\*) Howard G. & Laurel J. Freeman Friends of the Charlotte Harbor (R) Gaea Guides (R) Gainesville Women's Forum James A. & Ellen R. Gershow (\*) Prof. Mandell & Joyce K. Glicksberg (\*) Michael W. & Elsbeth K. Gordon (\*)

Jeffrey L. & Sarah W. Harrison (\*) Douglas J. & Abbie M. Hearn Gene W. & Evelyn H. Hemp (\*, R) James D. & Peggy O. Henderson II Jeffrey D. Hillman & Stephanie Cornell-Hass Sondra R. Hunter Christopher M. & Heather M. Janelle (\*) Dr. N.H. Jones Elementary School Clayton H. & Linda G. Kallman (\*) Kha Le-Huu & Partners Gerald & Kathryn L. Kidder (\*) Eugene G. Kowalski Lucian & Suzanne Kragiel (\*) Thomas H. & Shirley M. Lane Paul C. & Dawn B. Logas (\*) Darcie A. MacMahon & David P. Harlos (\*, R) Bruce A. Mast & Lynn S. Findley (\*) Suzanne T. Mastin (\*) Stacia M. McCracken (\*) J. David & Elizabeth M. McGonagle (\*) W.A. & Elizabeth McGriff Robins P. McIntosh & Helen Lan Shan James A. & Mary Lou Merkner (\*) Jerald T. Milanich & Maxine L. Margolis (\*, R) Terance F. & Susan B. Millan Randy Mote & Kamala Mann-Mote (R) Douglas R. & Catherine R. Noble Howard D. & Barbara W. Noble, Jr. John C. & Nina K. Norris (\*) David H. & Faith M. Oi (\*) Suzanne L. & James A. Orr, Jr. Stephen W. & Patricia M. Pavlik Phillips Electronics North America Corp. (R) Norman E. & Margaret B. Portillo Purvis, Gray & Co. Vera Rabino (\*) Donald M. & Linda L. Reed (\*) Warren J. & Sara H. Rice (\*) William F. & Constance C. Roberts (\*) John J. & Nancy H. Ross William A. & Edda D. Ross (\*) Glenn K. & Laurie G. Rousseau (\*) Alicia Rudin & Victor Rush (\*) Donna L. Ruhl (\*) G.E. & Wunhild Ryschkewitsch (\*) Arthur W. & Phyllis P. Saarinen (\*) St. Andrew Catholic School (R) School District of Lee County (R) Anne R. & Joseph W. Shands, Jr. (\*) Gavin J. Sherlock Glenn A. & Celeste A. Shitama (\*) Terry N. & Marjorie S. Silverman Timothy B. Strauser & Marcella C. Wilson (\*) Patricia A. Stump Anthony W. & June M. Sullivan (\*) Dorothy Towne & David B. Webster Thom L. & Linda S. Tyler (\*)

Village View Community Church of God, Inc. Susan W. Wagner Ruth H. Wallbrunn (\*) Daniel W. & Marcia E. Welch (\*) Paul J. West Cynthia M. Weygant & Gary S. Edinger (\*) Isabel D. Wolf & Richard V. Lechowich (\*) William P. & Ann S. Wollschlager (\*, R) Charles E. & Maureen K. Wood (\*)

#### MONARCH SOCIETY MEMBERS

Alyce B. Boyd Burns Brothers, Inc. Ginny & Joe Cauthen Gladys G. Cofrin Kiki Lisa Courtelis Charles V. & Elizabeth B. Covell Catherine & Richard Crandall Carol Austin Crevasse & Family Marshall M. & Paula P. Criser Charles H. Denny III & Dr. Wanda N. Denny Sheila K. Dickison Thomas C. Emmel Barbara & Phil Emmer Family Foundation Ron & Barbara Dianne Farb. Climb for Cancer Foundation Libby & Leonard Furlow Goforth Family Marvin & Peggy Gresham Bruce & Medea Harris Clark & B.J. Hodge Giovanna Holbrook Hough Family Foundation, Inc. Arlene C. Huszar & Victor M. Yellen Christopher M. James Douglas & Sheila Jones John & Peggy Kirkpatrick Leslie & Paul A. Klein Claudia & David Ladensohn Judy Locascio/Allstate Insurance Co. Dr. Madelyn M. Lockhart J. Bernard & Chris Machen Bob, Joelen & Ryan Merkel Geoffrey & Ann Moore for Carl Schreck Sandra & Bill Olinger Susan Palmer & Andrew Palmer Connie & Kay Palumbo Mary Jeanne Phillips Teina Phillips & Rick Medina Susan & Paul Robell In Loving Memory Linda Saarinen BSBR 1976 Paul, Carole Ann & Alexander Schulz Jenny & Eric Scott/Florida Neurosurgical

Carol & Stephen Shey

James & Amy Shimberg Ilene Silverman & Harvey Budd Bob & Beverly T. Singer Mickey & Donna Singer The Wesley Cofer Skiles Family The C. Frederick Thompson Foundation Katelynn, Mackenzie & Judge Usher Vam & E.T. York Patti & Ron Zollars

#### GIFTS IN HONOR OR MEMORY OF:

Tricia Biancamano Pope Cheney Katelyn Joy Derstine Adrian Filippi Elise Gresham

#### FLORIDA MUSEUM ASSOCIATES BOARD

Sam Goforth, President Malcolm King, Vice President Ken McGurn, Treasurer Aase Thompson, Secretary Joel Buchanan Ray Cauthon Jacki Challoner Joyce Daniels Barbara Emmer Mary Ellen Funderburk Libby Furlow, Emeritus Elise Gresham, Emeritus (D) Peggy Kirkpatrick, Emeritus Suzanne Kirkpatrick Leslie Klein, Emeritus Carrie Lee Roslyn Levy Judy Locascio Bronia Lowenstein, Emeritus Bruce Mast **Rick Medina** Terry Mullane Bill Olinger Annette Perry Kirk Ruth Kim Shimeall Ilene Silverman Beverly Singer Marie Tuck Deborah Usher Lisa Wasshausen Victor Yellen

#### Kev

- \* Museum Associate
- C Curators Society
- F Founders Society-
- R Randell Research Center
- G Gift in Kind
- D Deceased

## **Publications**

#### **Peer-Reviewed and Other Scientific Publications:**

Allen, J.M., D.L. Reed, M.A. Perotti, and H.R. Braig. 2007. Evolutionary relationships of Candidatus Riesia endosymbiotic Enterobacteriaceae living within hematophagous primate lice. Applied and Environmental Microbiology 73(5):1659-1664.

Althoff, D.M., M.A. Gitzendanner, and K.A. Segraves. 2007. The utility of Amplified Fragment Length Polymorphisms in phylogenetics: a comparison of homology within and between genomes. Systematic Biology 56:477-484.

Armbruster, J.W. and L.M. Page. 2006. Redescription of Pterygoplichthys punctatus and description of a new species of Pterygoplichthys (Siluriformes: Loricariidae). Neotropical Ichthyology 4(4):401-409.

Auerbach, P. and G. Burgess. 2007. Injuries from nonvenomous marine animals. pp. 1654-1691 in Wilderness Medicine, Fifth Edition, Mosby Elsevier, Inc, New York, NY.

Auffenberg, K., I.R. Quitmyer, J.D. Williams, and D.S. Jones. 2006. Non-marine Mollusca. pp. 247-261 in S.D. Webb, ed. First Floridians and Last Mastodons: The Page-Ladson Site in the Aucilla River. Springer, New York, NY.



Science Hall housed the Museum from 1910-1937.

Banks, R.C., C. Cicero, J.L. Dunn, A.W. Kratter, P.C. Rasmussen, J.V. Remsen Jr., J.A. Rising, and D F. Stotz. 2006. Forty-sixth supplement to the American Ornithologists' Union check-list of North American birds. Auk 123:926-936.

Bloch, J.I. and D.M. Boyer. 2006. New skeletons of Paleocene-Eocene Plesiadapiformes: a diversity of arboreal positional behaviors in early primates. pp. 535-581 in M. Ravosa and M. Dagosto, eds. Primate Origins: Adaptations and Evolution. Springer, New York, NY.

Bloch, J.I., M.T. Silcox, E.J. Sargis, and D.M. Boyer. 2007. New Paleocene skeletons and the relationship of plesiadapiforms to crown-clade primates. Proceedings of the National Academy of Sciences 104:1159-1164.

Blunden, T.K. and K.L. Krysko. 2007. Agama agama africana (African rainbow lizard) reproduction. Herpetological Review 38(1):73.

Briggler, I., O. Bvers, M. Nickerson, A. Pitt, and I. Tavano. 2007. Hellbender Population and Habitat Viability Assessment, Final Report. IUCN/SSC/GBSG, Apple Valley, MN.

Buzgo, M., A.S. Chanderbali, S. Kim, Z. Zheng, D. Oppenheimer, P.S. Soltis, and D.E. Soltis. 2007. Floral developmental morphology of Persea americana (Lauraceae): the oddities of male organ identity. International Journal of Plant Sciences 168.261-284

Chanderbali, A.S., S. Kim, M. Buzgo, Z. Zheng, D.G. Oppenheimer, D.E. Soltis, and P.S. Soltis. 2006. Genetic footprints guide perianth evolution in Persea (Lauraceae): AGAMOUS expression in evidence of andropetals. International Journal of Plant Sciences 167:1075-1089.

Chase, M.W., M.F. Fay, D.E. Soltis, P.S. Soltis, and V. Savolainen. 2006. Simple phylogenetic tree searches easily succeed with large matrices of single genes. Taxon 55:573-578.



Science Hall exhibits (1924) featured many glass cases.

Cleere, N., A.W. Kratter, D.W. Steadman, M.J. Braun, C.J. Huddleson, C.E. Filardi, and G. Dutson. 2007. A new genus of frogmouth (Podargidae) from the Solomon Islands results from a taxonomic review of Podargus ocellatus inexpectatus Hartert 1901. Ibis 149:271-286.

Conrath, C. and J. Musick. 2007. The sandbar shark summer nursery within the bays and lagoons of the Eastern Shore of Virginia. Transactions of the American Fisheries Society 136(4):99-

Conrath, C. and J. Musick. 2007. Investigations into depth and temperature habitat utilization and overwintering grounds of juvenile sandbar sharks, Carcharhinus plumbeus: the importance of near shore North Carolina waters. Environmental Biology of Fishes. Online first: DOI 10.1007/s10641-007-9263-0

Covell, C.V. Jr. 2006. The mantisflies (Neuroptera, Mantispidae) of Kentucky. Journal of the Kentucky Academy of Science 67(1):65-66

Cui, L., P.K. Wall, J.H. Leebens-Mack, B.G. Lindsay, D.E. Soltis, J.J. Doyle, P.S. Soltis, J.E. Carlson, K. Arumuganathan, A. Barakat, V.A. Albert, H. Ma, and C.W. dePamphilis. 2006. Widespread genome duplications throughout the history of flowering plants. Genome Research 16:738-749.

Daniels, J.C., J.A. Pence, and T.C. Emmel. 2006. Additional records of *Cyclargus ammon* (Lycaenidae: Lycaeninae) in the Florida Keys. Journal of the Lepidopterists' Society 60:97-99.

Daniels, J.C., J.A. Pence, and T.C. Emmel. 2006. Notes on the ovipositional behavior of Leptotes cassius theorus (Lycaenidae: Lycaeninae) in the Lower Florida Keys. Journal of the Lepidopterists' Society 60:99-100.

Daniels, J.C. 2007. Courtship solicitation by females of the  $barred \, subphur \, butterfly \, (Eurema: \, daira) \, (Lepidoptera: Pieridae).$ Journal of Insect Behavior 20(1):129-135.

Davis, S.B., W.S. Judd, and K.D. Perkins. 2006. Noteworthy collections: Florida: Oplismenus burmanii (Retz.) P. Beauv. (Poaceae). Castanea 71(4):333-334.

Deagan, K. 2006. Review of The Archaeology of Colonial Encounters: Comparative Perspectives by G. Stein. Journal of Field Archaeology 31(3):338-340.

Deagan, K. 2007. Eliciting contraband through archaeology: illicit trade in eighteenth-century St. Augustine. Historical Archaeology 40(3).

Emmel, T.C. 2006. Review of Guide to the Butterflies of Russia and Adjacent Territories by V. K. Tuzov. Holarctic Lepidoptera 10(1-2):16.

Emmel, T.C. 2007. A record of Aphrissa neleis in north Florida (Lepidoptera: Pieridae). Tropical Lepidoptera 17(1-2):6.

Enge, K.M., K.L. Krysko, and A.P. Borgia. 2006. Geographic distribution: Ctenosaura similis (black spiny-tailed iguana). Herpetological Review 37:494.

Fanton, J.C.M., F. Ricardi-Branco, D.L. Dilcher, and M. Bernardes-de-Oliveira. 2006. New gymnosperm related with Gnetales from the Crato palaeoflora (Lower Cretaceous, Santana Formation, Araripe Basin, northeastern Brazil): preliminary study. Geociencias 25(2):205-210.

Fanton, J.C.M., F. Ricardi-Branco, D.L. Dilcher, and M. Bernardes-de-Oliveira. 2006. Iara Iguassu, a new taxon of aquatic angiosperm from the Crato palaeoflora (Lower Cretaceous, Santana Formation, Araripe Basin, northeastern Brazil). Geociencias 25(2):211-216.

Feldmann, R.M. and R.W. Portell. 2007. First report of Costacopluma Collins and Morris, 1975 (Decapoda: Brachyura: Retroplumidae) from the Eocene of Alabama, U.S.A. Journal of Crustacean Biology 27(1):90-96.

Fitzpatrick, S.M. and W.F. Keegan. 2007. Human impacts and adaptation in the Caribbean islands: an historical ecology approach. Earth & Environmental Science Transactions of the Royal Society of Edinburgh 98:1-17.

Gerrienne, P., D.L. Dilcher, S. Bergamaschi, I. Milagres, E. Pereira, M. Antonieta, and C. Rodrigues. 2006. An exceptional specimen of the early plant Cooksonia paranensis, and a hypothesis on the life cycle of earliest Eutracheophytes. Review of Palaeobotany and Palynology 142:123-130.

Gibson, L.D. and C.V. Covell Jr. 2006. New records of butterflies and moths (Lepidoptera) from Kentucky. Journal of the Kentucky Academy of Science 67:19-21.

Gomez, P., M. Moulton, and R. Franz. 2006. Microhabitat use by introduced Mediterranean geckoes in north central Florida. Southeastern Naturalist 5(3):425-434.

Hay-Roe, M.M., G. Lamas, and J. Nation. 2007. Pre- and postzygotic isolation and Haldane rule effects in reciprocal crosses of Danaus erippus and Danaus plexippus (Lepidoptera: Danainae), supported by differentiation of cuticular hydrocarbons, establish their status as separate species. Biological Journal of the Linnean Society 91:445-453.

Hay-Roe, M.M. and J. Nation. 2007. Spectrum of cyanide toxicity and allocation in Heliconius erato and Passiflora host plants. Journal of Chemical Ecology 33(2):319-329.

Hoover, J.P. and S.K. Robinson. 2007. Retaliatory mafia behavior by a parasitic cowbird favors host acceptance of parasitic eggs. Proceedings of the National Academy of Sciences 104:4479-4483.



The Seagle Building housed the Museum until 1971.

Hoover, J.P., T.H. Tear, and M. Baltz. 2006. Edge effects reduce the nesting success of Acadian Flycatchers in a moderately fragmented forest. Journal of Field Ornithology 77:425-436.

Jarzen, D.M. and D.L. Dilcher. 2006. Middle Eocene terrestrial palynomorphs from the Dolime Minerals and Gulf Hammock Quarries, Florida. Palynology 30:89-110.

Jarzen, D.M. and S.A. Jarzen. 2006. Collecting pollen and spore samples from herbaria. Palynology 30:111-119.

Jensen, C.T., M.D. Moriarty, K.D. Johnson, R.E. Terry, **K. Emery**, and S.D. Nelson. 2007. Soil resources of the Motul de San José Maya: correlating soil taxonomy and modern Itzá Maya soil classification within a Classic Maya archaeological zone. *Geoarchaeology* 22(3):337-357.

Jiggins, C.D., R. Mallarino, K.R. Willmott, and E. Bermingham. 2006. The phylogenetic pattern of speciation and wing pattern change in neotropical *Ithomia* butterflies (Lepidoptera Nymphalidae). *Evolution* 60:1454-1466.



The Seagle Building exhibits were organized by field of study.

Jones, S., D.W. Steadman, and P.M. O'Day. 2007. Prehistoric archaeology on the small islands of Aiwa Levu and Aiwa Lailai, Lau Group, Fiji. *Journal of Island and Coastal Archaeology* 2:72-98.

Keegan, W.F. 2006. Review of *Dialogues in Cuban Archaeology* edited by L.A. Curet, S.L. Dawdy, and G. La Rosa Corzo. *Americas* 63(2):304-305.

Keegan, W.F. 2007. Taino Indian Myth and Practice: The Arrival of the Stranger King. University Press of Florida, Gainesville, FL.

Kirchman, J.J. and D.W. Steadman. 2006. Rails (Rallidae: *Gallirallus*) from prehistoric archaeological sites in Western Oceania. *Zootaxa* 1316:1-31.

Kirchman, J.J. and D.W. Steadman. 2007. New species of extinct rails (Aves: Rallidae) from archaeological sites in the Marquesas Islands, French Polynesia. *Pacific Science* 61:145-163.

Kneebone, J., D.E. Ferguson, **J.A. Sulikowski**, and P.C.W. Tsang. 2007. Endocrinological investigation into the reproductive cycles of two sympatric skate species, *Malacoraja senta* and *Ambryraja radiate*, in the western Gulf of Maine. *Environmental Biology of Fishes*. Online first: DOI 10.1007/ s10641-007-9215-8.

**Kratter, A.W.** and S. Small. 2007. First record of Northern Fulmar (*Fulamrus glacialis*) for Florida, and notes on other North Atlantic seabird specimen records in 2004-2005. *The Florida Field Naturalist* 35:22-25.

Kratter, A.W., J.J. Kirchman, and D.W. Steadman. 2006. Upland bird communities on Santo, Vanuatu, Southwest Pacific. *Wilson Journal of Ornithology* 118:295-308.

**Krysko, K.L.**, H. Rehman, and **K. Auffenberg**. 2007. A new species of *Cyrtopodion* (Gekkonidae: Gekkoninae) from Pakistan. *Herpetologica* 63(1):100-113.

Latvis, J. and I.R. Quitmyer. 2006. Underwater excavation methods. pp. 247-261 in S.D. Webb, ed. First Floridians and Last Mastodons: The Page-Ladson Site in the Aucilla River. Springer, New York, NY.

Lindqvist, C., A.-C. Scheen, M.-J. Yoo, M. Bendiksby, P. Grey, D.G. Oppenheimer, J.H. Leebens-Mack, D.E. Soltis, **P.S. Soltis**, and V.A. Albert. 2006. An expressed sequence tag (EST) library from developing fruits of an Hawaiian endemic mint (*Stenogyne rugosa*, Lamiaceae): characterization and microsatellite markers. *BMC Plant Biology* 6:16-30.

MacFadden, B.J. 2006. Review of *The Paleogene Mammalian* Fauna of Santa Rosa, Amazonian Peru Los Angeles by K.E. Campbell Jr. Journal of Mammalian Evolution 13:161-163.

**MacFadden, B.J.** and L.R.G. DeSantis. 2007. No more ivory tower: communicating geoscience to society. *Geotimes* 52(3):42-43.

MacFadden, B.J., J. Labs Hochstein, R.C. Hulbert, Jr., and J. Baskin. 2007. Revised age of the late Neogene terror bird (*Titanis*) in North America during the Great American Interchange. *Geology* 35:123-126.

Manchester, S.R. 2006. Review of Atlas of the Pleistocene Vascular Plant Macrofossils of Central and Eastern Europe Part 1. Pteridophytes and Monocotyledons by F.Y. Velichkevich and E. Zastawniak. American Association of Stratigraphic Palynologists Neussletter 39(4):34.

Manchester, S.R. and I. Chen. 2006. Tetracentron fruits from the Miocene of western North America. *International Journal of Plant Sciences* 167(3):601-605.

Manchester, S.R. and L.J. Hickey. 2007. Reproductive and vegetative organs of *Browniea* gen. n. (Nyssaceae) from the Paleocene of North America. *International Journal of Plant Sciences* 167(4):897-908.

Manchester, S.R. and W.C. Mcintosh. 2007. Late Eocene silicified fruits and seeds from the John Day Formation near Post, Oregon. *Paleobios* 27(1):7-17.

Manchester, S.R., W.S. Judd, and B. Handley. 2006. Foliage and fruits of early poplars (Salicaceae: *Populus*) from the Eocene of Utah, Colorado, and Wyoming. *International Journal of Plant Sciences* 167(4):897-908.

Merkle, D.A., S.I. Guttman, and M.A. Nickerson. 2006. Genetics and taxonomy. pp. 275-280 in O. Byers, ed. Hellbender Population and Habitat Viability Assessment Briefing Book. IUCN/ SSC/CBSG, Apple Valley, MN. **Milanich, J.T.** 2006. A un nuevo mundo: Indios y Europcos en la Florida del siglo XVI. pp. 55-82 in R. Chang-Rodríguez, ed. *Franqueando Fronteras: Garcilaso de la Vega y la Florida del Inca*. Pontifica Universidad Católica del Perú, Lima, Peru.

Milanich, J.T. 2006. New World: Indians and Europeans in sixteenth century La Florida. pp. 47-65 in R. Chang-Rodriguez and J. O'Neill, eds. *Beyond Books and Borders: Garcilaso de La Vega and La Florida del Inca*. Bucknell University Press, Lewisburg, PA.

Milanich, J.T. 2006. Foreword. pp. ix-x in J.H. Hann, ed. The Native American World Beyond Apalachee: West Florida and the Chattahoochee Valley. University Press of Florida, Gainesville, FL.

Milanich, J.T. 2007. Gordon R. Willey and the archaeology of the Florida Gulf Coast. pp. 15-25 in W. Fash and J. Sabloff, eds. *Gordon R. Willey's Contributions to American Archaeology: Contemporary Perspectives*. Oklahoma University Press, Norman, OK.

Milanich, J.T. 2007. Foreword. pp. xi-xii in W.F. Keegan, ed. Taino Indian Myth and Practice: The Arrival of the Stranger King. University Press of Florida, Gainesville, FL.

Milanich, J.T. 2007. Foreword. pp. xv-xvii in D.L. Hutchinson, ed. Tatham Mound and the Bioarchaeology of European Contact: Disease and Depopulation in Central Gulf Coast Florida. University Press of Florida, Gainesville. FL.

Milbrath, S. 2006. Ethnoastronomy in cultural context. Cambridge Archaeological Journal 16(3):364-368.

Moore, M., A. Dhingra, **P.S. Soltis**, R. Shaw, W.G. Farmerie, K.M. Folta, and D.E. Soltis. 2006. Rapid and accurate pyrosequencing of angiosperm plastid genomes. *BMC Plant Biology* 6:17-30.

Natanson, L.J., J.A. Sulikowski, J.R. Kneebone, and P.C. Tsang. 2007. Age and growth estimates for the smooth skate, Malacoraja senta, in the Gulf of Mexico. Environmental Biology of Fishes. Online first: DOI 10.1007/s10641-007-9220-y.

Nickerson, M.A. 2006. Captive population and educational outreach. pp. 315-322 in O. Byers, ed. Hellbender Population and Habitat Viability Assessment Briefing Book IUCN/SSC/CBSG. Apple Valley, MN.

Nickerson, M.A. and K.L. Krysko. 2006. Status and distribution. pp. 41-48 in O. Byers, ed. Hellbender Population and Habitat Viability Assessment Briefing Book IUCN/SSC/CBSG. Apple Valley, MN.



Former Museum Director J.C. Dickinson and staff are pictured during Dickinson Hall's 1971 dedication.



The Northwest Florida exhibit features a limestone cave.

Nickerson, M.A. and C.E. Mays. 2006. Life history. pp. 207-210 in O. Byers, ed. Hellbender Population and Habitat Viability Assessment Briefing Book. IUCN/SSC/CBSG. Apple Valley, MN.

Nickerson, M.A., K.L. Krysko, and R.D. Owen. 2006. Status and distribution. pp. 49-67 in O. Byers, ed. Hellbender Population and Habitat Viability Assessment Briefing Book IUCN/ SSC/CBSG. Apple Valley, MN.

Nickerson, M.A., A.L. Pitt, and M.D. Prysby. 2007. The effects of flooding on Hellbender salamander, Cryptobranchus alleganiensis Daudin 1803, populations. Salamandra 43(2):111-118.

Noble, D.R. 2006. The Flint Riverquarium: promoting knowledge about Georgia's aquatic resources through recreational learning. Georgia Journal of Science 64(3):108-114.

Oliveira, L.O., R.B. Huck, M.A. Gitzendanner, W.S. Judd, D.E. Soltis, and P.S. Soltis. 2007. Molecular phylogeny, biogeography, and systematics of Dicerandra (Lamiaceae), a genus endemic to the southeastern United States. American Journal of Botany 94:1017-1027.

Owens, A.K. and K.L. Krysko. 2007. Distribution of the introduced Texas horned lizard, Phrynosoma cornutum (Harlan 1825) (Sauria: Iguanidae: Phrynosomatinae), in Florida. Florida Scientist 70:62-70.

Page, L.M., R.K. Hadiaty, J.A. Lopez, I. Rachmatika, and R.H. Robins. 2007. Two new species of the Akysis variegatus species group (Siluriformes; Akysidae) from southern Sumatra and a redescription of Akysis variegatus Bleeker 1846. Copeia (2): 292-303.

Paulay, G. 2007. Metopograpsus oceanicus (Crustacea: Brachyura) in Hawaii and Guam: another marine invasive? Pacific Science 61:295-300.

Perotti, M.A., J.M. Allen, D.L. Reed, and H.R. Braig. 2007. Host-symbiont interaction of the primary endosymbiont of human head and body lice. FASEB 21(4):1058-1066.

Piercy, A., T. Ford, L. Levy, and F.F. Snelson Jr. 2006. Analysis of variability in vertebral morphology and growth ring counts in two Carcharhinid sharks. Environmental Biology of Fishes 77:401-406.

Piercy, A., J. Carlson, J. Sulikowski, and G. Burgess. 2007. Age and growth of the scalloped hammerhead shark, Sphyrna lewini, in the north-west Atlantic Ocean and Gulf of Mexico. Marine Freshwater Research 58:34-40.

Pirkle, F.L., F.J. Rich, J.G. Reynolds, T.A. Zayac, W.A. Pirkle, and R.W. Portell. 2007. The geology, stratigraphy, and paleontology of Reids, Bells, and Roses bluffs in northeastern Florida. Guide to Fieldtrips - 56th Annual Meeting, G.S.A. S.E. Sect. & Department of Geology and Geography Contribution Series, Georgia Southern University 1:137-151.

Pitt, A. and M.A. Nickerson. 2006. Cryptobranchus alleganiensis (Hellbender salamander) larval diet. Herpetological Review 37(1):69.

Porter, C.M. 2007. Review of California's Frontier Naturalists by R.G. Beidleman. Journal of the History of Biology 40:193-194.

Portnoy, D., A. Piercy, J. Musick, G. Burgess, and J. Graves. 2007. Genetic polyandry and sexual conflict in the sandbar shark, Carcharhinus plumbeus, in the western North Atlantic and Gulf of Mexico. Molecular Ecology 16:187-197.

Pyrcz, T.W., K.R. Willmott, J.P.W. Hall, and A.L. Viloria. 2006. A review of the genus Manerebia Staudinger (Lepidoptera: Nymphalidae: Satyrinae) in the northern Andes. Journal of Research on the Lepidoptera 39:37-79.

Reed, D.L., J.E. Light, J.M. Allen, and J.J. Kirchman. 2007. Pair of lice lost or parasites regained: the evolutionary history of Anthropoid primate lice. BMC Biology 5(7).

Rehman, H., T.J. Papenfuss, and K. Auffenberg. 2006. Behavioral ecology of Crossbamon orientalis (Sindh sand gecko) from Uthal, District Bela, Balochistan, Pakistan. Journal of Natural History and Wildlife 5(1):169-171.

Saarinen, E.V. and J.C. Daniels. 2006. Miami blue butterfly larvae (Lepidoptera: Lycaenidae) and ants (Hymenoptera: Formicidae): new information on the symbionts of an endangered taxon. Florida Entomologist 89(1):69-74.http:// www.fcla.edu/FlaEnt/fe89p69.pdf.

Silcox, M.T., E.J. Sargis, J.I. Bloch, and D.M. Boyer. 2007. Primate origins and supraordinal relationships: morphological evidence. pp. 831-859 in W. Henke, H. Rothe and I. Tattersall, eds. Handbook of Paleoanthropology, Vol. 2: Primate Evolution and Human Origin. Springer-Verlag, New York, NY.

Slapcinsky, J. 2006. Paryphantopsis (Gastropoda: Pulmonata: Charopidae) from the Louisiade Archipelago of New Guinea. The Nautilus 120(4):119-130.

Snow, R.W., K.L. Krysko, K.M. Enge, L. Oberhofer, A. Warren-Bradley, and L. Wilkins. 2007. Introduced populations of Boa constrictor (Boidae) and Python molurus bivitattus (Pythonidae) in southern Florida. pp. 417-438 in R.W. Henderson and R. Powell, eds. The Biology of Boas and Pythons. Eagle Mountain Publisher, Eagle Mountain, UT.



The South Florida exhibit features a Calusa ceremony.

Soltis, D.E., J.W. Clayton, C.C. Davis, M.A. Gitzendanner, M. Cheek, V. Savolainen, A.M. Amorim, and P.S. Soltis. 2007. Monophyly and relationships of the enigmatic family Peridiscaceae. Taxon 56:65-73.

Soltis, D.E., M.A. Gitzendanner, and P.S. Soltis. 2007. A 567-Taxon data set for angiosperms: the challenges posed by Bayesian analyses of large data sets. International Journal of Plant Sciences 168:137-157.

Soltis, D.E., J.H. Leebens-Mack, and P.S. Soltis (eds.). 2006. Developmental Genetics of the Flower, Advances in Botanical Research, Vol. 44. Academic Press/Elsevier, San Diego, CA.

Soltis, D.E., A.B. Morris, J. McLachlan, P.S. Manos, and P.S. Soltis. 2006. Comparative phylogeography of eastern North America. Molecular Ecology 15:4261-4293.

Soltis, D.E., P.S. Soltis, D.W. Schemske, I.F. Hancock, I.N. Thompson, B.C. Husband, and W.S. Judd. 2007. Autopolyploidy in angiosperms: have we grossly underestimated the number of species? Taxon 56:13-30.

Soltis, P.S. 2006. Tragopogon. pp. 303-306 in Editorial Committee, Flora of North America, eds. Flora of North America. Oxford University Press, New York, NY.

Soltis, P.S., D.E. Soltis, S. Kim, A. Chanderbali, and M. Buzgo. 2006. Expression of floral regulators in basal angiosperms and the origin and evolution of ABC function. pp. 483-506 in D.E. Soltis, L.H. Leebens-Mack, and P.S. Soltis. eds. Developmental Genetics of the Flower, Advances in Botanical Research, Vol. 44. Academic Press/Elsevier, San Diego, CA.



Visitors enjoy the Hall of Florida Fossils exhibit.

Steadman, D.W. 2006. Extinction and Biogeography of Tropical Pacific Birds. University of Chicago Press, Chicago, IL.

Steadman, D.W. and Ó. Carranza-Castañeda. 2006. Early Pliocene to early Pleistocene birds from central México. pp. 61-71 in Ó. Carranza-Castañeda & E.H. Lindsay, eds. Advances in late Tertiary vertebrate paleontology in México. Universidad Nacional Autónoma de México, Instituto de Geología y Centro de Geociencias, Publicación Especial no. 4. Mexico D.F., Mexico.

Steadman, D.W. and S. Jones. 2006. Long-term trends in prehistoric fishing and hunting on Tobago, West Indies. Latin American Antiquity 17:316-334.

Suarez-Santiago, V.N., M.J. Salinas, N. Garcia-Jacas, P.S. Soltis, D.E. Soltis, and G. Blanca. 2007. Reticulate evolution in the Acrolophus subgroup (Centaurea L., Compositae) from the western Mediterranean: origin and diversification of section Willkommia Blanca. Molecular Phylogenetics and Evolution 43:156-172

Sulikowski, J., T. Driggers, T. Ford, R. Boonstra, and J. Carlson. 2007. Reproductive cycle of the blacknose shark, Carcharhinus acronotus, in the Gulf of Mexico. Journal of Fish Biology 70:428-440.

Sulikowski, J., S. Irvine, K. DeValerio, and J. Carlson. 2007. Age and growth of the roundel skate (Raja texana), from the Gulf of Mexico, USA. Marine Freshwater Research 58:41-53.

Tate, J.A., Z. Ni, A.-C. Scheen, J. Koh, C.A. Gilbert, D. Lefkowitz, Z.J. Chen, D.E. Soltis, and P.S. Soltis. 2006. Evolution and expression of homeologous loci in Tragopogon miscellus (Asteroceae), a recent and reciprocally formed allopolyploid. Genetics 173:1599-1611.

Tavano, J., A. Pitt, and M.A. Nickerson. 2007. Agkistrodon piscivorus leucostoma Western Cottonmouth aggregation. Herpetological Review 38(2):202.

Thibideau, A., D. Killick, W. Lyman, K. Deagan, J. Cruxent, and J. Ruiz. 2007. The strange case of the earliest silver extraction by European colonists in the New World. Proceedings of the National Academy of Sciences 104:3663-3666.

Thomson, A.W. and L.M. Page. 2006. Genera of the Asian catfish families Sisoridae and Erethistidae (Teleostei: Siluriformes). Zootaxa 1345:1-96.

Townsend, J.H. 2006. Celestus montanus Schmidt. Catalogue of American Amphibians and Reptiles 834:1-3.

Townsend, J.H. 2006. Geophis dunni Schmidt. Catalogue of American Amphibians and Reptiles 838:1-3.

Townsend, J.H. and L.D. Wilson. 2006. Geophis fulvoguitatus Mertens. Catalogue of American Amphibians and Reptiles 839:1-4.

Uhl, D., S. Klotz, C. Traiser, C. Thiel, T. Utescher, E. Kowalski, and **D.L. Dilcher**. 2007. Cenozoic paleotemperatures and leaf physiognomy an European perspective. *Palaeogeography*, *Palaeoclimatology*, *Palaeoecology* 248:24-31.

Wang, Q., **D.L. Dilcher**, X.Y. Zhu, Y.L. Zhou, and **T.A. Lott**. 2006. Fruits and leaflets of *Wisteria* (Fabaccae, Papilionoideae) from the Miocene of Shandong Province, Eastern China. *International Journal of Plants Sciences* 167(5):1061-1074.

Webb, E., H. Schwarcz, C.T. Jensen, R.E. Terry, M. Moriarty, and K. Emery. 2007. Soil carbon isotopes at Motul de San Jose. *Geoarchaeology* 22(3):291-312.

Wheeler, E.A., **S.R. Manchester**, and M. Wiemann. 2006. Eocene woods of central Oregon. *Paleobios* 26(3):1-16.

Whitten, W.M., M.A. Blanco, and N.H. Williams. 2006. Recircumscription of *Pityphyllum* (Orchidaceae: Maxillariinae). *ORCHIDS (Lindleyana)* 75:452-456.

Willmott, K.R. and A.V.L. Freitas. 2006. Higher-level phylogeny of the Ithomiinae (Lepidoptera: Nymphalidae): classification, patterns of larval hostplant colonisation and diversification. *Cladistics* 22:297-368.

Willmott, K.R. and G. Lamas. 2006. A phylogenetic reassessment of *Hyalenna* Forbes and *Direenna* Doubleday, with a revision of *Hyalenna* (Lepidoptera: Nymphalidae: Ithomiinae). *Systematic Entomology* 31(3):419-468.



The Wall of Wings contains thousands of Lepidoptera.

Wilson, L.D. and **J.H. Townsend**. 2007. A bonanza of boas and pythons. *Iguana* 14(2):25-27.

Wilson, L.D. and **J.H. Townsend**. 2007. Biogeography and conservation of the herpetofauna of the upland pine-oak forests of Honduras. *Biola Neotropica* 7(1):137-148.http://www.biotaneotropica.org.br/v7n1/pt/ fullpaper?bn02307012007+en.

Wilson, L.D. and **J.H. Townsend**. 2007. A checklist and key to the snakes of the genus *Geophis* (Squamata: Colubridae: Dipsadinae), with commentary on distribution and conservation. *Zootaxa* 1395:1-31.

Wright, J.J. and L.M. Page. 2006. Taxonomic revision of Lake Tanganyikan *Synodontis* (Siluriformes: Mochokidae). *Florida Museum Natural History Bulletin* 46(4):99-154.

Yang, G., X. Zeng, and H. Wang. 2006. The Permian Cathaysian Flora in Western Henan Province, China - Yuzhou Flora. Geological Publishing House, Beijing. China. (Book in Chinese with English Summary).

Zanazzo, A., M.J. Kohn, **B.J. MacFadden**, and D.O. Terry. 2007. Large temperature drop across the Eocene-Oligocene transition in central North America. *Nature* 445:639-642.

Zomlefer, W.B., W.S. Judd, W.M. Whitten, and N.H. Williams. 2006. A synopsis of Melanthiaccae (Liliales), with focus on character evolution in tribe Melanthicae. pp. 566-578 in J.T. Columbus, E.A. Friar, J.M. Porter, L.M. Prince and M.G. Simpson, eds. Comparative Biology of the Monocotyledons: Proceedings of the Third International Conference. Rancho Santa Ana Botanic Garden, Claremont, CA.

#### Popular Publications, Miscellaneous Reports:

Carlson, B. and **W.F. Keegan**. 2006. Boat trips. *Times of the Islands* Fall 76:56-61.

**Cordell, A.S.** 2006. Petrographic evaluation of paste categories from the Avon Park Air Force Range Project, Highlands and Polk Counties, Florida. pp. 257-261 in M. Wilder and C.D. Frederick, eds. Archaeological and Geomorphological Investigations at the Avon Park Air Force Range, Highlands and Polk Counties, Florida. Avon Park Air Force Range, United States Air Force Air Combat Command.

**Cordell, A.S.** 2007. Aboriginal pottery paste variability and clay utilization. pp. 459-609 in G.A. Mikell, et al., eds. Archaeological Data Recovery of the Wynne Haven Beach Site (80K239), Eglin Air Force base, Okaloosa County, Florida. Panamerican Consultants, Inc.

**Cordell, A.S.** 2007. Petrographic evaluation of pottery from the Rio Tanamá Sites. pp. 259-282 in L.A. Carlson, ed. A Multidisciplinary Approach to Site Testing and Data Recovery at Two Village Sites (AR-38 and AR-39) on the Lower Rio Tanama, Municiplality of Arecibo, Puerto Rico. U.S. Army Corps of Engineers, Jacksonville District.

**Daniels**, J.C. 2007. Citizen science through compound eyes: how butterflies can help environmental engagement and learning. *Connect* 3:26-27.

**Daniels, J.C.** and **S.J. Sanchez**. 2006. Blues' Revival: Can a change in diet - and a little laboratory assistance - help a Florida butterfly escape extinction. *Natural History* 115(8):26-28.

Gareca, Y., E. Forno, T. Pyrcz, **K.R. Willmott**, and S. Reichle. 2006. Lista preliminar de mariposas diurnas de Bolivia. pp. 1-66 in Y. Gareca and S. Reichle, eds. *Mariposas Diurnas de Bolivia*. PROMETA, Tarija, Bolivia.

Keegan, W.F. and B. Carlson. 2006. Cannibals! *Times of the Islands* Summer 75:56-61.

Keegan, W.F. and B. Carlson. 2007. Caves. *Times of the Islands* Winter 77:52-57.

Keegan, W.F. and B. Carlson. 2007. The Stranger King. *Times of the Islands* Spring 78:58-63.

King, F.W. 2006. Wildlife space and corridors. *The Sportman's Gazette* 7(7):1,5.

King, F.W. 2006. It once was hair. The Sportsman's Gazette 7(12):1,9.

King, F.W. 2007. Puddle, pond, lake, and wetland. The Sportsman's Gazette 8(1):1,5.

King, F.W. 2007. Whence came the tourists? The Sportsman's Gazette 8(2):1,5.

King, F.W. 2007. And the tourism increased. *The Sportsman's Gazette* 8(3):1,5.

King, F.W. 2007. Wildlife attractions and theme parks. *The Sportsman's Gazette* 8(4):1,5.

King, F.W. 2007. Florida's wildlife pets. *The Sportsman's Gazette* 8(5):1-2.

King, F.W. 2007. Going, going, gone? The Sportsman's Gazette 8(6):1-2.

Krysko, K.L. and A.N. Hooper. 2006. Potential pollination of non-native coconut palms, *Cocos nucifera* (Arecales: Arecaceae), by non-native Madagascar giant day geckos, *Phelsuma madagascariensis grandis* (Sauria: Gekkonidae), in the Florida Keys. *Gekko* 5:33-38.

Manchester, S.R. 2006. Review of Atlas of the Pleistocene vascular plant macrofossils of Central and Eastern Europe Part 1. Pteridophytes and monocotyledons by F.Y. Velichkevich and E. Zastawniak. American Association of Stratigraphic Palynologists Newsletter 39(4):34. **Marquardt, W.H.** 2006. Teaching pavilion finished: renovations begin on Gill House. *Friends of the Randell Research Center Newsletter* 5(3):3.

**Marquardt, W.H.** 2006. Ask the archaeologist: were the Calusa really seven fect tall? *Friends of the Randell Research Center Newsletter* 5(4):2.

Marquardt, W.H. 2007. 3,000 Years ago on Useppa Island. Friends of the Randell Research Center Newsletter 6(1):1.

Marquardt, W.H. 2007. Art, authors, and archaeology at Pineland. Friends of the Randell Research Center Newsletter 6(1):2.

Marquardt, W.H. 2007. Under it all, Useppa still holds surprises. Useppa Chronicle 10(1):1,11.

Marquardt, W.H. and K.J. Walker. 2006. In the Florida Museum Lab: Analysis and Curation. *Friends of the Randell Research Center Newsletter* 5(4):3.

Milanich, J.T. 2006. Cultural Indigestion? Florida Frontier Gazette 5(3):6-7.

Milbrath, S. 2006. Armageddon at Postclassic Mayapan. Natural History 115(6):60-63.

Milbrath, S. 2007. Mayapan's effigy censers: iconography, context, and external connections. Final Report to the Foundation for Mesoamerican Studies, 2007 http://www. famsi.org/reports/05025/index.html.

Miller, J.Y. 2007. Mexican database project. *MeGuire Center News* No. 1:4, Florida Museum of Natural History, University of Florida, Gainesville, FL.

Miller, J.Y. 2007. McGuire Center becomes mecca for lepidopterists, hosts three international meetings in 2006. *McGuire Center News* 1:1,4, Florida Museum of Natural History, University of Florida, Gainesville, FL.

**Porter, C.M.** 2007. Cosmology & cosmotology. *History of Science Society Newsletter* 36(1):13,24.

Retzer, M.E. and **L.M. Page**. 2006. Endangered and threatened fishes of Illinois. *Outdoor Illinois* 15(1):16.

Sourakov, A. 2007. Dominican Republic: notes on evolution of butterflies and of our knowledge about them. *News of the Lepidopterists' Society* 49(2):46-49,55.

Townsend, J.H. and L.D. Wilson. 2006. Denizens of the dwarf forest: herpetofauna of the elfin forests of Cusuco National Park, Honduras. *Iguana* 13(4):242-251.

Walker, K.J. and D.L. Ruhl. 2006. Historical Ecology of the Everglades National Park: Annual Report on Year 7 of Environmental Archeological Analysis, Cataloging, and Curation of SEAC Accession 590. Southeast Archeological Center, National Park Service, Tallahassee, FL.



The Butterfly Rainforest opened in 2004.

# Support the Museum

Every gift to the Florida Museum of Natural History – whether of time, resources or collections – enhances and expands all of its activities and thus the quality of the visitor experience. There are a variety of ways to contribute to the Museum and its mission, and participation is welcomed at any level.

## Membership



The Florida Museum's members form the core of its support and are

important participants in its programs and advocates in the community. In fiscal 2006-07 membership grew 7 percent to almost 900 Associates and Curators Society donors.

Memberships support all areas of the Museum as well as the members' preview lectures and special events. In the past year previews were held for *Hatching the Past: The Great Dinosaur Egg Hunt* and *Tibet: Mountains and Valleys, Castles and Tents.* The largest preview was for the Museum's own *Megalodon: Largest Shark that Ever Lived*, which drew more than 500 members and guests. The Museum also offered a *Tastes, Tunes and Treasures VIP Open House* featuring the Malacology Collection. Guests viewed a selection of the finest specimens of corals, shells and mollusks from Dickinson Hall and interacted with curators and students.

The Florida Museum Associates Board renewed the longstanding tradition of Passport galas by hosting *Passport to Carnivale Around the World* on Feb. 9. Board members, community sponsors, host committee members and other attendees raised more than \$40,000 to fund Museum research and programs while enjoying an evening of fabulous costumes, decorations, dancing and international cuisine.

Museum staff are developing several new member initiatives. Member benefits have been expanded to include free or reduced admission to all fee-based special exhibitions, and the Museum soon will offer a combination Membership/Butterfly Rainforest Annual Pass program. The Museum's member web site also has been redesigned and a member survey was conducted to help the Museum determine which benefits are most meaningful to members, and how it can provide the best service and value in the future.





#### MEMBERSHIP LEVELS INCLUDE:

 Associates:

 Student:
 \$25

 Individual:
 \$50

 Dual:
 \$75

 Family/Group:
 \$100

 Supporting:
 \$150

 Explorer:
 \$250



ld above

ıd above

id above

GURAI	ORS	30	CIEI	Y:
Benefa	ctor:			gif

Pa

Di

netactor:	gints of \$500 and
llow:	gifts of \$1,000 an
tron:	gifts of \$2,500 ar
rector's Circle:	gifts of \$5,000 ar

### For additional information please contact:

Gifts and Corporate Sponsorship: Beverly Sensbach, Director of Development, (352) 273-2087 Membership: (www.flmnh.ufl.edu/membership) Leslie Campbell, Membership Coordinator, (352) 273-2047 Volunteer Opportunities: (www.flmnh.ufl.edu/volunteers) Julie Crosby, Volunteer Coordinator, (352) 273-2055

### FLORIDA MUSEUM OF NATURAL HISTORY

PROFESSIONAL STAFF | July 1, 2006 - June 30, 2007

#### DIRECTOR'S OFFICE

Director - Douglas S. Jones, Ph.D. Associate Director - Graig D. Shaak, Ph.D. Executive Secretary - Sharon K. Thomas

#### **Budget and Human Resources**

Coordinator - A. Darlene Novak Office Manager - Barbara L. Hackett Payroll - Rachel E. Sloan Peards - Audrey L. Ford Personnel - Arja Rompotti-Horn Purchasing - Mary B, Windham Travel-Shuronna G. Wilson

#### Development / Membership

Development Director - Beverly S. Sensbach Membership Coordinator - Leslie L. Campbell Secretary - Susan A. Jarzen

#### Museum Technology

Coordinator - William G. Paine Network Manager - Daniel F. Stoner Webmaster – Sarah E. Fazenbaker Info Tech Specialist – Matthew A. McDonell / Oluaegun Yayi IT Practitioner - Olusegun Yayi / T.J. Talley

IT Expert - Gregory Traub

#### DEPARTMENT OF NATURAL HISTORY (Collections & Research)

Assistant Director and Chair - Scott K. Robinson, Ph.D. Assistant to Chair & Anthropology Registrar Elise V. LeCompte Maintenance Supervisor - George D. Hecht Program Assistant - Pamela W. Dennis

Caribbean Archaeology Curator - William F. Keegan, Ph.D.

#### Environmental Archaeology

Assistant Curator - Katherine F. Emery, Ph.D. Collection Managers - Sylvia J. Scudder Irvy R. Quitmyer

#### Herbarium

Curator and Keeper - Norris H. Williams, Ph.D. Collection Manager - Kent D. Perkins Sr. Biologist - W. Mark Whitten, Ph.D. Program Assistant - Gertrude R. Lindler

#### Herpetology

Curators - F. Wayne King, Ph.D. Max A. Nickerson, Ph.D. Associate Scientist - L. Richard Franz, Jr. Collection Manager - Kenneth L. Krysko, Ph.D.

#### Ichthyology

Interim Curator - Lawrence M. Page, Ph.D. Assistant Scientist - J. Andres Lopez, Ph.D. Collection Manager - Robert H. Robins Biological Scientist - Griffin E. Sheehy Post-Doctoral Research Associate Rebecca Johansen, Ph.D.

#### Florida Program for Shark Research (FPSR)

Director, FPSR, and Curator, International Shark Attack File - George H. Burgess Education Coordinator - Cathleen L. Bester Research Biologist - Alexia A. Morgan Andrew N. Piercy Post-Doctoral Research Associate

Christina Conrath, Ph.D.

#### Invertebrate Paleontology

Gurator - Douglas S. Jones, Ph.D. Collection Manager - Roger W. Portell Laboratory Technician - Sean Roberts

#### Katharine Ordway

Chair of Ecosystem Conservation Eminent Scholar - Scott K. Robinson, Ph.D. Biological Scientist - Steve G. Daniels Post-Doctoral Research Associate Jeffrey P. Hoover, Ph.D.

#### Latin American Art and Archaeology Curator - Susan Milbrath, Ph.D.

Lepidoptera and Biodiversity (McGuire Center) Center Director - Thomas C. Emmel, Ph.D.

Curator - Lee D. Miller, Ph.D. Curator - Jacqueline Y. Miller, Ph.D. Assistant Curator - Paul Z. Goldstein, Ph.D. Assistant Curator - Keith R. Willmott, Ph.D. Curatorial Scientist - Charles V. Govell, Jr., Ph.D. Collection Manager - George T. Austin, Ph.D. Collections Coordinator - Andrei Sourakov, Ph.D. Construction Coordinator - James B. Schlachta Vivarium Assistant Manager - Jeffrey Hansen Program Assistant - Christine M. Eliazar Post-Doctoral Research Associates - Akers Pence, Ph.D. Andy Warren, Ph.D.

#### Malacology

Curator - Fred G. Thompson, Ph.D. Associate Curator - Gustav Paulay, Ph.D. Collection Manager - John D. Slapcinsky

#### Mammalogy

Assistant Curator - David L. Reed, Ph.D. Collection Managers - Candace L. McCaffery Laurie L. Wilkins IT Expert - Matthew J. Collins Post-Doctoral Research Associate Jessica E. Light, Ph.D.

#### **Molecular Systematics & Evolutionary Genetics**

Curator - Pamela S. Soltis, Ph.D. Assistant Scientist - Matthew A. Gitzendanner, Ph.D.

#### Museum Studies

Curator - Charlotte M. Porter, Ph.D.

#### North Florida Archaeology

Curator Jerald T. Milanich, Ph.D. Collection Manager-Donna L. Ruhl Ceramic Technologist - Ann S, Cordell

#### Ornithology

Curator-David W. Steadman, Ph.D. Collection Managers - Andrew W. Kratter, Ph.D. Thomas A. Webber, Ph.D.

#### Paleobotany

Graduate Research Professor - David L. Dilcher, Ph.D. Curator - Steven R. Manchester, Ph.D. Collection Manager – Hongshan Wang, Ph.D. Biological Scientist – Terry A. Lott

#### Spanish Colonial Archaeology

Distinguished Research Curator Kathleen A. Deagan, Ph.D. Collection Manager - Gifford J. Waters, Ph.D.

#### South Florida Archaeology,

Curator - William H. Marquardt, Ph.D. Assistant Scientist & Collection Manager Karen J. Walker, Ph.D.



#### SW Florida Archaeology (Raudell Research Center)

Director - William H. Marquardt, Ph.D. Assistant Director, Research Programs and Services - John E. Worth, Ph.D. Coordinator, Research Programs & Services -Kara Bridgman Program Assistant - Jennifer J. Jennings

#### Vertebrate Paleontology

Assistant Curator - Jonathan I. Bloch, Ph.D. Collection Manager - Richard C. Hulbert, Ph.D. Sr. Biologist - Russell W. McCarty II / Jane Mason Biological Scientist - Arthur R. Poyer

#### EXHIBITS AND PUBLIC PROGRAMS

Assistant Director - Douglas R. Noble, Ph.D.

#### **Business** Office

Business Manager - Gloria M. Sanders Office Manager - Charlene O. Smith Program Assistant - Katherine K. Gerard Fiscal Assistant - G. Colin Martin Store Manager - Stacey D. Crandall Special Events Coordinator M. Carolina Puente / Karen Judd

#### Education

Education Director-Jamie C. Creola School Programs - David J. Webb Jeannette E. Carlisle Public Programs - Kendra Lanza-Kaduce Volunteer Program - Julie V. Grosby

#### Exhibits

Assistant Director - Darcie A. MacMahon Designers - Ian M. Breheny Elecia Crumpton Jay C. Fowler Traveling Exhibits - Tom L. Kyne

#### Informal Science Education (Center)

Center Director - Betty A. Dunckel, Ph.D. WINGS Project Director -- Marilyn M. Martin WINGS Program Coordinators - Nikole K. Kadel Kathy C. Malone MESS Project Director - Shari A. Ellis, Ph.D. **MESS Education Coordinators** Stephanie L. Dodman / Lisa Wiggins Carrie B. Sheets / Domenic J. Durante

MESS Research Associate - Janice S. Chang Secretary - Dona-Marie Mintz

#### Public Relations/Marketing

Assistant Director - Paul E. Ramey, APR Photographer - Jeffrey L. Gage

#### Security & Fabrication

Operations Coordinator - Kurt Auffenberg Artisan - Ronald A. Chesser Carpenters/Cabinet makers - J. Patrick Bennett Nathan R. Bruce Facilities - Jay C. Weber Security Guards - Sean Geiger John H. McIntosh Harvey E. Yawn

#### EMERITUS FACULTY

Director Emeritus - Joshua C. Dirkinson, Jr., Ph.D. Curator Emeritus - Carter R. Gilbert, Ph.D. Distinguished Research Curator Emeritus S. David Webb, Ph.D. Curator Emeritus - Elizabeth S. Wing, Ph.D. Curator Emeritus - Charles A. Woods, Ph.D.

Fiscal Assistant - David P. Hurst

Curator - Bruce J. MacFadden, Ph.D.

