

# **Florida Museum of Natural History (FLMNH)**

## **2006 Budget/Program Review Wednesday, March 22, 2006**

### **Introduction**

Today's museums nourish minds and spirits by fostering contemplation, exploration, critical thinking, and dialogue to advance knowledge, understanding, and appreciation of science, history, the arts, and the natural world. They strengthen and enrich the lives of people by inspiring lifelong learning, preserving our unique histories, culture, achievements, values, and contributing to the livability and economic vitality of our towns and cities. Museums encourage people to explore new ideas, exchange stories, and to discover collections and objects from our natural and cultural heritage. And in collaboration with community partners – from schools and libraries to public broadcasting and social service organizations – museums foster civic participation and cultural understanding. These are but a few of the reasons that congress has declared 2006 to be the Year of the Museum.

A part of the University of Florida for over a century, the Florida Museum will celebrate the Year of the Museum in its dual capacity as both university museum and the legislatively designated state museum of natural history. This designation of state museum by statute (Florida Statute §1004.56) on a university campus is fairly novel, but for the Florida Museum has proven to be incredibly healthy. As the statewide epicenter for natural science and anthropological collections, the Florida Museum has grown to become the largest collection-based museum in the southeastern U.S. The more than 20 million objects and artifacts held at the museum represent a nationally recognized scientific resource that has fueled a tremendous amount of original research while providing the raw material for hundreds of UF graduate theses and dissertations. This symbiotic relationship has allowed the Florida Museum to develop an enviable record of scholarship, teaching, and service while helping to train the next generation of natural scientists.

We recognize the delicate balance that the Florida Museum must maintain in the organizational hierarchy of the university as a non-degree-granting unit with faculty. We have enjoyed strong support from present and past administrations that have had an appreciation for, and understanding of, the role and value of a university natural history museum. We have designed our new strategic plan to complement that of the university's as our missions must be congruent. However, we recognize that our value to the university is not based solely on student credit hours generated, but a complex formula of teaching, research, collections care and conservation, and public service. The museum competes and cooperates very nicely with our cognate academic departments across campus. We believe that the Florida Museum represents a vital research and educational resource at UF.

Much of the success of the museum lies in the ability of the faculty and staff to compete for sponsored research. Also, the museum's recent successes in development and fundraising have afforded it the opportunity to keep pace with research, collections care and conservation,

exhibition development, and public education. The Florida Museum is recognized by its peer institutions as one of the leading university natural history museums in the nation. The museum's growth and development have been carefully strategized, monitored, and evaluated. However, several opportunistic events in the last few years have accelerated our plans to become a 21<sup>st</sup>-century museum operating at the cutting edge of anthropological, biological, and paleontological collections-based research. The establishment of our new Molecular Genetics Laboratory and the McGuire Center for Lepidoptera and Biodiversity has thrust the Florida Museum into an international leadership role in biodiversity research and education. They have also enabled us to participate as a leader in informal science education where we have embraced the statewide and regional demand.

Perhaps the growth in public education and outreach is best demonstrated in our burgeoning web site statistics for 2005, as they are rather remarkable:

1) total hits	308,402,753
2) total pages viewed	29,063,541
3) total visits	12,291,174
4) average visits per day	33,681
5) average duration of visit	11 minutes

The most popular area on the site is the International Shark Attack File with the venomous snakes of Florida coming in a close second.

The Butterfly Rainforest has proven to be a world-class attraction that complements our statewide presence in natural history exhibits and public programs. The BR attendance for 2004-05 was 126,994. This achievement represents a major investment of resources. The museum has absorbed substantial costs in establishing the McGuire Center and Butterfly Rainforest, as has the university. However, we have exhausted our day-to-day financial capacity. We have become "rate poor" and no longer have the ability to fill critical staffing needs in the museum as well as exercise any discretion for exemplary staff. We have committed to significant start-up packages for the faculty recently recruited not only for the McGuire Center but also the core research group in Dickinson Hall. An independent consulting firm manages the Butterfly Rainforest. This strategy was adopted because we had neither the start-up resources nor the management skills to begin operation of such a unique and major enterprise. The first year of operation finished well in the black. The second year has resulted in a drop in revenues and the museum administration has had to supplement the gate revenues with over \$50,000 from non-state resources. A year-two attendance decline was predictable, and coupled with hurricanes and the escalating costs of the management contract; we face a deficit for the current year. The contract is under review by the UF Office of General Counsel. The options include: 1) continue with a monthly deficit, 2) attempt to modify or buy-out the contract, or 3) close the Butterfly Rainforest. We will explore our options with you upon receipt of the General Counsel's review.

A significant issue looming for the Florida Museum involves the serious fire code violations at Dickinson Hall. We have been under a constant state of renovation for the past three years attempting to deal with many of these violations. The situation has seriously hampered our ability to conduct business. The university has supported the bulk of the renovation costs; however, our financial resolve has been tested as well. We have had to budget all of the museum's carry-forward funds for renovations the last three years. Fortunately, Academic Affairs and Research & Graduate Programs partnered with the museum in installing modern

fume hoods in those areas that maintain alcohol collections. We have less than an eight-year occupancy window remaining in Dickinson Hall, as the greatest single fire code issue cannot be resolved and that is the considerable volume of natural history specimens stored in alcohol. The museum and university must move forward with plans to build a new facility(s) and turn over Dickinson Hall to Academic Affairs for teaching/office/lab space.

The museum has made significant gains in our shared goal with the university of raising our various enterprises into the top ten nationally. We will begin a re-accreditation review by the American Association of Museums in 2006 and have already begun the self-study. We are confident that we will receive the highest rating of museum accreditation.

## **Current Issues**

### **A. New Hires and Their Role in Strengthening the Florida Museum**

We will make no new permanent faculty hires in 2005-06. We recruited Dr. Andres Lopez, a brilliant young ichthyologist, who currently is supported on a large NSF grant. In addition to his own phylogenetic research, he is developing a system for curating genetic resources. Dr. Lopez represents the caliber of academician we wish to recruit to our permanent faculty.

In the next few years we face the retirement of key senior faculty, especially in the field of archaeology. This fall we began inviting internationally prominent scientists to campus for seminars to help us identify the best candidates and research areas for future growth.

### **B. Facilitation of the Advancement of the Florida Museum's Strongest Departments and Programs**

- 1. COLLECTIONS:** *Rank among the top 5 nationally for collections we hold in terms of size, unique strengths, accessibility, taxonomic importance, stewardship, and use.*

The Florida Museum focuses its primary collection emphasis on Florida, the southeastern U.S., and the circum-Caribbean. However, the museum's internationalization initiative has resulted in an expanded base of natural history specimens and artifacts. All of the collections have grown in size and stature, a prerequisite for a dynamic museum.

In 2005, the U.S. National Park Service (NPS) and the Florida Museum entered into a cooperative agreement in which the FLMNH will curate wet (alcohol preserved) biological specimens collected on NPS lands in south Florida. The majority of the specimens are fishes, reptiles, amphibians, and marine invertebrates, plus a few mammals and birds, collected in Everglades National Park, Biscayne National Park, Dry Tortugas National Park, and Big Cypress National Preserve. This collaborative effort is significant because it contributes to the missions of both the FLMNH and the NPS. Florida Statute §1004.56 mandates that the FLMNH, at the University of Florida, collect and maintain archival collections of biological specimens and materials in sufficient numbers and quantities to provide within the state and region a base for research on the diversity, evolution, and conservation of wild species and natural ecosystems. The NPS specimens are welcome additions to the FLMNH collections.

- 2. EXHIBITS:** *Produce, maintain, and feature high quality permanent, temporary, and traveling exhibitions that are related to our mission, based on sound scholarship, excellence and accuracy of presentation in exciting, visitor-friendly formats.*

The Butterfly Rainforest is arguably a national leader in formal and informal science education and its complementary **“Wall of Wings”** is a dazzling expression of the ecology and biodiversity the Lepidoptera. The blockbuster traveling exhibit **“Search for the Giant Squid!”** completed its run and has been replaced by **“Glow”**, a very popular and educational and entertaining interpretation of bioluminescence. **“Journal of Light”**, photographer John Moran’s search for the soul of Florida, continues to overwhelm our visitors. The **“Pearsall Collection of American Indian Art: 40<sup>th</sup> Anniversary Selections”**, a Florida Museum exhibit, continues its very successful run. We anxiously anticipate the September installation of **“Hatching the Past: The Great Dinosaur Egg Hunt”**.

- 3. RESEARCH:** *Maintain an international reputation for scholarly research by being highly productive in terms of publications, sponsored research, and fieldwork.*

Under the leadership of Dr. Scott Robinson, Ordway Professor of Ecosystem Conservation and Assistant Director for Research and Collections, the natural science research has flourished with peer reviewed publications, interdepartmental cooperation, internationalization, and outstanding grant and contract support. A stellar example of reputation building is Dr. Robinson who established a new research program in Peru and continued his research on the effects of urbanization on the birds of Florida. His work in Peru focuses on the role of interspecific competition and mutualisms on the distributions and habitat selection of birds along elevational gradients in the Andes. This research involves two graduate students in the Department of Zoology and is now expanding to include studies of endangered species restricted to small geographical ranges in the Amazon Basin. Dr. Robinson and two other graduate students continued to work on the causes of the major changes in bird communities that follow the conversion of natural habitats to urban and residential developments in Florida. During the 2004-2005 year, his research team located and monitored more than 300 nests and determined that nest predation rates actually decrease in urban areas for many species.

- 4. HIGHER EDUCATION:** *Continue to be a model for university-associated natural history museums: training the next generation of systematists, anthropologists, natural scientists, and museum professionals.*

Museum faculty and staff have taken leadership roles in natural history and museology professional societies, accreditation surveys, and assessment programs. The Florida Museum is recognized as a national leader in university-based natural history museums. Museum faculty continue their formal classroom teaching, focusing on graduate education. We are proud of our partnerships with our cognate teaching departments. The museum faculty teach without further compensation.

In 2004-05 we loaned the following FTE's:

Zoology	.35
Anthropology	1.24
Botany	.96
Entomology/Nematology	.18
Wildlife Ecology	.10
Geology	<u>.13</u>
Total	3.96 FTE

Museum faculty currently supervise 55 graduate students in our cognate teaching departments in CLAS, IFAS, etc. Museum grants and contracts support the majority of these students.

5. **SUPPORT:** *Broaden the museum's base of support from private and public sources to support exhibits and public programming, educational outreach, collection growth, scientific fieldwork, and scholarly research.*

**a. Grant and Contracts**

The Florida Museum's successes are noteworthy. In 2004-05 the museum was awarded \$1,661,720 in new awards and a release of \$3,320,016 in yearly allocation of multiple year awards for a total of \$4,891,736. To date for fiscal 2005-06 we have received \$1,111,587 in new awards and \$973,289 in yearly allocation of multiple year awards for a total of \$2,084,876; rather impressive for a six-month effort. It is striking that the Exhibits and Public Programs department of the museum generated \$970,798 for FY 2004-05 and \$593,703 for the first six months of this year in education grants.

The grant and contract successes parlay significantly to the generation of overhead for the university. The Florida Museum generated \$530,181 in 2004-05 and \$259,402 to date for 2005-06.

**b. Fundraising**

The museum continues its aggressive pursuit of marketing, public relations, development, and fundraising. The University of Florida Capital Campaign provides an exciting, although daunting, atmosphere for philanthropy, one which we must embrace. Our past successes indicate that the Florida Museum is marketable and should compete very nicely for private, corporate, and governmental support.

Fundraising is a museum-wide effort. All categories of faculty and staff directly or indirectly participate in fundraising and development. We have inherent disadvantages in that we have no alumni base. However, the museum is a terrific product that helps sell itself. We are very proud of our recent successes. In 2004-05, the museum raised \$3,834,815. This year looks equally promising as we have recorded gifts of \$2,457,107 to date for 2005-06. The museum currently holds 51 pledges with a cumulative value of \$3,191,867.

## **C. Current Faculty Searches – None**

## **D. Goals for Advancing the Florida Museum’s Research Agenda**

### **1. Construct a New Collections & Research Building at the 34<sup>th</sup> Street Site**

- a.** Dickinson Hall is aging and poorly designed and constructed for the care and conservation of natural history collections. Currently, there are approximately 50,000 gallons of alcohol, the preferred medium of preservation of natural history specimens, in Dickinson Hall. This constitutes a major fire code violation. The State Fire Marshall, in consultation with UF Environmental Health and Safety, developed a general safety and emergency plan for Dickinson Hall. We installed rated fire walls, an information sharing plan, and identification badges. We recently completed installation of a new fire detection and early warning system to insure employee health and safety. This good faith effort however does not eliminate the problem. The sheer volume of alcohol exceeds the capacity allowed for Dickinson Hall and cannot meet code, regardless of the corrective measures. The storage of alcohol constitutes a flash point risk in the event of a fire or even a spark. There are specific codes for an alcohol facility that only can be realized in a new building. Also, the State Fire Marshall granted the museum a 10-year variance on the use of Dickinson Hall. We have less than eight years remaining on the variance.

The most expeditious plan is to reunite the museum at one campus locality and build a new facility or facilities attached to Powell and McGuire Halls at the museum’s 34<sup>th</sup> Street site. We are exploring two options: 1) construction of a building for storage of those collections that require special handling, and a collections and research facility, or 2) a combined structure uniting both functions. The land is designated for the museum on the UF Campus Master Plan, and President Machen has embraced the project. Also, Dickinson Hall can be released to Academic Affairs for conversion to offices, laboratories, and classrooms. This location is central to many university functions and programs.

- b.** The Florida Museum genuinely needs an auditorium for audiences of 300-400. The Florida Museum is at the center of the UF Cultural Plaza, thus such a facility would have great shared utility with the Phillips Center and Harn Museum. The development team has identified prospects that have the capacity to make it happen. We ask that you give your blessing and permission to proceed with planning and fundraising.

### **2. Aggressively Recruit Outstanding Replacement Faculty**

The Florida Museum will lose two stellar archaeologists in the next couple of years: Drs. Kathleen Deagan, Distinguished Research Curator of Archaeology, and Jerald Milanich, Curator of Florida Archaeology. The museum has been recognized as the statewide, regional, and national leader in Florida and Caribbean archaeology. The Randell Research Center in Pineland, Florida has developed quite nicely as a research and education center. However, the museum must maintain its presence on the main campus as a national leader to compete for the best students and grants and contracts.

### **3. Position the Florida Museum as a Campus Leader for Biodiversity Studies**

Biodiversity is one of the most important topics for the 21<sup>st</sup> century. Nowhere is this more apparent than in Florida. With over 20 million specimens in its collections, along with its huge number of databases and the ability to analyze the genetic codes of specimens, the museum represents one of the greatest biodiversity resources available. Our goal is to have the museum recognized and used more widely as a locus for biodiversity research.

### **4. Expand Program in Molecular Genetics**

The Florida Museum has taken a leadership role in the field by growing rapidly and successfully in the non-traditional arena of molecular genetics. Genetics, systematics, and evolution have prospered through the application of modern cutting-edge science. We propose to become more creative in providing funding, both grants and contracts and fundraising, to advance this research specialty.

### **E. Progress Towards Creating a Diverse Faculty**

This challenge is real and timely. We have had difficulty recruiting a diverse faculty in the classic scientific “ologies” of the museum world. Minorities are at a premium; but, since we face several retirements in the next few years, we plan to recruit through the traditional recruiting services as well as the minority services provided by UF Human Resources. We recruited a terrific Latin-American ichthyologist on a grant and hope to find a position to keep him permanently. A proposal to hire an African-American botanist with a Ph.D. from Harvard died for lack of university support a year earlier.

### **F. Undergraduate Incentives – N/A**

### **G. Additional Substantial Courses for our Lower Division Students**

Museum faculty primarily teach graduate level courses and seminars in their disciplines through cognate academic departments. Historically this has paid dividends for both the museum and the teaching departments as we have access to the students for recruitment and the departments enjoy the student credit hours. We are prepared to partner with the teaching departments to explore other teaching opportunities.

### **H. Special Provost Consideration for 2006-07**

**We sincerely hope you recognize that the Florida Museum is under-resourced!**

**Rate and General Operating Support:** The University of Florida endorsed a recurring legislative budget request for the Florida Museum in the 1998-1999 legislative session. The request was funded at \$1.2 million (budgeted at \$2.0 million) of which nearly 70% was allocated in rate. This special was timely as Powell Hall construction was just completed and opened to the public at the Cultural Plaza. The rate was used for staffing Powell Hall and filling-in shortcomings at Dickinson Hall. The general operating support maintained the day-to-day operations of both facilities. The unencumbered rate routinely was converted to operating support. The museum has not had an infusion of new rate since then. McGuire

Hall subsequently has consumed the balance of rate as well as much of the operating support. We have experienced inflation and additional costs in managing the 56-acre Randell Research Center in Pineland, which suffered considerable damage last hurricane season, and the 9,500-acre Ordway Preserve in Putnam Hall.

The museum has become rate poor. The museum administration has managed very well the resources provided by the Office of the Provost. However, we have lost all flexibility in filling critical positions in Powell and McGuire Halls. We have serious concerns about our security coverage in McGuire Hall and the Butterfly Rainforest. PeopleSoft has stretched our Budget and Human Resources and Museum Technology staffs to the breaking point. We are responsible for additional expenses associated with the renovations and fire code corrections in Dickinson Hall. The repair costs of the Hurricane Charlie damage at the Randell Research Center were fronted by the museum. We are recovering, however FEMA payments are delayed and reimbursing from 75 to 90% of the actual costs.

The McGuire Center for Lepidoptera and Biodiversity is operating on \$22,000 per year, the annual allocation to the former Allyn Museum of Entomology which was transferred to campus two years ago. The Butterfly Rainforest is operating at a deficit. The contractual cost to operate the BR is in excess of \$56,000 per month.

1. We ask special consideration for new rate for the museum in the 2006-07 fiscal year.

We have an obligation to hire a facilities manager for McGuire Hall and four full-time guards for Powell and McGuire Halls. The Harn Museum currently has five full time Teams guards and the FLMNH has two.

We must hire a fiscal assistant for the Budget and Human Resources office. We currently are supporting this position on grant overhead. Also, we need to add a programmer to assist with the day-to-day operations and the overloads caused by PeopleSoft.

Facilities Manager	\$ 47,500
Fiscal Assistant	35,500
Security Guards (4) @ \$25,000	100,000
IT Programmer	<u>55,000</u>
Total	\$238,000

2. We ask special consideration of an additional \$100,000 in general operating support (OE + OPS), the bulk of which will be used to offset operating expenses in McGuire Hall and the Butterfly Rainforest.
3. We ask you to consider allocating bridge money to hire the following staff.

Assistant Development Director:  $\$35,000 + \$6,713 \text{ FB} + \$8,591 \text{ INS} = \$50,304$   
 Public Relations Assistant:  $\$32,500 + 46,234 \text{ FB} + \$8,591 \text{ INS} = \$47,325$

We propose short-term financing of both positions. We are prepared to assume 33% in year two, 66% in year three, and 100% in year four at which time the positions should be self-sufficient. The positions are critical for the capital campaign and the long term financial stability of the Florida Museum of Natural History.

**We ask UF to consider endorsing a \$2,000,000 recurring legislative budget request for the Florida Museum in Legislative Year 2007-08. The precedent for such a request exists as this was done for the opening of Powell Hall in 1998-99, also budgeted at \$2,000,000 and funded at \$1,200,000. The Florida Museum serves the dual role of the University of Florida Museum and State Museum of Florida (Florida Statute §1004.56) as this duality was part of the justification in 1998-99. This is in response to the opening of McGuire Hall and the Butterfly Rainforest and the operational costs thereof coupled with cost escalations of all other museum functions. The museum's 2006-07 LBR was approved by the university and forwarded to the Board of Governors where it died.**