

Florida Museum
of Natural History
2017-2018 Annual Report



FROM THE DIRECTOR

If I had to select a title for this 2017-2018 Annual Report, most likely it would be “***Transitions.***”

From my perspective as Director, I feel we witnessed an unprecedented number of important changes to our Museum personnel, programs and philosophies this year.

For example, in January 2018 we transitioned into our second century as Florida’s state museum of natural history. We celebrated the final chapter of our 100th anniversary year (2017) with the centennial exhibition – ***Rare, Beautiful and Fascinating: 100 Years @FloridaMuseum.*** The exhibit highlighted the enormous accomplishments of the Museum’s first century, which resulted in more than 40 million specimens and objects under our curatorial care. Certainly we’ll never stop collecting, but our research and collections emphasis is also transitioning to digitization and data sharing to address important scientific questions and challenging environmental issues.

The transition from pure collection growth and curation to data mining for the benefit of science and society represents a subtle shift in our traditional museum philosophy. Always proud of our collections and exhibitions, we are increasingly concerned with creating a positive impact on the diverse communities we serve, from scientists and university students, to K-12 youth and the general public. Like so many of our peer institutions, this means we need to “turn the Museum inside-out,” better understand our audiences, appreciate their needs and concerns, and find ways to touch their lives. Our investments in digitization, social media, Museum pop-ups, and school programs all reflect this commitment to audience impact.

This report also highlights significant personnel transitions we experienced this year. Several influential, long-serving faculty and staff retired in 2017-18 who were instrumental in raising the bar of excellence at the Florida Museum. They will be sorely missed. Within this group I would especially note the untimely passing of Dr. Thomas Emmel, Founding Director of our McGuire Center for Lepidoptera and Biodiversity. Tom’s irrepressible passion for the natural world, particularly Lepidoptera, his commitment to students, and his vision for collections and the role of museums in inspiring future generations, made him singularly successful in building the world’s leading Lepidoptera research facility and collection. This annual report is dedicated to his memory.

I am excited to report a transformational, \$10 million gift received this year from our long-time friends and supporters, Jon and Beverly Thompson of Fort Myers. Major donors to our new *Discovery Zone* permanent exhibit and numerous University of Florida initiatives, the gift establishes the UF Thompson Earth Systems Institute, to be housed in a new addition to the Florida Museum. The institute will communicate how the Earth’s systems (atmosphere, hydrosphere, cryosphere, geosphere, biosphere) are interconnected and potentially disturbed by mankind, with cascading consequences for our environment. We are thrilled at this opportunity to advance communication and public understanding of current research discoveries about Earth’s natural systems in Florida, and beyond. Stay tuned as this timely Earth Systems Institute takes shape.

Finally — a personal transition. This past year my term as Board Chair of the American Alliance of Museums ended. Thankfully I have two more years as Immediate Past Chair, as I love my museum colleagues on the AAM Board and feel both the Florida Museum and I have benefited greatly from this experience. I hope you enjoy this report!

Sincerely,



Douglas S. Jones, *Director*





DONOR PROFILE

For long-time Museum volunteer, it was always about teaching the children

Libby Furlow first visited the former Florida State Museum in the mid-'60s after she and husband Leonard moved back to Gainesville from Chapel Hill, North Carolina, for his fourth year of medical school residency at Shands Hospital.

Back then the Museum was located in the Seagle Building downtown, and she took her young children to see and learn about the exhibits, as well as to have Museum scientists identify the shark teeth, arrow heads, bones and other items they often found in the creek behind their home.

Libby, a former schoolteacher, was a faithful Museum volunteer for 48 years — one of the institution's longest-serving docents. And while she accomplished, witnessed and learned a lot over the years, she believed the Museum's most important mission remained unchanged: to introduce children "to a world of things that they don't find on TV and often don't find at school."

"I mean, some of the schools and some of the teachers do a wonderful job, but some of them (children) are absolutely blown away when they come in the Museum and they see the mammoth or the mastodon, or go in the Fossil Hall," Libby said. "And they just have no idea."

She said it was rewarding to see a child's eyes light up when they experience the animals that once roamed the state, or watch a video of the monarch butterfly's life cycle.

"It's fun to see the children get a whole new idea about stuff that they never even thought of," she said. "And the parent chaperones are often just as amazed as the children."

Libby spent most of her time at the Museum leading school groups, but she also worked briefly in the research collections, and until last year volunteered weekly in the *Butterfly Rainforest* exhibit since its opening in 2004. Libby, who turned 85 in December, admitted she was "slowing down a little" and when able, enjoyed volunteering as an exhibit docent in the *Florida Fossils: Evolution of Life and Land* or *South Florida: People & Environments* exhibits.

An emeritus member of the Museum Associates Board, Libby actively served many years, including as president from 1981-83 and in other officer positions. The Museum recognized her in 2009 as Volunteer of the Year.

Husband Leonard, a retired physician who served on the University of Florida faculty six years and worked in private practice 17 years, said, "There's one thing you need to know about Libby: She always found something to do."

After retiring, Leonard did volunteer medical work on more than 50 reconstructive surgery tours that took him to countries such as Angola, Brazil, China, Colombia, Egypt, El Salvador, Guatemala, Honduras, Kenya, Russia and Venezuela. Libby accompanied Leonard on most of the trips as one of the medical personnel, "doing whatever was needed," he said.



"She worked in the operating room, as a circulating nurse took care of children in post-op — she even ran the sterilizer one year," Leonard said. "She never just went anywhere and sat."

Over the years, the Furlows have donated to education initiatives and other areas of need throughout the Museum. When asked what prompted them to become Museum donors, Libby said, "We feel that Florida is our university now and we want to support it."

"I think the Museum is great," she said. "I think it's a well-hidden secret in Gainesville still and we just need more money to get the word out to the public."

Sadly, Libby, who was diagnosed with a rare form of leukemia last fall, died unexpectedly Dec. 18 after a brief hospital stay, just 11 days after being interviewed for this story. She will be greatly missed.



FACULTY AND STAFF SPECIAL ACHIEVEMENTS

Jacqueline Miller received the William D. Winder Service Award from the Lepidopterists' Society

Doug Soltis was elected to the American Academy of Arts and Sciences

Doug Soltis received a University of Florida Term Professorship Award

Pamela Soltis was elected to the American Academy of Arts and Sciences

Pamela Soltis received the Southeastern Universities Research Association Distinguished Scientist Award

Pamela Soltis received a University of Florida Term Professorship Award

David Steadman received a University of Florida Term Professorship Award

David Steadman received a University of Florida Research Foundation Professorship Award

FACULTY AND STAFF TRANSITIONS



George Burgess | 1979-2017
Director, Florida Program for
Shark Research



William Marquardt | 1983-2018
Curator, South Florida Archaeology
and Ethnography and Director,
Randell Research Center



Betty Dunckel | 1978-2018
Director, Center for Informal
Science Education



Susan Milbrath | 1983-2017
Curator, Latin American Art
and Archaeology



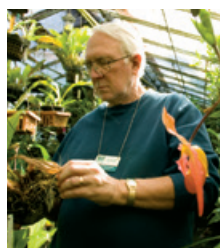
Christine Eliazar | 2003-2018
Program Assistant, McGuire Center
for Lepidoptera and Biodiversity



Darlene Novak | 1971-2018
Assistant Director, Budget
and Human Resources



Barbara Hackett | 1999-2018
Office Manager, Budget and
Human Resources



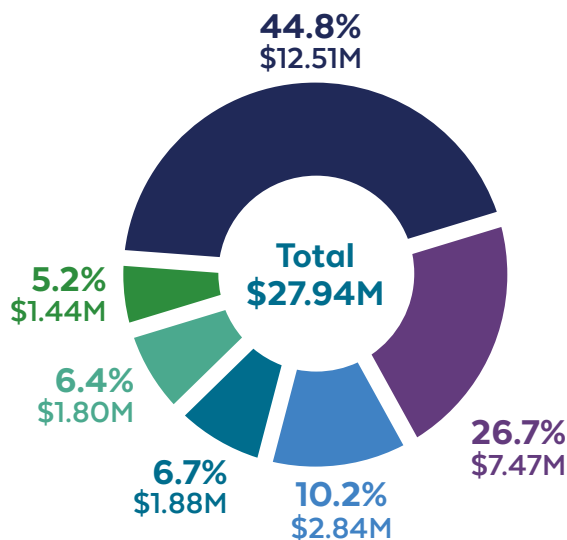
Norris Williams | 1981-2018
Keeper of the Herbarium

FINANCIALS

2017-2018

REVENUE

- UF/State Allocation
- Grants and Contracts
- Gifts
- Investment Income
- Earned Income
- Other UF Income

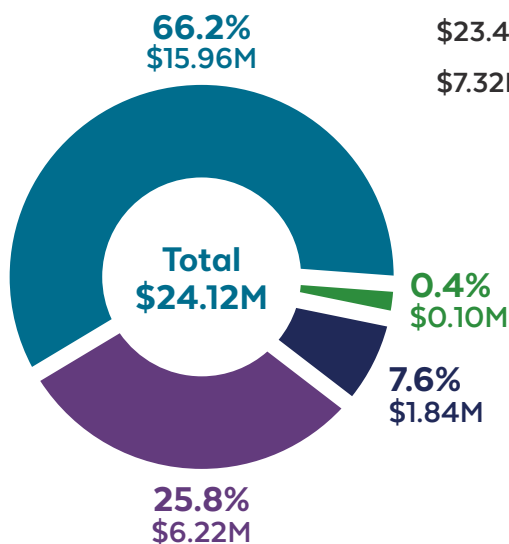


FUNDRAISING

- \$4.63M Gifts to Endowment
- \$23.44M Total Endowment Value
- \$7.32M Pledges received in FY2018

EXPENDITURES

- Salaries and Benefits
- Transfer for Future Programming
- Overhead/Other Fees
- Operating



FEATURED EXHIBITS



**MASTERS OF THE NIGHT:
THE TRUE STORY OF BATS**



THE SCOOP ON POOP

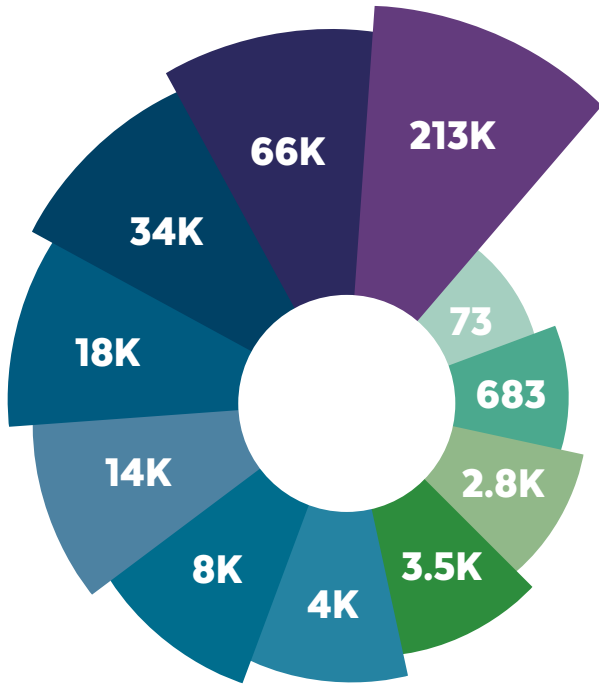


**RARE, BEAUTIFUL &
FASCINATING: 100 YEARS
@FLORIDAMUSEUM**



**FROGS: A CHORUS
OF COLORS**

IMPACT BY THE NUMBERS 2017-2018



ATTENDANCE & OUTREACH

212,755	Annual visitation
65,772	Visitors to Museum traveling exhibits at other venues
33,535	Hours donated by 535 volunteers
17,701	Public Programs attendees
13,716	School program participants
8,079	Other community outreach participants
3,966	School outreach participants
3,470	Visitors to Pop-up Museum events
2,775	News articles published with a potential viewership of 3.6 billion
683	K-6 camps and classes participants
73	Teacher workshop attendees



STAFF & FACULTY TEACHING






43	Courses taught by Museum faculty
105	Graduate committees chaired
155	Graduate committees served
105	Independent Studies supervised



COLLECTIONS & RESEARCH

235	Peer-reviewed publications
673	Scientific and other visitors to collections
466	Collection loans of 38,266 specimens and artifacts
40+	Million specimens and artifacts
74	Grants and contracts worth \$7.47 million
236	Undergraduates and postdoctoral fellows working in collections
28	Countries including the U.S. where Museum scientists conducted research
17	States including Florida where Museum scientists conducted research
6,368	New accessions to collections
355,227	New specimens and artifacts cataloged

WEB PAGE & SOCIAL MEDIA

7.46	Million Web page views
2.68	Million Web page visits
202,554	 Pinterest followers
29,904	 Facebook likes
8,566	 Twitter followers
1,513	 YouTube subscribers
4,069	 Instagram followers

ANNUAL REPORT PUBLICATIONS: 2017-2018

Albury, N.A., **R. Franz**, R. Rimoli, P. Lehman, and A.L. Rosenberger. 2018. Fossil land tortoises (Testudines: Testudinidae) from the Dominican Republic, West Indies, with a description of a new species. *American Museum Novitates* 3904:1–28.

Alexeev, Y.E. and **E.V. Mavrodiev**. 2017. *Eragrostis frankii* C.A. Mey. ex Steud. – A new alien species in flora of Lower Volga. *Bulletin of Moscow Society of Naturalists* 122(5):60–64.

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Alvarado, J.J., J.L. Chacón-Monge, F.A. Solís-Marín, **T. Pineda-Enríquez**, A.A. Caballero-Ochoa, S.S. Rivera, and R.R. Chaves. 2017. Equinodermos del Museo de Zoología de la Universidad de Costa Rica. *Revista de Biología Tropical* 65(1-1):272–287.

Aementeros, M., D. Saladrigas, L. González-Casuso, E.D. Estevez, and **M. Kowalewski**. 2018. The role of habitat selection on the diversity of microbenthic communities in three gulfs of the Cuban Archipelago. *Bulletin of Marine Science* 94:249–268.

An, J., L. Gong, and **G. Paulay**. 2018. A review of the genus *Bopyrissa* (Epicaridea: Bopyridae: Pseudioninae), with description of three new species. *Zootaxa* 4482:579–590.

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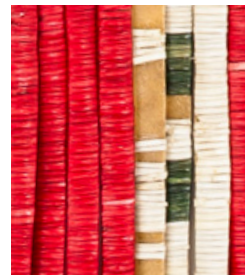
Bayarsaikhan, U., V.V. Dubatolov, **J.B. Heppner**, and Y.-S. Bae. 2017. Taxonomic review of genus *Danielithosia* Dubatolov & Kishida (Lepidoptera, Erebidae, Arctiinae) from northern Vietnam, with one new species. *Zootaxa* 4291:572–580.

Bell, R.C., J.L. Parra, G. Badjedjea, M.F. Barej, **D.C. Blackburn**, M. Burger, A. Channing, J.M. Dehling, E. Greenbaum, V. Gvoždík, J. Kielgast, C. Kusamba, S. Lötters, P.J. McLaughlin, Z.T. Nagy, M.-O. Rödel, D.M. Portik, B.L. Stuart, J. VanDerWal, and K.R. Zamudio. 2017. Idiosyncratic responses to climate-driven forest fragmentation and marine incursions in reed frogs from Central Africa and the Gulf of Guinea Islands. *Molecular Ecology* 26:5223–5244.

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Boyd, D.A., P. Nithirojpakdee, G. Deen, C. Vidthayanon, C. Grudpan, W. Tangjitjaroen, **J.M. Pfeiffer**, **Z.S. Randall**, T. Srisombat, and **L.M. Page**. 2017. Revision of the Horseface loaches (Cobitidae, *Acantopsis*), with descriptions of three new species from Southeast Asia. *Zootaxa* 4341(2):151-192.

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Buffum, P.S., K.M. Ying, X. Zheng, K.E. Boyer, E.N. Wiebe, B.W. Mott, **D.C. Blackburn**, and J.C. Lester. 2018. Introducing the computer science concept of variables in middle school science classrooms. *Proceedings of the 49th ACM Technical Symposium on Computer Science Education (SIGCSE)*, Baltimore, Maryland 2018:906-911.

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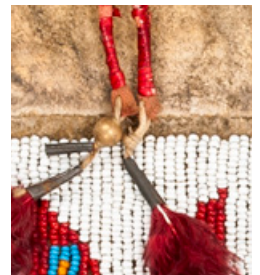
Chesser, R.T., K.J. Burns, C. Cicero, J.L. Dunn, **A.W. Kratter**, I.J. Lovette, P.C. Rasmussen, J.V. Remsen Jr., J.A. Rising, D.F. Stotz, and K. Winker. 2017. Fifty-eighth supplement to the American Ornithologists' Union check-list of North American birds. *Auk* 134:751-773.

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Crow, G.L., R.L. Humphreys, **G.J.P. Naylor**, and A. Emanuel. 2017. An unusual capture of the Bluntnose Six Gill shark, *Hexanchus griseus* on a pelagic longline in the Hawaiian longline fishery with comments on the worldwide genetic population structure. *Records of the Hawaii Biological Survey for 2016. Bishop Museum Occasional Papers* 119:23-28.

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Daniels, J.C. 2018. *Vibrant Butterflies: Our Favorite Visitors to Flowers and Gardens.* Adventure Publications, Cambridge, MN. 132 pp.

Denton, J.S., J.G. Maisey, M. Grace, A. Pradel, M.H. Doosey, H.L. Bart Jr., and G.J.P. Naylor. 2018. Cranial morphology in *Mollisquama* sp. (Squaliformes; Dalatiidae) and patterns of cranial evolution in dalatiid sharks. *Journal of Anatomy* 233(1):15-32. DOI:10.1111/joa.12823.

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Durden, L.A., J.T. Vargo, **J.E. Hayden**, J.R. Slotten, D.R. Tangren, and **D.L. Matthews.** 2017. A moth bioblitz inventory for Rock Hill Preserve and Apalachee Wildlife Management Area in northwestern Florida. *Southern Lepidopterists' News* 39(3):242-257.

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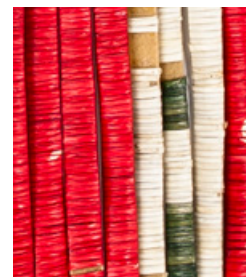
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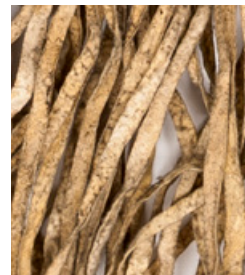
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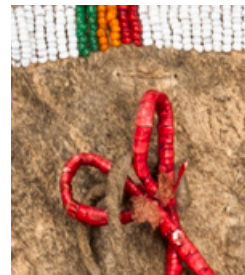
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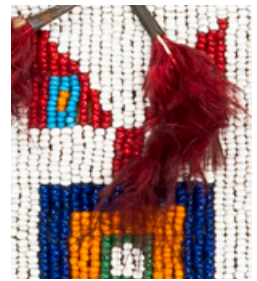
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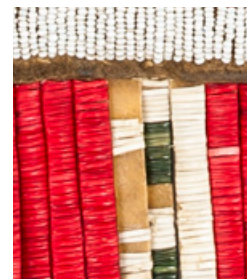
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In Memory of Dr. Thomas Emmel | 1941-2018

McGuire Center for Lepidoptera and Biodiversity
 Founding Director Thomas Emmel died unexpectedly May 26, 2018, while traveling in Brazil. Just one month earlier a new butterfly species, which Emmel first discovered nearly 60 years ago in Mexico, was named in his honor. McGuire Center Senior Collections Manager Andrew Warren named the species *Cyllopsis tomemmelii*.

Inside photos, clockwise from upper left: Staff and volunteers continued fieldwork at the Montbrook fossil site in Levy County last year. The location has produced thousands of specimens for the collections, including some new to science. The Museum hosted two Tree of Life events in November 2017, including the premiere of the "Treetender" film in the Central Denny Gallery, and a projection on the west exterior wall of the Harn Museum of Art of the interactive digital video "One Tree, One Planet: All Life Is One" by Paris-based environmental artist and architect Naziha Mestaoui. More than 1,300 visitors enjoyed activities during the Museum's National Fossil Day program on Nov. 4, 2017. The Museum and First Magnitude Brewing Co. released the third beer in their butterfly conservation series, Migration Marzen, Sept. 15, 2017. The Museum hosted its third-annual sold out "Drink with the Extinct" event Nov. 3, 2017. This image of a green orchid bee, *Euglossa dilemma*, by Jonathan Bremer won honorable mention in the 2017 Elegance of Science art competition. "The Scoop on Poop" featured exhibit, which the Museum hosted Jan. 27-May 6, 2018, included an interactive dung beetle race component that was popular with visitors. Museum Director Doug Jones and spouse Sheila, right, enjoy "Passport to the Galapagos" on April 18, 2018, with Associates Board President Anne Shermeyen. McGuire Center Senior Collections Manager Andrew Warren displays a case of a newly recognized butterfly species, *Wahydra graslieae*, which he discovered and named in honor of Field Museum chief curiosity correspondent Emily Graslie in March 2018. This *Mikadotrochus beyrichii* shell is one of numerous specimens donated to the Museum by retired physician and volunteer Harry Lee of Jacksonville, Florida, who the Museum highlighted in a June 2018 Science Story. A fossil prep lab allowed Museum scientists to interact with visitors during in the "Rare, Beautiful & Fascinating: 100 Years @FloridaMuseum" exhibit, on display Sept. 23, 2017-Jan. 7, 2018. **Front and back cover:** This well-preserved tobacco pouch made by the Sioux people dates to circa 1910.

Florida Museum photos by Kristen Grace, Sophia Zayas, Jeff Gage & Jonathan Bremer



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