

the *Nature* of things

AT THE GEORGIA MUSEUM OF NATURAL HISTORY

A Whale of a Move: New Addition to Research Collection

Bud Freeman

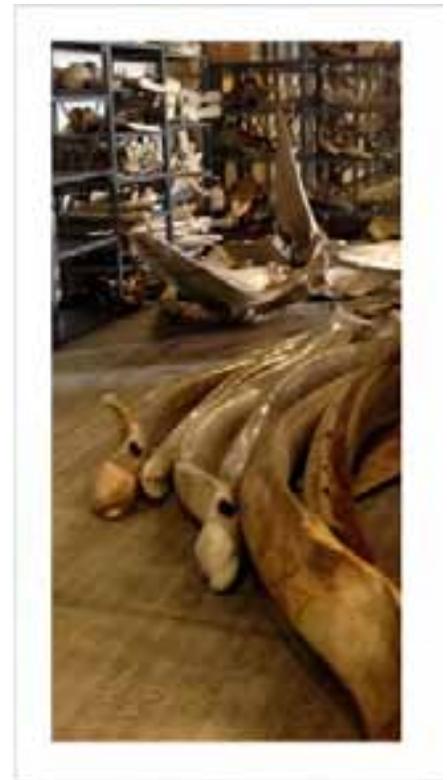
July, 2013, trip number three of GMNH staff to the Boston, Massachusetts area, specifically to the former Battery John B. Murphy, constructed to house two 16" Naval guns as part of the defense of Boston Harbor during World War II. The Battery structure, which includes a 650' long tunnel, is now part of Northeastern University's Marine Science Center located in East Point, Nahant, Massachusetts. Our trips were to help pack and load a series of trucks bound for the Museum of Natural History in Athens, Georgia. The Museum has acquired the vertebrate collections of Northeastern University curated in this old battery, which include a stunning assembly of marine mammals from New England, as well

as terrestrial mammals from many points in the world. There are also birds and fishes, mostly from New England, but also a few nice surprises like a series of splendid Ethiopian birds.

These collections are a significant and exciting addition to the Museum's collections.

Our preliminary estimates are 1320 specimens of various species of marine mammals—represented by the orders Cetacea and Carnivora. Coupled with our own collections, GMNH now curates the 6th largest marine mammal collection in the US and the 11th largest in the world.

A Whale of a Move, continued on page 7



Friends Annual Celebration Gala

This is the first notice to everyone about the wonderful Celebration Gala to be held October 19th at the State Botanical Garden of Georgia.

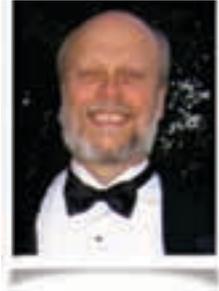
Celebration is the primary way we raise money to support the efforts of the Museum - which is now among the ten largest university affiliated natural history collections in the United States!

The Celebration committee and the Board will have great music, good friends and fabulous finds at the Silent Auction.

Please come prepared to outbid your friends and neighbors for that perfect item and support the mission of the Friends at the same time.

We will be sending out updates about Celebration as the big date approaches. Also, as we move to a calendar-year basis for membership you will receive a request to renew for 2014. Look for your invitation soon!

From *the* Director



Greetings-what a lovely end to the month of August with the return of Fall-like weather.

We have had a busy

summer, mostly dominated by the acquisition of a very significant collection of vertebrate specimens curated by Professor Gwilym Jones of Northeastern University, located in Boston, Massachusetts. We are nearly finished with the move of this collection to our curation facility on the Atlanta Highway. We have received seven truck loads of specimens and unloading these would not have been possible without the help of the Friends. The

Smithsonian Institution donated 90 museum cabinets and with the help of the Friends, we unloaded and installed all of these cases, which will be needed to help house the Northeastern collection. Nikki Castleberry, the vertebrate collections manager, along with the help of Museum interns and others, has done an outstanding job of re-arranging our space to accommodate and now begin the long process of curating this addition to our holdings. We anticipate an open house in the near future this fall to give folks a glimpse of our facility and some of these amazing specimens.

This move would not have been possible without the financial support of the Friends, T.E.R.N. (friends of

Georgia DNR non-game) and other donors to the Museum's endowment fund. We partnered with UPS for the transportation solutions, and this certainly helped reduce shipping costs and more importantly safely transport the collection.

Associate Curator Richard Hoebeke has been busy again, providing positive identification of *Agrilus planipennis* (also know as the Emerald Ash Borer) specimens collected in the Atlanta area. These specimens are now safely in the Arthropod collection, but Ash trees in the Southeast now face a serious threat from this invasive insect.

--Bud Freeman

Join the Friends of the Georgia Museum of Natural History on Our Upcoming Field Trip to Broxton Rocks on May 2-4, 2014

Broxton Rocks is the single largest exposure of sandstone in the Altamaha Grit, a subterranean band of sandstone that lies under some 15,000 square miles of the Atlantic Coastal Plain. The area consists of a series of cracks, pools, damp cliff walls, waterfalls, and rugged outcrops, all carved into a shallow gorge over many centuries by Rocky Creek. A substantial part of Broxton Rocks is a protected preserve of 3,799 acres, of which 1,528 are managed by The Nature Conservancy. The area is located in northeastern Coffee County, Georgia.

Dr. Frankie Snow of South Georgia College will be our host and guide. He will give an orientation talk on Friday evening after we arrive at Little Ocmulgee State Park, near McRae, Georgia, which is about 150 miles south of Athens. We will spend all day Saturday exploring the diverse habitats in the Nature Conservancy Preserve. On Sunday, before we return to Athens, we will make a stop at the Moody Forest Natural Area, another Nature Conservancy Preserve on the Altamaha River, located near Baxley, about 40 miles to the east. There we will visit an unusual old-growth longleaf pine-blackjack oak forest.

We have reserved double rooms with private baths in the lodge at Little Ocmulgee State Park for Friday and Saturday nights. The lodge has a dining room where we plan to have dinner Friday night and breakfasts on Saturday and Sunday. Dinner Saturday will be at a local restaurant. We will need to pack lunches for Saturday. Cost of the trip, including a \$100 per person, tax-deductible donation, will be \$200 (double occupancy). Please indicate your interest in participating to Robert Wyatt (rewyatt@uga.edu) as soon as possible because space is limited.

From *the* President



In this newsletter I have decided to give you a break from my constant carping about what you can do to help the Georgia Museum of

Natural History and my exhortations for you to join us on our next Friends field trip. If you want to volunteer or send a donation, the information is elsewhere in this newsletter. If you want to accompany us to Broxton Rocks in early May of 2014, another article in this newsletter tells you how.

Instead, I want to tell you about a paper I published recently in *The Bryologist*, the journal of the American Bryological and Lichenological Society, describing a new species of moss from Georgia and Florida. Members of the GMNH staff and perhaps most of the Friends will not be surprised by this, even if they, like most people (including many botanists) pay little attention to bryophytes. But I suspect the general public has the attitude that the flora and fauna of the Southeast has been studied exhaustively and

that there is nothing new to be discovered.

Plagiomnium floridanum, the new moss, has been overlooked previously because of its superficial similarity to another very common and widespread species, *P. cuspidatum*, which occurs in Europe and Asia, as well as North America. The latter species, however, is an allopolyploid, whereas *P. floridanum* is haploid. Moreover, *P. floridanum* is unisexual; *P. cuspidatum*, bisexual. So far as we know, *P. floridanum* is restricted to limestone outcrops along rivers in northern Florida and southern Georgia. Careful examination of the plants reveals a number of morphological differences between them, and they are genetically more divergent than the average species-pair of flowering plants.

A project in Great Smoky Mountains National Park, called the ATBI ("All Taxa Biodiversity Inventory"), suggests that even those of us who are experts on a narrow segment of biodiversity are overlooking a great deal of the life that surrounds us. Since 1998, the ATBI has been bringing biologists of all stripes

to the Park to collect and study everything that occurs there. As of November 2012, the list of organisms identified was 18,038! Of these, 7,636 were new to the Park and 923 were new to science. Some of the better-studied and less species-rich groups like birds, amphibians, reptiles, and mammals have not yielded any new species. But among less charismatic groups, 270 new bacteria have been described; 78 new algae; 58 fungi; 42 spiders; and 32 mites.

All of which leads to the inevitable conclusion that we are nowhere near finished describing and cataloguing, much less understanding the functional roles in nature, of the incredible biodiversity of this planet. The view of many, even some in the community of biologists, that everything has been discovered and described in the Southeast is clearly wrong. There is a pressing need for more field biologists and for support of museum-based collections.

--Robert Wyatt

Join us next May for our trip to Broxton Rocks!





Friends Trip to the Jones Center at Ichauway Plantation

Friends Enjoyed Exploring the Flora and Fauna of Longleaf Pine-Wiregrass Savannas in Southwest Georgia

Robert Wyatt

Our spring field trip took us to the Joseph West Jones Ecological Research Center located in Baker County south of Albany. After checking in and having dinner in the Visiting Scientist Dormitory, Dr. Lindsay Boring, Director of the Center, led us on a tour of the research campus. We were also accompanied by Dr. Kay Kirkman, Associate Scientist, whose degree in plant ecology, like Lindsay's, is from the University of Georgia.

We were impressed with the office and laboratory space tucked beautifully into the landscape of longleaf pines, live oaks, and understory plantings of an impressive array of native azaleas. Gisela Gresham was especially impressed with a display in the entrance hall of paintings by Italian-born artist Athos Menaboni,

who each year produced a new masterpiece for Robert Woodruff's Christmas card. Mr. Woodruff, of course, was the long-time CEO of the Coca-Cola Company, who established Ichauway Plantation as his private quail hunting preserve.

The rest of us were more impressed with an aerial photograph of Ichauway and the surrounding countryside. Realizing how much of the area has been converted to center-pivot irrigation for farming peanuts and other crops made us appreciate all the more Mr. Woodruff's vision in assembling the 28,500-acre land base for the plantation and managing for quail, which meant burning on a regular basis and keeping the longleaf pine-wiregrass ecosystem in a healthy state.

Saturday morning we made a brief visit to the historical Woodruff Circle, including seeing the horse barns, hunting wagons, dog pens, and the famous dog cemetery. Then we moved on to see the longleaf pine forest and learn about the importance of prescribed fire and the need for removal of successional hardwoods. We also learned about karst sinkholes and their linkages to aquatic environments in view of





recent above-average precipitation. We had been warned about likely hot weather and ravenous mosquitoes when making final arrangements for our visit, but we were fortunate to have near-record low temperatures for late April and these conditions kept the insects at bay.

After lunch we visited the historic bridge over Ichauway-Nochaway Creek and took a group photo on the steps of the Ichauway Store. Then it was on to Dubignon to see several forest management demonstrations, longleaf restoration plots, and



native seed gardens. We also saw the recently completed eddy-flux towers, which are part of the Center's involvement as part of NEON (the National Ecological Observatory Network).

Following a stop to view the Flint River at Horseshoe Bend, we went to one of the sites where the endangered Red-cockaded Woodpecker has been re-introduced. It is estimated that the population of these woodpeckers has declined by 99% since the time of European settlement, largely due to reduction of suitable habitat. They are the only North American woodpecker that excavates nest cavities in living pine trees. Our expectations were low, but we were rewarded at once seeing several woodpecker nests and observing bird activity at these holes.

On Sunday morning we visited a sandhill area and saw a number of beautiful wildflowers, including Lady Finger Lupine (*Lupinus diffusus*). We

also did some birdwatching around a temporary wetland and tried to dodge an inordinately large hatch of toads. We met Dr. Lora Smith, Associate Scientist, a herpetologist studying gopher tortoises. She brought along her "gopher-cam," a portable TV screen and camera attached to a long flexible hose that she can quickly thread into a gopher tortoise burrow to observe them underground. Given the unusually cool weather, we would not otherwise have been able to see these charismatic animals so characteristic of these habitats.

After lunch we started on our way home. I don't know about the rest of our party, but Ann and I got a good view of a bald eagle just north of Newton, the closest town to Ichauway. It was a perfect way to cap a brilliant weekend of natural history.



Welcome New Board Members



Lanie Barlow, the owner of Georgetown Frames, has been designing custom frames for

more than thirteen years. She also enjoys creating beautiful one-of-a-kind jewelry.



Kandy Duke is a Ph.D. horticulturist turned personal trainer and fitness instructor.

She is an avid proponent for landscaping with native plants and loves to recycle anything.



Brad Sanders is a retired graphic arts teacher who taught for 25 years in the Clarke County School District. He is the author

of *Guide to William Bartram's Travels* and the art director for *Tipularia*, the journal of the Georgia Botanical Society.



Alan Covich obtained his doctorate at Yale University and is a professor at the Odum

School of Ecology. His research includes the effects of urban growth and the intersections of road networks on river networks.



Dale Hoyt holds a doctorate in zoology from the University of Michigan. Dale has taught a variety of biology courses

throughout the US and co-leads weekly 'Nature Rambler' walks at the State Botanical Garden.



Dac Crossley is curator (emeritus) for mites and ticks in the Museum. This summer he's given a lot of attention

to chigger mites - itching to do a report on the chiggers of Georgia. He's also reporter for the Newsletter - please contact Dac about events or accomplishments.



Lee Hubrich is a retired orthopedic surgeon who was in practice for 34 years at Hawthorne Orthopedics.

He has four children and eight grandchildren.

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A Whale of a Move, continued from page 1

GMNH holdings now include the largest Minke Whale collection in the world. The numbers of marine mammals, terrestrial mammals, birds and fishes acquired total at least 85,000 specimens. Cataloguing and incorporation of these collections will entail considerable effort over the next couple of years, but some of these specimens are already being used for teaching and research.



The Museum partnered with United Parcel Service to develop transportation solutions to moving these materials, which included very large skulls and skeletal materials of marine mammals, as well as standard heavy museum cabinets. We have unloaded 7 trucks carrying collection materials from Northeastern University this spring and summer, and anticipate another one or two trucks transporting the remaining materials, which we will pack in late December.



The Friends have been of enormous help with the unloading phase of the project, and have helped handle some amazing specimens. UPS has produced a promotional video of the transportation effort, which also showcases some of these amazing specimens and the challenges of loading and unpacking them. This video can be seen on the Museum Website by following this link--<http://naturalhistory.uga.edu/index.php?page=content/museuminfo/news#NUVC>.



Annual Meeting of the Friends

Dave Coleman

Our Annual Meeting was held in the Museum on May 18TH.

After enjoying a lunch of finger-food from Big City Bread Company, washed down by imported beers and/or imported wines, we proceeded to the business meeting.

Robert Wyatt announced that a slate of officers was elected by the board, with the following people elected for a one-year term: Robert Wyatt, President; Terry Camp, Vice President; Betty Jean Craige, Secretary; and Paige Cummings, Treasurer.

The following slate of new members of the Board was proposed by the nominating Committee, comprised of Betty Jean Craige, Chair, Terry Camp and Kay Giese. Betty Jean Craige moved that the following nominees be elected to the Board: Lanie Barlow, Alan Covich, Dac Crossley, Kandy Duke, Dale Hoyt, Lee Hubrich, and Brad Sanders. Dave Coleman seconded the motion. The nominees were elected unanimously to the Board by acclamation.

Bud Freeman, Director, presented a report describing the use of funds provided by the Friends for 2012-2013.



Join the Friends and support the Museum

Membership includes: a subscription to *The Nature of Things* newsletter, invitations to museum events, Friends programs, and field trips. Membership and donations are tax-deductible to the extent allowed by law.

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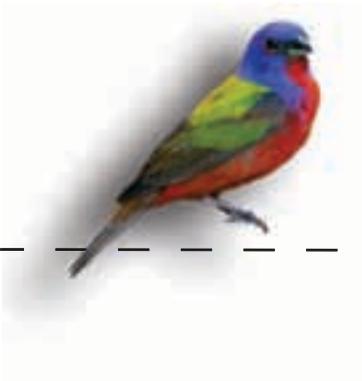
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