

# Museum Quarterly

LSU Museum of Natural Science

February, 2006

Volume 24, Issue 1

## Museum of Natural Science Curators and Directors

**Frederick H. Sheldon**  
*Director, George H. Lowery,  
Jr., Professor, and  
Curator of Genetic  
Resources*

**Christopher C. Austin**  
*Curator of  
Herpetology*

**Robb T.  
Brumfield**  
*Curator of  
Genetic Resources*

**J. Michael  
Fitzsimons**  
*Curator of Fishes*

**Mark S. Hafner**  
*Alumni Professor and  
Curator of  
Mammals*

**James V. Remsen**  
*John Stauffer McIlhenny  
Professor and  
Curator of Birds*

**Rebecca Saunders**  
*Curator of  
Archaeology*

**Judith A.  
Schiebout**  
*Curator of  
Vertebrate  
Paleontology*

**Sophie Bart Warny**  
*Director of  
Education*



## Letter from the Director...

The road to academic success is long and difficult. Kids start in college, wend their way through graduate school (perhaps stopping to take an M.S. degree), reach a Ph.D., struggle through one or more postdoctoral positions, then—if extremely lucky—land a position as an assistant professor. After that they face the promotion hurdles through tenure and professional ranks. On this journey, perhaps the most important and difficult milestone is obtaining that first “real” job as an

assistant professor. Such positions are extremely rare, and the competition for them is extraordinary.

Now to the point. This year is a big year in ornithology. Two major professorial jobs are open, one at the University of New Mexico and the other at the University of Kansas. Both universities have excellent natural history programs, and ornithologists from all over the world have applied in the hope of landing a job. However, in an unusual, perhaps unique, turn of events, the competition comes down to a quest among three good friends from a single university,

LSU: **Rob Moyle** (Ph.D. 2002), **Jason Weckstein** (Ph.D. 2003), and **Chris Witt** (Ph.D. 2004). At New Mexico, **Rob** and **Chris** were interviewed along with one candidate each from the University of Chicago and University of Kansas. **Chris** was offered the job, but hasn't accepted it yet. In about two weeks, **Rob**, **Jason**, and **Chris** will be interviewed at Kansas, along with a candidate from the University of Washington. There's no doubt that an LSU grad will get the Kansas job, it's just a matter of which



Rob Moyle

of our boys it will be.

If this competition isn't a demonstration of the paramount position of LSU's graduate program in ornithology, I don't know what is. Congratulations to **Rob**, **Jason**, and **Chris**, no matter how it turns out. We are extremely proud of you guys.



Chris Witt



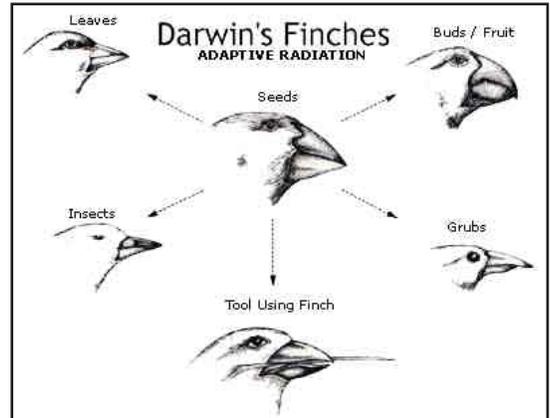
Jason Weckstein

**Fred Sheldon**

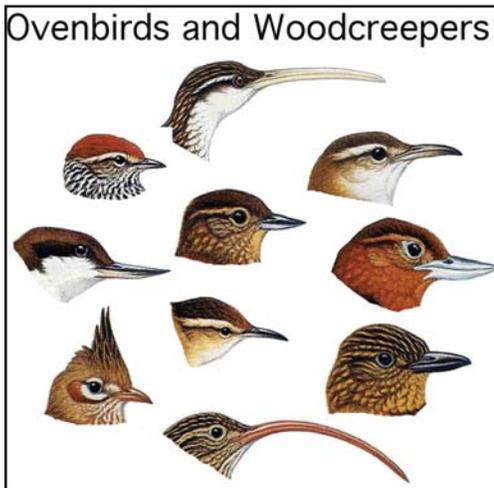
# NSF Grant Awarded to Study Ovenbirds and Woodcreepers....

By: Robb Brumfield

The famous Darwin's Finches of the Galapagos Islands stand as one of the most impressive adaptive radiations. After colonizing the islands, a single ancestral finch species eventually diversified into 13 species of different sizes, bill shapes, and ecologies. Imagine if the distribution of that ancestral species was not limited to a set of small islands, but instead had the entire continent of South America in which to diversify! That is exactly what happened with a group of predominately South American birds known commonly as the ovenbirds and woodcreepers (family Furnariidae). From a single ancestral species, there are now 326 species that differ wildly in body shape and size, feeding behavior, and nest architecture. The radiation encompasses species that have converged on the tree-climbing adaptations of woodpeckers and others resembling wrens, jays, thrashers, thrushes, larks, and warblers.



Santa Claus delivered a wonderful present just before the holiday break when **Dr. Robb Brumfield** learned the National Science Foundation funded their proposal to study ovenbirds and woodcreepers (these ovenbirds are not closely related to the ovenbird folks are familiar with in eastern North America). The 3-year \$400,000 grant is a collaboration between **Dr. Brumfield**, **Dr. J. V. Remsen**, and recent Museum graduate **Dr. Alex Aleixo** (now Curator of the Goeldi Natural History Museum in Belém, Brazil). The primary goal of the project is to use DNA sequences to reconstruct the evolutionary tree of all 326 species of ovenbirds and woodcreepers. Over 97% of the ovenbird and woodcreeper species are found within South America (the rest occur in Central America) so that an evolutionary tree of all 326 species will permit a detailed understanding of the historical and ecological processes that led to the spectacular radiation.



Because of the long tradition of ornithological fieldwork in South America, tissues for the genetic work are available for 219 species in the Museum's Genetic Resources Collection. Another 60 species are available in the genetic resource collections of other museums. That leaves 47 species from which tissues are needed. The NSF grant will fund collecting expeditions throughout virtually all of South America. Tissues are needed from Bolivia, Brazil, Chile, Colombia, Guyana, Peru, and Venezuela! Stay tuned.

## Around the Lab with Robb Brumfield...

**Matt Carling** has been busily extracting DNA from the buntings he collected to study the Indigo/Lazuli Bunting hybrid zone in the northwestern United States. He found Indigo Bunting mitochondrial DNA (mtDNA) in a bird that looks more similar to a Lazuli than it does to an Indigo, which, since mtDNA is maternally inherited, implies the individual bird may very well be the offspring of a pairing between a first generation hybrid female and a Lazuli male – very cool!

Besides providing the first glimpse of the genetics of the Indigo and Lazuli Bunting hybrid zone, Matt's early findings will also help him tailor his itinerary for his 2006 field season to ensure he focuses his efforts in locations likely to contain hybrid individuals.

**Zac Cheviron** is studying the population genetics of several species with wide altitudinal distributions in the Andes to gain insights into the genetic basis of adaptation to high elevation habitats. His early data indicate that while most genes show almost no divergence between high and low elevation populations, there are a handful of genes that are highly divergent between the two elevations. This is a very exciting result because these divergent genes are great candidates for uncovering the genetic basis of adaptation to high elevation habitats. The next step will be to determine how this genetic variation within the species is partitioned with respect environmental factors, such as temperature and rainfall. Zac plans on presenting the initial results of this project at the North American Ornithological Conference in Veracruz, Mexico, in October. He's got a lot of work to do before then!

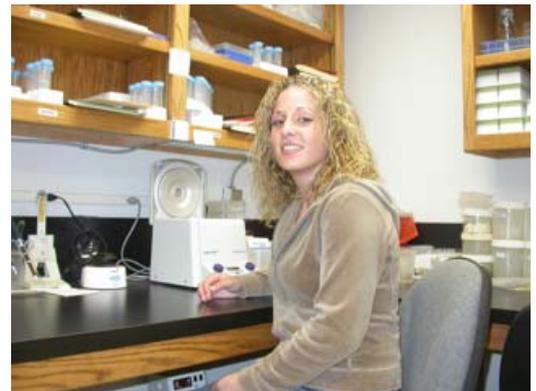
**Curt Burney** is studying the biogeographic histories of furnariid (ovenbird) species that are co-distributed throughout the lowlands of Central and South America. Using a comparative approach, he is looking for concordant patterns of genetic differentiation. Still in the preliminary stages of his research, Curt is busy combing museum collections for appropriate tissues, gathering range maps for his focal taxa and trying to convince his advisor to send him on a South American collecting trip.

## Congratulations to Katie Stammen...

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Congratulations to undergraduate student-worker Katie Stammen, who was recently accepted into the LSU-Shreveport Medical School. Katie graduated with a B.S. from LSU in December after spending the last two years in the Brumfield lab characterizing the MHC locus, a gene in manakins that controls immune re-



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## A Letter From Dave Anderson

Dear Faculty, Students and Friends of the MNS,

We will be living in Pico Bonito National Park, Honduras, for 15 months. Pico Bonito is one of the most famous parks in Honduras, known for its large size (>100,000 ha), wildlife (jaguars, among others), and pristine forests. It is very remote and isolated, and we'll be living in a small village somewhere. I'll be studying the community ecology of the birds living in the rain forest canopy. My wife, Yas, will be keeping us healthy with her great cooking. She plans to write children's books, and may teach. More on the science coming soon.

Cheers,  
David



# War-torn Bougainville Island Fieldwork

**B**ougainville Island in the southwest Pacific is home to a large diversity of plant and animal life, much of it endemic- found only on this one island. Geologically the island is active; the two main mountain ranges on the island are volcanic peaks with the tallest, Mt. Balbi, reaching 2717 meters in elevation (over 8000 feet). Geographically Bougainville is the most northerly island in the Solomon Island chain but politically it is a province of Papua New Guinea to the west. A brutal civil war has raged for the last fifteen years on Bougainville in an attempt to gain independence from Papua New Guinea. In the last year the United Nations has brokered a peace settlement that gives the people of Bougainville a large degree of autonomy from the Papua New Guinean government. The long civil war has prevented access by scientists but in November **Chris Austin**, Assistant Curator of Reptiles and Amphibians, was able to travel to Bougainville Island to study the diverse and poorly known herpetofauna as part of an ongoing National Science Foundation grant project. Travel was difficult. "All the main bridges had been bombed during the war. The only way I could cross the numerous rivers flowing from the rugged interior was in four-wheel-drive vehicles with snorkels. Getting your boots wet while sitting in truck is not fun. Luckily I had the support of the



Mt. Balbi (2717m) is the highest mountain peak on Bougainville island. Chris climbed to the peak, losing a toenail in the process, and set up to field camps 600m, 1300m and 1800m elevations.

local police force. I bought 100 liters of diesel for their UN donated Landcruiser and in return was able to get a ride to the village I planned to use as a base for my fieldwork." Chris set up three field camps on the southeastern slopes of Mt. Balbi and collected specimens, tissue samples, and photographs of more than 50 species of reptiles and amphibians. Chris also published an article in Papua New Guinea's national newspaper the Post-Courier on the importance of museums and natural history collections. This popular

news article provided important exposure for Papua New Guinea's National Museum and the natural history collection at the University of Papua New Guinea. Further the news article highlighted the coordination of the Museum of Natural Science with these two museums. Fieldwork by Chris in New Guinea (November-December) and graduate student **Alison Jennings** in Vanuatu (July-October) added over 1200 new specimens to the LSUMNS Herpetology collection. The Reptile and Amphibian collection is of critical importance for systematics, biodiversity, and conservation; in 2005 the Herpetology Department handled 52 data requests or specimen loans to U.S. and foreign scientists.



Chris and local crew at a field camp at 1300m on the southeastern slope of Mt. Balbi. The frame of the bush house is made from sapling trees and the roof is made with ferns and wild banana leaves.

# Lizard Malaria Research in Press

More than 300 million people are infected with malaria each year in tropical and subtropical regions of the world resulting in 1 to 3 million fatalities. Malaria, therefore, is one of the leading causes of death in the world. Understanding the role of the pathogenic effects of the *Plasmodium* parasites that causes malaria infections is of critical importance. Only four species of *Plasmodium* parasites infect humans. By comparison, it is estimated that there are over 200 *Plasmodium* species that infect lizards, making lizards an ideal model system for studying the effects of parasite infection. Despite its importance of New Guinea as a biodiversity hotspot, the parasites of its wildlife, particularly blood parasites, are poorly studied. A scientific paper on malaria in lizards from Papua New Guinea by **Chris Austin** and **Susan Perkins** (American Museum of Natural History) will appear in the next edition of the *Journal of Parasitology*. The paper examines both morphology and DNA sequences from malaria parasites and identifies two distinct *Plasmodium* species.



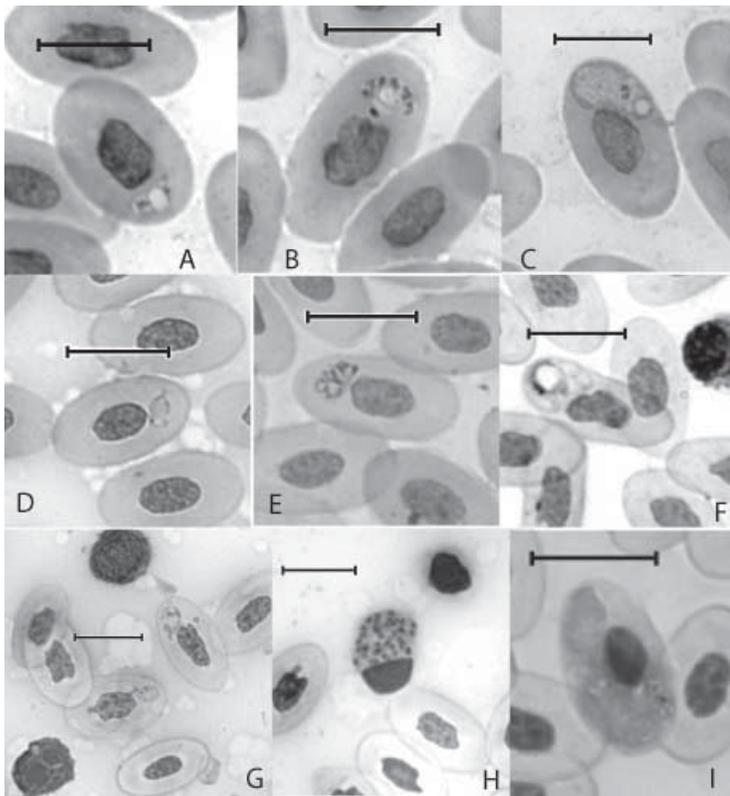
The Solomons Coral Snake (*Salmonelpas par*) is a venomous snake from the elapid family (the same family Cobras belong to). This snake is found in rainforests near small creeks. This species is endemic to the Solomon archipelago and is uncommon in museum collections.



The Australasian species of tree snakes of the genus *Dendrolaphis* are a taxonomically challenging group. They are active daytime foragers that prey on small vertebrates, primarily lizards.



*Sphenomorphus cranei* is a skink that is only found on Bougainville island. The species inhabits the cool wet moss forests from 1000-1400m.



Morphological types of malaria parasites (*Plasmodium*) observed in the three skink genera. Malaria parasites infect the red blood cells; the dark area of each red blood cell is the nucleus and the parasites are the lighter structures inside the cells. Scale bar in each photo equals ten micrometers.

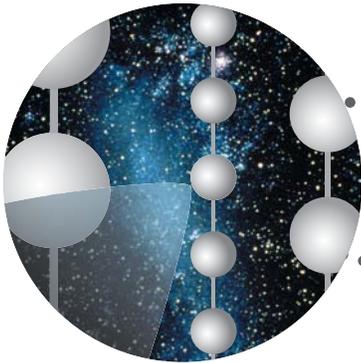
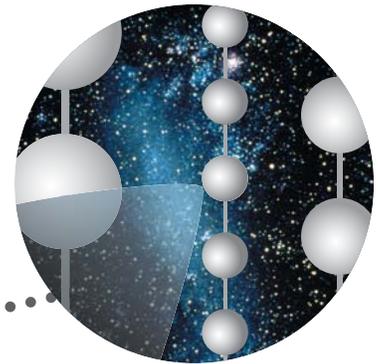
# Mark Your Calendar....



## Museums Day Featuring: The IceCube Project and Experience Antarctica

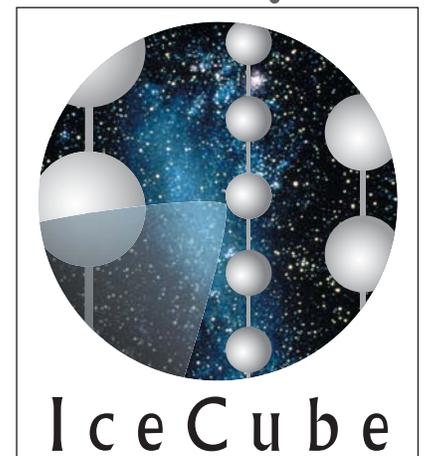
Sunday  
April 2  
2 p.m to 5p.m.

The annual LSU GEMS/Museums Day, celebrating the numerous galleries, exhibits, museums and campus special sites will be Sunday, April 2, from 2 p.m. to 5 p.m. More Information about special events, including participants and available door prizes, will be released closer to the event. Please check our website at <http://www.lib.lsu.edu/special/lsugems/>.



The Museum of Natural Science has a special treat for the Baton Rouge Community. The Museum will be hosting the IceCube traveling exhibit to help us celebrate our new Experience Antarctica exhibit. On Museum Day, IceCube staff members will answer questions about the exciting science behind the telescope.

IceCube is a project to construct a new type of telescope that will use the ice at the South Pole to explore some of the most energetic and distant reaches of the universe. The telescope will consist of more than 5000 extremely sensitive sensors that will detect subatomic particles called neutrinos instead of normal light. The sensors will be deployed in a regular array starting approximately one mile below the surface to form a detector that will occupy one cubic kilometer of ice. IceCube is primarily funded by the United States National Science Foundation and also receives support from a number of foreign agencies. 30 institutions are involved, about half from the USA including Southern University in Baton Rouge, and groups from Belgium, Sweden, Germany, the Netherlands, New Zealand, and Japan. Please see <http://icecube.wisc.edu/> for more information and links to the Baton Rouge spring 2006 meeting.



# Research..... Discovery



## ANTARCTIC DRILLING PROGRAM

### WARNY AND ASKIN SELECTED TO CARRY OUT THE PALYNOLOGICAL AND PALEOENVIRONMENTAL CHARACTERIZATION OF ANDRILL'S SOUTHERN MCMURDO SOUND PROJECT.



October 25, 2005

Dear Sophie,

I write to advise you of your selection as a member of the office (paleontology) team for the SMS ANDRILL Project. The science team for the project comprises scientists working together both on- and off-site in different roles. The Co-Chief Scientists for the project (Dave Hirstot & Fabio Florindo) will write more formally with more specific instructions regarding your specific involvement in the project and expectations with respect to pre-drilling, drilling and post-drilling activities including the workshops and publication requirements. In the mean-time, would you please help the Co-Chiefs by notifying them, by return e-mail ([gharnand@land.ohio.edu](mailto:gharnand@land.ohio.edu), [florindo@lps.it](mailto:florindo@lps.it)), if you still intend to participate or if your circumstances have changed and you are no longer able to participate.

I would also like to take the opportunity to congratulate you on your selection for participation in the inaugural projects of the International ANDRILL Program. The opportunities for participation were very much oversubscribed so I feel assured that the selected teams will deliver scientific results and findings of the highest calibre.

The selection process for participation in the MIS and SMS Projects and establishing their individual scientific teams was comprehensive. Proposals were first evaluated and ranked by internally designated panels. The national rankings were then forwarded to the co-lead scientists for the two projects and the International Science Implementation Committee (M.A.S.I.C.) who, following the National recommendations, assembled the scientific staffing plans for each Project. The combined staffing plans account for the scientific requirements for each project and the national levels of logistics dollars thus far contributed to the ANDRILL Program.

Several of the Co-Chief Scientists and management team for ANDRILL are currently in Antarctica conducting final site surveys for the drilling to begin on schedule. However, I expect that you will hear more from them soon. You should also be hearing from your designated National funding sources regarding funding levels as outlined in your individual proposals. I attach a preliminary list of invited participants for the project in broad discipline categories. More detailed final participant lists will come from your co-lead scientists.

Once again, welcome to the ANDRILL Program and I look forward to meeting and working with you in Antarctica and at the various workshops and meetings.

Yours sincerely,

Gary S. Wilson

CHAIR - MCMURDO ANDRILL SCIENCE IMPLEMENTATION COMMITTEE

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UNIVERSITY OF OTAGO - DUNEDIN - NEW ZEALAND

**Sophie Warny** (LSU MNS/BASC) and **Rosemary Askin** (Ohio State University) have been selected to join the ANDRILL team of 21 paleontologists from the United States, Italy, New Zealand, and Germany. ANDRILL is a multinational initiative designed to recover stratigraphic core records for use in interpreting Antarctica's climatic, glacial, and tectonic history over the past 50 million years.

Warny and Askin will conduct the palynological analyses on some of the cores that will be drilled during the 2007 austral spring. Palynology and the reconstruction of paleovegetation (via spore and pollen analysis) and sea-surface temperatures (via dinoflagellate analysis) remains the most direct way to characterize paleoclimate. They will use paleovegetation characteristics, and their changes through time, to provide vital calibrating information for climate modeling.

Evolution of Neogene climate is one of the most elusive and contentious issues in Antarctic geologic history. ANDRILL offers an excellent opportunity to recover pristine palynomorph assemblages from intervals for which we have no current evidence.

Warny and Askin proposed to conduct a palynological study for the "Core Characterization" phase of the Southern McMurdo Sound Project. Target strata are mid to late Miocene in age, an interval that spans key steps in the evolution of Antarctic climate. Palynomorphs recovered from sediment cores in SMS should provide detailed data on Neogene climate evolution, and the role and development of the East Antarctic Ice Sheet. A key objective is testing alternative theories of Antarctic Neogene climate evolution.



LSU's John Wrenn and Sophie Warny at the Antarctic Research Facility at the University of Florida. Wrenn was one of the U.S. palynologists on the Cape Roberts drilling project (CRP) in the nineties. CRP was one of the first drilling projects to yield some of the most complete palynological records for Antarctic Neogene palynology.

# Ocean Commotion 2005

By: Laura N. Stuart



The Louisiana Sea Grant Program hosted Ocean Commotion 2005 at the LSU Pete Maravich Assembly Center on Thursday, October 27, 2005. The PMAC was transformed into an educational heaven filled with exhibitors ready to tell kids all about the Louisiana coast.

LSU researchers and private and public organizations provided exhibits. Exhibit viewing was divided into two time slots, each two hours in length, with one time slot reserved for K-4 students and the other reserved for 5-8 students.

The primary purpose of these exhibits was to give students the chance to learn about and touch the products of the aquatic animals, plants and minerals- upon which Louisiana's citizens are dependent.

The Museum of Natural Science hosted an exhibit on past and present sea creatures in which children got to examine fossilized and modern skeletons. The fossilized skeletons displayed included the skull and vertebrae of *Basilosaurus*, an Eocene whale species discovered South of Shreveport along the Red River, Louisiana, now part of **Dr. Judith Schiebout's** vertebrate paleontology collection. The modern skeletons were composed of a dolphin skull, a modern whale vertebra and sting ray teeth to allow morphological comparison. Modern samples are all part of **Dr. Mark Hafner's** mammal collections. The students gathered around the table to hear Museum Education Director **Dr. Sophie Warny** and assistant **Rebecca Tedford**, identify the fossils and discuss the locations of the finds and their environmental significance.

"The kids are cute and they don't believe that the *Basilosaurus* was that big or that it was found in Louisiana. They laugh when you tell them Louisiana was once underwater," said Theresa Douglas, a MNS public relation intern who assisted at the booth.

Ocean Commotion was once again a great opportunity for the Museum to display its collections of fossils to children from the greater Baton Rouge community. Ocean Commotion seeks to provide students with an educational field trip and provide LSU researchers with a forum to display their research. The Museum of Natural Science has participated in this event since the original Ocean Commotion was held in 1998.

A local Baton Rouge high school science club, Saint Joseph's Academy, hosted a booth on the baleen whales. One visiting student said that "the whale people" were her favorite booth. In their presentation, the St. Joseph's group taught the children about speaking and eating patterns of the whales. They began by teaching the children how to say hello in whale and then taught the children how baleen whales eat by taking in water and then pushing it back out while keeping the plankton in their mouths. After the lesson, the girls of the SJA Science Club demonstrated the eating process of the whale with water, glitter and combs.



Each year Ocean Commotion brings about 3,400 area students and teachers to LSU to learn about our coast and sea from about 60 exhibitors.

# Special Saturday: Snakes Alive! • • • •

By: Amy Brittian

Photo Credit: Jared M.L. Normand

Some slithery reptiles stole the show inside the Museum of Natural Science in Foster Hall on October 23, 2005, as part of the Special Saturday program.

Young children and snake enthusiasts gathered for the Museum's "Snakes Alive" program hosted by evolutionary biology Ph.D. student Josh Meyer. The program featured details on snake evolution, and their daily lives and predatory behavior.

Meyer showed a PowerPoint presentation and shared his 6-foot tree snake.

"It's a given that kids love snakes," Meyer said. "This is to show them that snakes aren't some evil beasts."

Marianne Konikoff regularly attends the museum's monthly programs. She said she loves snakes.

"Snakes are my favorite," Konikoff said. "I want to have one as a pet, but my mom won't let me."

Konikoff said she plans to attend a college in Boston to major in herpetology, the study of reptiles and amphibians.

Another self-proclaimed future herpetologist is 7-year-old Louis Laville.

Laville, proud owner of "Max," the leopard gecko, brought his pet to the program in a red, yellow and blue carrier.

"I like lizards better than snakes because you can handle them better," Laville said.

In addition to Meyer's pet snake, several other snakes were available for guests to hold.

**Shannon Guidry**, former LSU graduate student and now Bluebonnet Swamp program manager, brought snakes from the nature center.

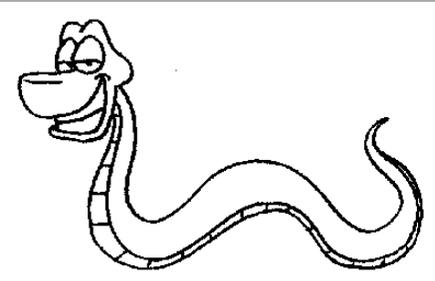
"More people are afraid of snakes than anything else," Guidry said. "So many people kill snakes, so this is important to teach kids how to treat snakes."

After the program, children were encouraged to participate in reptile-themed arts and crafts.



Joshua Meyer, evolutionary biology Ph. D. student, presents his pet python after his talk on snakes in Foster Hall's Museum of Natural Science. His presentation taught children that snakes are not as scary as they seem.

A snake is any of numerous scaly, legless, sometimes venomous reptiles of the suborder Serpentes or Ophidia (order Squagata), having a long, tapering, cylindrical body. They are found in most tropical and temperate regions.



# • • • Special Saturday: Backyard Birding!

By: Laura N. Stuart



Local children came to the Museum of Natural Science on Saturday morning to learn about the birds they could observe in their backyard.

The children gathered for the Museum's "Backyard Birding" program hosted as part of the Special Saturday Program which features lecturers on different topics. Jason Zoeller was the speaker, and he led the children through a lecture on different Louisiana birds.

"When looking at birds, you want to look at the parts of the birds, the patterns exhibited, the shape of the beak and the shape of the tail," Zoeller said.

Zoeller's PowerPoint presentation focused on descriptions of the characteristics of the birds. He described song birds, wading birds, birds of prey, doves, waterfowl and attracting birds. He continued his presentation by naming some common Louisiana birds including the Northern Mocking Bird, Northern Cardinal, Blue Jay, Carolina Chickadee, Red-Bellied Woodpecker and White Ibis. He made the children laugh when he told them that the beak of the White Ibis hooks down so he can dig for crawfish.

"Birds do not have hands, so they have to construct nests using only their beak. They can tie 18 kinds of knots with their beaks," he said. The second part of the presentation was interactive. Zoeller had each child take a bird nest and follow him to the George H. Lowery Jr. Hall of Birds where he described the bird that builds the nest, the nesting pattern of the bird, and the actual construction of the nest.

After the program, children were encouraged to participate in arts and crafts meant to give them a hands-on knowledge of birds.

The children made pinecone bird feeders by spreading peanut butter on pinecones and coating them in bird seeds.

The children participated in the Beak Game set up by **Rebecca Tedford**, the Special Saturday coordinator. The children were given clothes pins, spoons and tweezers which they used to attempt to pick up raisins, marbles, lemon drops and macaroni. The goal was to see how much food they could pick up in a twenty seconds. The record was 15.

"I never realized that being a bird was so hard," said one local child.

The children also constructed bird nests. The catch was that they had to construct them like a bird would with a beak, or in the case of the children two popsicle sticks. They added water, moss, twigs, leaves and grass to a bowl of dirt which they molded to form the nests. They filled the nests with eggs (or in our case cotton balls). "Birds are really messy," one child observed. The "Backyard Birding" program was a success, and the children had a good, if messy, time learning about the birds of Louisiana.



# Louisiana Museum Of Natural Science Holiday Party

By: Laura N. Stuart

On Saturday, December 10, the Museum of Natural Science faculty, staff, students and friends gathered to celebrate the holidays with a festive social gathering. The annual Holiday Party is a great way to have the people associated with the Museum relax and meet one another.

In accordance with Museum tradition, the annual outstanding graduate student was honored. This year's awardee was **Steve Fullen** (see below).

The Museum has another tradition. Each year the guests donate a book that goes to the Louisiana State University Women's Center Children's program. We at the Museum would like to thank the guests of the party for their generosity in helping us with this cause. The LSU Women's Center looks forward to incorporating the new books into one of their many programs. These programs help students, faculty and staff on our campus who are raising small children.

The Museum of Natural Science would also like to thank the Baton Rouge branch of Community Coffee for donating the coffee that the attendees enjoyed. We wish to thank Sophia Griffin our contact at the BR Community Coffee Branch. We appreciate your annual support of our Holiday Party.



Matt Carling, Robb Brumfield, Christie Cheviron and Zac Cheviron enjoying the party.



Dr. Fitzsimmons and his wife looking at the exhibit.



Steve Fullen, Fred Sheldon and Rebecca Saunders at the award presentation.

## Steve Fullen

Steve is a graduate student in the Department of Geography and Anthropology, and he is also the Collections Manager for the Archaeology Division at the MNS. He watches the budgets for all the grants, handles all loans, oversees cataloging and long term curation, directly oversees the various and sundry student workers and curatorial assistants, and does most of the purchasing for the Archaeology Collection. Steve just completed his Master's Degree this past December.

Steve's Master's research, which he designed himself, was an innovative approach to paste analysis in prehistoric "Tchefuncte" pottery dating to between 2800 and 2000 B.P. This "first pottery" in Louisiana is sophisticated in terms of exterior attributes—vessel shape and surface decoration—and the styles of shape and decoration indicate direct or indirect interaction with other cultures of the eastern coastal plain. In contrast to the more eastern types, however, vessel production methods were quite crude, leading to certain characteristic contortions and laminations in the pottery paste that are diagnostic of the type. It appears that easily copied, exterior attributes were disseminated without the accompaniment of the more intangible paste production procedures. Steve's research demonstrated that, throughout the Tchefuncte period, there was an active program in the refinement of paste production procedures. His results are not only important in providing a method for seriating Tchefuncte pottery, but also in more theoretical, cultural evolutionary topics such as the dissemination/adoption of new technologies and their adaptation to local environments.



Staff children color during the party.

# Museum of Natural Science Publications●●●

## Chris Austin

**Austin, C.C** 2006. Checklist and comments on the terrestrial reptile fauna of Kau Wildlife Area, Papua New Guinea. *Herpetological Review*, in press.

Piskurek, O., **Austin, C.C.** and N. Okada. 2006. Sauria SINEs: Genealogy of novel short interspersed retrotransposable elements that are widespread in reptile genomes. *Journal of Molecular Evolution*, in press.

**Austin, C.C.** and S.L. Perkins. 2006. Parasites in a biodiversity hotspot: A survey of hematozoa and a molecular phylogenetic analysis of *Plasmodium* in New Guinea skinks. *Journal of Parasitology*, in press

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# Congratulations to the New Parents ● ● ● ● ●



**Satya Maliakal Witt and Christopher Cooper Witt** are pleased to announce the birth of their daughter, Iris Maliakal Witt (7 pounds, 10 ounces, 20.5 inches), at 7:43 PM, December 24, 2005, at Alta Bates Hospital, Berkeley, California. The whole family is happily recuperating at home. Congratulations to the parents, recent LSU graduates.

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