

# Museum Quarterly

LSU Museum of Natural Science

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## Museum of Natural Science Curators and Directors

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**Sophie Bart Warny**  
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Education*

## Letter from the Director...



### Move to Basic Sciences

The Museum is an independent research unit. As such, it has been floating in the University for 70 years betwixt and between academic colleges. In recent years, the Museum has reported either to the Vice Chancellor for Research or the Provost. In some respects this has been a good arrangement, allowing us a great deal of freedom. On the other hand, without a boss with a vested interest in our prosperity, the Museum has suffered ever increasing money problems. Its operating budget has been cut so often that it's a mere shadow of what it was 25 years ago. The Museum's curatorial assistantships, which fund graduate student training in museum techniques, have been whittled away to pay for salary increases. Almost every curator earns substantially less than his or her peers in the departments in which we teach. In short, the museum, despite its remarkable academic achievements, has been on a grim fiscal trajectory.

Us old goats probably could survive the downward spiral; after all, retirement is just around the corner and we're resolved to poverty. But the Museum's young curators have been placed in a tough situation. They are expected to be as productive as the best professors at LSU, but over the long haul their salaries would be a fraction of those of their colleagues in other science departments. Moreover, all of us have a responsibility to maintain the Museum's high academic standards and to insure the future of its collections. Without the University's financial support, that future has been uncertain. Clearly, action was needed.

So, the curators decided last spring to seek permission from LSU's higher administration to move the Museum into the College of Basic Sciences. This process was facilitated by the enthusiastic support of the College Dean, Kevin Carman, and took place on July 1, 2007. The advantages of our new situation are several. The Museum now reports to a boss who has a vested interest in our success. All the crowing we do about how great we are may actually reach the ears of higher administrators. Those of us who are biologists and geologists can become professors in our cognate departments (instead of adjunct professors) and, thus, be eligible for the same pay raises as our peers. And we no longer have to beg as outsiders for graduate assistantships for our students. Of course, a few problems remain to be worked out. A major one is how the Museum's Archaeology program and its leader **Becky Saunders**, who teaches in the College of Arts and Sciences, will fit in our new situation. But, by and large, we are happy with the Museum's new home and have great expectations for a prosperous future.

Fred Sheldon

# POLAR PALOOZA Brings Polar Research and Issues to Louisiana with Traveling Show Thanks to the LSU MNS

Article by Peter Rejcek, *Antarctic Sun* Editor



In 1957, when Charles Bentley and a handful of other adventurous scientists set out on an expedition across West Antarctica in tracked vehicles to make the first measurements of the ice sheet, few in the general public were probably aware of the feat.

Fifty years later, the polar regions and those who have devoted their careers to studying them are stars in their own traveling road show, POLAR PALOOZA. A public education and outreach initiative supported by the National Science Foundation (NSF) and NASA, and locally by the Irene W. and C.B. Pennington Foundation, POLAR PALOOZA is something of a “scientific circus,” in the words of one of its organizers, Geoff Haines-Stiles.

“It’s more of a performance than a lecture,” Haines-Stiles explains. The show includes guest

speakers, high-definition video clips of researchers in the field, and the use of authentic artifacts, such as a 3,000-year-old ice core, on loan from the National Ice Core Laboratory in Lakewood, Colorado. It’s the sort of public relations extravaganza that didn’t exist five decades ago during the International Geophysical Year (IGY), a multinational scientific blitz across the frontiers of Earth and space that eventually led to the U.S. Antarctic Program.

“There was no particular effort to reach the public at all,” says Bentley, an emeritus professor at the University of Wisconsin-Madison and the principal investigator for Ice Coring and Drilling Services at the university’s Space Science and Engineering Center.

“Furthermore, we didn’t really understand



Above: the seven speakers on stage in Louisiana. Left: families and children tried on Arctic and Antarctic survival gears after the show at the BREC theatre.

back 50 years ago the connections between the polar regions and the rest of the world,” adds Bentley, 78, who will return to Antarctica in January for a deep ice core project in West Antarctica, where POLAR PALOOZA will capture him on camera for a podcast.

“[The polar regions] seemed isolated and remote, and of interest as part of the Earth; but it took quite a while to learn how closely related they are to the rest of the world,” Bentley says.

“We find that a significant number of researchers are really excited to have a chance to share their science with large public audiences,” Haines-Stiles says. “They certainly recognize that NSF has made ‘broader impact’ a criterion of success for funding, but I think they’re just as interested in sharing their results, the curiosity they’ve had about such exotic and dramatic locations.”

And the public is responding, according to Haines-Stiles. “Teachers in the Polar Palooza K to 12 workshops really love having the chance to meet directly with the researchers who are doing such interesting work,” he says.

At the **Louisiana State University Museum of Natural Science**, which hosted a three-day POLAR PALOOZA show in Baton Rouge in November, the climate change themes presented by the half-dozen researchers who spoke at the event resonated with attendees. Hurricane Katrina taught many people that we have to find ways to co-exist with nature, according to **Sophie Warny**, education director at the museum and an NSF grantee who works in palynology, the study of fossil pollen and algae, a field used to reconstruct paleoclimate.

“Like the Inuit population in Barrow, Alaska, we are in the front line here,” she says. “We are in a low lying area, so that even a slight melting of polar ice could produce a big [disruption] of the coastline, with [a] major impact on our economy — fisheries and oil production in the coast — geography, population distribution, way of life, culture, etc.” **Warny** says the public is slowly accepting the facts about climate change, even if some of the basics of the science — such as the dramatically elevated levels of carbon dioxide found in ice cores since the Industrial Revolution — haven’t yet stuck in the minds of most.

“Various members of the public asked us at the end of the show what they can do to do their part,” **Warny** says. “That, in itself, and seeing the children clap their hands on the beat of the [presentation] music and being fascinated by our research was a fantastic way to end the show — and hoping that we made a difference in Louisiana.”

Left (top to bottom): Dr. Mike Castellini (University of Fairbanks) used a mascot to talk about blubber. JCC Highschool students after the show. The MNS offered three shows and filled the BREC theatre with a total of over 2100 students, teachers, and members of the public. Two Louisiana teachers with educator Tim McCollum during the teacher workshop the MNS organized with Adrienne Lopez (SOAR coordinator, BASC), at the LRCE. Street sign at the BREC Independence Park Theatre.





# LSU MNS Partners with NPR's Science Friday

Article by Ashley Berthelot

The **LSU Museum of Natural Science's** Virtual Museum now features unique science videos on its Web site as part of a new partnership with **National Public Radio's Science Friday** and its educational outreach partner, **Talking Science**. This cooperative effort offers museum visitors weekly news and information about science and technology in an informative yet entertaining way.

LSU's Virtual Museum, located at [www.lsu.edu/VirtualMuseum](http://www.lsu.edu/VirtualMuseum), joins more than three dozen educational organizations, museums and institutions that are taking part in this effort by embedding the "Video Pick of The Week" onto their own Web sites.

"This partnership brings a national dimension to the Virtual Museum program developed by Denise Egéa-Kuehne of LSU's French Education Project and I thank the support of the Louisiana Board of Regents," said **Sophie Warny**, LSU MNS Education Director.



A picture of Hurricane Andrew from the Science Friday video on Hurricanes, Climate, and Weather. (Pick of the Week 1/25/07)

While Science Friday attracts millions of listeners via radio broadcasts and Internet podcasts, Talking Science is instrumental in adding an important educational element: making science museums and technology centers key distribution partners.

"We are very excited about welcoming the **LSU Museum of Natural Science** as a partner," said Ira Flatow, host and executive producer of Science Friday. "We are both dedicated to making science accessible, interactive and engaging for everyone."

Talking Science and Science Friday will soon be adding a number of new features to meet the desires of an audience that appreciates information on-demand, including but not limited to streaming videos of live science events, pre-produced programs, written blogs, video blogs and an option to watch in Spanish.

[www.lsu.edu/VirtualMuseum](http://www.lsu.edu/VirtualMuseum)

# James H. Hunt

## The Evolution of Social Wasps

With a foreword by Raghavendra Gadagkar



The ISBN for the paperback version is ISBN: 978-0-19-530797-9 (\$44.50).

An early MNS alum, **James H. (Jim) Hunt**, recently checked in with an update of his whereabouts since leaving LSU. Jim did his M.S. with **George Lowery**, graduating in 1969. His thesis was a field study of the wrenthrush, *Zeledonia coronata*, a cloud-forest endemic of Costa Rica and western Panama. Accompanied by fellow grad student **Al Gardner** and ZO Department chair Walter Harman, Jim drove in 1968 from Baton Rouge to Costa Rica in the Museum's "carrall." The ensuing five months of field study led to a publication in *The Auk* (1971; 88:1-20) that featured a **John O'Neill** painting of the wrenthrush as a frontispiece. Jim still has (and treasures) John's painting.

After graduating from LSU, Jim moved on to doctoral study at the University of California, Berkeley, where he (lamentably, we think) left ornithology in favor of an ecological study of ants in southern California and central Chile. Then during a postdoctoral year with E. O. Wilson at Harvard, Jim changed interests once again to the evolution of sociality in insects.

## LSU MNS Alum Publishes Book on Wasps

In 1974, he took a one-year temporary teaching position at the University of Missouri-St. Louis (UMSL), where he initiated his studies of wasps, especially the paper wasp genus *Polistes*. Thirty-three years later, Jim retired from UMSL, having reached the rank of Professor and Chair of Biology. During those years, he pursued diverse researches on wasps in Missouri and various tropical locales – the lure of the tropics instilled by that first trip in 1968 has never left him.

In 2003-04 Jim was a Fellow of the Wissenschaftskolleg zu Berlin, where he wrote a book that synthesized his work of the preceding thirty years with the broader literature on insect social evolution. That book, *The Evolution of Social Wasps* (Oxford University Press, 2007), puts forward a paradigm shift in how the evolution of social insects is studied and understood. So far, it is being very favorably reviewed.

Jim's retirement from UMSL in August 2007 signaled the close of a major phase of his life but not the end of his career. He now is a Visiting Professor (i.e., without tenure) of Zoology and Entomology at his undergraduate alma mater, North Carolina State University. There he has joined one of the strongest groups of social insect researchers in the U.S., and he plans on researching and writing for years to come.

Jim is having considerable success at this rather late stage of his career – in 2005 he was elected a Fellow of the American Association for the Advancement of Science, and his recent researches have been published in *Science* and *Proceedings of the National Academy of Sciences*.

Jim still fondly recalls his years at the MNS (then called the LSUMZ) and says he has always been grateful for the education, experience, and introduction to the tropics that he received while here.

# In the Mountains of Mexico

Article by Verity Mathis

When I first came to the **Museum of Natural Science** in 2006 as a graduate student, I had no idea that within the next year and a half I would have the opportunity to travel to Mexico not once, but twice. The first trip occurred in December 2006 when lab mates **Amber Gates**, **Jesús Fernández** and I accompanied our advisor **Dr. Mark S. Hafner** and his brother (fellow mammalogist Dr. David J. Hafner of the New Mexico Museum of Natural History) on a small mammal collecting trip through the Mexican states of Durango and Coahuila. At that time, my own dissertation research was unformed, and I was just along for the experience. After a few dead

ends and failed project ideas, I became inspired by one of the gopher species we had encountered in our trip, the southern pocket gopher (*Thomomys umbrinus*). This is a gopher about which little is known because it occurs at high elevations in patchy populations that can be challenging to find. Past research conducted by Dr. Hafner has implied that the species known as *Thomomys umbrinus* may in fact be two or three species, and so the first goal of my dissertation is to understand the phylogeography and specific status of this little gopher. This species will also be a model for many interesting research ideas, ranging from questions on speciation to ecological niche requirements. After some preliminary work in the lab, Dr. Hafner and I decided on another trip to Mexico



The town of Bolaños, Jalisco, nestled in the Sierra Madres.

this past December in order to obtain specimens, karyotypes, and tissues from important localities to understand the distribution of this species. Our trip was only about 10 days in length, but in that time we drove over 3,300 miles—the equivalent of traveling across the United States and then some!

Our trip began in Albuquerque, New Mexico where we met Dr. David Hafner and prepared for the drive through Mexico. In Ciudad Juárez, we picked up Sérgio Tránsito, an undergraduate at the Universidad Nacional Autónoma de México, who would be accompanying us on our trip. He turned out to be a valuable addition to

our team, collecting many of the gophers and eagerly learning how to prepare skins for scientific study. We started in the vast desert of Chihuahua and traveled up through the beautiful (and at times, snowy) Sierra Madre Occidental, where we skirted around the Barranca del Cobre (aka Copper Canyon). We continued down through Durango and Zacatecas. From Zacatecas we crossed into Jalisco, driving over remote, winding roads through the mountains and finding gophers in unexpected places. We then began our slow return back through Mexico, all the time finding extremely important specimens at all our collecting sites, which will be truly valuable to my dissertation project.

Along with being a successful trip from a scientific perspective, it was also a culturally enriching

experience. Mexico is a beautiful country, and everyone we met was friendly, helpful and curious about what we were doing. We passed through remote mountain enclaves, bustling cities, and small towns dominated by gorgeous churches. One night we had the opportunity to be in the town of Plateros, Zacatecas, on the first feast night celebrating El Santo Niño de Atocha. It turns out that this town is a pilgrimage destination in December and is considered the third most holy site in Mexico. We felt extremely lucky to have stopped there for the night, and it was just one of our many memorable evenings.

We said goodbye to Sérgio in Juárez and made our way back to Albuquerque, excited about the success we had and curious as to what story our gophers would tell. David Hafner is currently working on the karyology of our gophers. We hope that the research we are conducting will help fully understand the genetic history of this species and guide future research. I wish to thank the **LSU Museum of Natural Science** for providing funding for this trip, and Mark and David Hafner for their planning, support and guidance.



Mexican student Sergio Transito inspects his first southern pocket gopher.

## Ocean Commotion 2007



The Louisiana Sea Grant Program hosted Ocean Commotion 2007 at the Pete Maravich Assembly Center on Thursday, October 25, 2007. The PMAC quickly filled with colorful booths and enthusiastic volunteers ready to tell kids about the Louisiana coast.

LSU researchers, as well as both public and private organizations, provided some 80 exhibits. The primary purpose of these exhibits was to give young students the chance to learn about and experience marine plants, animals, and minerals upon which Louisiana is dependent.

The **LSU Museum of Natural Science** held an exhibit on marine fossils found in Louisiana, dating from the Paleozoic Era. The exhibit was hosted by **Rebecca Tedford**, a graduate student in geology, **Loren Price**, a student worker from the **LSU MNS**, **Travis Atwood**, a graduate student in vertebrate paleontology, and **Haw-Chuan Lim**, a PhD student in ornithology. **Mike Williams**, a vertebrate paleontology graduate student, gave a talk on shark teeth from the Paleocene to the recent eras. The Museum's exhibit focused also on the *Basilosaurus*.

Each year, Ocean Commotion draws about 3,400 students and teachers from the greater Baton Rouge area. The event is a great opportunity for the Museum to provide students with a unique educational opportunity and for LSU researchers to display their research.

This year, the **LSU Museum of Natural Science** received special recognition for its 10th year of participation in Ocean Commotion.

# Herpetology News



Left:  
Boelen's  
python  
*Morelia  
boeleni*  
from the  
highlands  
of New  
Guinea.

## **Doug Rossman**

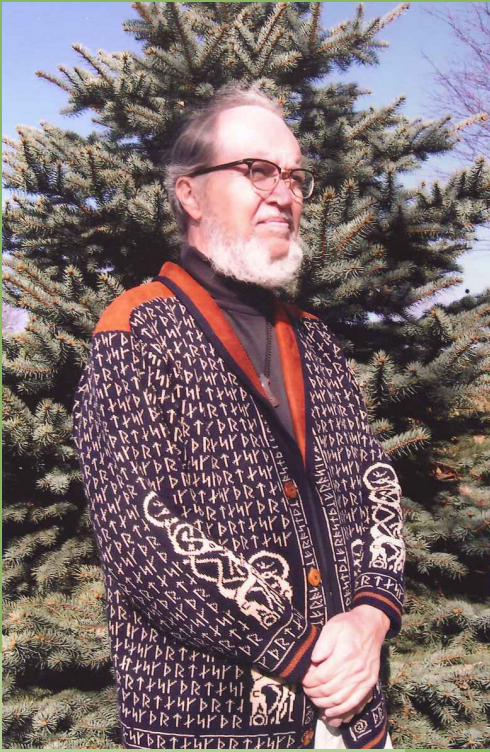
Curator Emeritus **Doug Rossman** retired from LSU in December 1998, and relocated to Decorah, Iowa, in June 1999. There he became a research associate in the Department of Biology at Luther College, which has given him faculty privileges (including access to library services, e-mail, laboratory supplies, and a conduit for borrowing specimens). Since retiring from LSU, Doug has published three systematic papers on South American water snakes of the genus *Helicops*, one on Mexican garter snakes of the genus *Thamnophis* (with former LSUMNS doctoral student **Frank Burbrink**), and a description of a previously unknown bone in the snout of a North American water snake of the genus *Nerodia* (with former

LSUMNS doctoral student **Jeff Boundy**).

Doug and Jeff are continuing their study of the evolution of the thamnophiine snake skull and its systematic implications, and Doug is collaborating with Walter Schargel (UTA doctoral student) on a study of several Peruvian snake taxa of the genus *Atractus*. An investigation of cryptic species in the *Helicops leopardinus* complex with Bill Lamar (UTA research associate) is also in progress.

**Erratum:** In the last issue Doug Rossman was inadvertently left out as co-author with research associate Jeff Boundy on a paper detailing a new snake skull bone.





Above: Doug Rossman remains active in research despite retirement; he published three papers in the last nine years since leaving LSU. Photograph courtesy of Doug Rossman.

### Active Students

The Herpetology graduate and undergraduate students have been active this past quarter. PhD student **CJ Hayden** presented his research at the 9<sup>th</sup> annual Graduate Student Symposium. **Nathan Jackson** and CJ both submitted National Science Foundation Doctoral Dissertation Improvement grants; receiving one of these highly competitive grants is the hallmark of a great graduate student and hopefully both their proposals will be funded. Resulting from his Fulbright award, CJ was featured as one of six top LSU students to win prestigious awards for study in a two-page *Advocate* article (23 November 2007). His accomplishments were also featured on the front banner on the LSU web page.

**Stacy Peterson** and **Joshua Jordan** are two hard working undergraduate researchers in Herpetology. All their hard work in the lab paid off in January 2008 with the submission of a research article for peer-review publication in the journal *Conservation Genetics*. Their research project focused on the conservation status of Boelen's python (*Morelia boeleni*). This snake is a montane New Guinea endemic found in highlands above 1000 m and below the tree line. It is protected in Papua New Guinea but not in Indonesian Papua. Several US and European zoos have active captive breeding programs that have been largely unsuccessful. To understand the degree of genetic diversity in wild and captive animals the students undertook a genetic analysis of 89 *M. boeleni* for which they sequenced two mtDNA loci and one nuclear locus for a total of 1,364 bp of sequence data per individual. Their results will hopefully be published soon.

### LiveScience Article published on the Web

In cooperation with the National Science Foundation, LiveScience is a website dedicated to making basic research by scientists available to the general public. To read a 'day in the life' vignette of what field work is like for our herpetology group in rugged New Guinea log on at: <http://www.livescience.com/animals/071221-bts-new-guinea.html>



**The LSU MNS newsletter is now available online at:**

[http://appl003.lsu.edu/natsci/lmns.nsf/\\$Content/Newsletters?OpenDocument](http://appl003.lsu.edu/natsci/lmns.nsf/$Content/Newsletters?OpenDocument)



C.J. Hayden working in New Guinea.

## LSU Student Receives Fulbright Grant to Study in Indonesia

Article by Ashley Berthelot

**C.J. Hayden**, doctoral student in biological sciences and member of the Austin Herpetology Lab in the **LSU Museum of Natural Science**, recently received a Fulbright grant to study reptiles and amphibians in the dense jungles of Papua, the Indonesian side of the biologically megadiverse island of New Guinea.

**C.J.**, a native of Redondo Beach, Calif., received the grant as part of the Fulbright Institute of International Education. In 2006, the Fulbright Program awarded approximately 6,000 grants to American students, teachers, professionals and scholars to study, teach, lecture and conduct research in more than 150 countries.

**C.J.** will spend 10 months conducting survey work in Papua, a relatively unstudied part of the is-

land. "While the eastern half of the island is an independent country, the western half was annexed by Indonesia following World War II," he said. "There have been violent clashes between militant groups such as the Free Papua Movement and the Indonesian military throughout the region. For that reason and others, very little research has been conducted on the western half."

**C.J.**'s day-to-day life in Papua will consist of the near-endless search to collect specimens of snakes, frogs and lizards. These specimens will then be preserved for future study in order to document patterns of diversity found throughout the island. But getting around on the island itself is no easy chore as New Guinea is the world's largest and tallest tropical island. "It's massive," said **C.J.** "It's the largest undisturbed tract of forest in the Asia Pacific, and it's extremely mountainous. There are hardly any roads, so we have to fly pretty much anywhere we want to go."

Once the collecting phase is over, **C.J.** will use DNA from the specimens to study population divergence and the timing of speciation events in light of what we know about the geological history and ecological environments. He hopes to make sense of how past geological transformations and climate alterations produced the island's floral and faunal megadiversity. "During three months of very rugged field work last year in New Guinea, I was able to see how committed **C.J.** is to understanding the pattern and process of biodiversity," said **Chris Austin**, assistant curator of herpetology at the **LSUMNS**, and assistant professor in biological sciences. "**C.J.** is an outstanding and versatile young scientist, and he is highly competent in the jungles of New Guinea as well as in the **LSU Museum of Natural Science** molecular genetics laboratory."

# Holiday Social 2007



On Saturday, December 8, the **Museum of Natural Science** faculty, staff, students, and friends gathered to celebrate the holidays with a festive social event. The annual holiday party is a great way for the Museum family to celebrate at year's end.

In accordance with museum tradition, the annual "Outstanding Graduate Student" was announced. This year's honoree was **Matt Carling**, pictured at the top left with Museum Director **Fred Sheldon**. **Matt** is a graduate student in ornithology.

This year's Student Service Award was also announced at the holiday social. **Rebecca Tedford** was awarded for her dedication to the Museum. **Rebecca** is pictured at the top right also with **Dr. Sheldon**.



Left: Grad. students C.J. Hayden and Verity Mathis. Centers: Grad. student H.C. Lim with his wife Ching Chi. Undergrad. Katie Faust with fiancé Tommy. Right: Tammie Jackson, our fantastic Administrative Coordinator.

# Special Saturdays

## The Louisiana Rock Record

The Louisiana Rock Record Special Saturday on September 29, 2007, gave the attending children an overview of geologic mapping in East Baton Rouge Parish. The also learned about the Baton Rouge fault. The speaker was Richard P. McCulloh from the Louisiana Geological Survey.

Three volunteers from the LSU geology department came to the Special Saturday to answer questions on rocks and minerals. Thanks are extended to these special volunteers: Catherine Sutera, graduate student in geology; Jessica Mumphrey, President of LSU's GEO Club; and Erin Walden, undergraduate in geology.

The activities included coring stratigraphic cupcakes, a Q&A on rocks and minerals, and making a geologic map of Louisiana, using sand to represent the late Pleistocene deposits and mud to represent Holocene deposits from the Mississippi River and the gulf coast.



Above: Special Saturday goers learn to core stratigraphic cupcakes (Tedford, R. and Warny, S., 2006. Investigating the cake-layer Earth and its fossil record. National Science Teacher Association, December, p. 40-44). Below: Kids enjoy making their geologic maps of Louisiana, using sand and mud.





Kids ask questions about the rocks and minerals they received at the Louisiana Rock Record Special Saturday.

## Gulf Coast Sea Life

The Gulf Coast Sea Life Special Saturday took place on October 20, 2007. The speakers were Alice Dennis, a graduate student in biology, and Dr. Michael Hellberg, Alice's advisor. The Museum had live marine invertebrates such as sea anemones, shrimp, hermit crabs, and barnacles available for the kids to interact with hands-on. The kids also got to use the Scope-On-A-Rope to see the marine animals' body parts at varying microscopic levels. **Rebecca Tedford** gave a talk about vertebrate and fish anatomy.

One activity was building "Frankenfish." Each child assembled a fish, using different tail fins, body shapes, caudal fins, etc. The second activity was doing Gyotaku, the Japanese art of fish printing. The kids used redbird, perch, flounder, and other fish native to Louisiana.

## It's an Icy World: Exploring Antarctica

On November 10, 2007, the **MNS** held a Special Saturday on Antarctica. The speaker was Phil Bart, who talked about his research in Antarctica. He also talked about important polar research, ice sheet dynamics, and how ice sheet dynamics are important to Louisiana.

One of the activities was making a marine arctic food web. The other was to make a blubber glove to see how important blubber is in keeping animals warm. For this activity, kids put Crisco in two ziplock bags. They put their hand in icy water with and without the blubber glove to see the extreme difference.

# Journeys to the East

Article by Haw-Chuan Lim

Malaysia has been the focus of my research for the past few springs and summers. It is also my home, where I spent the first six years of educational life before heading off to Singapore and Australia for school and college. Malaysia is located in the equatorial zone, almost exactly on the opposite side of the globe from Louisiana. Geographically, it is divided into two sections, one connected to the Asian mainland (peninsular Malaysia or “Malaya”) and the other on the island of Borneo (Sarawak and Sabah). Tropical rainforest and mangrove comprise the main primeval terrestrial habitat types. Ornithologically, Malaysia is a rich country, with about 746 species.

I

work on the population genetics of birds in forests that have been fragmented or degraded, examining the effects of logging and development on the genetic diversity of birds. As a result, and unfortunately, this work generally does not place me in lush contiguous rainforests where large exotic animals like tigers, rhinos, and orangutans lurk. Instead, a typical field site is a small island of rainforest surrounded by a sea of palm oil plantations. Palm oil is the chief agricultural produce of Malaysia (about 7 million tons of crude palm oil were produced in 2001), and reaching study

sites in southern peninsular Malaysia inevitably requires me to drive for hours past monotonous palm oil plantations. It is a depressing sight, not unlike how one would feel driving through acres of corn fields in, say, Iowa, instead of rolling prairie. Despite their isolation, the forests in which I work contain a surprising number of bird species, with members of the avian families Timaliidae (babblers), Pycnonotidae (bulbuls), Nectariniidae (sunbirds), and Muscicapidae (Old World flycatchers) well represented in mist-net captures. Larger birds, such as hornbills and pheasants, are often seen or heard as well.

Another part of Malaysia in which I have spent a good deal of time is Lake Ke-



Rainforest with encroaching palms in the foreground

nyir in northeastern peninsular Malaysia. At 38,000 ha, it is the largest man-made lake in Southeast Asia. The area designated for the lake was impounded in the late 70s and early 80s in order to generate hydroelectric power. Former hilltops and highlands in the area are now islands, creating an excellent setting for studying genetics of recently fragmented populations. Although the lake is scenic and relatively undisturbed (except by occasional underwater logging barges and tourist boats), it also presents challenges for researchers. The main problem is that gaining

access to the islands requires a houseboat, and these can be rented for US \$150-200 per day. Virtually all other transportation is also by boat and is thus expensive. Getting from the edge of an island to its interior is not a trivial matter either, since many of the islands were steep sided ridges prior to inundation, and they are covered by bamboos and rattans (with nasty needle-sharp hooks) that thrive along the disturbed edges and present often impenetrable barriers.

My project in Lake Kenyir remains one of the most memorable of my life. I remember having breakfast on the boat as the sun rose over the serene lake, with decades-old tree stumps (partially submerged in the lake water) and distant mountains completing the picture. The work in Lake Kenyir was a collaboration, with expedition members studying a variety of ecological phenomena on the islands, including leaf litter decomposition, vegetation structure, etc. Every member of the team had a fundamental relationship with the National University of Singapore, either as a current graduate student or alumnus (including myself!). Despite the daily grind, our spirits were buoyed by the excellent food made by an accompanying cook (whom we affectionately called auntie – a term Malaysians use commonly for “elderly” respected ladies) and visits to a nearby spectacular waterfall. At the end of the trip, as we looked forward to our return to civilization and release from the trials of rattans and ridges, the houseboat taking us on our last trip to terra firma hit a submerged tree stump while within sight of the pier. Water rushed in

and filled our dining area. Fortunately, it was a pontoon boat, and although almost entirely filled with water, it didn't sink. We were rescued by the boat owner (who was none too pleased with the pilot).

On my most recent trip to the heart of darkest Southeast Asia, I braved the urban jungles of Singapore – an island nation just south of peninsular Malaysia. It is one of the world's most densely populated countries in the world (16,400 persons per square mile). My purpose there was to sample birds found in a network of degraded secondary forests, virtually the only non-developed areas on the island. Because civilization was never more than a stone's throw away, I had to contend with unusually difficult hazards like parking ticketd and potential theft of my mist-nets. At the end of a couple months of field work in Singapore, I managed to collect 200+ blood samples of the Yellow-vented Bulbul (*Pycnonotus goiavier*), a ubiquitous bird in scrubby vegetation, as well as many other common species. Now, back in the lab at LSU, with the help of nuclear DNA microsatellite markers, I hope to uncover subtle signatures of landscape mediated gene flow in this species.

All this work, pain, and fun would not have been possible without the support of many people and agencies, including **Fred Sheldon** (my advisor), friends in the National University of Singapore, Associate Professor Navjot Sodhi at NUS, the Wildlife Department of Malaysia, the National Parks Board of Singapore, and various generous funding agencies.



## Congratulations to Robb and Tiffany Brumfield!

The MNS is happy to announce the birth of his latest member: Luke Brumfield, son of curator **Robb Brumfield**. Luke was born Sunday morning (Jan. 20th) at 7:26 a.m. He weighed 7 lb, 2.3 oz. He was 19.5” tall.

Luke and mother Tiff are doing great!



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