

# Research & Collections Newsletter



May 2013

**re•search** (ri-sûrch', rē'sûrch) n. **1.** Scholarly or scientific investigation or inquiry. See synonyms at inquiry. **2.** Close, careful study. **3.** When performed on collections, the *raison d'être* of all great natural history museums.

## Collection News

### Mammalogy

Hannah Walker, a student in the Wildlife, Fish and Conservation Program at UC Davis, visited in March to examine the skulls and pelts of zebras and African antelopes. Hannah is working with Professor Tim Caro exploring the function and evolution of color in mammals.

More than 1,300 juvenile California sea lions (*Zalophus californianus*) have stranded in southern California since January 1st of this year — at least 10 times the number in a typical year. As part of the National Marine Mammal Stranding Network, Mammalogy staff are part of the team investigating this Unusual Mortality Event.



On April 30th, Dave Janiger and Jim Dines retrieved the decomposed carcass of a Cuvier's beaked whale (*Ziphius cavirostris*) from Crystal Cove State Beach in south Orange County. Beaked whales are uncommon in museum collections, and much about these unusual cetaceans remains unknown, making this new specimen an important acquisition for the marine mammal collection. As recently as 2002 a new species of whale, Perrin's beaked whale (*Mesoplodon perrini*), was described using specimens from our collection.

## Polychaetes

Dr. Paul Schroder (Washington State University) visited in April in order to hand-carry a fragile type specimen of the extraordinary syllid worm *Ramisyllis multicaudata* which he donated to the section. The worm really lives up to the Latin definition of its name: *rami* means branch and *multicaudata* means many-tailed. One individual can have up to 400 interconnected branches and tails! *Ramisyllis multicaudata* is commensal on a single species of sponge, interwoven throughout the host's tissue. Paul spent nearly 2 months picking apart one sponge to reveal the worm inside.

Another contribution to the collection came from Dr. Anja Schulze (Texas A&M), who donated 258 lots of the fireworm *Hermodice carunculata* collected from the Gulf of Mexico, Malta, Crete, and the U.S. Virgin Islands. The specimens were used to determine if this fireworm, which occurs throughout the Caribbean, is really one species or two.

## Ichthyology

Richard Rosenblatt, Elizabeth Miller and Phil Hastings of the Marine Vertebrate Collection at the Scripps Institution of Oceanography recently designated 29 of our triplefin blenny specimens as paratypes in their paper "Three new species of triplefin blennies of the genus *Enneanectes* (Teleostei, Tripterygiidae) from the tropical eastern Pacific with a key to Pacific species of *Enneanectes*" published in *Zootaxa* 3636 (2), 2013. They also donated four more paratypes from their collection to the LACM.



## Research Library

The Research Library received a donation of 180 books, DVDs and videotapes on natural history and ecology topics from the Sierra Club Angeles Chapter library. These items will be a nice addition to the library's collection.

## Vertebrate Paleontology

The Department of Vertebrate Paleontology has recently acquired a Next Engine 3D scanner. Thanks to our Vertebrate Paleontology Curator, Dr. Xiaoming Wang, we will now be able to make three dimensional scans of our fossils in-house. This cutting edge technology will allow us to manipulate digital images, take precise measurements, and "print" detailed replicas of our fossils for exchange, display, and research purposes.

The Department of Vertebrate Paleontology continues to partner with owners of property containing the middle Miocene, 15.5 million-year-old Sharktooth Hill Bonebed near Bakersfield, Kern County. Several field trips were made in recent months to connect with donors, receive gifts of fossils, and verify previously-recorded Museum localities. We are grateful to Ms. Mary Ernst and Mr. Rob Ernst for their continued interest and support of the fossil marine mammal research program at LACM. On 15 March, Vertebrate Paleontology Chief Preparator Howell W. Thomas and volunteers received a generous donation of fossil baleen whale skulls from the Ernst family.

## Conservation

On April 5, Tania Collas and Liz Homberger gave KCRW Reporter and Producer Saul Gonzales a tour of the Conservation lab, highlighting their work for the *Becoming Los Angeles* exhibit. To read Saul Gonzalez's post on

the exhibit and to listen to the related interview with Dr. Pisano, with a few lines from Liz, Tim Bovard, and Kristin Friedrich, please visit:

<http://blogs.kcrw.com/whichwayla/2013/04/behind-the-scenes-at-las-natural-history-museum>.

## Dinosaur Institute

Henry Tsai, a masters student from the University of Missouri, visited the collection and the dinosaur hall to take 3D photographs in mid-March. His research interest is on the joint anatomy and locomotion of archosaurs. Unlike mammals, archosaurs build much of their joints from thick layers of cartilage. This makes it difficult to interpret the joint function of fossil archosaurs (e.g. dinosaurs), because the real joint surface that the animal used during life is lost due to fossilization. Using the knowledge we have on living reptile and bird joint anatomy, Henry can begin interpreting how much and what kind of soft tissues once occupied the hip joint cavity of fossil archosaurs. This will contribute to our understanding of extinct archosaur hind limb function and locomotor behavior.



## Herpetology

Over the past few months, Herpetology has undertaken a re-organization of the tissue collection. The collection has a number of older tissues from work by previous curators John Wright and Bob Bezy, who were active collectors of tissue samples from the early days of molecular analyses. However, these tissues were never organized into a single collection and were never fully cataloged. Further, recent work by Greg Pauly has led to rapid growth of the tissue collection. Therefore, the collection was recently re-organized, and with the help of Bill Mertz, most of the older specimens (1,129 tissues records) have now been imported into KE Emu. Recently acquired material will soon be added, and collection holdings will be made available on-line.

## Rancho La Brea



Project 23 final excavation of the Box 1 vent deposit.

Project 23 has been the largest ongoing salvage effort by the Page Museum ever (as opposed to scheduled excavations). To date, we have completed excavation of six of the large boxes, and two are in progress. Over the past 4 ½ years, we have excavated over 127,000 lbs of asphaltic sediment using small hand tools, processed over 15,000 lbs of matrix, measured almost 9,000 fossils *in situ* and have prepared, identified, cataloged and databased almost 15,000 specimens. The number of cataloged records is higher than measured specimens because each bone that is measured can bring with it 10–300 microfossils! Last winter, excavators completed the large vent deposit in Box 1 from which over 3,000 fossils were measured *in situ* with many more microfossils being recovered daily in the lab. Excavation has recently focused on Box 14 with at least 4,700 specimens measured *in situ*. More *Bison antiquus* elements are visible on the surface, all possibly from the same individual. Other recent finds include

a cluster of *Canis dirus* vertebrae, a *Capromeryx* minor phalanx and calcaneum, bird beaks of various sizes,

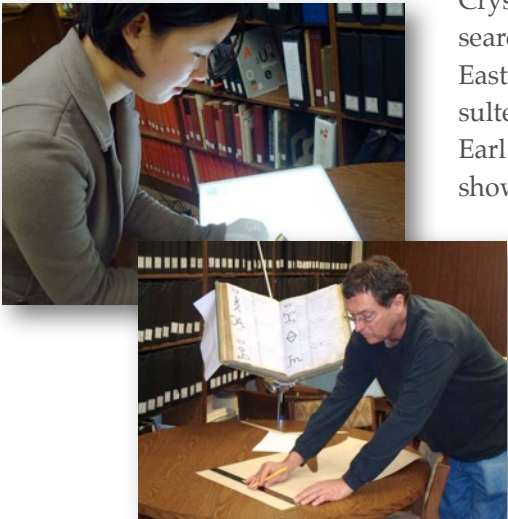
and many well preserved beetles. We are currently preparing to open two more boxes which will be visible to guests in the park this summer on the east side of the compound.

In March, Eric Scott, Curator of Paleontology at the San Bernardino County Museum, visited the Page Museum's collections to work with Preparator Christina Lutz. Eric and paleontologists at the SBCM have been working for the past several years on Ice Age fossils they've discovered near Las Vegas, Nevada. Their new finds include the first record of *Smilodon* from the Las Vegas region, as well as the most complete horse skull and jaws ever recovered from the site. To better identify this specimen, Eric and Christina measured juvenile teeth of the horse *Equus "occidentalis"* for comparison. The Page Museum's collections enabled confirmation that these new discoveries are not the same species as the La Brea horse. Eric and Christina also measured foot bones of *Equus "occidentalis"* for their ongoing study of Ice Age horses from Gypsum Cave, also in Nevada. Those specimens, housed in the Vertebrate Paleontology collections at the Natural History Museum of Los Angeles County, have never been studied in detail. Eric and Christina have submitted their findings for presentation at the annual meeting of the Society of Vertebrate Paleontology in Los Angeles this coming October.



Eric Scott and Christina Lutz examining horse material at the Page Museum.

## History



Crystal Kui from New York visited the Seaver Center in March for research for a book, *The Dawn of Technicolor*, to be published by George Eastman House in 2015 in celebration of Technicolor's centenary. She consulted several collections on early photographic processes including the Earl Theisen Film Frame Collection shown here.

Collections Manager Brent Riggs constructs a piece of reinforcement for a mount in preparation to exhibit a 19th century county cattle branding book in the upcoming Becoming Los Angeles exhibition.

This spring, the History, Registrars, and Conservation Offices facilitated the return of a sculpture by Donal Hord entitled *Wheel of Industry*. The sculpture was completed in 1934 as part of the U.S. Works Progress Administration program and was originally seen at the east entrance of the museum. It depicts a man squatting behind a four sectioned wheel with each quadrant featuring a different scene of figures and wheeled machines. Having recently undergone conservation treatment, it is now located at the new Carson collection warehouse.



# Field Work

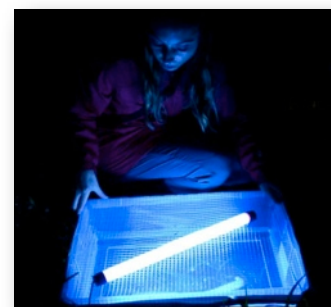
## Entomology

Costa Rica, April 14-29. Dr. Brian V. Brown and Anna Holden assessed the progress of the Zurqui All Diptera Biodiversity Inventory (ZADBI) by visiting the lab at the



*Dr. Brian V. Brown and Associated Researcher Wendy Porras filming phorid flies parasitizing ants.*

National Biodiversity Institute of Costa Rica (IN-Bio), where material is prepared. They visited the main sampling site (Zurqui) to assess collecting methods and to install a new weather sensor. They also worked on preparations for an August Diptera Blitz, when ZADBI's international collaborators will convene to collect and identify as many fly species as possible for a week at Zurqui. Additionally, Dr. Brown, Anna, Lisa Gonzalez, and Costa Rican Associated Researcher Wendy Porras conducted fieldwork at multiple localities within Costa Rica to collect various species of phorid flies as part of the department's continuing research on ant-parasitizing phorid flies. Both projects are funded by grants from the National Science Foundation.



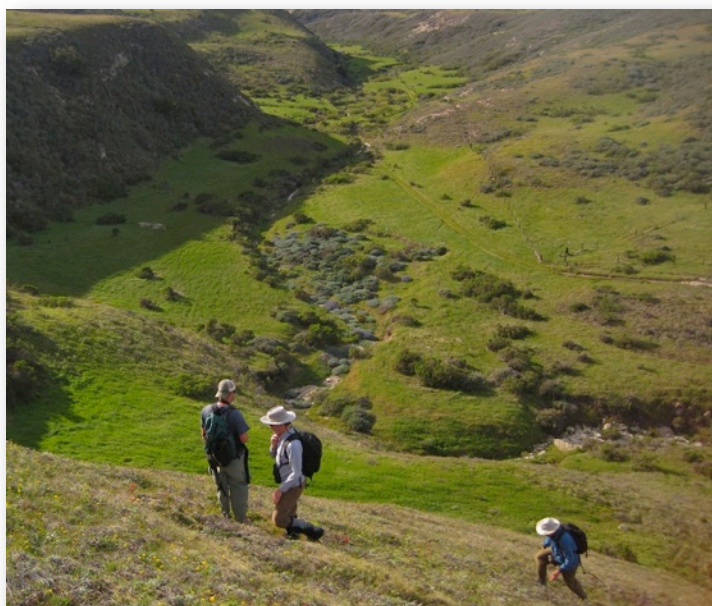
*Project Manager Anna Holden setting up a black light pan trap for the night.*

## Herpetology

### *Channel Islands Re-discovery*

Although 18.3 million people inhabit the Greater Los Angeles Area, there are still places only a short distance from downtown Los Angeles where fieldwork requires expedition-style approaches, and the vertebrate fauna is still surprisingly understudied. In a few hour boat ride or 40-minute plane ride from Los Angeles, one can be on the Channel Islands. Despite being known for their unique plants and animals (including a dwarf mammoth), these nearby islands remain remarkably understudied.

Greg Pauly has been conducting fieldwork on four of the Channel Islands and on the adjacent mainland in recent weeks. The goal of this research is to understand the colonization history of the islands and the distinctiveness of the island populations. Greg and his collaborators are examining genetic and morphological differences among reptiles and amphibians of all eight Channel Islands, as well as differences among island and mainland populations. Collaborators on the project include Chris Funk and Cameron Ghalambor at Colorado State University, Scott Sillett at the Smithsonian, and NHM Research Associate Jeanne Robertson at CSU Northridge.



*Chris Funk, Cameron Ghalambor, and Scott Sillett on Santa Rosa Island.*



Southern Alligator Lizard on San Miguel Island.

The goal of the fieldwork has been to collect tissue samples and specimens for the genetic and morphological work from six focal species: Southern Alligator Lizards, Side-blotched Lizards, Western Fence Lizards, Island Night Lizards, the Channel Island Slender Salamander, and the Pacific Chorus Frog. The night lizard and the slender salamander are endemic to the Channel Islands, meaning they occur there and nowhere else. Even the species that are thought to occur on both the islands and mainland often show unique features on the islands. The island Fence Lizards and Side-blotched Lizards tend to be larger (termed *island gigantism*) and with a slightly different color pattern than their mainland counterparts, while the island Alligator Lizards tend to be smaller than on the mainland (termed *island dwarfism*). However, even for these common species that show morphological differences on the islands, detailed morphological and genetic studies have not yet been conducted to characterize how truly unique these island populations might be.

Greg, Chris, Cameron, and Scott sampled on Santa Rosa Island March 12–17. Greg and UC Davis undergraduate Jennifer McKenzie then sampled on San Miguel Island March 21–26. One of the highlights of this trip was finding the names of Jack von Bloeker, Lloyd Martin, George Kanakoff and other NHM researchers in the guest book from Rancho Rambouillet, the former ranch site on San Miguel Island. These researchers visited the island in July 1939 as part of the Museum’s Channel Islands Biological Survey. San Miguel is especially understudied because of the difficulty in getting there. The seas are generally too rough for passenger boats so small planes are needed to land on the short dirt landing strip. Once on the island, thorough sampling is quite time consuming because there are no roads or vehicles, and all sampling requires hiking to and from sites. Greg and Jenn, with the assistance of Ranger Ian Williams, traversed most of the island for their fieldwork



UC Davis undergraduate Jennifer McKenzie noosing a Western Fence Lizard in Willow Canyon, San Miguel Island.

and were rewarded for their efforts with some geographically unique finds. There were no previous museum records of any reptiles or amphibians from the western 40% of the island but Greg, Jenn, and Ian found slender salamanders and alligator lizards from the extreme western end of the island.



Christine Thacker, Luis Chiappe, and Greg Pauly on Eastern Anacapa Island; Middle and Western Anacapa Islands in the background.

Greg, Luis Chiappe, Christine Thacker, and CSUN graduate student Jason Warner then visited East Anacapa on March 30–31. Here they collected 10–12 specimens of each of three species: the Channel Islands Slender Salamander, Southern Alligator Lizard, and Side-blotched Lizard. Despite the fact that East Anacapa now sees the highest visitation of any of the Northern Channel Islands, the island herpetofauna had been very poorly sampled. Prior to these recent collections, the only previous museum specimens from East Anacapa were seven Side-blotched Lizards collected in 1958 (LACM 99200–99206).

Greg and Jeanne Robertson then collected on Catalina Island April 9–12. Work here was facilitated by Catalina Island Conservancy biolo-

gists Tyler Dvorak and Julie King. Despite extreme drought conditions, numerous specimens were found. In addition to the native taxa observed, we documented non-native Red-eared Slider Turtles established in at least two reservoirs. This non-native turtle had not been recorded previously for the island, and Greg, Tyler, and Julie are now planning more detailed surveys to do just that.

Most recently, Greg and Jeanne have focused their fieldwork on the mainland and spent April 28 collecting in the Santa Monica Mountains. Between the Channel Island and mainland sampling, this work has so far yielded 255 specimens.

### *Citizen science yields a new state record gecko*

On April 15, a Torrance homeowner submitted a photo to the *Lost Lizards of Los Angeles* (LLOLA) project of an usual looking gecko photographed on his front porch. Richard Smart, coordinator of citizen science, recognized the gecko as a potentially exciting find and forwarded it to Greg. Recognizing it as a potential new record for the state, Greg headed to Torrance where he found a gecko hiding between the wall and downspout of the Torrance man's house. The amount of gecko poop (come on, doesn't everyone get excited about gecko poop?) found around the residence suggested there were at least 3–5 individuals around the house exterior, and the homeowner later caught a second gecko and observed a third. The geckos have been there for at least two years and young were observed previously.



*Indo-Pacific Gecko collected in Torrance, California.  
Photo by Edgar Chamorro.*

The geckos are Indo-Pacific Geckos and are a non-native species already established in Florida, Georgia, and Hawaii. This is an all female, parthenogenetic species, and the second specimen collected had a maturing egg. This is the first state record of Indo-Pacific Geckos established in California, giving the LLOLA project its second big claim to fame: first the first county record of the introduced Mediterranean House Gecko, and now the first state record of the introduced Indo-Pacific Gecko!

As the weather warms, Greg plans to target the Torrance neighborhood for further citizen scientist submissions to figure out how widespread these geckos are.

## **Polychaetes**



*The port of Misawa: unloading clams from a fishing boat on one of the replacement docks.*

Leslie Harris (Collection Manager) travelled to Misawa, Japan, with Dr. John Chapman (Oregon State University) and Terry Thompson (Lincoln County Commissioner, Oregon). They spent two weeks investigating the invertebrates and algae growing on the new docks that replaced the ones swept away by the 2011 tsunami. Helped by Japanese colleagues, this field work provided them with a better picture of what the original docks might have carried when they set out on their trans-Pacific journey to Oregon and Washington. Approximately 50 pounds of mussels, oysters, seaweeds, crustaceans, polychaetes, and other invertebrates were shipped back to the US for further sampling.

## Rancho La Brea

Research Associate Chris Shaw, Melody Weaver (Page Museum), Fred Croxen and Robert Predmore (Arizona Western College) spent a productive four days in early April in the badlands near El Golfo de Santa Clara (Sonora, Mexico) mapping fossil localities and collecting middle Pleistocene fossils. A new micro-vertebrate site yielded dozens of jaws and postcranial remains of toads, turtles, rabbits and rodents (rats and mice). In addition, remains of fish, tortoise, sloth, gomphothere, tapir, horse, deer, and pronghorn were recovered from scattered localities in three canyons.



*Gomphothere (mastodon-like animal) left maxilla.*



*Sigmodon medius (extinct species of cotton rat) right dentary.*

## Dinosaur Institute



*Top: Dr. Chiappe with colleagues Dr. Wang Xuri and Ms. Teng Fang Fang of the Dalian Museum of Prehistory. Bottom: Stephanie Abramowicz photographing fossil Mesozoic birds at Dinosaurland, China.*

Dr. Luis Chiappe, Stephanie Abramowicz and Maureen Walsh returned from a very successful trip to China in mid-March. The group visited the Dalian Museum of Prehistory, the Nanjing Institute of Paleontology and Paleoanthropology, the Dinosaurland Park and Museum in Changzhou, and the Institute of Vertebrate Paleontology and Paleoanthropology (IVPP) in Beijing. Maureen Walsh finished final preparation of a new research specimen; this very interesting Early Cretaceous bird is being studied by Dr. Chiappe and colleagues from several institutes in China and is particularly important because it combines traits typical of two major groups of early birds. Stephanie Abramowicz continued her work photographing a large number of Chinese Cretaceous birds for a new book authored by Dr. Chiappe (John Hopkins University Press) which will highlight the ancient birds of the Early Cretaceous Jehol Biota of China.



*Left to Right, Drs. Qiang Ji, Luis Chiappe and Wang Xuri in front of the beautiful sauropods of Dinosaurland, Changzhou, China.*

Justin Hall, Jose Soler, Dr. Luis Chiappe and Maureen Walsh traveled to New Mexico's Bisti/Dana-Zin Wilderness during mid-April for four days of prospecting for dinosaurs and other tetrapods from the Late Cretaceous sediments of the Fruitland and Kirtland formations. This prospecting trip was in advance of a summer expedition that will inaugurate the multi-year Augustyn Dinosaur Expeditions into New Mexico.

Dr. Luis Chiappe joined assistant curator of Herpetology Dr. Greg Pauly and Ichthyology curator Dr. Chris Thacker on a collecting trip to Anacapa Island off of Ventura in early April. This trip is part of Dr. Pauly's research program with the goal of examining the evolutionary history of lizards and salamanders endemic to the island (see earlier under *Field Work / Herpetology*).





## Vertebrate Paleontology



*Dr. Samuel A. McLeod reveals baleen whale vertebrae and ribs from the Sharktooth Hill Bonebed.*

Sean and Lisa Tohill, VP volunteers and Sharktooth Hill property owners, continued to extend their hospitality to our Department by hosting three field parties 16–17 March, 30–31 March, and 26–28 April. During these recent trips, Dr. Lawrence G. Barnes, Dr. Samuel A. McLeod, Vanessa R. Rhue, Dr. Xiaoming Wang, and Howell W. Thomas led volunteers to prospect, excavate, and collect vertebrate fossils from the middle Miocene Sharktooth Hill Bonebed. Current

excavations are exposing a section of this bonebed for viewing during a planned field trip for the annual meeting of the Society of Vertebrate Paleontology, which will be hosted by our Museum this coming fall.

On 27 April, Vertebrate Paleontology staff and volunteers surveyed outcrops east of Bakersfield of the late Miocene Kern River Formation. This deposit has yielded important fossil terrestrial vertebrates that are approximately 9 million years old, and our Museum houses the primary collections from this deposit, including many type specimens of carnivorans and peccaries. These localities were originally collected by personnel from the California Institute of Technology.



*Top: Vertebrate Paleontology volunteers Aimee Earl, Lisa Tohill, and Deb Wold (left to right) excavate a baleen whale skeleton. Bottom: Dr. Lawrence G. Barnes and Dr. Xiaoming Wang discuss stratigraphy of the late Miocene Kern River Formation exposed in the Sharktooth Hill National Natural Landmark.*

# Meetings, Workshops, and Presentations

## Ichthyology

Rick Feeney attended a SCAITE (Southern California Association of Ichthyological Taxonomists and Ecologists) meeting at the Cabrillo Marine Aquarium on March 4.

## Conservation

The Art History Undergraduate Student Association (AHUSA) at UCLA invited Assistant Conservator Liz Homberger to participate in a panel discussion on the subject of careers in Art History on March 7. She and the other panelists discussed the practicalities of pursuing a graduate degree as well as opportunities and challenges in the professional field, with a focus on careers in museums.

## Vertebrate Paleontology

Vertebrate Paleontology Curatorial Assistant Vanessa R. Rhue attended and presented at the *6th Annual Fossil Preparation and Collections Symposium*, 19–24 April. The conference was hosted by the Royal Tyrrell Museum in Drumheller, Alberta, Canada. A series of talks was delivered on preparation techniques, collections moving projects, conservation case studies, and innovative excavation methods by museum professionals and volunteers

from around the world. The platform talks delivered at the conference were recorded and will be made available via the Royal Tyrrell Museum YouTube Channel: <http://www.youtube.com/user/RoyalTyrrellMuseum>. Vanessa presented a poster entitled *Cultivating Pedagogy: A Holistic Approach to Professional Development*, which proposed an educational model for cultivating and imparting our collective technical knowledge of “best practices” to the next generation of professionals. Vanessa thanks Richard Hulser for acquiring some rare fossil preparation publications that aided in the preparation of this presentation. Tours of the Royal Tyrrell Museum collections storage, exhibit halls, research facilities, library, and preparation laboratories were eye opening into the network of support dedicated to advancing scientific research within the province. A series of hands-on workshops covered an array of technical topics related to prepared and unprepared collections from silicone molding, adhesives, and gypsum products to digital photography, cast painting, and air scribe maintenance. A field trip to Dinosaur Provincial Park, a UNESCO World Heritage Site, in southeastern Alberta, Canada, rounded out the conference.

*Vanessa R. Rhue participates in a Fossil Preparation and Collections Symposium field trip to Dinosaur Provincial Park in southeastern Alberta, Canada.*



## Ornithology

Dr. Ken Campbell, Curator of Ornithology, traveled to São Paulo, Brazil, in early March for a week-long organizational conference with 25 colleagues from the U.S., Brazil, and four other countries. The purpose of the conference was to lay the organizational groundwork and establish working research groups for the five-year research project entitled: *Dimensions US-BIOTA-São Paulo: Assembly and evolution of the Amazonian biota and its environment: an integrated approach*, which is being funded by the U.S. National Science Foundation, the U.S. National Aeronautics and Space Administration (NASA), and the Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP), Brazil. The primary goal of the research is to understand the origin and evolution of the modern-day Amazonian biota by determining the evolutionary history of four key groups: vascular plants, birds, butterflies, and primates; as well as how the geologic history of the Amazon Basin has affected the evolution of the biota. Dr. Campbell presented a talk on the possible scenarios for the geologic history of the basin and discussed the types of research needed to completely understand the physical evolution of the Amazon Basin.

## Research Library

In early April, Chief Librarian Richard Hulser was a panelist in a workshop on *Pivoting to meet technology change* at the *Computers in Libraries 2013* conference in Washington, D.C. This conference had over 1,200 attendees from a variety of institutions around the world. Richard was a co-speaker on techniques to getting the best deal when negotiating electronic content subscriptions and technology licenses for a library or institution.

Richard attended the *Art Libraries Society/North America* conference in Pasadena in late April where the focus was on crafting the future of cultural institution libraries in the face of constrained budgets, staffing and space. The meeting also provided an opportunity for discussions with librarians from The Getty, LACMA and other local institution libraries regarding future collaborations and awareness of resources. For instance, did you know that the Fashion Institute of Design and Merchandising located in downtown Los Angeles sent its students to the NHM Hall of Dinosaurs to get inspiration to create new footwear designs?

## Dinosaur Institute

Justin Hall attended and co-presented at the Southcentral Chapter of the Geological Society of America meeting in Austin, Texas, April 4–6, as part of a symposium in honor of Wann Langston, Jr. His presentation summarized giant pterosaur mass estimates and predicted launch strategy: how big is too big?



## Herpetology

Greg Pauly gave a seminar at CSU Long Beach on April 18th to a crowd of over 100 undergraduates, graduate students, and faculty. The talk was entitled *Mating Signal Evolution and Sexual Selection in the Western Toad Species Group* and focused on the unusual loss of the primary mating signal, the advertisement call, in Western Toads.

## History

Brent Riggs and John Cahoon attended the *Society of California Archivists Annual Meeting* in Berkeley, April 11–13. Mr. Riggs gave a presentation at the *Online Archive of California (OAC) Contributor Meeting* on the California Digital Library's Record Express encoding tool, used to place collection finding aids on the OAC. Collection Managers Betty Uyeda and Riggs have placed 550 collection level finding aids on OAC over the past eleven months, using the new Record Express template. A recent improvement to Record Express allows participating archives to attach searchable PDF series level and item level collection guides to the collection level records, and the Seaver Center has placed a dozen of these guides on OAC since January.

On May 1, William Estrada participated in a half-day meeting in Los Angeles for the Smithsonian Institution's *Immigration & Migration Initiative*. For the past two years he has served on the California consulting team for this national project of the Smithsonian in Washington, D.C. The goal of the *Immigration & Migration Initiative* is the development of various public programs, including a traveling exhibition and ten-day Folklife Festival on the National Mall, as part of the 2015 recognition of the 50th anniversary of the landmark 1965 Hart-Celler Immigration Reform Act, signed by President Lyndon Johnson. The main reason for the Immigration Act was the Civil Rights Movement. The Civil Rights Movement was to rid America of racial/ethnic discrimination. Two other bills, the Civil Rights Act of 1964 and the Voting Rights Act of 1965, Johnson signed for the same reason. The Hart-Celler Act was therefore a corrective measure instituted to atone for a past history of discrimination in immigration.

## Rancho La Brea

On April 5, Chief Curator Dr. John Harris visited the Royal Tyrrell Museum in Alberta, Canada, to give a presentation on the history and research of Rancho La Brea in that museum's Speaker Series.

Research Associate Chris Shaw attended the *Desert Research Symposium* at Zzyzx (near Baker, California), where he networked with George Jefferson and Robert Reynolds on the recent recovery of *Smilodon gracilis* and *Homotherium crenatidens* from Riverside County, California.

On Sunday April 7, Dr. David Whistler, Curator Emeritus of Vertebrate Paleontology, and Gary Takeuchi, Assistant Collections Manager at Rancho La Brea, led a one day field trip to the lower part of the Dove Springs Formation (12 million years old) in Red Rock Canyon State Park. The trip had 27 participants from the Red Rock Canyon Interpretive Association. Preparator Laura Tewksbury and volunteer Herb Schiff from Rancho La Brea also helped out. Even though the trip was intended as orientation training they collected a horn core of an antelope and a neck vertebra from a camel.

## Anthropology

On March 26, Collection Managers Chris Coleman and KT Hajeian worked with Mary Ringhoff of USC to teach a graduate-level class in the Archaeology Storeroom. Mary Ringhoff instructs a basic-level archaeology course within the Heritage Conservation Program at USC's School of Architecture. Though this class is mostly intended for architectural historians, planners, and architects, we were happy to support the inclusion of a session about the fundamentals of current archaeological practice because it helps for those working in building construction to be aware of archaeological resources.

Chris and KT used an array of historic and prehistoric items from the Archaeology collections to teach basic artifact recognition skills. It was most important to show the students the kinds of objects they may encounter when working on sites in Southern California. The collection of artifacts excavated during the construction of NHM's car park were particularly useful for demonstrating how small details on the objects can lead to further research of the dates of manufacture, use, and/or disposal and can even help rebuild some of the past activities at the site.



On March 27, Collections Manager Chris Coleman (at left in photo) conducted two lectures for teachers who are writing lesson plans for NHM's Education Department as part of NHM's *For Teachers, By Teachers* program. The workshop had the 3rd, 4th, and 5th grade teachers develop content for a Teacher Guide related to the Earthmobile's themes. Chris presented a selection of historic artifacts associated with the historic archaeology of Exposition Park, a mortar and pestle production sequence from San Miguel Island and a few miniature prehistoric canoe models.

On April 7, Collections Manager Chris Coleman was invited by Advancement to speak at the *NHM Next Generation Committee Cocktail Event* for Museum Fellows. The subject of the talk was *The Archaeology of Exposition Park*, which outlined the activities of the previous Agricultural Park from 1872-1910. Originally there was a racetrack, several saloons, an exposition building and the terminus for the Main Street Agricultural Park Railway. Artifacts associated with these facilities were recovered during the construction of the car park and garden area north of the museum. The PowerPoint presentation included historic maps and photos and a selection of the actual excavated artifacts.

## BioSCAN

On April 17, BioSCAN Project Coordinator Dean Pentcheff addressed NHM's Alliance Board on *BioSCAN: Biodiversity in Our Garden*. Though incorporating information about the BioSCAN biodiversity research project and NHM's Nature Garden, the emphasis was on biodiversity itself, and how our actions on the planet have made the entire Earth our garden, to cultivate as we see fit.

*A view of Earth, our garden.*



# External Funding

## Dinosaur Institute

Justin Hall was awarded a \$4000 biodiversity grant for a laser scanner for the department.

## Vertebrate Paleontology

Vertebrate Paleontology curator Dr. Xiaoming Wang received a grant from the National Science Foundation entitled, *Critical Transitions Across the Phanerozoic: A Roundtable Workshop on Sino-US Collaborative Research on Major Events in the History of Life during the Past 600 Million Years* (NSF EAR- 1332320; PI: X. Wang, R. Bernor, D. Bottjer, and N. Hughes; \$25,206, 4/1/13–3/31/14).

# Public Outreach

## Herpetology

Greg Pauly, Research Associate and CSU Northridge professor Bobby Espinoza, Vanessa Vobis, and Laurel Robinson led a “herp hike” at Malibu Creek State Park on April 13. Greg and Bobby were assisted in finding animals by enthusiastic volunteers Amber Suto (12th grade) and Christian Coffelt (7th grade). Although the weather started cool and foggy, the 25 participants still were able to observe many animals including seven reptile species. Pictured is Bobby Espinoza showing off the first snake of the day, a young Western Yellow-bellied Racer.



Herpetology has also offered several recent collection tours. On March 11, Greg provided a tour to 16 staff members as part of R&C’s new program of monthly collection tours available to NHM staff. On April 26, Nefty led a tour for David Huckaby’s vertebrate zoology class from California State University, Long Beach.

## Polychaetes

Leslie Harris (Collection Manager) and Kirk Fitzhugh (Curator) participated in the March 9 Curator’s Cupboard on *Mysterious & Bizarre*, showing off some of the finer specimens in our collections and giving tours throughout the event. Leslie presented a display at the April 21 Sustainable Sundays on *Reduce, Reuse, Recycle* focusing on the effects of plastic debris in the marine environment, in particular what happens when it’s mistaken for food by seabirds and marine mammals. Thanks go to everyone who contributed plastic trash for the display and to Kimball Garrett (Collection Manager, Birds) for the loan of three albatross specimens — that really made the display memorable for our visitors! Leslie also participated in the National Park Service’s *Science Festival* at Paramount Ranch on April 27 (see below under Malacology).



## History

Museum Archivist Cathy McNassor was invited to attend the preview event at the Getty Center for the exhibit, *Overdrive: L.A. Constructs the Future, 1940 – 1990* and the kick-off of the Getty's *Pacific Standard Time Presents; Modern Architecture in L.A.* (PSTP).

Museum Archives along with the Page Museum assisted the Los Angeles County Museum of Art (LACMA) with their exhibit for the PSTP series, *The Presence of the Past: Peter Zumthor reconsiders LACMA*. Photographs, architectural plans and renderings from the Museum Archives and the Page Museum will be displayed to show the changes to the site during the 20th century. Eleven of the spectacular scientific illustrations by John Livzy Ridgway will be exhibited, along with fossils and the museum's magnificent Charles R. Knight mural of Rancho La Brea. In July, Ms McNassor will lead an historical tour of Hancock Park in conjunction with this exhibit.



## Malacology

Lindsey Groves conducted "tours" for the March 1 *First Fridays* event. These tours were actually short lectures entitled *Earthquake research in southern California during the past 100 years*, which preceded the lecture by First Fridays special guest Dr. Lucy Jones of the U.S. Geological Survey, Pasadena.

## Invertebrate Paleontology

Invertebrate Paleontology Collection Manager Mary Stecheson participated in the March 9th *Mysterious and Bizarre Curator's Cupboard*. Mary displayed and discussed specimens of ammonites, crinoids and clams similar to the ones that are on exhibit in the Dinosaur Hall.



Photo by Vanessa Ruhe.

## Malacology, Invertebrate Paleontology, Polychaetes, Herpetology & Marine Biodiversity Center

Lindsey Groves (Malacology), Mary Stecheson (Invertebrate Paleontology), Leslie Harris (Polychaetes), Greg Pauly and Nefti Camacho (Herpetology), and Kathy Omura and Estella Hernandez (Marine Biodiversity Center) participated in the *4th Annual Science Festival* at Paramount Ranch section, Santa Monica Mountains National Recreation Area, Agoura Hills, California, on Saturday, April 27. Lindsey exhibited native and introduced terrestrial and freshwater mollusks of the Paramount Ranch area with an emphasis on

the non-native New Zealand Mudsails collected in nearby Medea Creek. Mary featured a variety of invertebrate and vertebrate fossils from the Santa Monica Mountains and discussed the geology and tectonics of the area. Leslie presented *Tidepool Critters – Changing Tides* and featured various intertidal invertebrates and how they adapt to environmental conditions as oceanic temperatures change. Greg and Nefti exhibited preserved specimens of local reptiles and amphibians, some invasive



Lindsey Groves "rookie" card.

species and a few exotics including a baby caiman and glass lizard. They also promoted the *Lost Lizards of Los Angeles* citizen science project, and Greg led a herp hike during which participants got to see numerous lizards and two rattlesnakes. Kathy and Estella presented *Life Under the Dock* with wet preserved invertebrates commonly found under docks and on pier pilings off our coast. In particular, they had mussels and a sea fan, barnacles and sea stars. A new feature of the annual event was a set of 11 scientist trading cards issued by the National Park Service including Lindsey Groves! See Lindsey for a copy and he'll even autograph it for you.

## Ichthyology



Left to right: Chris Thacker, Paul DeSalles, and Mario Enriquez.

Dr. Javier Gago brought his biology class from Glendale Community College to visit the Fish Collection on April 25. David Huckaby brought his Vertebrate Zoology class from the California State University at Long Beach to visit on April 26.

Chris Thacker, Rick Feeney, Paul DeSalles, and Mario Enriquez participated in *Curators Cupboard* on March 9 in the Foyer. Herpetology and Ichthyology had a combined theme of *Wiggly wonders: snakes, eels and other legless creatures*.

Tanja Wolfmeyer hosted the Herpetology side of the table, while Nefty Camacho led tours of the Herpetology Collection.

Chris Thacker led children's tours for both the *Scavenger's Safari* and *Junior Scientist* programs, with the theme of *Exploring Fishes of the Deep Sea*. The tours and lessons explored the adaptations that deep sea and midwater fishes use, including bioluminescence and adaptations for feeding and finding prey and mates in a sparsely populated environment.



Pacific Black Dragonfish (*Idiacanthus*, LACM 11505-7).

## Mammalogy

Students taking marine mammal classes at Orange Coast College and at California State University, Long Beach, visited the Museum's marine mammal collections in March for behind-the-scenes tours led by Dave Janiger and Jim Dines. In early April Jim Dines was interviewed on *CU@USC*, a live talk show produced by the student run TV channel at the University of Southern California.

## Rancho La Brea

On Saturday March 16, Lead Preparator Carrie Howard gave a presentation to the docents at their monthly potluck at the Page Museum. Carrie updated everyone on the progress at Project 23. Preparators Laura Tewksbury and Christina Lutz brought freshly excavated fossils to show the audience.

On March 19, Preparator Karin Rice was invited to give lectures for Jill Krezoski's historical geology class at Palomar College in San Marcos. Karin gave two talks; one was about both Rancho La Brea geology and fossil discoveries and the second was a career talk discussing life as a geologist.



On Saturday April 20, Lab Manager Shelley Cox gave a presentation to the docents at their monthly potluck at the Page Museum. Shelley updated the docents on the small adult saber-toothed cat individual nicknamed "Gimli" from Project 23.



Lead Preparator Carrie Howard gave a presentation to the docents at the Page Museum about Project 23.

## Vertebrate Paleontology

On 6 and 9 March, Vertebrate Paleontology Collections Manager Dr. Samuel A. McLeod presented lectures and tours to docents and volunteers on the *Age of Mammals* exhibit hall. Special attention was given to the Marine Mammal displays and mezzanine paleoenvironmental stories. Participants gained a behind-the-scenes perspective into the making of the *Age of Mammals* exhibit hall and the history behind the discovery, preparation, mounting, and research of the specimens on display.

On 9 March, Dr. McLeod, Vanessa R. Rhue, and Howell W. Thomas participated in the first *Curator's Cupboard* of the 2013 season. The Department of Vertebrate Paleontology featured mysterious and bizarre fossil specimens of a baby sea turtle from Palos Verdes, a frog skeleton found during drilling for a well core, and a *Helicoprion* shark tooth whorl. Children were encouraged to use their artistic talents and imagination to draw pictures interpreting the original appearance of these mysterious fossils. We thank our dedicated volunteers, Deb Wold, Debora Lee, Karen Kent, and Grayson Kent, for their help in making this outreach event a success.

On 15 March, Vanessa R. Rhue gave a behind the scenes tour of the Vertebrate Paleontology collections and Preparation Laboratory to students studying Anthropology at Biola University. The tour focused on modern curation methods and practices, with an emphasis on conservation housing of specimens. Dr. Samuel A. McLeod spoke about the methods used to date fossils and the importance of stratigraphic documentation in the fossil record.



Students were taught the organizational structure of the collections and were given specific assignments to locate in the collections fossils of various ages for discussion with our Curator Emeritus, Dr. Lawrence G. Barnes, and former LACM Vertebrate Paleontology employee Paul Langenwalter. The students also got a glimpse of the methods and materials used in taxidermy from Tim Bovard, who brought them into his workshop for a behind the scenes look at what goes into making a specimen ready for exhibit.



*Deb Wold and Howell W. Thomas explain different interpretations of the *Helicoprion* shark tooth whorl in light of recent research. Notice the gallery of drawings displayed on the foyer wall drawn by children who participated in the event.*

*Students from Biola University examine dire wolf skulls from our Kern County Maricopa Brea collection, and learn how we catalogue specimens in our collections.*



On 28 April, Vertebrate Paleontology staff and volunteers visited the Buena Vista Museum of Natural History in Bakersfield, California. Their Executive Director, Ms. Koral Hancharick, and



Repository Curator, John Stegall, hosted Dr. Xiaoming Wang, Howell W. Thomas, Dr. Lawrence G. Barnes, and Vertebrate Paleontology volunteers Karen Kent, her husband Evan, and son Grayson, Stephanie Lapeyre-Montrose, Giar-Ann Kung, Debora D. Lee, Lisa Tohill, and Sean Tohill. We identified, observed, and photographed several of their important specimens, and borrowed others for restoration in our Vertebrate Paleontology Preparation Laboratory.

*Dr. Xiaoming Wang, Buena Vista Museum Repository Curator John Stegall, Dr. Lawrence G. Barnes, and Howell W. Thomas (left to right) observe the most complete known adult male skull from the Sharktooth Hill Bonebed of the extinct sperm whale *Aulophyseter morricei*.*



## Student Mentoring and Research



*Graduate students Mairin Balisi and Caitlin Brown from UCLA working in the collections at the Page Museum.*

### Rancho La Brea

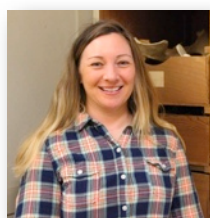
Graduate students Mairin Balisi and Caitlin Brown from Dr. Blaire Van Valkenburgh's lab at UCLA are working with Chris Shaw in the paleopathology collections at Rancho La Brea. Living canids and felids are often traumatically injured from hunting, leaving diagnostic lesions on their skeletons. Consequently, the location of such injuries is suggestive of the hunting style of the animal in life. For this study Mairin and Caitlin have quantified skeletal pathologies in the two predominant mammalian predators from Rancho La Brea, *Canis dirus* and *Smilodon fatalis*, to test hypothesized differences in hunting styles between these two predators previously derived from their morphology. They found differences in the location of injuries between the two species consistent with their predicted method of taking prey and hope to present their findings at the *Society of Vertebrate Paleontology Annual Meeting* in Los Angeles in October 2013.



### Dinosaur Institute

Danielle Armendariz, a former student of the NSF funded Proyecto Dinosaurios, was granted an internship at Mammoth Hot Springs, South Dakota, for the entire summer and leaves for her appointment on May 15, 2013. Good Luck Danielle!

### Vertebrate Paleontology



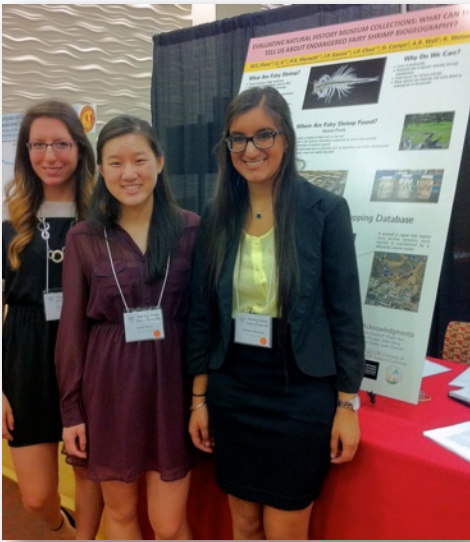
Vanessa R. Rhue and Dr. Samuel A. McLeod are pleased to have Stephanie Lapeyre-Montrose, a graduate student at California State University Northridge, assisting us with various Vertebrate Paleontology collections projects. Stephanie comes to us with undergraduate degrees in Geology and Anthropology, and has worked as an environmental geologist in the southern California area. Stephanie also has a solid knowledge of comparative anatomy, which she gained during her work as a veterinary science technician during college. She also volunteers as a docent at the Strathearn

Historical Park and Museum in Simi Valley. Stephanie is currently pursuing a Master's Degree in Anthropology, with a thesis focusing on locating potential hominin fossil sites in Morocco and Algeria. We are delighted to have Stephanie's enthusiastic personality and willingness to tackle various curation projects, from updating cabinet labels to packing specimens at the Invertebrate Paleontology warehouse and participating in fieldwork.

## Marine Biodiversity Center

This has been a super intense Winter Semester in the Marine Biodiversity Center — but also a fabulously productive one!

Our 6 workstudy students: Kelsey Bailey, Maria Peltekova, Jean Pongsai, Kristi Gadalla, Tristan Jordan, and Jennifer Shen sorted insects for BioSCAN, participated in behind the scenes tours for the public and press, packing collections at the South Grand Invert Paleo Facility. They contributed greatly to hosting the *NHM-USC-Keck Joint Biodiversity and Environment Seminar Series*, and much, much more.



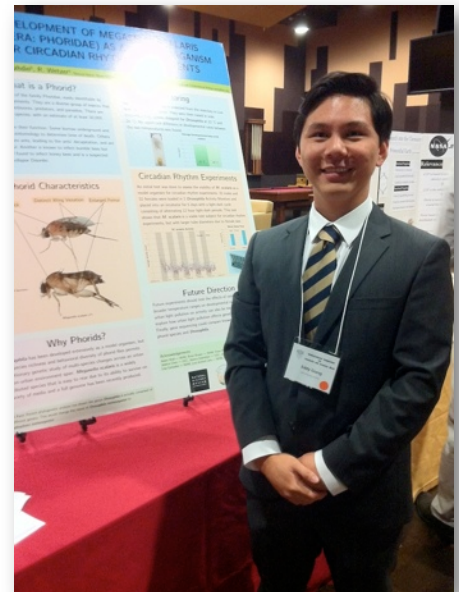
Julia Garcia, Janie Chen, and Harleen Marwah (left to right, Mark Floro not shown) at their poster on endangered fairy shrimp.

work to curate, inventory, and digitize the entire NHM fairy shrimp collection (roughly 5,000 lots), identify specimens likely to yield molecular data, and produce an interactive map. So far we have been able to generate 16S gene sequences from six museum specimens including some that are listed federally as endangered. Abstracts and posters for these two projects are available at: <http://research.nhm.org/mbc/archive>.

The entire Lab contributed to the scientific process and projects. Adam Wall recruited the students and led scientific mentoring and research project management, Regina Wetzer offered mentoring, Lisa Gonzales (capturing/rearing flies), Dean Pentcheff (data gathering and analysis, text editing), Phyllis Sun (advice on photography, layout, design), and Kathy Omura (coordinated the multiple simultaneous projects).

Meanwhile Mark LeBlanc, who recently graduated with his Master's degree from Cal State L.A., has completed a first draft of a portion of his thesis including drawings, SEMs, and a description of a new ostracod species from Panama.

Mark Floro, Julia Garcia, Harleen Marwah, Eddy Giang, Janie Chen, and Christina Li are USC undergraduate students who worked on two separate research projects in the lab. They produced two research posters which were each presented in two symposia: (1) USC's 15th Annual Undergraduate Symposium and (2) the Southern California Academy of Sciences 106th Annual Meetings. Both posters are competing in best poster competitions as this newsletter goes to press. Eddy described his two semester effort rearing the phorid fly *Megaselia scalaris* and demonstrating its usefulness as a model organism for studying circadian rhythms. Mark, Christina, Harleen, Julia, and Janie described their



Eddy Giang at his poster on rearing phorid flies.

# Volunteers and Research Associates

## Rancho La Brea

The Rancho La Brea Department would like to take this opportunity to wholeheartedly thank our wonderful volunteers for all the time and great work that they provide to our excavations, preparation and curation of the collections at the Page Museum. Since *Project 23* began 4 ½ years ago our volunteers have given 52,300 hours of service! We could not have accomplished this work without the help of the following people: Bethany Ader, Lilia Alvarado, Louise Bahar, Melissa Bradpiece, Karen Burns, Ruth Cohen, Jill Comsky, Raul Correa, Jana Davis, Meganne Drake, Mary-Ellen Friedman, Bruce Fischer, Cecilio Garcia, Daniel Garcia, Barbara Hill, Abraham Jaramillo, Yasaman Javadzadeh, Kacey Johnson, Patrick Johnson, Jillian Jones, Sunny Lee, Ryan Long, Meena Madan, Kelly McCumber, Caitlin McHugh, Nola Milner, Jean Moore, Paula Passarello, Chelsea Rohrbach, William Saballos, Matthew Sager, Judy Scharf, Herb Schiff, Jack Schwellenbach, Catie Scullion, Kathrine Shaum, Mary Simun, Pat Simun, Chrystine Skelly, Ryan Smith, Keith Solmo, Stanley Strauss, Dixie Swift, Judith Sydney-Gordon, Annie Tang, Tara Thara, Jacqueline Thevenot, Robin Turner, Elissa Wall, Alicia Way, Harry Williams, Jeanette Woerner, Joseph Woods, Linda Wright and Bob Yeager. Thank you!!

This year we recognized two outstanding volunteers; Bruce Fischer and Jack Schwellenbach. On April 15 staff attended the *31st Annual County Volunteer Recognition Luncheon* at the Dorothy Chandler Pavilion where they



*Bruce Fischer with Shelley Cox accepting his award at the 31st Annual County Volunteer Recognition Luncheon.*

honored Bruce Fischer, who has been volunteering at *Project 23* for the past 4 years. Bruce not only brings his expertise to the project but can always be counted on to help out, and his enthusiasm is contagious. Bruce has also joined our expeditions to El Golfo de Santa Clara, Mexico.

On April 30 we recognized Jack Schwellenbach as our department's Outstanding Volunteer of the Year. Jack has volunteered both in the *Fishbowl Lab* and at the *Project 23* excavations for 1,600 hours over the past 5 years. He is a dedicated worker and brings a great sense of humor to the project. Jack was also awarded a 5 years of service pin along with Abraham Jaramillo. Robin Turner and Harry Williams were awarded their 25 years of service pins!

We would also like to thank Research Associate Chris Shaw who has been invaluable in the curation of *Project 23*. Since his retirement in late 2011 as



*From L-R: Jack Schwellenbach, Robin Turner, Abraham Jaramillo and Harry Williams.*

the Collections Manager, he has spent two days a week working in the collections at the Page Museum and has helped to identify and check identifications on most of the *Project 23* material. He is always available to answer questions related to the historic collections, to mentor students and to share his expertise with people learning how to identify specimens at Rancho La Brea.

*Research Associate Chris Shaw identifies microfossils in the Fishbowl Lab.*



## Vertebrate Paleontology

The Department of Vertebrate Paleontology is pleased to recognize Jimmy Kaplan as our 2013 Volunteer of the Year. The decision to honor Jimmy for his service to our Department was immediately evident to those privi-



*Jimmy Kaplan (at far right) talks to honored guests about our Miocene basking shark, a new species of Cetorhinus, during our Centennial Safari open house tour of the Vertebrate Paleontology Preparation Laboratory in February 2013.*

leged to work with him in the Preparation Laboratory and field over the past two years. Jimmy is a native of the Los Angeles area, and he decided to volunteer for us during his school breaks while studying for his Bachelor's Degree in Geology at Whitman College in Walla Walla, Washington. Upon graduation in the Spring of 2012, Jimmy quickly immersed himself in our Vertebrate Paleontology program and dedicated numerous hours each week to fossil preparation. We are especially grateful to Jimmy for his enthusiasm and willingness to help us on weekend trips to collect fossils for the museum and during public outreach events throughout the year. We thank Jimmy for his many hours of service to our Department of Vertebrate Paleontology, and for going above and beyond to promote the science of paleontology to the public. We wish him a productive field season as he participates in excavations of dinosaurs in Wyoming this summer!

Howell W. Thomas is pleased to announce Melissa Sherman as our newest volunteer in our Preparation Laboratory. Melissa comes to us from within the Museum, where she currently works as an Administrative Assistant, coordinating special events. Melissa has interests in osteology and scientific illustration and is currently doing course work toward a degree in Anthropology. Melissa is a dedicated volunteer in our Department, working several days a week in the early morning hours, currently preparing a fossil baleen whale lower jaw collected from Santa Cruz Island. The Department of Vertebrate Paleontology is thankful to have Melissa's cheerful spirit and dedication to our program.



*Chris Coleman with Anthropology volunteers Stephanie Cranage, Hilo Sugita (holding her award), and Rocio Santoyo.*

## Anthropology

At the *Annual Volunteer Recognition Night* on April 30, 2013, Anthropology volunteer Hilo Sugita was the recipient of an Outstanding Volunteer Award. Hilo is currently attending UCLA for a BA in Archaeology. In the fall, Hilo will be conducting field work on the Fayum Archaeological Field Project in Egypt through UCLA. Since coming on board on November 18, 2011 Hilo's work (over 370 hours!) making artifact house mounts, cataloguing Ancient Egyptian collections and assisting with Public Programing are contributions that have helped us achieve our departmental goals.

## Malacology

Malacology volunteer Robert (Bob) Moore was honored for his dedication to the Malacology collection at the annual *Volunteer Recognition Night – Outstanding Achievers’* selection. Bob has done everything from curation and identifications of backlogged collection material to scanning papers for the section and assisting with packing Invertebrate Paleontology cabinetry for the impending move. His dedication to the Malacology section is greatly appreciated and his recognition is indeed deserved.

*Malacology volunteer Bob Moore packing IP cabinetry.*



## Invertebrate Paleontology

The Invertebrate Paleontology collection will soon be moving from its present home at South Grand Ave. to a new facility in Carson, near the History department warehouse. The 4 million specimens in the Invert Paleo collection are contained in about 700 cabinets, each of which had to be carefully packed before moving. We put out a Museum-wide call for packing help and had over 40 people respond, from full-time staff to volunteers to research associates. Although the procedure wasn't complicated — mainly stuffing drawers with newsprint — it was tiring and required dedication and a good snack break! A few representative photos, although I couldn't include everyone. Many thanks to all! The actual moving date is still pending.

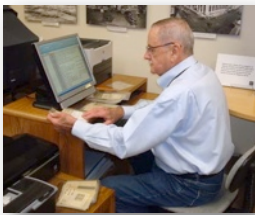


## History

Seaver Center volunteer Peter Bomba is shown entering data as part of his ongoing work cataloging hundreds of rare film frames.

Four volunteers converged on a Thursday afternoon in the Seaver Center reading room: Gary Kisor in the foreground working with L.A. County business incorporation documents; behind him is Grace Levine indexing a biography; UCLA library

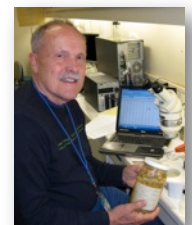
school volunteer Amanda Cheung consulting with Collections Manager Brent Riggs; and Lynne Eisler indexing incorporation papers.



# Distinguished Visitors

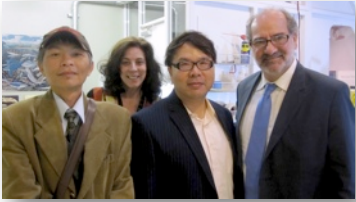
## Ichthyology

Dr. Camm C. Swift, Curator Emeritus of Ichthyology, visited the Collection on April 29 to look at some gobiid fishes. Camm is giving a presentation on gobies at the SCAITE meeting at the Cabrillo Marine Aquarium in San Pedro in May.



## Mammalogy

Dr. Petra Deimer, president of the Society for the Conservation of Marine Mammals, and her husband Hans-Jürgen Schütte, a German television journalist and conservationist, visited the marine mammal warehouse in March. A passionate advocate for marine mammal conservation, Dr. Deimer has written several books and countless articles on marine mammals, the environment, and many other conservation issues. She has served on the International Whaling Commission's Scientific Committee, the German government's Species Conservation Advisory Committee, and as an advisor to the International Fund for Animal Welfare.



## Dinosaur Institute

Benjamin Tung-yang Chi, Director, and Peter Pi-ho Huang, Senior Cultural Officer, of the Taipei Economic & Cultural Office in Los Angeles visited the museum in April to introduce themselves and initiate discussions regarding possible collaborative projects in the near future.

## Polychaetes

We have two visitors at the moment. Dr. Sergio Salazar-Vallejo (ECOSUR, Chetumal, Mexico) is here to review our specimens of the families Sternaspidae and Fauveliopsidae, two very odd and perplexing groups. Dr. Maria Capa (Natural History Museum, University of Trondheim, Norway) is leading a collaborative project to revise the family Sphaerodoridae. We have large numbers of all three families so a visit here was a "must" for both of them.



## Entomology



Simeão de Souza Moraes, a Ph.D. candidate at the Laboratório de Sistemática de Lepidoptera, Museu de Zoologia, Universidade de São Paulo, Brazil, spent the week of 15 April studying our collection for his cladistic analysis and taxonomic revision of the pericopine tiger moth genus *Dysschema*. The identification of these sexually dimorphic Neotropical moths can be particularly challenging, especially when it comes to associating the males with their corresponding females. While the mostly nocturnal males are usually readily attracted to lights at night, many of the females are diurnal and look nothing like the males: instead, they are in a mimicry complex that includes dayflying

longwing butterflies in the genus *Heliconius* (how and when they find each other to mate is another question!).

## Rancho La Brea

On April 1 the Rancho La Brea staff hosted members of the Libyan Department of Antiquities and gave them an extended tour of the excavations, lab, collections and exhibits. They were part of the International Visitor Leadership Program visiting well known cultural sites across the United States.

On April 10, George Crawford, the director of the Blackwater Draw Museum in New Mexico, visited the Page Museum for a behind-the-scenes tour. His colleagues Chuck Larue and Joe Hodulik from the Pacific Coast Archeological Society were with him. The Blackwater Draw contains an important archaeological site



Dr. John Harris shows a mammoth tooth to George Crawford, Chuck Larue and Joe Hodulik.

([http://en.wikipedia.org/wiki/Archaeological\\_site](http://en.wikipedia.org/wiki/Archaeological_site)) that is the type-site (<http://en.wikipedia.org/wiki/Type-site>) of the Clovis culture ([http://en.wikipedia.org/wiki/Clovis\\_culture](http://en.wikipedia.org/wiki/Clovis_culture)). He was in town to give a talk to the Pacific Coast Archaeological Society and took the opportunity to visit and was impressed with our “quantity and quality of specimens.”

## Malacology

Paleo-consultant Robin Turner (Los Angeles) visited Malacology to confirm the identification of some Pliocene-Pleistocene terrestrial and freshwater gastropods from the Bakersfield area. Starting on April 14, Emilia González (El Colegio de la Frontera Sur, Chetumal, Quintana Roo, Mexico, ECOSUR) began examining the Malacology holdings of the gastropod family Eulimidae, which are commensal and/or parasitic on echinoderms, during her stay through June 10. Charles Drost and Sky Bischoff-Mattson (USGS Southwest Biological Science Center Flagstaff, Arizona) examined terrestrial snails from San Clemente Island for survey work they are conducting. Ángel Valdés and students Jessica Goodheart and Jen Alexander (Cal Poly Pomona) visited Malacology to use the SEM facility and to examine the nudibranch holdings. George Kennedy (Brian F. Smith and Associates, Poway, California)



visited Malacology and Invertebrate Paleontology to confirm identifications of several dozen specimens of micro-mollusks from Pleistocene terrace deposits in San Diego County. Terrestrial mollusk specialist Lance Gilbertson made two visits in April to compare newly collected samples of helicid snails with those in the collection. Conservation biologist Roy van de Hoek (Ballona Institute) visited Malacology to examine the holotype of *Cymbovula segaliana* Cate, 1976, as he is writing a biography on Earl Segal (deceased from CSUN Biological Sciences) for whom the specimen was named. Richard Squires visited Invertebrate Paleontology and Malacology to examine fossil and Recent specimens of the gastropod family Ficidae and borrowed several specimens for comparative purposes.



## Vertebrate Paleontology

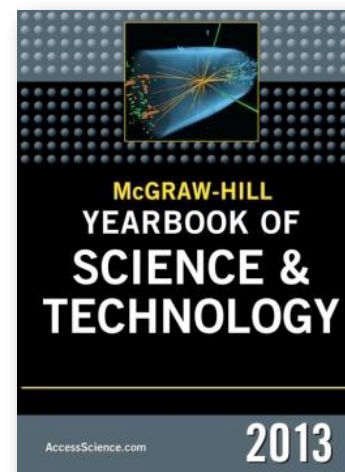
On 11 April, Benjamin Tung-yang Chi, Director, and Peter Pi-ho Huang, Senior Cultural Officer, representatives of the Taiwan Academy Taipei Economic and Cultural Office in Los Angeles, visited the Museum. Dr. Samuel A. McLeod and Vanessa R. Rhue provided tours of the *Age of Mammals* exhibit hall and the Vertebrate Paleontology collections. We were honored to host international representatives of Taipei’s Cultural Commission and aid in their establishment of contacts with cultural institutions throughout Los Angeles.

# Recent Publications

Carranza-Castañeda, O., J.J. Aranda-Gómez, **X. Wang**, and A. Iriando. 2013. The early-late Hemphillian (Hh2) faunal assemblage from Juchipila Basin, State of Zacatecas, Mexico, and its biochronologic correlation with other Hemphillian faunas in central Mexico. *Contributions in Science*, 521: 13–49.

Deng, T., Z.-x. Qiu, B.-y. Wang, **X. Wang**, and S.-k. Hou. 2013. Late Cenozoic biostratigraphy of the Linxia Basin, northwestern China; pp. 243–273 in X. Wang, L. J. Flynn, and M. Fortelius (eds.), *Fossil Mammals of Asia: Neogene Biostratigraphy and Chronology*. Columbia University Press, New York.

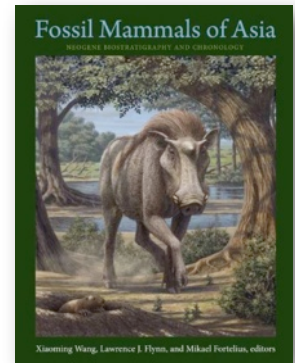
- Goy, J. W., and **J. W. Martin**. 2013. Redescription of *Microprosthema semilaeve* (von Martens, 1872) (Decapoda: Ste-nopodidea: Spongicolidae) and description of a new species of *Microprosthema* from Dry Tortugas, Florida. *Zootaxa* 3630 (3): 467–488.
- Groves, C. P. and **J. M. Harris**. 2013. Family Suidae; p.25 in Kingdon, J.S. & Hoffmann, M. (eds.). *The Mammals of Af-rica*. Vol. 6. *Pigs, Hippopotamuses, Chevrotain, Deer, Giraffes, and Bovids*. Bloomsbury Publishing, London
- Harris, J. M.** 2013. Suborder Suiformes; p. 24 in Kingdon, J.S. & Hoffmann, M. (eds.). *The Mammals of Africa*. Vol. 6. *Pigs, Hippopotamuses, Chevrotain, Deer, Giraffes, and Bovids*. Bloomsbury Publishing, London
- Harris, J. M.** 2013. Superfamily Suoidea; p. 24 in Kingdon, J.S. & Hoffmann, M. (eds.). *The Mammals of Africa*. Vol. 6. *Pigs, Hippopotamuses, Chevrotain, Deer, Giraffes, and Bovids*. Bloomsbury Publishing, London
- Harris, J. M.** 2013. Subfamily Suinae; pp. 25–26 in Kingdon, J.S. & Hoffmann, M. (eds.). *The Mammals of Africa*. Vol. 6. *Pigs, Hippopotamuses, Chevrotain, Deer, Giraffes, and Bovids*. Bloomsbury Publishing, London.
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# Staff Departures and New Staff

## Dinosaur Institute



Erika Canola was hired as a paleontological preparator and will be working in the dino lab on the second floor. She has worked part-time and volunteered for the Dinosaur Institute since 2007. A former participant of the Proyecto Dinosaurios NSF funded project, Erika has been a strong member of our field crew from the beginning. She has joined four expeditions to Utah to collect the sauropod dinosaur “Gnatale,” participated in the Mojave Desert expedition in 2007 to collect trackways for our Dinosaur Hall and supported the Proyecto Dinosaurs program by accompanying undergraduates from the southern California area on expeditions to the Petrified Forest in Arizona.

Jose Soler has been hired as a paleontological preparator and will be working in the 4th floor paleontology laboratory. Jose has volunteered since 2011 and has participated in many field expeditions. His fieldwork experience includes the Gnatale quarry in Utah, the Bisti/De-Na-Zin Wilderness in New Mexico and the Petrified



Forest in Arizona. Jose also enjoys public programs and has always been an eager participant in many museum events including Haunted Museum and Fossil Day at the Page Museum.



Maureen Walsh was hired as assistant collections manager for the Dinosaur Institute. After a decade of fossil preparation on all types of fauna, she is very excited to focus on maintaining and organizing the collection for visiting researchers and the public, in addition to supporting collaborative research abroad and the department’s fund raising goals for the future.

# Miscellaneous

## Rancho La Brea

On March 11, the Australian *Today Show* filmed live segments with presenter Steve Jacobs via satellite to Australia from the Project 23 excavations, the Fishbowl Lab, and Pit 4 in Hancock Park. This show is the longest running breakfast news program in Australia.



On April 20, Museum Fellows met at the Page Museum to celebrate 100 Years of Digging at

Rancho La Brea. The event started with cocktails at the Project 23 excavation site where staff showed off specimens still in the ground and explained excavation techniques. There was also a table of prepared specimens on show. Staff mingled with the 92 guests until they were ushered into the Page Museum for two presentations. Museum Archivist Cathy McNassor talked about the history of Rancho La Brea and Chief Curator Dr. John Harris gave a presentation on past and current research.



## Malacology

On Thursday, March 21, Curator Emeritus James McLean was honored with the 2013 Festivus Award by the San Diego Shell Club. The inscription reads “In recognition of your lifetime contributions to conchology and malacology. Your combined as well as separate achievements have significantly advanced lasting public appreciation and scientific knowledge of mollusks and the natural world.” Following the award presentation, Jim gave a program on the gastropod superfamily Liotiodea.

*Jim McLean with his 2013 Festivus Award from the San Diego Shell Club.*



## Vertebrate Paleontology

Vertebrate Paleontology Curator Dr. Xiaoming Wang and artist Julie Selan have been engaged with a new temporary exhibit by the National Museum of Natural Science in Taiwan. This exhibit was named *From Dragon to Beast — Great Extinctions and Great Evolution*, and we were involved in illustrating four large murals depicting various Cenozoic mammals from Hezheng Museum in the Gansu Province. The exhibit opened on 28 March 2013.



*A scene from the late Miocene (about 11-5 million years ago) in Linxia Basin at the northeastern margin of the Tibetan Plateau. This mural illustrates an extinct large mammal community of elephant-like gomphotheres, ancestral badgers, extinct giraffes, hornless rhinos, pigs, gazelles, a sabertooth cat, a giant hyena, and three-toed horses (roughly from left to right).*

## Jay Bisno, 1939–2013

Former staff member Jay Bisno, 74, passed away on Tuesday, May 7, from complications of the dementia that developed in 2009. Jay was a curatorial assistant in the Archaeology collections from 1973 through his retirement in 1993. He also volunteered in the Research Library and Malacology and was a docent. Jay's specialty was Egyptology and Biblical Archaeology, but he also had a passion for astronomy, shells of the eastern Mediterranean and the Gulf of Aqaba, nautical artifacts, stamps, and humor of all kinds. However, his greatest love was for his wife Alice, children Dorit, Rona, Karen, and Oren, his many grandchildren, and Corgis. Jay will always be remembered for his snappy wit and wisdom of life. He was indeed one-of-a-kind and is sorely missed by all who knew him.

*Jay Bisno with former staff members Kim Milliken (now Hayden), Outreach (left), and Mark Herbert, Assistant Librarian (right), at the 1995 Museum Open House.*



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