Research & Collections Newsletter



March 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

Mineral Sciences

Mineral Sciences recently purchased an extraordinary 6.65 carat gem powellite (calcium molybdate). During the Tucson Gem and Mineral Show, numerous gem and mineral specimens were donated to the museum. A few highlights are shown below and more can be seen at www.facebook.com/gemmineralcouncil

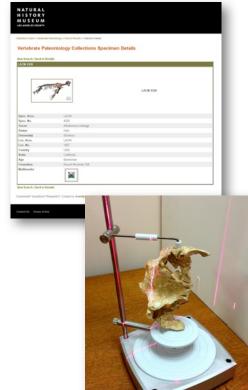
> Clockwise from left: Opal from Wollo, Ethiopia (18.01 ct). Gift of Francesco Mazzero and Eyassu Bekele. Fluorite on quartz from Ware mine, Westmoreland, New Hampshire. Gift of Alain Martaud. Corundum (variety: sapphire) from Zazafotsy quarry, Fianarantsoa, Madagascar. Gift of Joel Siegel.

Research Library

Chief Librarian Richard Hulser participated in the NHM Centennial Safari activities aided by three graduate student volunteers. There were several items on display for attendees to see including some miniature books and two rare late nineteenth century folios of hand colored bird and cat illustrations.

Shown in the photo is a display of original library furniture accompanied by enlarged photographs of them as first used in 1926. A 1908 book about the pearl industry donated to the library by the Doheny family sits on an 1890 book and music stand.





Vertebrate Paleontology

In early February the Vertebrate Paleontology collections data went live on the NHM website (screenshot at right) via a hyperlink search form: http://collections.nhm.org/vertebrate-paleontology. Sam McLeod and Vanessa Rhue thank Bill Mertz for his knowledge of KE-Emu functions and Mike Picco for his Museum web programming skills that helped make the data available. We are very appreciative of their time and expertise that provides researchers and the public access to our collections on the web.

On 22 February, Howell Thomas and volunteers Lisa Tohill and Jimmy Kaplan took a fossil dolphin skull (left) from the Sharktooth Hill Bonebed to be scanned by a NextEngine 3D Laser Scanner at the John D. Cooper Archaeological and Paleontological Curation Center in Orange County. The results of the three dimensional scan will allow replicas of the specimen to be "printed" in plastic for research and display purposes.

On 5 March Vanessa Rhue visited Ralph B. Clark Regional Park in La Habra, California. Lisa Babilonia (right), paleontologist and

curator of Clark Paleontology Museum, gave a tour of the new fossil marine hall, fishbowl laboratory, and recentlyadded collections room. While many of

the fossils on display were acquired as a result of local environmental mitigation work, it's a little known gem that the park itself, nestled in the Coyote Hills, is a significant vertebrate fossil deposit. The La Habra Formation in the area has yielded a diverse Rancholabrean age fossil assemblage of vertebrates, invertebrates, and plant materials. Local students interested in pursuing paleontology, archaeology, or related fields for a career are encouraged to volunteer in the fishbowl laboratory, assist with on-site fieldwork, organize collections, and participate in public programing and education.



Rancho La Brea

One of the more interesting specimens being prepared in the Fishbowl Lab at the moment is a sabertoothed cat that broke its canine during life. With close examination of its left canine you can see tooth wear on the smooth broken surface. A fragment of enamel was also found embedded at the base of this canine which would have been under the gum line in life. Evidence of alveolar resorption from an infection is also visible.

> Top right: Volunteer Chrys Skelly cleans a sabertoothed cat skull that broke its canine during life. Bottom right: Close up of the partially prepared sabertoothed cat skull with embedded enamel fragment and evidence of infection on its left side.



Entomology

Fly specialization: one potential way for the Museum to avoid the dilemma of midsize insect collections.

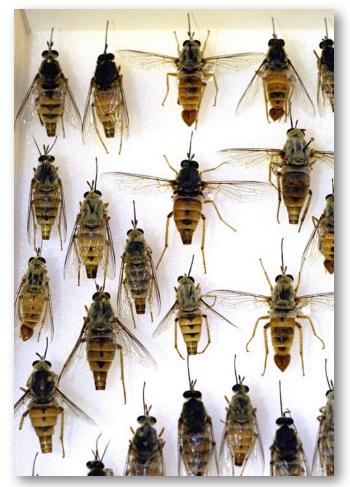
All natural history collections are of some value to science. Some collections, however, are considered "great" because they have larger numbers of specimens, more types, better geographic range, or other desirable attributes. Generally, the largest collections are considered to be "great." For example, few would argue that the Smithsonian collection of insects is not a great collection, and within the USA, it has among the largest numbers of specimens of most groups of insects.

The dilemma for medium-size collections is that they can never compete in the "biggest is best," or "Smithsonian" model. Most insect collections are taxonomically comprehensive, and thus spread their limited resources (money, staff, time, space) over all groups of insects. Under this paradigm, midsized collections, with their more limited resources, will almost always be inferior. These collections may have certain areas of strength, based on the historic interests of their curators, but these are scattered, rarely planned or considered strategically.

The LACM is a good example of a medium-sized insect collection. With 5.5 million specimens it is smaller than the largest US museum collections, but bigger than most university collections. Set within an institution preserving 35 million specimens (possibly second in size only to the Smithsonian in North America), the entomology collection enjoys much less prestige and visitation than the sister collections of marine invertebrates, Pleistocene fossils, and Western history artifacts that make up the bulk of the LACM holdings. Worse still, the LACM is frequently overlooked by researchers borrowing material for revisionary work, while other California collections are "must contact" institutions. Similarly, LACM entomology enjoys few visits by taxonomic specialists, even when they are traveling in Southern California.

Existing strengths of the LACM are ants, bees, Central American moths, phorid flies, and scarab beetles. Each is an excellent collection, and attracts the odd visit by specialists, with the rest of our holdings remaining relatively untouched. With this situation, it occurred to me to consider specializing the collection resources and, as I am a dipterist, making us a world class Diptera institution. There are several advantages to doing this:

• instead of a mediocre collection, covering all of entomology, we can become a focused, world-class strength of the museum.



- as a Diptera oriented institution, we should be able to expect much more loan activity and more visitors for the collection (thus increasing curation of the specimens)
- we will create a collection that will be easier to curate, as we will not have to be so conversant in Coleoptera, Hymenoptera, Lepidoptera, and so on
- we can focus some of our resources in library purchases

• we can strategically grow our collection, improving our standing as a world class collection, rather than having growth be at the whim of future curators.

Disadvantages are few, although some have been suggested:

- future searches for entomology curators will be constrained by our specialization
- lack of a taxonomically comprehensive collection makes the collection less useful for local biologists.

The answer to these concerns are that a) a future curator with the world-class pre-existing collection of Diptera will be in a better position than one with a mediocre comprehensive collection and, b) we will maintain synoptic collections of local insects as well as material for exhibit purposes within the museum of nonspecialization groups.

In order to establish a world-class collection of (in this case) Diptera, one can then concentrate all efforts in growth and collection building to the group of specialty. To prevent getting sidetracked, other donations, no matter how tempting, have to be declined or accepted only on the contingency that they may not be retained.

A more radical version of the specialization involves exchange of parts the collection not belonging to the Diptera with other like-minded institutions who wish to grow in a similar way. In our case, we found a first partner in the Utah State University, where Dr. Will Hansen has built an excellent collection of mostly Neotropical Diptera. The current staff of their entomology department, however, is more interested in Hymenoptera, and this spring we are doing a large-scale exchange of USU Diptera for LACM Hymenoptera (exclusive of ants and bees). This exchange includes about 600 drawers of material on each side. It more than doubles our holdings of general Diptera, not including our already major collections of Phoridae, Blephariceridae, and Neotropical Psychodidae. It also makes USU a major Hymenoptera collection, a truly win-win arrangement.

Exchanges can quickly change the face of the collection, but they are expensive. Moving 600 drawers to Logan, Utah, and bringing the same number back to Los Angeles will cost about \$3000. Still, this is much less money than that required to build a 600 drawer collection from scratch. Curator Brian Brown foresees the possibility of more such exchanges in the future for the LACM.

Meetings, Workshops, and Presentations

Mineral Sciences

From February 5th -17th Mineral Sciences staff attended the Tucson Gem and Mineral Show, the most important trade show in the mineral world. Collectors, vendors, geoscientists and museum staff from all over the world descend on the city of Tucson, Arizona. Everyone hopes to see the latest mineral and fossil discoveries, attend lectures, and see exhibits of fine minerals from museums and private collections. Eloise Gaillou, Alyssa Morgan and Tony Kampf also attended the Tucson meeting of the Society of Mineral Museum Professionals and created an exhibit for the Tucson Gem and Mineral Society Show (a.k.a. the "Main Show"). See http://nhminsci.blogspot.com for the full story.



Eloise Gaillou in Tucson, shopping, more shopping, and sticker shock.

Malacology & Invertebrate Paleontology

Lindsey Groves and Mary Stecheson co-hosted the 17th annual gathering of the Southern California Unified Malacologists (SCUM) in the Times Mirror Room on Saturday, January 19th. Thirty-six professional, student, and

amateur malacologists and invertebrate paleontologists attended the event. SCUM is an annual gathering for attendees to share current research and other molluscan interests with other attendees with similar interests. There are no dues, officers, or publications. SCUM also provides a forum for students to present their research in a relaxed atmosphere. In fact, five students of former Malacology curator Ángel Valdés gave impressive and informative presentations.

> Southern California Unified Malacologists (SCUM) XVII participants.



Vertebrate Paleontology

On 7 February Dr. Lawrence G. Barnes gave a Research & Collection Seminar Series lecture to museum staff, docents, and volunteers. The lecture covered the activities and findings from recent fieldwork in partnership with



Dr. Daryl P. Domning of Howard University and their Mexican colleagues. The title of the talk was *Re-discovering Fossil Marine Mammal Localities in Baja California Sur, Mexico: Field Work of 2012 and Plans for Future Work.*

On 5 March Vanessa Rhue (below) was invited by Paul Langenwal-

ter, former Vertebrate Paleontology employee at LACM, to give a guest lecture to undergraduate students studying Anthropology, History,

and Science at Biola University as part of their Spring Anthropology Lecture Series. Vanessa was delighted to return to her alma mater and speak on *What's in a Muse? Museum Collections & Curation.* An array of museum highlights was covered from the Classical origin of museums to European curiosity cabinets to modern conservation and curation methods.



Herpetology

Herpetology Teacher Workshop

Greg Pauly, working in collaboration with Molly Porter and Kristen Metzger, led a teacher workshop in part designed to foster citizen scientists who might contribute to the Lost Lizards project. On March 2nd, the group spent the morning at Malibu Creek State Park looking for reptiles and amphibians, with a follow-up tour of the collection and discussion on March 9th. Field assistance was provided by our high school volunteer Amber Suto and our excellent 7th grade field herper, Christian Coffelt.

Public Outreach

Echinoderms

The museum's Curator of Echinoderms, Dr. Gordon Hendler, led a Saturday excursion to the incredible tide pools at Abalone Cove on Palos Verdes Peninsula. February 9th was a perfect day to find out "what it is that makes tidepool creatures the most exotic and fascinating Angelenos." Seas were calm, and the adventurous climbed on the wave-washed outermost rocks where gooseneck barnacles catch the surf. Younger expedition members found an abundance of unfamiliar animals and plants living among inshore rocks, and everyone learned something new during Gordon's impromptu lectures on the biology, behavior, and ecology of the seashore's inhabitants. These pictures show members of the party gathered round to see a gorgeous polka-dot sea star (*Pisaster giganteus*) that has blue and pink tipped spines. (Photos courtesy of Vanessa Vobis).



Preparator Michelle Tabencki attended the career day event at the Kid Space Museum in Pasadena on February 2, where she presented the thrill of being a paleontologist. Children had the opportunity to hear about the daily activities taking place at Project 23, as well as how to become a paleontologist. The presentation included a PowerPoint slide show, tools, excavation clothes and a saber-tooted cat skull cast. Children were encouraged to study science and pursue volunteer opportunities in their future.

Mineral Sciences

The Tucson Gem and Mineral Show has a different theme every year, this year was fluorite (CaF₂). Mineral Sciences staff created an exhibit called *Fluorite Fun Facts* that highlighted the many uses of fluorite in our everyday lives and explained a few of fluorite's interesting physical and optical properties (form, color and fluorescence). This exhibit won the award "Best Educational Exhibit by an Institution." This is the first time NHM has ever won this award!



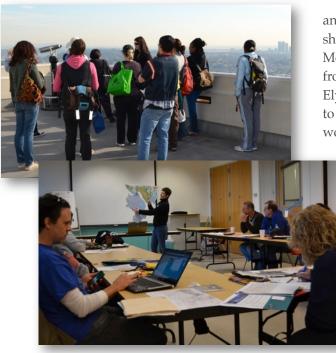
Malacology & Mineralogical Sciences

Lindsey Groves (Malacology), Alyssa Morgan (Mineralogical Sciences), and Robert DeGroot (Southern California Earthquake Center, USC) co-led a field trip to observe active faults and related structures of the central Los Angeles Basin on Saturday, January 5th for a group of local science teachers. Molly Porter, Kristen Metzger,

Active faults of the Los Angeles Basin teachers group at the Baldwin Hills Scenic Overlook: Kristen Metzger and Molly Porter (with fault maps) listen as Bob DeGroot (USC sweatshirt) lectures about LA Basin tectonics. The Hollywood fault is at the base of the Santa Monica Mountains in the background, and the overlook straddles the Newport-Inglewood fault.







and Rosa Mazon (all E&E) who initiated the trip and workshop were also in attendance. Fault scarps of the Santa Monica-Hollywood-Raymond fault system were featured from Santa Monica to Arcadia as well as portions of the Elysian Park fold system from the Los Feliz/Echo Park area to Boyle Heights. The following Saturday, January 12th, a workshop session was held at NHMLAC for the same

> group of teachers to review the field excursion, copy fault locations to individual maps, and discuss topics including plate tectonics, faulting, folding, and seismology in greater detail and how to integrate these concepts into their curricula.

> Top left: Alyssa Morgan (center) lectures to the Active faults of the Los Angeles Basin teachers group from the roof of the Griffith Planetarium about the Elysian Park fold sequence that can be seen to the left of the downtown LA buildings.

Bottom left: Kristen Metzger demonstrating relative motions of the Pacific and North American plates during the workshop session for the Active faults of the Los Angeles Basin teachers group.

Malacology

On Valentine's Day (February 14th) Lindsey Groves presented two lectures on the phylum Mollusca for two senior level Zoology classes at Monrovia High School. Topics included a review of the mollusk classes, molluscan paleontology, phylogeny, endangered species, the importance of museum collections, and even some mollusk humor. This opportunity was initiated by Nathaniel Coleman (son of Anthropology Collection Manager, Chris Coleman) who is a senior at Monrovia H.S. and in one of the Zoology classes.



Lindsey Groves lecturing to Monrovia High School senior Zoology class on the Phylum Mollusca.

Vertebrate Paleontology

On 27 January Howell Thomas participated in a public outreach event at Cabrillo Beach Marine Aquarium's Whale Fiesta. Howell volunteered as their paleontological interpreter at the event and talked to the public about the local fossils collected in the area. A demonstration table featured mostly fossil whale bones, a rare example of fossil baleen, and one partial fossil bird skeleton.

Herpetology

Animo Charter Highschool

On Friday February 1st, students from Animo Charter Highschool not only had the opportunity to enjoy First Friday but also were given a tour of Herpetology by Greg Pauly and Neftali Camacho. They were shown a variety of specimens and were provided with information on the scientific importance of these collections.

R & C and Centennial Safari, February 23rd

Herpetology

Herpetology and Ichthyology put on their best dapper clothes for the Museum's Centennial Safari (see photo). Section staff was aided by our great volunteers, Estella Hernandez, Patricia Salerno, Amber Suto, and Tanja Wolfmeyer. Guests had the opportunity to see a sampling of specimens collected by two of our greatest contributors, Jay Savage and Eric Pianka. Showcased material included some of Savage's Costa Rican specimens such as the extinct Golden Toad and Pianka's large collection of Australian Thorny Devils. Guests were allowed to venture into the laboratory area where they were given a brief course on how specimens are preserved. They seemed to really enjoy that!



Vertebrate Paleontology

For the Centennial Safari, Dr. Xiaoming Wang, Dr. Samuel McLeod, Vanessa Rhue, and Howell Thomas organized a behind the scenes display of the Vertebrate Paleontology collections and laboratory. We highlighted three specimens during the tours: a mastodon molar collected in 1913 — a 100-year-old discovery in celebration of our



museum's centennial year, the skull of a gomphothere — the first vertebrate fossil catalogued in our collections as LACM 1, and a longsnouted dolphin from the Sharktooth Hill Bonebed — a published specimen that exemplified a long-standing scientific identity mystery. The Vertebrate Paleontology team thanks our dedicated volunteers MaiLing Thomas, Debora Lee, Deb Wold, and Jimmy Kaplan, who prepared fossils in the lab, engaged with our guests, and conveyed their enthusiasm for our department and collections.

Left to right: Jimmy Kaplan with gomphothere skull in background, Debora Lee, Vanessa Rhue with mammoth molar, **Mammuthus**, collected by William Mulholland, Deb Wold, Dr. Sam McLeod with cast of long-snouted dolphin, **Zarhinocetus errabundus**, Howell Thomas with mastodon molar, **Mammut**, MaiLing Thomas, and Dr. Xiaoming Wang.

Rancho La Brea

Rancho La Brea's Chief Curator Dr. John Harris, Collections Manager Aisling Farrell and Assistant Collections Manager Gary Takeuchi also participated in the Museum Member's Centennial Safari. Displayed in Dr Harris' office were real fossils from Rancho La Brea's collections, along with large prints of Hancock Park showing the early excavations, collections storage and the Museum's Hancock Hall in the 1920's. A ten minute clip from the popular silent movie Death Trap of the Ages also played on a loop. The Natural History Museum was given exclusive rights to excavate at Rancho La Brea in 1913 where they dug 96 sites over a two year period and amassed one of the world's largest terrestrial Pleistocene collections.

Rancho La Brea Assistant Collections Manager Gary Takeuchi shows a museum member a Pleistocene lizard jaw during the Centennial Safari Member's Event.



Crustacea, Malacology, BioSCAN and the Marine Biodiversity Center

Patron Family members were able to visit behind the scenes for the first time in ten years. On the 3rd floor, Adam Wall and Jody Martin (**Crustacea**) shared some of the largest crustacean specimens in the NHM collections — the giant spider crab (*Macrocheira kaempferi*), with its 10 foot legspan, was a conversation starter. Guests marveled at the sizes that the American lobster (*Homarus americanus*) and our Pacific lobster (*Panulirus interruptus*) can reach. With the world's largest ammonite (*Parapuzosia seppenradensis*, 8.5 foot diameter) as a backdrop on the 2nd floor mezzanine, Lindsey Groves (**Malacology**) exhibited specimens of ammonites, related nautiloids, and contrasted ammonite mass extinction with the survival of the chambered nautilus (*Nautilus pompilius*). On the ground in the Marine Biodiversity space, Lisa Gonzalez and Dean Pentcheff represented the **BioSCAN** project. Guests could get up close to a Malaise trap and weather station, see how night light trapping for insects is done, and see some of NHM's oldest pinned insect collections. Kathy Omura, Regina Wetzer, Kelsey Bailey, and Maria Peltekova (**Marine Biodiversity Center**) were on hand to help with interpretation and interact with the 1,250 guests that attended this NHM Grand Centenial Celebration.

History

On February 20th, Museum Archivist Cathy McNassor presented a lecture, *The Los Angeles County Museum*, 1910 – 1941, to the Museum Alliance. Ms. McNassor also participated in the Centennial Safari open house and shared original materials from the beginnings of the museum.



Guests visiting the Material Culture display at the Centennial Safari learned that the historical collections contain diverse objects. Staff members Beth Werling and Ayesha Saletore explained that only a small percentage of the collections are on exhibit at any one time. The Safari allowed tour-goers to see other special items not normally on display.

Shown were objects that ranged from the California Mission Period to the glitz and glamour of Hollywood. Included was a painting of the Mission San Gabriel by Edwin Deakin and

two Pebble Beach Concours d'Elegance trophies accompanied by images of numerous cars in the Automotive Collection (shown on the left side of the picture). Rolling out the red carpet, two Hollywood costumes were exhibited: a gown seemingly dripping of gold that was worn by Mary Pickford in Rosita, and a recently



acquired costume was for the title character in the 1924 silent film Peter Pan, including his shadow!

Seaver Center was one of five



Centennial Safari destinations on the Ground floor. Many of the museum founding collection items are housed in the Seaver Center. Collections Managers Betty Uyeda, Brent Riggs and John Cahoon showcased an 1869 panoramic photograph of Los Angeles; flight journal written by Amelia Earhart in 1928 when she became the first woman to fly across the Atlantic; and photographs of air endurance races and women's cross country races of the late 1920s to early 1930s. The big draw of the night was a rare original copy of the Emancipation Proclamation, signed by Abraham Lincoln in 1864.

History

The Centennial Safari also enabled a behind-the-scenes look at NHM's satellite institution, the William S. Hart Museum. Visitors stepped behind the curtain... stage curtain that is. Before becoming a mega movie star, Hart was a stage actor starring as Shakespeare's Romeo and Ben Hur's Messala. On display were a number of objects that had recently undergone conservation treatment. Also shown were makeup, accessories, and props that Hart used during his stage career that lasted until 1913 when he moved to the silver screen!



Anthropology

Anthropology opened the Archaeology Storeroom to visitors as part of the Centennial celebrations. Collection Managers Chris Coleman and KT Hajeian selected a range of objects that came to the museum in 1913 from both the Archaeology and Ethnology collections. Chris Coleman also presented a selection of objects that were re-

Anthropology oper

cently excavated from the museum's grounds when the new parking lot was being constructed. These finds combined with historic images and maps enabled the visitors to really connect with what the area would have looked like when the objects were in use. The event was successful and therefore very busy, so while Margaret Hardin helped Chris and KT with the object presentations, volunteers Goldi Chon-Upton, Hilo Sugita, and Joanna Reyes greeted the visitors and ushered them through the storeroom safely.



Student Mentoring and Research

Vertebrate Paleontology

Vanessa Rhue is pleased to announce that Vertebrate Paleontology has two undergraduate student interns for the Spring 2013 semester. Aimee Earl and Deb Wold are both seniors at Biola University, La Mirada, where they are studying Anthropology with an emphasis in Archaeology. Vanessa Rhue and Sam McLeod appreciate their detailed work ethic that has allowed for a complete inventory of our EIR reports and the curation of two, large incoming collections of microfossils from Simi Valley, California, and Smith Valley, Nevada.

Aimee (right) seeks to gain a better understanding of comparative anatomy during her internship in our department and intends to pursue graduate studies in Forensic Anthropology after graduation. Aimee aspires to use her education and training to work for a coroner's office or the Federal Bureau





of Investigation. In her spare time, Aimee is working toward a scuba diving certification and is a connoisseur of new, local food establishments.

Deb (left) comes to us with a background in nursing and biology. While at the museum, she is interested in cultivating her knowledge of osteology in conjunction with museum and laboratory methods. Deb hopes to eventually work at a museum or teach at the university level. Deb's current research interest is in the diet of early colonial American peoples and is considering graduate work in Osteology, American history, and Gastronomy. Deb enjoys reading and watching movies with her friends when she is not working as a library clerk or assisting with field excavations at the Biola University Mammoth Site.

Volunteers and Research Associates

Vertebrate Paleontology

Howell Thomas is pleased to introduced Dr. Karen Kent (right) as one of our newest Vertebrate Paleontology laboratory volunteers. Karen holds an M.A. in Biogenetics and a D.D.S. from Northwestern University in Chicago, Illinois. Karen has been practicing dentistry for over 30 years and is currently specializing in general dentistry in Agoura Hills. Karen and her son Grayson share a life-long interest in paleontology and fossil collecting. We are delighted to have Karen's witty spirit and love of fossil teeth!



Rancho La Brea

Top: Volunteer Bethany Ader doing

Right: Volunteer Jacquelyn Thevenot

cataloging Project 23 specimens.

data entry of the Hancock

Collection records.

The Rancho La Brea curatorial assistant volunteer force is steadily growing. There is currently an effort to electronically capture the paper catalog record backlog, as

well as ongoing weekly cataloging of specimens. This could not be done without the help of our volun-

teers. Data entry superstar Bethany Ader (left) has just finished

entering 20,000 records from the Hancock Collection, fossils excavated between 1913 and 1915 (we only have another 150,000 to go in this series!). Once edited, these records will be imported into the Museum's database, Emu. Of course there are new specimens to be cataloged every week. Chelsea Rohrbach has been cataloging Project 23 specimens one day a week for the past year and has added over 2,400 records. Gallery Interpreter Cate Scullion has also returned to help us catalog Project 23 and Meena Madan has recently started to catalog Hancock Collection material from 1913–1915. Herb Schiff has been working with Assistant Collections Manager Gary Takeuchi building fiberglass cradles for the Columbian mammoth Zed's vertebrae and ribs. Jill Comsky continues to work in the Chester Stock Memorial Library two days a week. The staff would also like to welcome new curatorial volunteers, Jacquelyn Thevenot and Kasey Johnson. Both ladies will be helping to catalog specimens and enter data into spreadsheets for various ongoing projects.

> Volunteer Herb Schiff making fiberglass cradles on public view at the Page Museum for mammoth vertebrae and ribs.



Distinguished Visitors

Malacology

Chuck Kopczak (California ScienCenter, Curator of Ecology) visited Malacology to confirm the identification of some kelp limpets collected from one of their exhibit tanks. "Storage Wars" Associate Producer Will Lupardus met with Lindsey Groves to determine a location for a filming session of the program featuring the Giant Clam (*Tridacna gigas*). Paleo consultant George Kennedy (Brian F. Smith and Associates, Poway, CA) visited Malacology to confirm identifications of several dozen specimens of micro-mollusks from a Pleistocene terrace deposit on San Clemente Island. This data will be published with Lindsey Groves and Daniel Muhs (US Geological Survey, Denver, CO) in an upcoming paper. Ángel Valdés and three students (Cal Poly Pomona) vistited Malacology to examine the nudibranch holdings.

Vertebrate Paleontology

On 30 January Dr. Terry L. Joslin, Principal Investigator and Native American Collaborator at Central Coast Archaeological Research Consultants, visited our collections to examine our fossil specimens of sunfish, *Mola mola*, in an effort to aid in the identification of specimens found at an archaeological site near Santa Barbara, California.

On 4 thru 8 February Dr. Vivianne Bernardo de Sant'Anna (right), of the Museu de Ciências e Tecnologia in Porto Alegre, Brazil, returned to continue her research on the family of needlefish, Belonidae. Vivianne usually works with extant fishes, but has taken an interest in relating the fossil record to her studies. Vivianne spent a week in our collections and was particularly impressed with the degree of preservation exhibited by our specimens from the Clarendonian Puente Formation.

On 30 January Eric Scott, Curator of Paleontology at the San Bernardino County Museum, and Christina Lutz, Excavator at Rancho La Brea, came to examine our collections of Pleistocene horses. Eric and Christina are interested in further examining our collection of fossils horses from Gypsum Cave, Nevada, as part of their on-going research of Plio-Pleistocene large mammals in western North America.





On 12 and 13 February Dr. Richard Stucky, Curator of Paleoecology & Evolution at the Denver Museum of Nature and Science, visited our collections to examine our specimens of *Navahoceros* or mountain deer from San Josecito Cave, Mexico. While Richard's predominant research interest is in the evolution of early Eocene mammals, the Denver Museum's Snowmastodon Project at Ziegler Reservoir near Snowmass Village focused his attention on comparative Rancholabrean fossils during his February visit.

Dr. Richard Stucky (left) with Eric Scott (right) discussing Pleistocene fossils with mountain deer limb bones in the foreground.

On 13 February Dr. Biren Patel, Assistant Professor of Cell & Neurobiology at Keck School of Medicine of USC, visited our collections to look at our early Eocene primates. Biren's research is focused on the functional and evolutionary morphology of hands and feet in non-human primates.

Herpetology

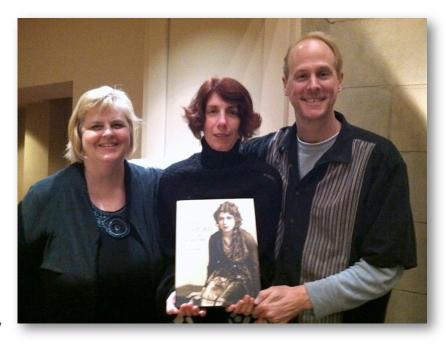
Over the course of the last few months, Herpetology has had quite a few visitors including California State Polytechnic University, Pomona, Master's students Thomas Marino and Kameron Roth who have been coming on a weekly basis as part of their research examining among population variation in head shape and size between male and female Southern Alligator Lizards. We also had a visit by Paul Gignac from Stony Brook University who took measurements on our crocodilian skulls and Mike Williams, formerly in Vertebrate Paleontology, who examines our skeletal collections as reference material to identify fossils as part of his paleomonitoring work. Lastly, long-time Research Associate Carl Lieb stopped by to examine some of his old specimens. Dr. Lieb was very active in the collection and contributed many specimens when he was a graduate student at UCLA (PhD 1981) before joining the faculty at the University of Texas, El Paso.

Recent Publications

- Godwin, J. C., G. B. Pauly, P. Q. Spinks, and H. B. Shaffer. 2013. Genetic analysis of the Alabama Red-bellied Turtle (*Pseudemys alabamensis*): estimation of population subdivision, among population gene flow, and species boundaries. Submitted to the U.S. Fish and Wildlife Service January 2013.
 The Alabama Red-bellied Turtle is a federally endangered species found only in southwestern Alabama and southeastern Mississippi. This report summarized our surveys for this species across its range and presented results of genetic analyses examining variation among the eight remaining populations of this species.
- Kampf, A. R., Housley, R. M., Mills, S. J., and Marty, J. 2013. Lead-tellurium oxysalts from Otto Mountain near Baker, California: VIII. Fuettererite, Pb₃Cu²⁺₆Te⁶⁺O₆(OH)₇Cl₅, a new mineral with double spangolite-type sheets. *American Mineralogist* 97, 506-511.
- Kampf, A. R., Housley, R. M., Mills, S. J., and Marty, J. 2013. Lead-tellurium oxysalts from Otto Mountain near Baker, California: IX. Agaite, Pb₃Cu²⁺Te⁶⁺O₅(OH)₂(CO₃), a new mineral with CuO₅–TeO₆ polyhedral sheets. *American Mineralogist* 97, 512-517.
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- **Kampf, A. R.**, Nash, B. P., and Loomis, T. A. 2013. Phosphovanadylite-Ca, Ca[V⁴⁺₄P₂O₈(OH)₈]·12H₂O, the Ca analogue of phosphovanadylite-Ba. *American Mineralogist* 97, 439-443.
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Mary Pickford was a philanthropist, savvy businesswoman, and most remembered as a movie queen! Mary Pickford: Queen of the Mov-



ies is a recently released compilation of essays by film historians about "America's Sweetheart" and edited by Christel Schmidt of the Library of Congress. Among the contributors is NHM's own Beth Werling, Collections Manager of Material Culture. Ms. Werling wrote two essays for the book — one on Mary Pickford's use of costume in her films, "Dressed for the Part," and another about the costumes and memorabilia Pickford donated to the Museum. Included are more than 40 photos illustrating the Museum's Mary Pickford artifacts. Ms. Werling participated in the Library of Congress's national book tour that included the Alex Theatre in Glendale, Hollywood's Egyptian Theater, the Motion Picture Home (which Pickford founded), Vroman's Bookstore in Pasadena, and the University of California at Santa Barbara. Pictured here are Ms. Werling, Christel Schmidt, and Jeff Mantor (left to right) taken at the Alex Theatre on February 7th.

Miscellaneous

Research Library

Chief Librarian Richard Hulser was featured in the 2013 Q1 online issue of the Royal Society Publishing (UK) newsletter in their regular feature *Spotlight on a Librarian*. In the article he discussed open source content access and affordable pricing for licenses to research articles. The article can be accessed using this link: http://newsletters.royalsociety.org/q/1N7XofzaQvq0eb/wv.

Malacology

Reality TV program "Storage wars" visited NHMLAC for filming an episode that will feature Lindsey Groves and a gentleman who purchased an abandoned storage locker that contained a single valve of a giant clam (*Tridacna gigas*). The purchaser wanted to find out more information about the specimen including why it so big, where it was from, and what it is worth. The natural history of the specimen was discussed but a value could not be assigned by the museum and could only refer the owner to professional appraisers and to check on-line auctions for current values. This episode may be aired sometime in early summer.

Malacology

Curator emeritus James H. McLean presented *Revision of living and fossil members of new superfamily Liotioidea: Long neglected basal gastropods and their significance for gastropod phylogeny* for the R&C seminar series on January 24th. This talk summarized an upcoming monograph of this group of interesting gastropods.

Rancho La Brea

There have been a number of behind-the-scenes tours at the Page Museum recently which include the Fishbowl Lab, collections and excavation site. Visiting groups include USC's Evolution and Population Genetics class, Cal Poly Pomona's Quaternary Geology class, and Schooling for Life, a local non-profit organization that provides educational enrichment programs for gifted students. The Rancho La Brea team has also been meeting with and giving tours to MTA staff and consultants on an ongoing basis in preparation for the Purple Line's Westside Extension

Project. The Page Museum will oversee all activities related to the recovery of fossils and will be the repository for any finds. An Exploratory Test Shaft is due to begin soon.

Top right: Beau Campbell gave a Fishbowl Lab tour to one of USC's Evolution and Population Genetics classes. Below right: John Harris gave a tour to MTA staff ahead of the Exploratory Test Shaft.





The BBC returned at the beginning of February to film more behind-the-scenes footage at the Page Museum with UCLA Professor Dr. Blaire Van Valkenburgh, Research Associate Christopher Shaw and Preparator Laura Tewksbury for the three part documentary called *The Ice Age.*

Laura Tewksbury was also interviewed for a short piece on the Today Show with Sara Haines about cultural Los Angeles attractions.

Top left: Laura Tewksbury being interviewed for a BBC documentary. Bottom left: The Today Show gets up close in Project 23's Box 14.



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