

Research & Collections Newsletter



November 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.



Happy 50th!

*This issue is the 50th consecutive R&C Newsletter,
marking the end of 10 years of uninterrupted production.*

*Congratulations to all of R&C,
and our thanks to all of you for your continued interest and support!*

Collection News

Ichthyology

An 18 ft. oarfish washed ashore at the Catalina Island Marine Institute, Toyon Bay, and was collected by Jasmine Santana, Taylor Sakmar and other staff at CIMI. The fish was dissected at Catalina and tissues, organs, blood samples, gills, tip of the tail, and a sample of fin rays were frozen and transported to our Ichthyology Collection (LACM 58180-1). The intestine and more tissues were sent to UC Santa Barbara. A second oarfish washed up in Oceanside five days later and was taken away by NOAA for examination and turned out to be a female with eggs. These are the fourth and fifth oarfishes to have washed up in California since 2006. The 2006 oarfish (LACM 56478-1), also from Santa Catalina Island, is on display on the first floor.

Anthropology

Recently, a Fellow at The Metropolitan Museum of Art in New York requested an inventory of the collection's ethnographic material from the Solomon Islands (part of Melanesia, near New Guinea). This part of the collection was catalogued on cards when the items arrived and several of the objects were displayed in a Pacific Island exhibit *circa* 1966, but it was never photographed, and data were never digitized. Therefore, locating and researching the objects became an exercise in discovery.

One such discovery is the item pictured at right. One look and it was immediately clear that it deserved some detailed research. The brilliance of the red feathers, the detail of the plant fiber stitching, and the sheer mass of the coils all indicated huge effort by the maker(s). Anthropology is indebted to volunteer Selena Pasillas for her comprehensive research on the item. She discovered that these "Red Feather Money Rolls" are now rare, and very few museums have them in their collections. It is even less likely to have one with the two connected coils (as shown) and with such brightness to the red feathers as these are indicators of a more valuable piece. Selena found out that the manufacture of these "Red Feather Money Rolls" declined greatly during WWII and since 1942, are no longer used. Skilled coil makers were specially trained and would pass the techniques from father to son or from uncle to nephew when no son was available. The last person trained to make them died in the 1980s.

Selena's research also shed light onto the manufacture and use of this object. It is called a "Red Feather Money Roll" because it was used as currency in payments for brides, supplies, canoes, maids, land transactions and livestock for food. These coils were traded within and outside of the Solomon Islands but were only manufactured in the Temotu Province. These rolls were particularly used to provide a "bride price"; about 10 coils being necessary for a bride. It took two men to make the coil and 50–60,000 red feathers from one type of bird, the Scarlet Honeyeater (*Myzomela sanguinolenta*). It may have taken up to 300 of these birds and anywhere from a month to a year to complete. Different grade values of the rolls depended on the brightness and the number of coils. The father of the bride was supposed to provide the grade 1, the brother grade 2, the uncle grade 3, cousins grade 4, and so on. If a father could not provide the grade 1 roll, he would have to give up his parental right to someone that could. Providing the rolls cemented the relationship between the bride's family, the groom and his family.



Herpetology

Museum Specimens Designated as Types

Taran Grant of the Universidade de São Paulo and Charles Myers of the American Museum of Natural History described five new species of poison frogs (Dendrobatidae) in the genus *Silverstoneia*. Their review of this genus relied heavily on Museum specimens that were originally collected in the late 1960's by Philip Silverstone in Colombia. Many Museum specimens were designated as types for three of the newly described species, including holotypes of *S. gutturalis* (LACM 44075) and *S. minutissima* (LACM 44001). Additionally, 14 Museum specimens were designated as paratotypes and 71 as paratypes.

Registrar's Office

In October, the Registrar's Office received the crates for the upcoming temporary exhibit, *Traveling the Silk Road*. It took six shipments in 53 foot long trucks (1 truck a day) to transport the 129 crates from storage to NHM. Getting the crates off of the truck and into the temporary exhibit gallery was a challenge, and for the last shipment, a crane was needed because the oversized crates were too large to fit on the new outside freight lift. Once inside, the exhibits team placed the crates into appropriate areas in the gallery based on the contents inside.

A very big thank you to Carlos Carrillo for operating the forklift, and the rest of the General Services crew for unloading all the crates. *Photo by Katie Kramer.*

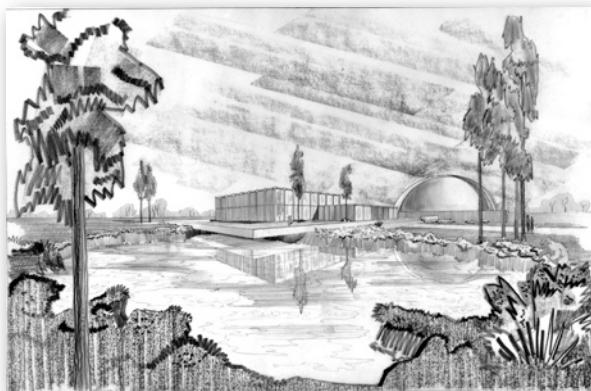


Entomology



During September 9-23, Wendy Porras (left) visited Entomology to help identify species of *Apocephalus*, assisted with organizing new Diptera acquisitions, and couriered ZADBI specimens from Costa Rica and helped prepare them for shipment to our many international collaborators. Wendy is a technician at the National Biodiversity Institute of Costa Rica (INBio), and since 2007 she has collected Diptera, in particular Phoridae, for collaborative projects between INBio and Brian Brown.

Giar-Ann Kung traveled to Utah State University to pick up the final fifty specimen drawers that were donated to Entomology. The first batch of nearly 400 drawers was retrieved in late Spring with Weiping Xie.



History

Museum Archives contributed photographs towards the *Never Built: Los Angeles* project at the A + D (Art and Design on Wilshire) Museum. An exterior rendering of the Cyclorama was used in the exhibit; that and other photos made it into the book version of the exhibit. The cyclorama was a feature of a proposed early 1960's museum for the fossils in Hancock Park. It was a dome, designed for visitors to be surrounded by images of the animals.

On September 18, Ms. McNassor and intern Kristin Contreras were given a tour of the exhibition by the show's curator, Greg Goldin.

The History Department, along with the help of Conservation, General Services, and Anthropology staff, in September inventoried, packed and transported artifacts from the portion of the Lando Hall of California History closed to the public. This area had been used a staging space for *Becoming Los Angeles* and housed a multitude of artifacts that had been pulled from off-site storage facilities for the curatorial and design team to review for possible inclusion in the new gallery. The artifacts not selected were cleared from the former staging area and sent to the new Carson Collection Facility to make way for the incoming *Just Add Water* and *Silk Road* artifacts.

The Seaver Center for Western History Research collaborated with the Education Department to provide historical photographs to the Echo Park Film Center for their use in creating a short, experimental documentary film to be screened at the L.A. Aqueduct Centenary celebration.

Rancho La Brea



Dr. Joan Madurell Malapeira examining the lower jaws of *Panthera atrox* in the Page Museum collections.

While in Los Angeles for the 73rd Annual Meeting of the Society of Vertebrate Paleontology (SVP) many researchers took advantage of the time to visit the excavations, lab, and collections at Rancho La Brea. Dr. Joan Madurell Malapeira from the Institut Català de Paleontologia Miquel Crusafont at the Universitat Autònoma de Barcelona, Spain, spent 2 weeks in the collections gathering data from our large Felidae collection. His research investigates the anatomical differences between the Old and New World Pleistocene Felidae, especially focused on the American species *Lynx rufus*, *Panthera augusta*, *Puma concolor* and *Panthera atrox* compared to their putative ancestors *Lynx issiodorensis*, *Panthera gombaszoegensis*, *Puma pardoides* and *Panthera fossilis*.

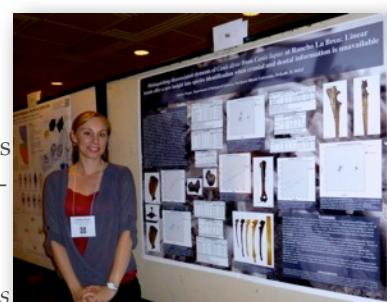
Fred Croxen, Geology Professor from Arizona Western College (AWC) in Yuma, visited the Page Museum with high school student Zeeshan Jawaid. Fred is mentoring Zeeshan who is already taking classes at AWC. His current project will be a study of the 2nd phalanx of the Pleistocene horses from El Golfo, Sonora, Mexico compared to the same bone of *Equus occidentalis* from Rancho La Brea. Since the Page Museum has such a large sample size it is the perfect place from Zeeshan to train.



Dr. Virginia Naples examining a large cat femur in the Page Museum collections.

Northern Illinois University (NIU) professor Dr. Virginia Naples continued her research on felid limb anatomy for her next book.

Lindsey Koper, also from NIU, finished her Master's thesis on the wolf collections at Rancho La Brea (RLB) at the end of October and presented a poster at SVP on her work. Her thesis title is "The anatomical description of the dire wolf (*Canis dirus guildayi*) forelimb from Rancho La Brea."



Lindsey Koper presenting her poster at SVP on *Canis lupus* and *Canis dirus*

Dr. Larisa DeSantis from Vanderbilt University is sampling herbivore and carnivore teeth from Rancho La Brea for both microwear and stable isotopes preserved in enamel. This study will add to other ongoing research into the diets of these animals based on collagen stable isotopes and will examine whether signals in dietary changes correspond with past climate change.



John Sounion, John Harris and Ben Fuller sampling bones from Project 23 in the Page Museum.

The Rancho La Brea department is continuing their collaborations with UC Irvine to get more ^{14}C dates and paired stable isotopes from both Project 23 and the Hancock Collection. The results from the first micro-vertebrate fossils from the site have just come back from the lab and will hopefully be incorporated in a joint publication next year. This large ongoing project will potentially shed light on some of the trophic interactions in the area during the end of the last Ice Age. These studies, paired with enamel stable isotopes and morphological studies will greatly enhance our understanding of the paleoecology of Los Angeles. This work has also resulted in several talks and a poster at SVP this month.



Dr. Larisa DeSantis making silicon molds of herbivore teeth for her microwear study in the Page Museum collections.

Field Work

Vertebrate Paleontology

During September, Dr. Xiaoming Wang participated in an expedition to Xorkol Basin in northern Tibetan Plateau. An earlier (2005) attempt has failed to find any vertebrate fossils, but this time we were rewarded with the oldest Cenozoic mammals in the plateau, with rhinos, chalicotheres, lagomorphs the most common. The discoveries yield clues to the age of basin as well as a first peek into the paleoenvironment in the Eocene, a time of initial collision of India Plate with Eurasia.

Ten young adult male Tibetan argali (*Ovis ammon hodgsoni*) in the Wild Camel Natural Reserve were in full alert, watching the strangers (our field team) walking by. A neighboring relative of the mythical Marco Polo sheep (*Ovis ammon polii*) further to the west, the Tibetan argali is extremely rare in the plateau. Often the only sign of their existence is the remains of their weathered skulls (inset). It would have been nice to find a fossil ancestor of the argali, but no such luck this time.



Our Museum has an agreement with Sean and Lisa Tohill to conduct excavations and research on the Sharktooth Hill Bonebed on their property. During September and October, Dr. Lawrence G. Barnes, Dr. Samuel A. McLeod, Vanessa R. Rhue, Howell W. Thomas, and volunteer Debora Lee worked with Sean and Lisa constructing a



Vanessa R. Rhue works on uncovering a fossil dolphin skull.

building to cover an area of bonebed that we had excavated, leaving the fossils in place. This is the first time part of this bonebed has been preserved *in situ* allowing a permanent viewing facility, and also providing data on the bonebed at a site that is geographically between other areas where we have worked at our Museum's previous excavations.



Structure covering an *in situ* portion of the Sharktooth Hill Bonebed.

Herpetology

Another introduced lizard documented in L.A.

On October 1, Greg Pauly and L.A. Times reporter Deborah Netburn visited the Hancock Park neighborhood adjacent to the Wilshire Country Club in search of Green Anoles. Green Anoles are a type of lizard native to the southeastern U.S. However, they sometimes become established outside of their native range due to escaped or released pets or individuals transported as stowaways on nursery plants.

The visit to this neighborhood was prompted by a report from Kimball Garrett. While conducting a Christmas Bird Count this past December, Kimball learned from another birder who spent a few months each year in the Hancock Park neighborhood that he had observed anoles for a number of years. Kimball informed Greg of the observation, which led to the anole hunt. On his visit, Greg observed male and female anoles of various size classes across several homes indicating an established population. After speaking with residents in the area, Greg learned that the anoles had been there for at least 12 years. This is the first record of anoles established in L.A. County and the third record for the state of California. Greg will be working with the original observer to report this new record in the scientific literature.

Introduced Italian Wall Lizards in San Pedro

Greg Pauly and high school student Hayden Kirschbaum are continuing their research in Coastal San Pedro studying Italian Wall Lizards, *Podarcis siculus*. They have visited the area twice in the past two months collecting the nonnative Italian Wall Lizard as part of their research to determine what impacts the nonnative lizards are having on native species.

Meetings, Workshops, and Presentations

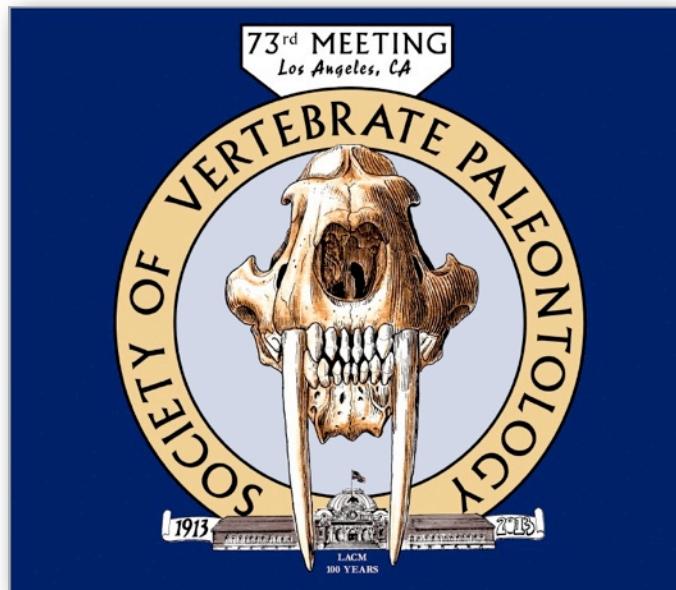
73rd Annual Meeting of the Society of Vertebrate Paleontology!

Nearly 1400 vertebrate paleontologists from all over the world congregated in Los Angeles to attend the 73rd Annual Meeting of the Society of Vertebrate Paleontology from October 30–November 2. This is the third time that our museum has hosted this international meeting, the others being in 1954 and 1977.

The meeting's Host Committee was co-chaired by Luis Chiappe and John Harris and included Larry Barnes, Ken Campbell (who supervised the volunteer activities that supported the meeting), and Xiaoming Wang (who helped coordinate the field trips). Cathy McNassor organized meeting merchandise (t-shirts, sweatshirts, mugs and pins) bearing the meeting logo crafted by famous paleoartist Mark Hallett. Vanessa Rhue and Aisling Farrell spearheaded the gathering of information for meeting participants re public transportation, dining opportunities, and "watering holes." All the Rancho La Brea staff participated in stuffing tote bags for the registration process and the Dino Institute staff provided traffic control for the SVP President's Reception at NHM.

Four hectic meeting days featured 312 platform presentations and 496 posters. John Harris co-organized and co-moderated a symposium entitled "La Brea and beyond: the paleontology of asphalt-preserved biotas" and Howell Thomas and Vanessa Rhue co-moderated the Preparators' Session. Ken Campbell, Luis Chiappe, Shelley Cox, Aisling Farrell, John Harris, Anna Holden, Carrie Howard, Christina Lutz, Vanessa Rhue, Karin Rice, Gary Takeuchi, Xiaoming Wang, and Kristen Brown (E&E) all contributed to at least one platform presentation and / or poster.

The meeting kicked off on October 29 with two field trips to the Page Museum and La Brea Tar Pits, led by Aisling Farrell, Gary Takeuchi, and Shelley Cox, followed by a public lecture at NHM by Dr. Tim White (U.C. Berkeley) on "Long ago and far away: six million years of human evolution in the Afar region of Ethiopia." The meeting's Welcome Reception, generously sponsored by trustee Paul Haaga, took place at NHM on the evening of October 30 and showcased the museum's new halls and gardens to all the meeting attendees. An evening symposium on the History of Vertebrate Paleontology organized by Cathy McNassor took place at NHM on the evening of October 31 and was well attended despite the traditional distractions of that day. The society's awards ceremony on the evening of November 2 honored Shelley Cox, Page Museum Lab Supervisor, with the society's prestigious Morris Skinner Award in recognition of her services to vertebrate paleontology. Post-meeting activities on Sunday November 3 included (1) a field trip to Sharktooth Hill led by Larry Barnes, Sam McLeod, Howell Thomas and Vanessa Rhue, (2) a field trip to the Mojave Desert co-led by Xiaoming Wang, Gary



Takeuchi, and Lindsey Groves, and (3) a public lecture at the Page Museum by renowned paleoartist Mauricio Anton on reconstructing *Smilodon*.

Before and after the meeting the Vertebrate Paleontology, Rancho La Brea, and Dino Institute departments were kept very busy as meeting participants took the opportunity to visit the various collections.

Below are some additional highlights added by VP, Rancho La Brea, and Dinosaur Institute staff.

Rancho La Brea

Morris Skinner Award: Each year at the annual meeting of the SVP the Morris Skinner Award honors outstanding and sustained contributions to scientific knowledge through the making of important collections of fossil vertebrates; it can also be made to those persons who encourage, train or teach others toward the same pursuits. This year's Skinner Award deservedly went to our own Shelley Cox, Page Museum Lab Supervisor. Shelley has run the Page's Fishbowl Lab since the museum opened and during her career with the museum has supervised more than 4,000 volunteers, many of whom in turn went on to become vertebrate paleontologists. This is the second time in five years that the Page Museum has been recognized for its contributions to vertebrate paleontology as former Collections Manager Chris Shaw was so honored in 2009.



Staff, volunteer and researchers from Rancho La Brea after the awards ceremony at SVP where lab Manager Shelley Cox won the Morris Skinner award.

Asphalt symposium: *La Brea and beyond: the paleontology of asphalt-preserved biotas* was the topic of one of only three symposia selected for the 73rd meeting of the SVP and was co-chaired by Dr. John Harris. The symposium, which explored various aspects of the biotas from asphaltic accumulations in North and South America, featured ten platform sessions and nine posters. La Brea staff and affiliates John Harris, Ken Campbell, Aisling Farrell, Gary Takeuchi, Shelley Cox, Carrie Howard, Karin Rice, Christina Lutz, Anna Holden, the relatively-recently-retired Chris Shaw, and former curators Bill Akersten and George Jefferson contributed to twelve of these.



After the *La Brea and beyond* symposium many new collaborations were formed related to ^{14}C dating and stable isotopes of fossils from asphalt seeps. At left, L-R: Grant Zazula from the Yukon Palaeontology Program, Canada; Jean-Noel Martinez from the Universidad Nacional de Piura, Peru; John Southon, Benjamin Fuller and Hector Martinez from the UC Irvine Department of Earth System Science Keck-CCAMS Group; and Ascanio Rincon from Instituto Venezolano de Investigaciones Cientificas, Venezuela

Dave Whistler (Vertebrate Paleontology Emeritus), Xiaoming Wang (Vertebrate Paleontology), Gary Takeuchi (Page Museum), and Lindsey Groves (Malacology) co-led a one day field trip to Red Rock Canyon State Park as part of the SVP annual meetings. Forty vertebrate paleontologists from around the world ventured from downtown Los Angeles to the Western Mojave Desert with a stop along the way in Palmdale to view a section of the San Andreas Fault. Lindsey Groves provided discussion about the San Andres system and other geologic features encountered on our trip. Once at Red Rock Canyon State Park, participants visited the fossil exhibits at the State Park interpretive center and Dave Whistler gave an overview of the geology and paleontology of the late Miocene Dove Spring Formation from the top of "Whistler Ridge." The afternoon was spent looking at some



Participants in the Red Rock Canyon fieldtrip after the SVP meeting

of Natural History) for assistance on the trip, Ranger Matt Williams (Red Rock Canyon State Park), and Red Rock Canyon Interpretive Association president Carolyn Jones and their many volunteers.



On October 29th about eighty vertebrate paleontologists from around the world visited the Page Museum for behind-the-scenes tours in conjunction with the SVP meeting. For many of the attendees, this was the first time in many years (or the first time at all) that they had visited the tar pits. Shelley Cox and Beau Campbell gave tours of the Fishbowl Lab, Christopher Shaw gave tours of the collections, Carrie Howard, Laura Tewksbury, Karin Rice, Michelle Tabencki and Christina Lutz gave tours of the Project 23 excavations. The trips were coordinated and led by Aisling Farrell and Gary Takeuchi.



Vertebrate Paleontology

Many Museum staff were involved on the host committee duties for the meetings, including the welcome reception at our Museum, workshops, field trips, preparators' table, symposiums, history of paleontology lecture series, exhibitions, auction, session moderators, banquet and many other events. Vertebrate Paleontology volunteers Kathleen Gonzalez, Karen Kent, Debora Lee, Lisa Tohill, and Sean Tohill also offered their time as volunteers at the meetings, assisting with various tasks including meeting registration.

Over 900 abstracts were submitted for consideration at this year's meetings. As a result, the majority of the presentations were in poster format, but three of our Vertebrate Paleontology staff were awarded oral presentations in the technical sessions and the Preparators' Session. Vertebrate Paleontology Curator Dr. Xiaoming Wang and co-authors gave an oral presentation, "Mio-pliocene carnivorans from western Tibet and the earliest record of pantherine felids." Vertebrate Paleontology Assistant Collections Manager Vanessa R. Rhue gave an oral presentation, "Imparting our Knowledge: Educating the Next Generation of Fossil Preparators and Collections Person-

fossil localities that the Museum had collected in the past before heading back to Los Angeles.

The Dove Spring Formation contains a nearly continuous sequence of diverse late Miocene vertebrate fossil assemblages and some 102 species of fossil plants and animals have been documented. The majority of the fossils that have been collected are housed in the collections of Department of Vertebrate Paleontology at the Museum.

We wish to thank Jack Tseng (American Museum of Natural History) and Kristen MacKenzie (Florida Mu-

nel." Chief Preparator Howell W. Thomas collected fossil sea turtle materials that were part of an oral presentation given by co-author James Parham, "New articulated specimens of leatherback sea turtles from the Cenozoic of North and South America Elucidate the phylogeny, diversity, global biogeography, and major evolutionary trends of Dermochelyids." Howell W. Thomas and Vanessa R. Rhue were also invited to moderate the oral presentations at the Preparators' session during the meetings. Curator Emeritus Dr. Lawrence G. Barnes along with Cathy McNassor gave a talk on the work Chester Stock as part of an evening symposium at the Museum on the History of Vertebrate Paleontology. Vanessa R. Rhue also participated in an SVP workshop, "Photogrammetry: Digital Data Collection in the Lab and Field" led by Neffra Matthews of the National Operations Center, Brent H. Breithaupt of the BLM and Matt Smith of Petrified Forest National Park.

Dr. Xiaoming Wang, Dr. David P. Whistler, Gary Takeuchi and Lindsey Groves co-led a field trip on 3 November titled, "Western Mojave Desert Geology and Vertebrate Paleontology with Special Emphasis on the Dove Spring Formation." The western Mojave Desert contains rich and diverse records of fossil vertebrate assemblages (and occasional marine assemblages) ranging in age from Paleocene to Quaternary. The Dove Spring Formation, the most thoroughly documented of these assemblages, represents one of the most complete Clarendonian to earliest Hemphillian-aged successions in North America. The diverse fossil assemblages collected over more than a hundred years contain a diverse assemblage of 86 species of fossil vertebrates, and pollen, phytolith, leaf and wood floras including the oldest published C4 grasses in North America. The majority of these collections are housed at the Natural History Museum of Los Angeles County.



Participants in the SVP Post-Meeting Field Trip to the Sharktooth Hill Bonebed in Kern County, California.

boundary through the Quaternary. Special attention was given to the Miocene marine sequence that has been analyzed paleomagnetically and formed the basis for numerous publications. The trip included stops near the Sharktooth Hill National Natural Landmark and exposed portions of the Sharktooth Hill Bonebed, a thin but dense layer of vertebrate fossils that is a global standard of comparison for middle Miocene marine assemblages.

Entomology

Curator Brian Brown gave a plenary lecture at the 150th Anniversary of the Entomological Society of Canada in late October in Guelph, Canada.

Imparting our Knowledge: Educating the Next Generation of Fossil Preparators & Collections Personnel



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Dr. Lawrence G. Barnes, Dr. Samuel A. McLeod, Vanessa R. Rhue, and Howell W. Thomas co-led a field trip on 3 November titled, "Sharktooth Hill National Natural Landmark". This one day field trip took participants to Kern County, California to visit various points of interest throughout the scientifically and historically significant Kern River district northeast of Bakersfield. Crossing the San Andreas Fault in the Tehachapi Mountains, where the North American and Pacific plates meet, we examined the regional geology of Kern River Oil Field, from the Oligo-Miocene bound-

History

On October 2nd and 3rd Dr. William Estrada gave two separate lectures and a tour for “Hidden Histories: Folding Back the Layers of California’s Latino/a History,” a conference held at the California Endowment in downtown Los Angeles and sponsored by California State Parks Foundation.

Museum Archivist Cathy McNassor organized a symposium on the History of Paleontology that was held at NHM in conjunction with the annual meeting of the Society of Vertebrate Paleontology in late October. Ms. McNassor also presented a talk on museum paleontologist, Chester Stock, while Dr. Larry Barnes displayed some fossils from the collection that were described by Stock. This photo shows Chester Stock with William Otto and Eustace Furlong on the roof of the Cal Tech geology building with the mounted plesiosaur which is on display in the museum’s new dinosaur hall.



Herpetology

Reptiles and Amphibians of Southern California (RASCals) Citizen Science Workshops

On September 19th, Greg Pauly, Lila Higgins, and Richard Smart held a half day workshop to develop partnerships with local museums and agencies in support of the Reptiles and Amphibians of Southern California (RASCals) citizen science project. The RASCals Meet-Up was attended by representatives of the San Diego Natural History Museum, the La Kretz Center for California Conservation Science at UCLA, the Santa Monica Mountains National Recreation Area, Friends of Griffith Park, and California Naturalists. Karen Wise and Greg Pauly kicked off the meeting with introductory comments about citizen science at the NHM and an overview of the RASCals project. Participants then engaged in discussions about what types of questions they wanted to address through the crowdsourcing of data collection via projects like RASCals. A second discussion focused on ways to advertise the project to the public.

The Meet-Up was very successful with all parties expressing a strong interest in partnering on RASCals. Less formal discussions will continue through the winter as the NHM and RASCals partners prepare for a larger outreach campaign when reptile and amphibian activity increases in the spring.

“Cocktails and Citizen Science” presentation

Following the RASCals Meet-Up, Greg gave a public lecture in the North American Mammal Hall about the RASCals project. The evening event kicked off with cocktails and snacks from 5pm to 6pm. Then, Greg gave a presentation about the goals of RASCals and some of our most exciting reptile and amphibian citizen science finds. The public lecture was well attended and a successful kick-off for NHM’s new “Cocktails and Citizen Science” series. A few special guests in the audience included several local citizen scientists who had made exciting discoveries. These included Will Bernstein, who co-discovered, with his son Reese, the first population of Mediterranean House Geckos in L.A. County, and Glen Yoshida, who found the first established population of Indo-Pacific Geckos recorded for the state of California. The Indo-Pacific Geckos were documented just south of the Museum in Torrance.

RASCals Teacher and Staff Training Workshop

The Museum hosted a third RASCals event on Saturday, September 28th organized by Greg Pauly, Lila Higgins, Richard Smart, Molly Porter, and Dan Keeffe. This event was a training workshop for local teachers as well as NHM staff and volunteers. Lila kicked off the workshop with a general overview of citizen science at the NHM. Greg then presented an overview of the RASCals project and some of our most exciting citizen science finds.

Richard followed up with an introduction to iNaturalist. These three talks inspired some excellent discussion. The group then split up into two sections. Molly led the teachers through discussions about incorporating iNaturalist and the RASCals citizen science project in classroom activities. Dan headed to the Nature Garden and led the NHM staff and volunteers in a discussion about effective strategies for sharing the Museum's citizen science projects with our visitors.

The workshop was well-received by attendees and the presenters also learned a great deal that will be useful in designing future workshops as we continue to grow our citizen science projects.

Additional Presentations

Greg Pauly gave an invited seminar at CSU Northridge on September 20th. He presented information about his research on mating signal evolution in Western Toads. The day also included meetings with graduate students and professors. On October 15th, Greg gave an invited lecture to the Ballona Wetlands Docent Group. This informal lecture was given outside at the wetlands and focused on local reptile and amphibian diversity. After the lecture, Greg led the group on a short nature walk to observe lizards and their habitat.

BioSCAN, Education, and Citizen Science

In collaboration with Molly Porter and Richard Smart of E&E, Dean Pentcheff attended the California Science Teachers Association conference in Palm Springs on 25 October. NHM was invited to deliver a workshop on Museum / Citizen Science initiatives and how they can augment experiential learning in secondary schools. BioSCAN's portion described the adaptation of the *BioSCAN: NightWatch* night-light sampling kits into educational tools. The well-received workshop was attended by about 30 participants (room capacity).



Photo credit: Richard Smart

External Funding

Herpetology

Greg Pauly and Jeanne Robertson, who is an Assistant Professor at CSUN and also a NHM Research Associate, were awarded a \$6,000 grant from the Southern California Research Learning Center (SCRLC). The SCRLC is a unit within the National Park Service that encourages research at three southern California national parks. Greg and Jeanne received funding to study the population genetics of the Island Fence Lizard on Santa Cruz Island. The Island Fence Lizard is a Channel Islands endemic, found only on three of the Northern Channel Islands.

Public Outreach

Rancho La Brea

National Fossil Day was celebrated at the Page Museum on Saturday October 12th. Rancho La Brea staff participating included Dr. John Harris, Aisling Farrell, Gary Takeuchi, and Beau Campbell. Highlights included a

growth series of saber-toothed limb bone and a skull of an old Smilodon individual from Project 23. Beau set up the always popular live microfossil sorting station and talked about the micro fauna discovered on a daily basis in the fishbowl lab.

The Page Museum's R&C staff is continuing to assist the Education Department with a new docent and volunteer training program. On October 6th behind-the-scenes tours of the Fishbowl Lab and Project 23 excavations were conducted by Shelley Cox, Beau Campbell, Carrie Howard, and Laura Tewksbury.

Preparators Laura Tewksbury and Carrie Howard presented their latest excavated fossils from Project 23 to over 50 people at the Page Museum's Home School Day in October. During this ever-popular Education Department program, the students got to see freshly excavated fossils up close and to ask a paleontologist about their work.



Dr. John Harris (right), National Fossil Day at the Page Museum.

Students got to see freshly excavated fossils up close and to ask a paleontologist about their work.

Haunted Museum

BioScan / Entomology / Crustacea

Halloween with crustaceans involves underwater backpacking, more commonly known as SCUBA diving. Our treasure hunt for unique specimens yielded sea fans, a kelp fish, clams, mussels, shrimp, and sea squirts, all live and freshly collected from the King Harbor Marina dock by Adam Wall (Crustacea) and Jean Pongsai (USC work-study student with MBC). We then trained the young rangers and explorers, who were eager to learn about isopods, tanaids, crabs, and barnacles, to understand how they survive the human-influenced ecosystem of marine docks. Work-study students Kelsey Bailey, Maria Peltekova, and Jennifer Shen also explained that these invertebrates differ from ones that may be found in tidal pools, since docks are relatively devoid of waves and changing currents. The campers developed skills in inspecting field collections up close and valuing the organisms that can live right under our feet! Our exhibit also contained SCUBA diving gear, complete with air tanks, fins, and weighted vests, for adventures deeper under the sea.

This year the Entomology Department participated at the Haunted Museum as one of the "First Aid" stations, providing visitors with unique alternatives to skin wound care with the use of insects. Lisa Gonzalez (NHM BioSCAN Project) displayed army and leaf cutter ant specimens from Central America and discussed how their powerful mandibles are used as sutures by local people to stitch up surface cuts. And what could be more thrilling than a giant pile of squirming maggots? Enlarged under a microscope and displayed on a monitor, hundreds of blowfly larvae delighted the visitors as we discussed maggot therapy as a means to heal very deep wounds (like Lisa's pretend machete wound covered in rice "maggots"). Additional specimens of exquisite flies from around the world were on hand for the visitor's viewing pleasure.

Herpetology

Herpetology showed up at Camp Hallow with an array of specimens found in forest environments. Campers were treated to a display of caecilians, various tree frogs, an Emerald Tree Python, a Mata Mata turtle, a gharial skull, and many other forest dwellers.



Conservation

At the 2013 Haunted Museum, Tania Collas and Liz Homberger hosted fun, hands-on conservation activities for kids of all ages. In the image at left, Liz guides a budding conservator in reconstructing a broken ceramic pot. Other activities included cleaning plastic glow-in-the-dark moth larvae from an ethnographic textile and restoring missing areas in a botanical drawing.



Ichthyology

Chris Thacker and Rick Feeney participated in Haunted Museum on October 27th inside the North American Mammal Hall with a display of Amazonian fishes. See vampire tetra or *Biara Rhaphiodon vulpinus* at right.

Anthropology



From left to right: Autry employee and former Anthropology volunteer Paige Bardolph, Anthropology Collections Manager Chris Coleman, Curator Margaret Hardin, Autry employee (and Chris' wife) Kim Walters, Anthropology volunteer Carolyn Weiss, and NHM volunteer Shunel Hines.

part of daily life. Native Californians often employed basketry bottles for this purpose. If they lived near the coast and had access to asphaltum it was used to coat the inside of the basket. In situations where asphaltum was not available, pine pitch was used to cover the outside of the basket. Both of these methods made the basketry bottles water tight.

At the Wells Fargo Family Fun Night on November 3, the Anthropology Department again presented artifacts that native Californians used to cook liquids without using a metal, ceramic or stone vessel.

History

The Haunted Museum on October 27: The History Department displayed a series of historic photographs depicting "Roughing It In Early L.A." keeping with the evening's theme of Surviving the Wilderness. At right is Betty Uyeda, Collections Manager, holding the flashlight as well as the attention of the audience.



Herpetology

Reptile and Amphibian Appreciation Day (RAAD)

Herpetology was out in full force for the 5th Annual Reptile and Amphibian Appreciation Day (RAAD) on Sunday, October 20. This year, Curator Greg Pauly, along with an amazing group of volunteers including Estella Hernandez, Hayden Kirschbaum, and Tanja Wolfmeyer, showcased a menagerie of exotic reptiles and amphibians from the herpetology collection. The diverse display included a Fer-de-



Greg Pauly answering questions from the public about reptiles and amphibians.

Lance, Indian Cobra, Snapping Turtle, legless lizards, and a caiman among many others. Citizen Science

Coordinator Richard Smart also joined the Herpetology tables and showcased a number of local reptile and amphibian species as he promoted the RASCals project. Research Associates Bobby Espinoza and Jeanne Robertson, both from CSUN, showed off gecko species and promoted our newest citizen science offering, GeckoWatch (see below). Neftali Camacho was also on hand for behind-the-scenes tours for the excited public. Greg also gave a public lecture about RASCals and some of the exciting finds so far discovered through citizen science. The day was capped off by the featured lecturer, Dr. Brad Shaffer, professor at UCLA and director of the La Kretz Center for California Conservation Science as well as a Research Associate in Herpetology. Brad's talk was entitled "Salamanders and turtles and genes, Oh My! Conserving reptiles and amphibians in California."



Above: The view from the Herpetology table out into the great RAAD crowd.

Wells Fargo Family Fun Night

Greg Pauly participated in this event for one of the Museum's Corporate Sponsors on Sunday November 3. Greg showcased a number of local native and nonnative specimens to the Wells Fargo employees and their families. He also showed several live animals and promoted the RASCals citizen science project.

GeckoWatch Citizen Science Project. In October, the museum launched its newest citizen science offering, GeckoWatch (<http://www.nhm.org/geckowatch>). The goal of GeckoWatch is to map the fine-scale distribution of nonnative geckos in the United States, and there are a surprising number of them with at least 18 nonnative gecko species now established in the U.S. We are especially interested in mapping the rapidly increasing range of the Mediterranean House Gecko, *Hemidactylus turcicus*, which has been the most successful gecko invader with established populations in at least 21 states.

The project is built off of a collaborative research project to examine whether the wide-ranging Mediterranean House Gecko is exceptionally plastic or experiencing rapid local adaptation as it colonizes diverse climates from the humid southeast, to the arid desert southwest, to the Mediterranean climates of California. The primary researchers on this project are Greg Pauly (NHM), Bobby Espinosa and Jeanne Robertson of CSU Northridge, Aaron Bauer of Villanova University in Pennsylvania, and Heather Liwanag of Adelphi University in New York. To expand the reach of this project, the GeckoWatch Team has developed partnerships with 23 institutions from 11 different states spread across the southern U.S. The project has also greatly benefitted from the efforts of Richard Smart and Lila Higgins in NHM's Citizen Science Office.

The Museum's previous and ongoing reptile- and amphibian-themed citizen science offerings have clearly demonstrated the effectiveness of citizen science in documenting introduced species. One of the great challenges in studying species introduced into urban environments is finding them in the first place. These introduced species often have small, local distributions in neighborhoods where they inhabit people's yards. These are areas that biologists cannot easily access, but crowd-sourcing through citizen science has resulted in many great discoveries. Locally, these finds include documenting the first Mediterranean House Geckos in L.A. County, the first Indo-Pacific Geckos in L.A. and Orange Counties (these are also the first records for the state), and the first Green Anoles in L.A. County.

Since its launch on the iNaturalist platform on October 23rd, GeckoWatch has received over 80 submissions! To learn more about the project, check out <http://www.nhm.org/geckowatch> or the iNaturalist project page at <http://www.inaturalist.org/projects/geckowatch>.

Ichthyology

Javier Gago brought his Marine Biology class from Glendale Community College to visit the Fish Collection on the 27th of September.

Vertebrate Paleontology

On 8 September and 5 October, Dr. Lawrence G. Barnes and volunteers Kathleen and Bob Gonzalez, Debora Lee, and Lisa and Sean Tohill visited the Buena Vista Museum in Bakersfield, California, where they helped with identifications of specimens from the Sharktooth Hill Bonebed, and attended a lecture by their Board Member Tim Elam.

Anthropology

Anthropology took part in the RAAD festivities for the first time this year by presenting objects that include depictions of reptiles and/or amphibians. Greg Pauly and Nefti Comancho graciously paired actual specimens from the Herpetology collections with the objects that portrayed them. This cooperation of the collections brought a whole new level to the interpretation of the objects which the public really enjoyed.

Malacology and Echinoderms



Lindsey Groves explaining paleoseismology to San Andreas Odyssey participants at Pallett Creek.

On Saturday, October 5th Lindsey Groves (Malacology) and Cathy Groves (Echinoderms) co-led *A San Andreas Odyssey* for 23 participants. This annual excursion highlights fault-formed geomorphic features including pressure ridges, fault scarps, sag ponds, hogbacks, fault scarps, and shutter ponds. Despite the fact that two of the regular stops are on National Forest land



Happy participants of the 2013 San Andreas Odyssey at Pallett Creek fault sign.

and the government shutdown was in effect... the trip went on as planned without any problems.

Vertebrate Paleontology, Polychaetes and Malacology

Sam McLeod and Vanessa Rhue (VP) exhibited specimens from “other” less well-known asphalt deposits including Carpinteria, McKittrick, and Maricopa. Guests were able to learn about the history of work that was done by famous paleontologists such as Charles H. Sternberg and Chester Stock. Polychaete fossils from Mazon Creek, Illinois and modern

counterparts were exhibited by Kirk Fitzhugh (Polychaetes). The area is famous for well preserved soft-bodied animals from the Pennsylvanian (~300 million years old). Kirk also discussed plate tectonic and polychaete evolution with visitors. Lindsey Groves exhibited Late Cretaceous invertebrates from the Ladd Formation of Silverado Canyon which included the only known Cretaceous lobster [*Linuparus canadensis* (Whiteaves, 1884)] from southern California.



Polychaetes curator Kirk Fitzhugh discussing Pennsylvanian aged polychaete fossils from Mazon Creek, Illinois with Page Museum visitor.



Sam McLeod and Vanessa Rhue exhibiting specimens from less-well known asphalt deposits of California for National Fossil Day.

History

A USC class studying the history of photographic technology toured the Seaver Center October 3 with nearly 80 students divided into 6 tours of 13 people each. They viewed examples of the many photograph processes including the Fox Talbot, Abel Fletcher and daguerreotype collections dating from the 1840s. The professor complimented the Seaver Center on the opportunity for her students to see for themselves the enormous variety of photography has engendered in its short history and bringing to life what was an abstraction in class discussions.



The 8th annual Archives Bazaar sponsored by *L.A. as Subject* was held October 12 at USC's Doheny Library. Representing the historical collections from NHM were Museum Archives and the Seaver Center for Western

History Research. Both sections unveiled coordinated presentations this year to recognize and celebrate the museum's 100th anniversary along with the archival materials on the founding of the Los Angeles Aqueduct.



Above is NHM volunteer Richard Thai greeting an attendee at the Seaver Center table. Shown at right from the left are Kristin Contreras, Archives Intern, and Museum Archivist Cathy McNassor.



Taste of History

The November 6, 2013 “Taste of History” event marked the 100th anniversary of the opening of the Los Angeles County Museum of History, Science and Art on November 6th, 1913, which coincided with the completion of the L.A. Aqueduct and the arrival of water from the Owens Valley. This 100th anniversary event featured an exhibit in the foyer with highlights from the History Department collections. Pictured are the christening Goblet and silver Trowel used to dedicate Exposition Park in 1910.

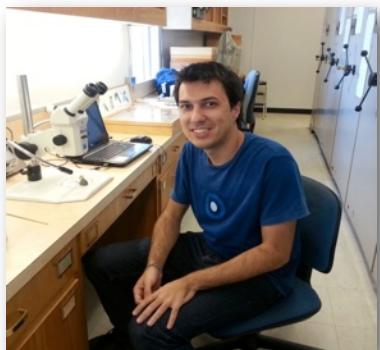


Following a reception and dinner, Dr. William Estrada, Curator and Chair of the History Department, gave a presentation on the growth of Los Angeles from the 1890s to 1913, the founding of the museum and the building of the Los Angeles Aqueduct. Pictured at right, standing in the center, is Dr. Estrada with members of the History Department during the November 6 civic ceremony held outside of the 1913 building.

Student Mentoring and Research

Conservation

On November 6th, the current class of conservation graduate students from the UCLA/Getty Conservation Program visited Conservation, Vertebrate Paleontology, Ornithology, Mammalogy, Anthropology, and Mineral Sciences to learn about preservation approaches and concerns for the diverse collections at the museum. In the image at right, Howell Thomas explains the process of excavating and stabilizing a baleen whale fossil specimen.



Entomology

Danilo Cesar Ament arrived in Entomology on October 14 to continue his doctoral research, “Phylogeny of Basal Phoridae” from the University of Sao Paolo, Brazil. Danilo has known Brian Brown since 2010, and he enjoys his visits to NHM to study its extensive collection of phorid flies. He will be in Los Angeles until December 13.

Ichthyology

Staff welcomed volunteer students from USC Bisc 499 to the Fish Collection on September 19th and 26th.

Rancho La Brea

Rex Roskos, an undergraduate from USC, has returned for another academic year of work study at The Page Museum. Rex is assisting the collections staff in data entry of the Hancock Collection cataloged records. Welcome back Rex!



Vertebrate Paleontology

A new Ph.D. graduate student, Nicole Adams, has enrolled in the Human & Evolutionary Biology (formerly known as Integrative Evolutionary Biology) program of USC. She is co-advised by curator Dr. Xiaoming Wang and Suzanne Edmands (USC Biological Sciences). Nicole is the first graduate student recruited under a private grant to study the Channel Island foxes (*Urocyon littoralis*). She will attempt to sequence DNA from fox samples from Mammalogy Department collected during the NHM Channel Island expeditions in the 1930-40s.

Vanessa R. Rhue and Dr. Samuel A. McLeod are pleased to introduce Steven Lopez as our undergraduate intern for the Fall 2013 semester. Steven is a student of Paul Langenwalter II at Biola University in La Mirada, California. He is currently pursuing his B.A. in Anthropology with an interest in underwater archaeology. Steven has been learning about museum curation and cataloguing of specimens in our Vertebrate Paleontology collections. In his spare time, he enjoys SCUBA diving and is the president of his University's SCUBA Divers Club.

Herpetology

Herpetology has been busy with seven USC students conducting research as part of their "Hands of Research at the Natural History Museum" (Bisc 499) course. Cristy Lytal, Jorge Rodriguez, and Helen Yuan are working on a project with Greg Pauly and Luis Chiappe examining whether teeth and diet data from varanid lizards can inform the diets of early birds.

Another four students are working with Greg on Channel Island reptiles and amphibians. Annie Young, Annika Guterma, and Rebecca Southern are studying body size variation within several island amphibian species. They are particularly looking at variation between mainland and island populations to test for patterns of island gigantism, a common pattern in which small species that colonize islands evolve a larger body size. Lastly, Nicole Adams is conducting a morphological analysis of Island Night Lizards. Island Night Lizards are an endemic species found only on the Channel Islands. Nicole is testing whether hypothesized subspecies can be differentiated based on morphology.

Volunteers and Research Associates

Vertebrate Paleontology

Vanessa R. Rhue and Dr. Samuel A. McLeod thank Liz Andres, our Museum Volunteer Coordinator, for recommending a fabulous team of dedicated volunteers who assisted us each week with preparations of our Vertebrate Paleontology collections for the influx of visitors associated with the Society of Vertebrate Paleontology meetings.

Alexis Yang (at right) is pursuing a master's degree in Forensic Anthropology at Cal State Los Angeles. Alexis has a background in Anthropology and Osteology as she has worked on excavations of a 17th century grave site in Poland. Alexis has been a delight to have around the department and we appreciate her quick learning abilities and her attention to detail.



Angela Richards (left) comes to us with a background in veterinary medicine and currently works full time while she is applying for graduate school in Museum Studies at Claremont Graduate University. Angela enjoys running and reading in her spare time. Angela has been a cheery addition to our weekly volunteers and we appreciate her dedicated help each week.



Kae Sawada (right) is currently working toward a master's degree in computer science and math. Kae has helped us with a variety of curation tasks, including the daunting tasks of updating cabinet labels. We appreciate Kae's willingness to help with whatever tasks are assigned to her.



Kae is also fluent in Japanese and has an interest in learning about the natural world.



Matthieu Munuz (left) is an undergraduate student at the University of Southern California. Matthieu enjoys writing, reading, and fishing in his spare time when he is not studying Anthropology. We appreciate Matthieu's careful fossil preparation work in our lab.



Anthropology

Carolyn Weiss started volunteering with Anthropology on September 11 and has since dedicated many judicious hours adding data to recently created records. Carolyn graduated from Cal State University Northridge in 1977 with a B.A. in Anthropology and worked 21 years with the LAPD as a Reserve Police Officer. Since her job required her to conduct hundreds of field investigations, she developed considerable skill in detailed analysis and observation. These qualities make her assistance particularly valuable because entering data from some of the earliest accessions can be meticulous and requires a vigilant eye for inconsistencies.

Some may also know Carolyn from her work assisting the public in various locations throughout the museum. Since she began in March, she has been certified as an interpreter for the Age of Mammals exhibit, the Nature Gardens and the Discovery Center, and she expects to acquire more certifications by the end of the year. NHM is lucky to have the assistance of such a considerate and personable person on the floor and the Anthropology department will be forever grateful for her help in creating a more comprehensive database for the collections.

Distinguished Visitors

Ichthyology

Steve Howard and Mike Booth, Fisheries Biologists from the United Water Conservation District, Santa Paula, CA, visited on September 4th to work on shrimpfuri and chameleon gobies.

Milton Love from UC Santa Barbara visited on September 12th to look at rockfish otoliths and talk about ribbon-fish.

Craig Campbell, Curtis Cash, Greg Lyon and Jim Rounds from the Ocean Assessments Unit, Environmental Monitoring Division, City of Los Angeles, visited the Section on October 30th and looked at rockfish specimens.

Mike Newbrey (Department of Biology, Columbus State University, Georgia) visited on October 31st to examine elasmobranch skeletons and teeth.

Herpetology

Numerous researchers have visited the collections in the past two months. David Blackburn, Curator of Herpetology at the California Academy of Sciences, visited to examine our African frog collections. The Museum has one of the best collections of African frogs in the United States, and David helped to re-identify some specimens as well as determine material of interest for his future research. Marina DeLeon visited for two days to swab frog specimens from northern California. After returning to UC Davis, she will use molecular techniques to assess if any of the frog specimens carried chytrid fungus. This fungus is well known for causing amphibian mortality worldwide.

Massimo Delfino from the University of Torino in Italy visited to examine snake skeletal material for comparisons to fossil material he is studying. Tristan Stayton from Bucknell University also visited to examine turtle specimens for his research on the evolution of the turtle shell. Two graduate students also visited recently including Sean Harrington from San Diego State University and Henry Tsai from the University of Missouri. Sean examined vipers as part of his dissertation research, and Henry looked at a number of lizards as part of his study on variation in soft tissue associated with the hip joint.

Malacology

James Holquist (UCLA) visited Malacology to examine live-collected mollusks from salt marshes for radiocarbon dating of pre historic marshes. Brian Urbano (Universidad Nacional Autónoma de México) spent a week identifying and examining the Malacology holdings of Mexican cephalopods in order to publish a complete list of the fauna. Candice Aguirre (Calif. St. Univ., Fullerton) visited to examine fissurellid gastropods for her thesis work. Daniel Geiger (SBMNH) made three visits to examine and photograph type specimens of fissurellids in the Ma-



Malacology visitor Brian Urbano (UNAM) examining an octopod specimen.

cology collection. Ángel Valdés (CPP) made two visits to use the SEM and identify nudibranchs in the collection. Robin Turner (Archaeo. Paleo. Resource Management) brought in several lots of fossil mollusks for identification confirmation.

Vertebrate Paleontology

During the month of October and November nearly 30 researchers and graduate students visited the Department of Vertebrate Paleontology in association with the 73rd Annual Meeting of the Society of Vertebrate Paleontology.

Dr. J.D. Stewart visited our collections in early October to continue his research on fossil Cretaceous fish.

Dr. Eric Scott of the San Bernardino County Museum and Christina Lutz from Rancho La Brea visited our collections to examine a Pleistocene horse skull from Gypsum Cave, Nevada.

Dr. Julia M. Fahlke (right) from the Museum für Naturkunde, Berlin, Germany visited our collections to study fossil mysticete skulls, including our holotype skull of *Mixocetus elysius* and the type series of *Chonecetus*, an early tooth-bearing mysticete of the family Aetiocetidae.

Dr. Ren Hirayama from the Waseda University, Japan visited our collections to study our fossil turtles.



Dr. David P. Whistler, LACM Curator Emeritus, visited our collections to study microfossils from the Lava Mountains of San Bernardino County.



Dr. John Orcutt of Cornell College (at left) spent one day studying our Pleistocene material as part of his ongoing research.

Dr. Bin Bai of the Institute of Vertebrate Paleontology and Paleoanthropology (at right), visited our collections to study our specimens of *Amynodontopsis bodei* and other Paleogene perissodactyls.



collections to study our specimens of *Amynodontopsis bodei* and other Paleogene perissodactyls.



Dr. Suyin Ting of Louisiana State University (at left) visited our collections for several days to study with Dr. Xiaoming Wang.

Dr. Evgeny Maschenko, Senior Research Scientist, Mammals Laboratory Borissiak Institute Russian Academy of Science, and Dr. Anastasia Kharlamova, Research Institute of Human Morphology of the Russian Academy of Medical Science, visited to look at the fossil whale brain with Howell W. Thomas and Dr. Lawrence G. Barnes.

Dr. Masaichi Kimura, retired Professor of Hokkaido University of Education and long-time collaborator with Dr. Lawrence G. Barnes, visited our collections to continue work on North Pacific fossil marine mammal research.

Dr. Olivier Lambert of the Institut royal des Sciences naturelles de Belgique, Brussels, Belgium (at right), visited for two days to study fossil dolphins with Dr. Lawrence G. Barnes.



Dr. Naoki Kohno of the National Museum of Japan in Tokyo worked for two days with Dr. Lawrence G. Barnes on pinnipeds and desmostylians.

Dr. Hiroshi Sawamura, Director of the Ashoro Museum, and Dr. Tatsuro Ando, of the same Museum, worked for two days with Dr. Lawrence G. Barnes on early tooth-bearing mysticete whales of the family Aetiocetidae.

Dr. Bruce Rothschild of The Arthritis Center NEO, LLC Baldwin City, Kansas met with Howell W. Thomas and Dr. Lawrence G. Barnes to discuss paleopathologies of fossil marine mammals.



Dr. Jorge Velez-Juarbe of the University of Florida (at left) spent 4 days studying our fossil and modern cetaceans as part of his research of marine mammals from the Panama Canal.

Dr. Hikaru Uno of Tsukuba, Japan, studied desmostylians and early baleen whales.

Dr. Mizuki Murakami of Waseda University, Japan, and his student associate, Satoshi Muruyama, of Kyoto University, spent five days studying fossil dolphins and other toothed whales with Dr. Lawrence G. Barnes. Yuichiro Nishioka of Kyoto University and Hirokazu Tokugawa, a paleo artist from Hyogo, Japan also visited our collections for one day.

Dr. Erich Fitzgerald of Museum Victoria, Australia (at right), spent 5 days studying our collections of fossil cetaceans, including our type series of early tooth-bearing mysticete whales of the family Aetiocetidae.



We also had several graduate students visiting the collections around the time of the SVP Meetings: Robert Boessenecker of the University of Otago spent two days studying fossil sharks and cetaceans. Tsai Cheng-Hsiu of the University of Otago visited our collections to examine our fossil and modern cetaceans. Christian Barron-Ortiz of the University of Calgary (at left) visited our collections to study our fossil horses from San Josecito Cave, Nuevo Leon, Mexico.

Recent Publications

- Barnes, L. G.** 2013. A new genus and species of Late Miocene paleoparadoxiid (Mammalia, Desmostylia) from California. *Contributions in Science, Natural History Museum of Los Angeles County* 521: 51-114.
- Colombo, F. and **Kampf, A. R.** 2013. Natrojarosite and silver halides from the El Criollo Pegmatite, Córdoba Province (Argentina). *Proceedings of the XI Congreso de Mineralogía y Metalogenia, San Juan, Argentina, October 16-19, 2013.*
- Kampf, A. R.**, Falster, A. U., Simmons, W. B., and Whitmore, R. W. 2013. Nizamoffite, $Mn^{2+}Zn_2(PO_4)_2(H_2O)_4$, the Mn analogue of hopeite from the Palermo No. 1 pegmatite, North Groton, Grafton Co., New Hampshire. *American Mineralogist* 97: 1893-1898.
- Kampf, A. R.**, Sciberras, M. J., Williams, P. A., Dini, M. and Molina Donoso, A.A. (2013) Leverettite from the Torrecillas mine, Iquique Provence, Chile: the Co-analogue of herbertsmithite. *Mineralogical Magazine* 77: 3047-3054.
- Lea, R. N. and **R. F. Feeney**. 2013. Status of two species of tilefish, *Caulolatilus princeps* (Jenyns) and *C. hubbsi* Dooley, originally described from the Galapagos Islands. *Galapagos Research* 68, published online-first on 13 October 2013.
- Mayr, G., J.L. Goedert and **S.A. McLeod**. 2013. Partial skeleton of a bony-toothed bird from the late Oligocene / early Miocene of Oregon (USA) and the systematics of Neogene Pelagornithidae. *Journal of Paleontology* 87: 922-929.
- Plášil, J., **Kampf, A. R.**, Kasatkina, A. V., Marty, J., Škoda, R., Silva, S., and Čejka, J. 2013. Meisserite, $Na_5(UO_2)(SO_4)_3(SO_3OH)(H_2O)$, a new uranyl sulfate mineral from the Blue Lizard mine, San Juan County, Utah, USA. *Mineralogical Magazine* 77: 2975-2988.
- Special Publication Section: Abstracts of talks delivered as part of the Society of Vertebrate Paleontology meetings, 2013**
- Akersten, W.**, and **Jefferson, G.** The Asphalt/McKittrick complex: Quaternary fossils associated with asphalt deposits from the southwestern margin of the San Joaquin Valley, 23 km northeast of Taft, Kern County, California.
- Arcucci, A., Ortega, F., Pol, D., **Chiappe, L.** A new crocodylomorph from the Morrison Formation (Late Jurassic: Kimmeridgia-Early Tithonian?) from the Fruita Paleontological Area, Western Colorado, USA.
- Balisi, M., Brown, C., Van Valkenburgh, B., and **Shaw, C.** What can paleopathology tell us about hunting modes?
- Brown, K., Scott, E., and **Akersten, W.** *Equus occidentalis* Leidy from Asphalt, Kern County, California.
- Campbell, K.** The owls of Rancho La Brea: predators, not scavengers, rule.
- Cerling, T., **Harris, J.**, Leakey, M., Levin, N., and Manthi, F. Ecological changes in the Turkana Basin over 4 Ma.
- Chiappe, L., Bell, A.**, Kisiel, J. Proyecto dinosaurios – A mentor-centered approach to engaging under-represented students in paleontological research.
- El Adli, J., Cherney, M., Fisher, D., **Harris, J.**, and **Farrell, A.** Last years of life and season of death of a Columbian Mammoth from Rancho La Brea.

Fuller, B., Fahrni, S., **Harris, J., Farrell, A.**, and Southon, J. Radiocarbon dating and isotopic analysis of Pleistocene fauna from Project 23 at Rancho La Brea: a novel method for tar removal from bone collagen by ultrafiltration.

Hall, J., Habib, M. Functional significance of feather asymmetry in extant avians and predicted flight performance in extinct taxa.

Harris, J., Farrell, A., Takeuchi, G., Cox, S., and **Howard, C.** *Ex Rancho La Brea semper aliquid novum.*

Hartstone-Rose, A., Donadeo, B., Boyde, B., Long, R., and **Farrell, A.** Broken and healed bacula of La Brea: a whole new definition of tough times!

Holden, A., and **Harris, J.** Timm, R. Paleoecological and taphonomic implications of insect-damaged vertebrate remains from Rancho La Brea, southern California.

Lutz, C., and Scott, E. Testing molecular hypotheses of late Pleistocene equid abundance in North America: horses from Gypsum Cave, Nevada.

Magana, J., D'Amore, D., Molnar, R., **Hall, J.** Identifying isolated shed teeth from the Kirtland Formation of North-western New Mexico.

Rice, K., Lai, K., Sessions, A., and **Takeuchi, G.** New technique to remove asphalt from microfossil-rich matrix from Rancho La Brea.

Schubert, B., **Cox, S.**, and Coltrain, J. The significance of Rancho La Brea from interpreting the paleobiology of gaint short-faced bears.

Shaw, C., and Quinn, J. The addition of *Smilodon fatalis* (Mammalian, Carnivora, Felidae) to the biota of the late Pleistocene Carpinteria asphalt deposits with ontogenetic and ecologic implications for the species.

Wang, X., Tseng, Z., Slater, G., **Takeuchi, G.**, and Li, Q. Mio-Pliocene carnivorans from western Tibet and the earliest record of pantherine felids.

Staff Departures and New Staff

Herpetology

This September we were fortunate enough to hire Azia Willis as a work-study student. Azia is a USC English major and has proven to be quite the worker. As of November, she has completed cataloging a large collection of gonadal slides donated by Research Associate and Whittier College Professor Dr. Stephen Goldberg. The slide collection comprises 70 boxes each with approximately fifty microscope slides prepared from the 1960's up until today. Azia will now be moving on to specimen tagging, cataloging and labeling.

Ichthyology

Paul DeSalles, our geo-referencing guru, left Ichthyology to join the officer training program in the US Coast Guard. We wish him all the best! Estella Hernandez has taken over his duties for the rest of the NSF Geo-referencing grant. Welcome to Fishes, Estella!

Vertebrate Paleontology

Vertebrate Paleontology welcomes a new postdoc, Dr. Camille Grohé, from Montpellier, France. Camille obtained her Ph.D. from Université de Poitiers working on fossil mammals of Thailand and Myanmar. She is supported by a NSF grant to Dr. Xiaoming Wang and will be working on various carnivore projects, including phylogeny of extinct Old World badgers, a new late Miocene otter from Yunnan Province (China), and recently discovered materials of Tibetan badger.



Conservation

After five years as Assistant Conservator, Liz Homberger has left the museum to launch her private practice in art conservation. Many thanks for all her diligent work and dedication on a multitude of challenging projects!

Miscellaneous

Rancho La Brea

The Museum organized a large media event at The Page Museum to highlight 100 years of digging, past present and future on October 28th. LA County Supervisor Zev Yaroslavsky, Museum Director Jane Pisano, UCLA Professor Blaire Van Valkenburgh, VP of Research and Collections at the Museum Luis Chiappe, and Chief Curator of The Page Museum John Harris gave remarks to the media in front of the Lake Pit. John Harris then led a tour of Hancock Park including Pit 91 and excavations at Project 23. The journalists interviewed and photographed most of the staff at the excavations, lab and collections. The day was a huge success with media outlets from around the world as well as our local LA Times picking up the story, which made its way to — among others — Ira Flatow's Science Friday blog and the Weather Channel.

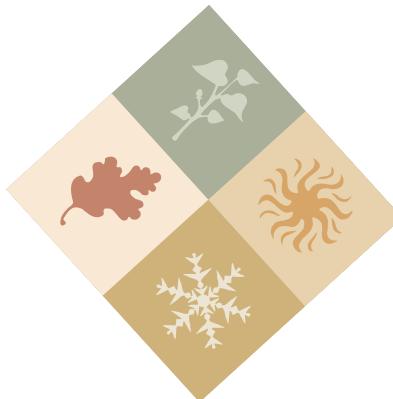
At right, L-R: UCLA Professor Blaire Van Valkenburgh, LA County Supervisor Zev Yaroslavsky, Chief Curator of The Page Museum John Harris, Museum Director Jane Pisano and VP of Research and Collections at the Museum Luis Chiappe after remarks on the *100 years digging at La Brea* media event.



And finally...

Happy Holidays!

Because this is the last R & C Newsletter for calendar year 2013, the R & C staff takes this opportunity to wish all of you a happy and safe holiday season and a bright and productive New Year.



The *Research & Collections Newsletter* is issued five times per year, in January, March, May, September, and November, by the Research and Collections staff of the Natural History Museum of Los Angeles County.

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<http://research.nhm.org/newsletters>

