

Research & Collections Newsletter



September 2009

re•search (rī-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

Conservation

Tania Collas and Liz Homberger have been busy preparing condition reports and carrying out treatments for the 30+ objects selected for the opening Rotunda exhibit. Treatments include the removal of the base from a fossilized log (pictured below), the consolidation of fragile root casts and barnacle clusters, and the mending of a platypus's paw (also pictured), among others.



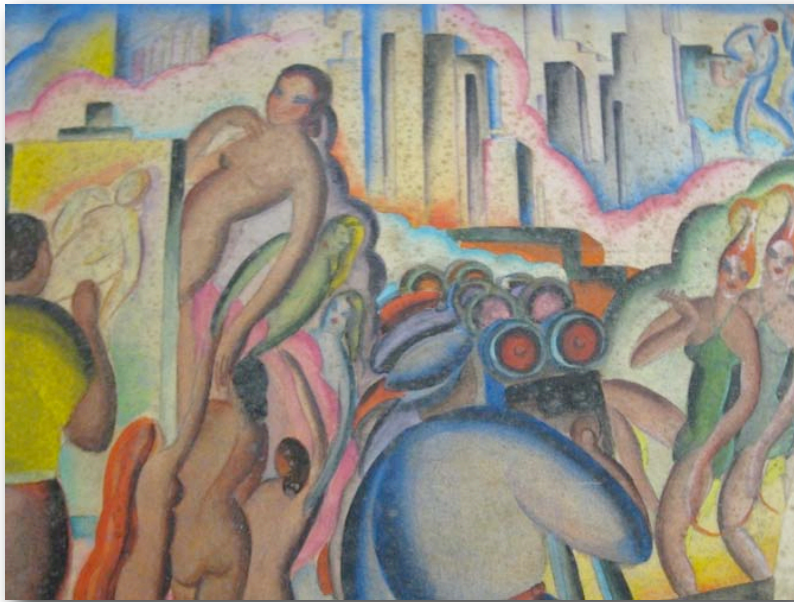
Mammalogy

The summer months brought a steady stream of visiting researchers to the Mammalogy collections. Among them were: Dr. Heidi Schutz (UC Riverside), Dr. Rob Eagle (CalTech), Dr. Julie Meachen-Samuels (Duke University), Pat Holroyd (UC Berkeley), Ashley Coutu (University of York, UK), Meghan Moran (Northeastern Ohio University College of Medicine) and Brian Kot (UCLA).

History

Los Angeles County Museum 1930 Mural Competition

In July 2009, Pat and Richard Simun donated sixteen paintings (technically referred to as “cartoons”) that were entries in the Museum’s 1930 mural competition. Titled “The Dynamic of Man’s Creative Power,” this was an international competition that invited artists to design work for the museum’s new grand foyer. Seventy-three artists each submitted four painted panels and a written prospectus. Ultimately, as a consequence of the Great Depression,



the winning murals were never executed in the foyer. The paintings donated by the Simuns are not the winning entries, and many of them cannot be matched to the artist who created them. They are, nonetheless, at this point in time, the only known surviving works from the competition, and this generous gift is a welcome addition to the documentation of the institution’s history.

Details from three different submissions to the “The Dynamic of Man’s Creative Power” mural competition.



Rare Document

The History Department's Seaver Center recently received a donation of a rare scrapbook highlighting the career of former Los Angeles and Chicago based boxing champion Jackie Fields (1908-1987, nee Jacob Finkelstein). The scrapbook covers Fields' entire amateur and professional career from the 1924 Paris Olympic Games to his first of two World Professional Welterweight crowns in 1929 to his retirement in 1933. The large scrapbook (more than 50 lb, at left) contains newspaper clippings, telegrams, cards, sketches and other memorabilia related to the boxer and his



A page from Fields' scrapbook.

times. Fields would later become one of the original owners of the Tropicana Hotel in Las Vegas. Among the most interesting items are several telegrams from Al Capone wishing the fighter good luck. The donation will

Promotional photograph of Jackie Fields.



become a key resource in History Curator William Estrada's current research exploring early 20th century prize fighting, ethnic identity, and the rise of Los Angeles' Italian, Jewish and Mexican American communities. The History Department wishes to acknowledge the work of Elizabeth K. Homberger, Assistant Conservator, for addressing initial conservation issues with this rare document.

North Grand Warehouse Summer Cleaning

Or... Plankton Disposal at the Warehouse

Approximately 2,000 square feet of prime floor space has been cleared at the North Grand Warehouse. In June, Environmental Recovery Services, Inc. along with staff from 4 different sections in the museum, shrink-wrapped boxes and buckets of zooplankton onto 59 pallets. In two and a half days, over 5,000 boxes and 200 buckets were packed and removed from the warehouse.

The fish and fish larvae had already been removed from these samples and there was no additional interest in the degraded and decalcified specimens remaining on the shelves.

Thanks to the General Services crew (Dan Hoffman, Carlos Carrillo, Walter Carrillo, Glenn Gaye), the packing and moving of pallets went quickly. The Ichthyology duo (Rick Feeney and Neftali Camacho) and Harry Filkorn from Invertebrate Paleontology were the steady pallet packers and shrink-wrappers. The workers from the



Marine Biodiversity Center were professional pallet jack operator Adam Wall (volunteer), spray paint specialist Kris Netchy (curatorial assistant), tireless box mover and ladder climber Estella Hernandez (volunteer) and coordinator Kathy Omura (collection manager).

Currently, the empty shelving units are still there minus the odoriferous zooplankton samples.

Rancho La Brea

Oil Flies

Research on oil flies and their larvae has become popular this summer at Rancho La Brea. Three separate research studies have been collecting both the flies and the larvae from the asphalt seeps, along with samples of liquid asphalt. These flies are about the size of the common fruit fly and lay their eggs directly in the liquid asphalt. The maggots live in the asphalt where they feed on trapped arthropods as well as being cannibalistic. Researchers are interested in learning about the bacteria that live in the guts of the maggots and how they digest the asphalt.



Preparation in the Fishbowl



This is a 3–6 month old *Smilodon* kitten partial maxilla from Box 1 of Project 23.

This summer the fishbowl lab has divided their attention between Zed the mammoth and the fossils from a single grid from Box 1. Within this grid (1m × 1m × 25cm) there have been over 500 specimens including bones from a 3–6 month old kitten, two sub-adults and an adult *Smilodon*, as well as a teratorn, juvenile horse, six dire wolves, four coyotes, and a giant ground sloth, to name but a few!

Two woolly mammoth tusks have been on display at the Page Museum for over 10 years. They were on loan from Vertebrate Paleontology and were returned this summer, freeing up room in the fishbowl lab for continued preparation of the rest of the plaster jackets. Guests can now view Zed's pelvis in this space.



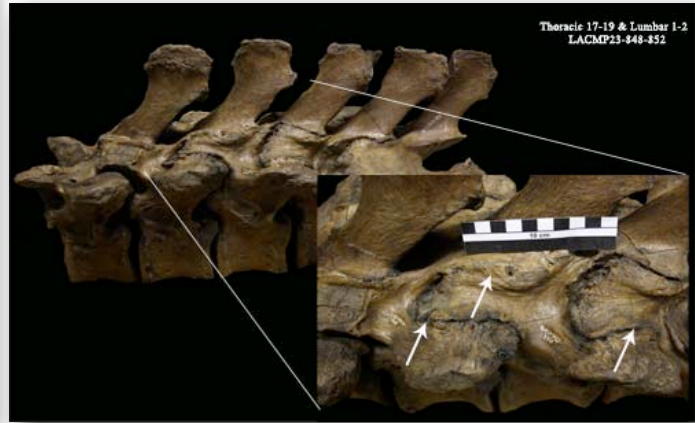
Group effort to move the heavy woolly mammoth tusks.

In addition, a section of 5 vertebrae (thoracic 17-19, lumbar 1-2) from the mammoth were completed, and show signs of fusion (ankylosing spondylosis).



Left: assistant lab supervisor Trevor Valle preparing Zed's left scapula. Seen here next to an Asian elephant scapula for scale

Below: the white arrows point to where the vertebrae have fused together.



Field Work

Vertebrate Paleontology

Xiaoming Wang, Gary Takeuchi, and Jack Tseng of Vertebrate Paleontology, along with a multi-institutional and multi-national team, were in Inner Mongolia, China, for their 2009 fieldwork season from 16 June to 1 July. This year the focus was on the Cenozoic paleoenvironment, biostratigraphy, geologic age determination, and fossil excavations. To get a sense of the ancient vegetation and environments, we collected fossil mammal teeth and fossilized soil samples, which contain signatures of carbon and oxygen isotopes that reveal vegetation composition from various localities. Inner Mongolia is also one of few places in Asia that produced volcanic lava flows during the time of fossil deposition, providing us with a rare opportunity to date the fossils. Samples of basalt were collected and analyzed in collaboration with Bill Hanes of Auburn University.

Gary and Jack conducted an excavation of a rich bone bed in the late Miocene Baogeda Ula Formation, which was discovered by graduate students from the Chinese Academy of Sciences in 2007. Rachel Yukimura (formerly a volunteer at the Discovery Center) joined the dig on her first trip to China. The crew opened up an approximately 4 meters long by 3 meters wide quarry in the upper part of the formation. Among the most important finds was a partial mustelid (weasel) skull uncovered on the second day of the excavation. On subsequent days dozens of limb, skull, and teeth fragments of gazelles (two or three species based on horncore morphology) were found in both condensed and looser concentrations within the quarry, and several large leg bones of extinct giraffids were also found buried with the smaller hoofed mammals. The second most important discovery in the bone bed was a pocket of complete limbs of small rodents, and the first partial

skull of *Hansdebruijnia* (a small murine rodent) known in China. At the conclusion of the excavation on 29 June, the team had inventoried 57 groups of identifiable bone elements in the bone bed, and made 16 plaster field jackets for transport back to Beijing and Los Angeles for preparation.

- A.** Gary Takeuchi working on the south side of the bone bed, with a giraffid metapodial exposed to the right in the foreground.
- B.** Jack Tseng (left) and Rachel Yukimura work on the east wall of the bone bed inside grids labeled by orange tape for mapping.
- C.** Graduate student Yuri Kimura (left, Southern Methodist University) and Rachel Yukimura work on one of the large plaster jackets, with goats grazing in the background.
- D.** Hired workers and crew members in the middle of a six-hour haul of a plaster jacket out to the truck (quarry is in the background).



Meetings, Workshops, and Presentations

Vertebrate Paleontology

Dr. Xiaoming Wang, curator of Vertebrate Paleontology, organized a workshop on Asian Cenozoic Mammal Biostratigraphy and Geochronology in Beijing, China, in June 8–10, followed by a conference field trip to the Linxia Basin of Gansu Province from June 11-15 (see photo below). This international conference, sponsored and funded by the National Science Foundation and the Chinese Academy of Sciences, was attended by an international array of more than 70 scholars and graduate students, with representation from 19 countries. The main purpose of the conference was to establish an internationally recognized framework of land mammal ages for Asia. The establishment of land mammal ages is a common standard that helps paleontologists to determine the geologic ages of fossil mammals and the rocks where they came from. A volume of the conference proceeding will be published by Columbia University Press.

Conference participants were delighted by the large quantity and exquisite preservation of fossil mammals, reminiscent of the Page Museum collections of our own, excavated from the Linxia Basin in Gansu Province, which will form part of the basis of the Asian land mammal ages. A paleontologic park is being constructed outside the Hezheng Palaeozoology Museum, as shown in the stone sculptures (above right) of Miocene mammals, represented by a shovel-tusked elephant, sabertooth cat, three-toed horse, extinct rhinos, and ancestral musk ox.

Rancho La Brea

The R&C staff of the Page Museum hosted an International Science Conference over 3 days in May. Presentations were mostly focused on Archaeology



and Anthropology but also included geology and paleontology. Collections Manager Chris Shaw spoke about paleopathology in carnivores from Rancho La Brea. Chris also presented at the North American Paleontological Convention in Cincinnati, Ohio where he talked about the environmental implications of the Irvingtonian biota from El Golfo, Sonora, Mexico.

Malacology

Emeritus Curator of Mollusks Jim McLean participated in the annual meetings of the Western Society of Malacologists (WSM) at California State University in Fullerton, June 23-29, and the American Malacological Society at Cornell University, Ithaca, New York, July 19-23. At both meetings he presented his nearly completed research "Revision of World Liotiidae, Recent and Fossil (Gastropoda: Vetigastropoda)." The museum-sponsored Pacific Conchological Club hosted an evening reception for the WSM that was attended by Lindsey Groves, Jim McLean, Malacology associates Phil Liff-Grieff and Pat LaFollette, and Malacology volunteers Robert Moore and Shawn Wiedrick.

External Funding

Crustacea

The National Science Foundation has awarded Dr. Jody Martin, Chief of the Division of Invertebrate Studies and Curator of Crustacea, a supplemental grant of \$110,500 for additional work on his “Assembling the Tree of Life: Decapoda” project. The supplement will allow for significant development of the bibliographic and full text database initiated during the first part of the grant project. That database provides researchers on the systematics of crabs, shrimps, lobsters, and related crustaceans with a centralized digital resource for the accumulated information that defines species, genera, and other taxa in the group (available at <http://decapoda.nhm.org/references>). This supplement is important for two reasons: first is the actual funding that it provides for the work; second is the strong signal it sends from the National Science Foundation of the value and validity of making primary research papers publicly available under U.S. copyright “Fair Use” guidelines.

Mammalogy

Jim Dines, Collections Manager of Mammalogy, was awarded a grant for \$69,700 from the National Marine Fisheries Service in support of the museum’s Marine Mammal Program. Funds from this grant will be used to enhance our efforts to collect specimens and associated data from dead-stranded whales and dolphins.

Vertebrate Paleontology

Jack Tseng, graduate student in residence in Vertebrate Paleontology, received an NSF Doctoral Dissertation Improvement Grant in July for his project on the functional morphology of hyaenids and canids. The grant is being used in part to pay for a full license of imaging and reconstruction software, which he uses to convert CT scans into 3D models. He will also use the grant to travel to the American Museum of Natural History in New York, the Natural History Museum in London, and the Muséum national d’Histoire naturelle in Paris to examine specimens and collect data for his doctoral dissertation.

Public Outreach

Curators Cupboard Events

Staff from Research & Collections participated in *three* Curators Cupboard events this summer. Each had a theme — Water, Air, and Land — and each was a collaboration with Public Programs and their Junior Scientist program.

The “Water” event was hosted by Anthropology and Ichthyology, with additional participation from the Cabrillo Marine Aquarium. The Dinosaur Institute, Ornithology, and History were presenters at the “Air” event, while Rancho La Brea, Herpetology, and Entomology were featured on the “Land” day.

A wide range of R&C staff delighted visitors with their specimens and expertise, centered around each theme. Additionally, the curatorial staff spent lots of time with the kids, to the mutual enjoyment of all. See below for further details from individual sections.



Entomology Curator Brian Brown with Junior Scientists at the “Land” Curators Cupboard event.

Anthropology



Jennifer Saracino behind the display at the Curator's Cupboard

The Anthropology Department participated in several events as part of the museum's weekend programming over the past few months. The Curator's Cupboard on July 18th had a water theme, so Margaret Hardin, Chris Coleman, KT Hajeian, and Jennifer Saracino brought out a selection of objects from the Inuit of Alaska and from the Northwest Coast Native Americans. These objects demonstrated some of the innovative technologies that these cultures developed to more effectively utilize their aqueous environments. The seal intestine parka from Alaska proved to be a big hit with the visitors!

History

The Seaver Center staff participated in the summer Curators Cupboard that focused on the theme of "Air." The collections materials displayed included Amelia Earhart's flight log (at right) and photographs from several aviation events and air races of the 1920s and 30s. This Curators Cupboard provided the opportunity to exhibit the recent donation of 1910 Dominguez Air Meet stereoviews from the Hathaway-Garbutt Family Collection. It was also the first showing of images from the Carroll Photo Service Collection, 1925-1947, currently being processed by Seaver Center Project Database Manager Brent Riggs.

Carroll/Schliepper 40-day endurance flight, Rosamund Dry Lake Bed in the Owens Valley, 1939.



Pilots and navigators before the 1929 Women's National Air Derby, a cross-country race that originated at Clover Field in Santa Monica and ended in Cleveland. Marvel Crosson (4th from left) was killed two days later when her plane crashed in Arizona.



Seaver Center Collections Managers John Cahoon and Betty Uyeda with Volunteer Seung Lee (far left) at the summer "Curators Cupboard" public program.



B Movies and Bad Science

History



The History Division, in conjunction with staff from Public Programs, R & C science divisions, and Education, concluded another successful season of *B Movies and Bad Science*. Six scientifically flawed

films selected by the History Department (many thanks to all for the suggested titles!) were shown in the Museum Auditorium on Sunday afternoons, followed by a Q & A session with an appropriate staff specialist: *The Monster That Challenged the World* (Lindsey Groves, Collections Manager, Malacology), *Beginning of the End* (Brian Brown, Curator, Entomology), *The Flying Serpent* (Jennifer Saracino, Curatorial Assistant, Ethnology), *Volcano* (Lindsey Groves; George Davis, Vertebrate Paleontology; Trevor Valle, Assistant Lab Supervisor, Page Museum; and Andrea Thomer, Senior Excavator, Page Museum), *Godzilla vs. Mothra* (Brent Karner, Associate Manager, Entomology Exhibit, Education), and *Reptilicus* (Luis Chiappe, Director, Dinosaur Institute).

The season highlights included an onstage “homage” to *Godzilla vs. Mothra*, with Brent Karner in a homemade



Movie still from *The Monster that Challenged the World*.

Godzilla costume being chased by a moth puppet on stilts, courtesy of the Dinosaur Encounters program, and the four-member panel that ripped apart *Volcano* in the best tradition



B-Movies and Bad Science staff participants for *Volcano* (L to R): Lindsey Groves (Malacology), George Davis (ex VP), Beth Werling (History) [Note the lava hat], Trevor Valle (Assistant Lab Supervisor, Page) and Andrea Thomer (Excavatrix, Page).

of *Mystery Science Theater*. Thanks to all, not only will the series return next summer with six more horrifying titles, there will also be a special holiday installment of the series this year.

Anthropology

As noted above, on July 26th, Jennifer Saracino presented the movie *The Flying Serpent* as part of the museum's successful *B Movies and Bad Science* series. This comical interpretation follows the carnage wreaked by the Aztec god Quezalcoatl, a flying serpent that must exact vengeance on behalf of a crazed archaeologist. Following the movie, Jennifer presented a more substantiated account of the Aztec myths and led the viewers on a tour through the Visible Vault to point out objects that bear reference to Quezalcoatl.

Malacology

Lindsey Groves also participated in two sessions of *B-Movies and Bad Science* this summer. *The Monster That Challenged the World* (1957) was featured on June 28th at the NHM. On August 9th he teamed up with George Davis (ex VP) and Trevor Valle and Andrea Thomer of the Page Museum for the discussion and showing of *Volcano* (1997), which featured the Tar Pits and the havoc an active volcano could wreak on Wilshire Boulevard. Beth Werling (History) was the delightful moderator for both sessions.

Anthropology

On September 12, Chris Coleman and KT Hajeian presented Peruvian textiles in the Archaeology Storeroom for groups that were participating in the Scavenger Safari. The collection managers selected objects that would help demonstrate the fabrication process and also showed the variety of the weaving techniques used in a country with a weaving tradition that stretches back 4,000 years.



A Wari textile dating to circa A.D. 700–1100



A pre-Columbian sewing basket with cotton

More Malacology!

Collections Manager of Malacology Lindsey Groves led three “Fossil Hunting in Silverado Canyon” outings in May and early June. The first (May 9th) was for museum members, and the second two (May 30th and June 6th) were for the museum Fellows. A total of 124 participants (38 members and 86 Fellows) collected Turonian (Late Cretaceous) fossils from the Baker Canyon and Holz Shale members of the Ladd Formation. Fellows were treated to a PowerPoint presentation about the Silverado Canyon area geology en route, a catered lunch afterwards at nearby Santiago Oaks Regional Park, and a preview showing of *The Monster That Challenged the World* on the return trip to NHMLAC, which was featured in this summer’s *B-Movies and Bad Science* series. Many thanks to colleagues Cathy Groves (Echinoderms), George Davis (ex VP), Harry Filkorn and Mary Stecheson (IP), and Robin Savoian, Christyann Evans, and Kim Kessler (Education) for their expertise and professionalism in the field. Special thanks to Alana Flanigan (ex Fellows Program



LACM staff (and friends) at Silverado Canyon collecting site (L to R): Kim Kessler (Education), Christyann Evans (Education), Lindsey Groves (Malacology), Mary Stecheson (IP), Ted Stecheson (spouse of Mary), and George Davis (ex VP).



Manager), Erin Romo (Membership), Desiree Ocampo (Membership), and Danielle Brown (Advancement) for their logistical prowess and innovations for the Fellows trips.

LACM staff at Santiago Regional Park following Fellows Fossil Hunting in Silverado Canyon outing (L to R): George Davis (ex VP), Harry Filkorn & Mary Stecheson (IP), Tom Jacobson (Advancement), Karen Wise (Executive Project Manager) Alanna Flanagan (ex Fellows Program Manager), Lindsey Groves (Malacology), Cathy Groves (Echinoderms), Erin Romo (Membership), Robin Savoian (ex Education), Jane Pisano (President & Director), Christyann Evans (Education).

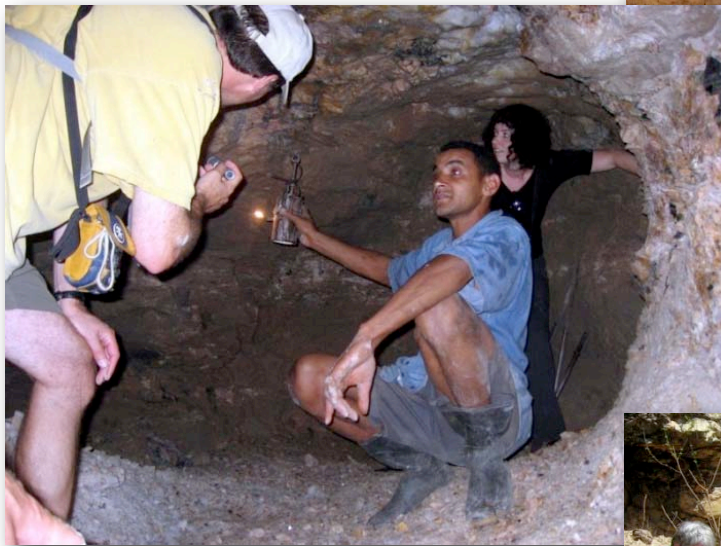
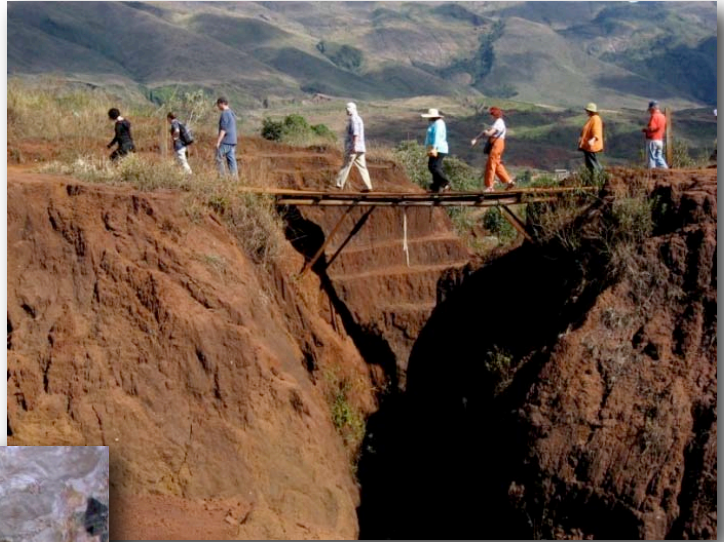
Mammalogy

Behind-the scenes tour of Mammalogy were given in May to busloads of first grade students from Longfellow Elementary School and in June to a summer session biology class from USC taught by Dr. Regina Wetzer (Crustacea). Also in June, Jim Dines participated in Career Day at Colin Powell Academy (a K-8 public school in Long Beach). Throughout the summer Mammalogy staff participated in the museum's Adventures in Nature programming by giving presentations and/or collection tours for Sophie Hunter's "Days of Darwin" class, Yvonne Nishikawa's "The Curious Case of Evolution" class, and Janet Mazon's "Mammal Mania" classes.

Mineral Sciences

Brazilian Gem Adventure

The Gem & Mineral Council held its 15th tour to the gem-rich state of Minas Gerais in Brazil from August 14 to 29. The group of sixteen, led by Curator Tony Kampf and his wife Kathy and assisted by Collections Manager Alyssa Morgan, visited more a dozen mines where they observed gem mining in action, had opportunities to dig for their own specimens, and learned about the geology and mineralogy of one of the most fascinating geologic areas in the world.



Participants had plenty of chances to buy beautiful gems and minerals along the way and at the culmination of the tour at Brazil's most famous gem show in Teofilo Otoni.

Plans are now under way for future gem and mineral tours to far-off places such as Australia and Morocco.



History

Silents Under the Stars

The Friends of Hart Park hosted their annual fundraising event at Hart Park on Saturday, August 8th. The evening included a special tour of the site's Ranch House conducted by Hart staff members Ayesha Saletore, Kristyn Van Wy, History Collections Manager Beth Werling, and a Summer Getty Intern. The highlight of the tour was the newly conserved saddle collection on display in the Saddle and Tack room. The tour was followed by dinner and a screening of the William S. Hart film *Sand*.

"Sparrows" Screening



From the Material Culture Collection: Mary Pickford's curls.

The History Division teamed with the Library of Congress, Glendale Arts, and the Alex Film Society to screen a newly restored print of Mary Pickford's gothic masterpiece *Sparrows* at the Alex Theatre in Glendale on Sunday, July 12th. Memorabilia from the Natural History Museum's Pickford collection, including the actress's famous curls were displayed in the theatre lobby for the 400 attendees to view. Collections Manager Beth Werling provided a tour of the lobby display prior to the film. Curator William Estrada, Kristen Hayashi from the Registrar's Office, and Julia Rivera from the Marketing Department assisted and participated in the day's program. The event was covered by *Variety*, the *Los Angeles Times*, and the *Glendale News Press*.



Guests enjoy a BBQ dinner before a film screening at Hart Park.

Photograph by Sheila Miller, Hart Volunteer.

Volunteers & Research Associates

Crustacea and Marine Biodiversity Center

Our summer was action packed with students and volunteers! There was lab cleaning and organizing in Crustacea, shelf label making in Polychaetes, topping off of alcoholic collections where needed, dried specimen mending, box making for fragile specimens, much specimen curation, and much, much more. Five days a week, eight hours a



day, all summer long. Thank you very much Jenessa Wall, Allison Chu, Chase Femrite, Phyllis Sun, Adam Wall, and Jonathan Sepulveda! We celebrated everyone's contributions and accomplishments with an outing to the Cabrillo Aquarium followed by a beach BBQ.

Rancho La Brea

Every year our volunteer numbers swell, and this year was no different... unfortunately we only get to see most of them for the summer months. This time around, we had a few students from out of state, and even one of the



Volunteers working in the fishbowl lab.

Stage Directors from the Los Angeles Opera. As we said goodbye to them, a new crew of volunteers was already in the queue. From jewelry designers and U.S. Postal workers, to students fresh from a field school... our ever-changing crew is certainly full of interesting individuals working 7 days a week on full public view.

History

Rachel Barnes, a UCLA graduate student working on her master's degree in Library & Information Science, has joined the History Division as a volunteer in the Museum Archives. She is working with Archivist Cathy McNassor sorting collection materials and boxing architectural plans. Rachel is currently learning how to write museum accession descriptions by working on the recently donated paintings from the museum's 1930 mural competition (see images and description of this collection under "Collection News").

Student Mentoring and Research

Conservation

From June to August, Conservation was fortunate to host a summer intern from the UCLA / Getty Conservation program. Graduate student Lauren Horelick spent over 100 hours treating a costume from the film *Annie Get Your Gun*, selected for the upcoming exhibit, *Under the Sun*. The dress was worn by Judy Garland and, later, by her replacement, Betty Hutton. Lauren stabilized tears, losses and flaking leather and also filled large areas of loss.



Above: during treatment (after stabilizing tears).
Below: after treatment (after loss compensation).



Distinguished Visitors

Malacology

Father Al Lopez (University of Central America) was back in Los Angeles for the summer to conduct research on Central American land snails while also performing priestly duties at St. Thomas the Apostle Church. Land snail specialist Lance Gilbertson (Newport Beach, CA) visited the Mollusk collection to deposit type material of a new species of urocoptid snail from Coahuila, Mexico. He also examined the collection holdings of other urocoptid snails. Karen Boyarsky (Los Angeles) visited Malacology to donate an unusually large specimen of *Turbinella angulata* [West Indian Chank Shell] that measured 395 mm in length collected from Islas Bahia, Honduras. Five students of former Malacology curator Ángel Valdés visited several times over the summer to examine nudibranch specimens and use the SEM. Richard Squires (CSU, Northridge) examined the Malacology holdings of glycymerid bivalves for comparison to fossil specimens.

Echinoderms

A Very Friendly Exchange with Venezuela



Iván Hernández, a professor from the Universidad de Oriente in Venezuela, spent three weeks in August intently working on his Master's degree research under the guidance Dr. Gordon Hendler. The productive visit was the long-delayed culmination of

an exchange of scientific correspondence begun by the two biologists in 2003. The subject of Iván's thesis research is the ecology of the brittle stars at Isla de Cubagua, which was the site of one of the earliest European settlements in the Americas. Despite the island's long history of occupation, Iván's samples from the Cubagua revealed several new species of brittle stars. Additional rare and undescribed species surfaced in samples that he brought, which had been collected from elsewhere in Venezuela during the last two decades. The surprising number of new discoveries is a consequence of the lack of attention that has been directed toward the marine biodiversity of Venezuela. In fact, Iván was astonished to find that the Natural History Museum's echinoderm collections contained the first scientific specimens of brittle stars ever found in Venezuela. He was also excited to find in our museum the only collections of deep-sea echinoderms ever made off the Venezuelan coast. Not surprisingly, Iván is already planning his next visit to the Museum, and a continuing collaboration with Gordon Hendler on the biology of Venezuelan brittle stars.

Crustacea

Drs. Julianne Kalman, (Exhibits and Collections Curator at the Cabrillo Aquarium) and Danny Tang (Postdoctoral Researcher at Hiroshima University, Japan) spent several weeks — off and on — in the crustacean and fish collections as they described a new species of chondranchid copepod (Crustacea: Copepoda: Cyclopoida) from the local fantail sole, *Xystreureys liolepis* Jordan & Gilbert. They are also redescribing a congeneric species in the gill cavity of spotfin flounder, *Cyclosetta fimbriata* (Goode & Bean) from the Gulf of Mexico. Both parasites belong to the Family Chondranchidae, a group in which the highly transformed "giant" female (~7mm) carries a much smaller male (~2mm) on her genital abdomen. It was a pleasure hosting Juli and Danny in the lab and standing by as they hovered for long hours over the compound microscope, dissecting and drawing very small copepod parts.

History

The History Division hosted a behind-the-scenes tour for the Louie family, one of L.A.'s oldest business families, whose history in the city dates back to Old Chinatown of the 1890s. David and Agnes Louie and their children were introduced to a sample of the R&C collections from the Seaver Center, Ichthyology, Entomology, Vertebrate Paleontology, and other R & C divisions. The Louie's daughter, Lindsey, is the reigning Miss Chinatown for 2009.



Above: The Louie Family with Seaver Center Collections Manager Betty Uyeda (at left).

At left: with Ichthyology Collections Manager Jeff Seigel

Recent Publications

Bracken, H. D., A. Toon, D. L. Felder, **J. W. Martin**, M. Finley, J. Rasmussen, F. Palero, and K. A. Crandall. 2009. The Decapod Tree of Life: Compiling the data and moving toward a consensus of decapod evolution. *Arthropod Systematics and Phylogenetics* 67(1): 99–116.

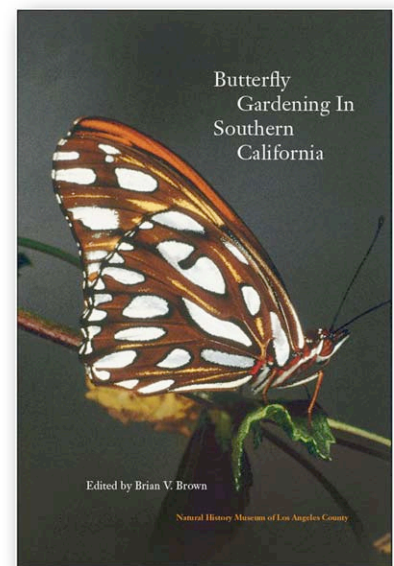
Brown, B. V. (editor). 2009. *Butterfly Gardening in Southern California*. Natural History Museum of Los Angeles County, 35 pp.

A product of our Scholarly Publications program, this booklet is an updated version of our popular, now sold-out 1999 classic that we produced to accompany the first opening of the butterfly pavilion. It allows naturalists and gardeners to identify most of the butterflies they will see in the Los Angeles basin, discusses their caterpillars and food plants, and gives suggestions about how to attract more butterflies to planted areas. We also hope it can be a model for other handbooks on backyard biodiversity that will be used as a guide not only in private yards but also in the forthcoming North Campus area.

Brown, B. V., A. Borkent, J. M. Cumming, D. M. Wood, N. E. Woodley, and M. Zumbado (editors). 2009. *Manual of Central American Diptera, Volume 1*. National Research Council Press, Ottawa, Canada. 714 pp.

Brown, B. V., A. Borkent, J. M. Cumming, D. M. Wood, N. E. Woodley, and M. Zumbado (editors). in review. *Manual of Central American Diptera, Volume 2*. National Research Council Press, Ottawa, Canada.

The Diptera, or true flies, are one of the most diverse lineages of life on our planet. With about 160,000



described species, flies make up about 10% of the known biodiversity. The greatest richness of flies is found in the New World tropics, where almost endless numbers of new species remain to be discovered. The vast Neotropical fauna has until now been considered almost untouched and certainly inaccessible to all but a few specialists.

This book project is the first resource ever assembled to allow the identification of all Central American flies (Diptera) to the genus level. A collaboration of 77 authors (43 in volume 1), the project is the culmination of eight years of work. There was extensive coordination of effort with the Costa Rican Instituto Nacional de Biodiversidad, including collaborative inventory work in the field, training of their parataxonomists, and interaction with their illustrators.

Volume 1 contains introductory chapters on natural history, phylogeny, and economic importance of Diptera, family-level keys to adults and larvae, and color photographs of each family. Then, starting with the Tipulidae (crane flies), each of the 42 families of the lower Diptera and lower Brachycera is treated, with the following sections: Diagnosis, Biology (including economic importance), Classification, Identification, Key to Genera, Synopsis of the Fauna, and Literature cited. The Synopsis section has a discussion of what is known about the taxonomy, biology, and distribution of each genus.

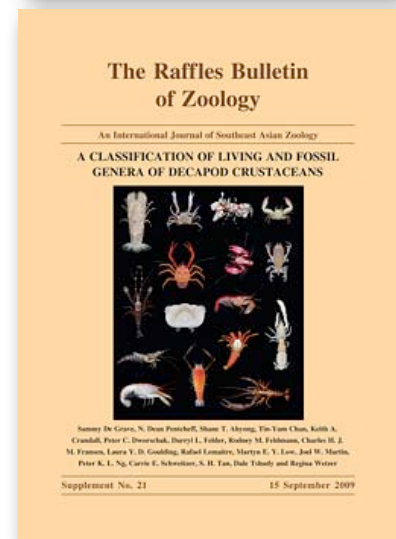
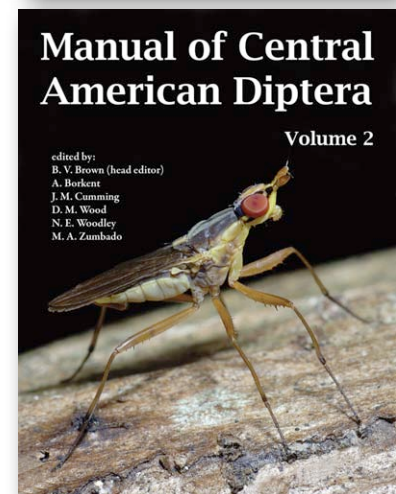
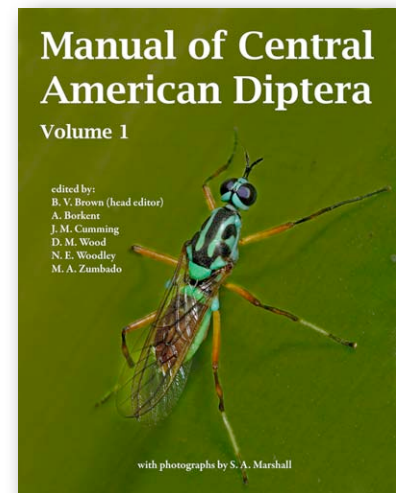
Volume 2 was submitted to the publisher in June, and is currently in review. It treats the 63 families of higher flies, or Cyclorrhapha, and will hopefully appear early in 2010.

De Grave, S., N. D. Pentcheff, S. T. Ah Yong, T.-Y. Chan, K. A. Crandall, P. C. Dworschak, D. L. Felder, R. M. Feldmann, C. H. J. M. Fransen, L. Y. D. Goulding, R. Lemaitre, M. E. Y. Low, J. W. Martin, P. K. L. Ng, C. E. Schweitzer, S. H. Tan, D. Tshudy, and R. Wetzer. 2009. A classification of living and fossil genera of decapod crustaceans. *The Raffles Bulletin of Zoology*, Supplement No. 21, 1–109.

Dean Pentcheff, Jody Martin, and Regina Wetzer are among the authors of a major new publication summarizing the classification of all decapod crustaceans (crabs, shrimps, lobsters, and their relatives). This is one product of the “Assembling the Tree of Life: Decapoda” grant from the National Science Foundation that has been funding work in the Crustacea section for several years. The paper (available at <http://decapoda.nhm.org/references/31051>) is one of the first of a new wave of publications in systematic biology that take advantage of dynamic links from within the text, allowing readers to get updated information even after the paper is published. In this case, that information includes a direct link to the full text of many of the over 1,500 references cited.

Filkorn, H. F., and J. Pantoja Alor. 2009. Cretaceous corals from the Huetamo region, Michoacán and Guerrero, southwestern Mexico. *Universidad Nacional Autónoma de México, Instituto de Geología, Boletín* 116, 1–168.

Groves, L.T. (2009) A Canadian cowry? *American Conchologist* 37(2), 4–5, figs. 1-4.



Kampf, A. R. (2009) The atomic structure of $Ba_2F_2(S^{6+}O_3S^{2-})$, a natural thiosulfate weathering product of old smelting slags at the Surrender Mill, Yorkshire. *Mineralogical Magazine* 73, 217–221.

Kampf, A. R., Rossman, G. R., and Housley, R. M. (2009) Plumbophyllite, a new mineral from the Blue Bell claims near Baker, San Bernardino County, California. *American Mineralogist* 94, 1198–1204.

Kampf, A. R. (2009) Mark Chance Bandy (1900–1963) in Bolivia—The Height of Mineral Collecting. *extraLapis English* 12, 54.

Martin, J. W. 2009. Cephalocarida and Mystacocarida of the Gulf of Mexico. Pp. 821–825 In: D. L. Felder & D. K. Camp (editors), *Volume 1, Biodiversity. Gulf of Mexico: Origin, Waters, and Biota*. Texas A & M University Press.

Martin, J. W., and T. A. Haney. 2009. Leptostraca of the Gulf of Mexico. Pp. 895–899. In: D. L. Felder & D. K. Camp (editors), *Volume 1, Biodiversity. Gulf of Mexico: Origin, Waters, and Biota*. Texas A & M University Press.

Martin, J. W., K. A. Crandall, and D. L. Felder (editors). 2009. *Decapod Crustacean Phylogenetics. Crustacean Issues 18*. CRC Press, Taylor & Francis, Boca Raton, Florida. 616 pp.

Another product of the NSF-funded “Tree of Life” project in the Crustacea lab, this impressive volume contains summary papers on decapod phylogeny from 80 authors representing 15 countries, many of whom were present at the 2008 symposium organized and hosted by Jody Martin at the SICB meetings in San Antonio, Texas.

Schnabel, K. E., **J. W. Martin**, and R. B. Moffitt. 2009. Additions to the decapod crustacean fauna of the Hawaiian Islands, III. A new species of the genus *Babamunida* (Crustacea: Galatheidae) from Hawaii based on morphological and molecular evidence. *Zootaxa* 2130: 21–30.

Seid, M.A. & **B.V. Brown**. 2009. A new host association of *Commoptera solenopsidis* (Diptera: Phoridae) with the ant *Pheidole dentata* (Hymenoptera: Formicidae) and behavioral observations. *Florida Entomologist*. 92: 309–313.

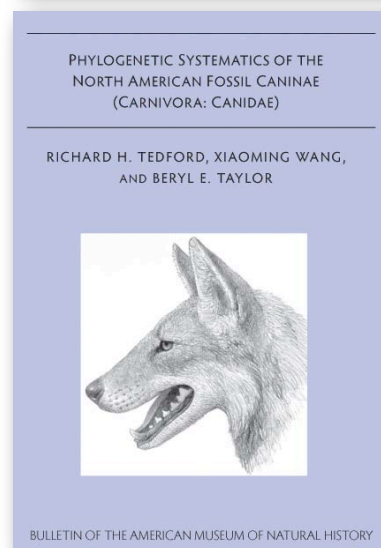
Tavares, C., C. Serejo, and **J. W. Martin**. 2009. A preliminary analysis of the Dendrobranchiata based on morphological characters. Pp. 261–279 In: Martin, J. W., K. A. Crandall, and D. L. Felder (editors). *Decapod Crustacean Phylogenetics. Crustacean Issues 18*. CRC Press, Taylor & Francis, Boca Raton, Florida. 616 pp.

Tedford, R.H., **X. Wang**, and B.E. Taylor. 2009. Phylogenetic systematics of the North American fossil Caninae (Carnivora: Canidae). *Bulletin of the American Museum of Natural History* 325:1–218.

This systematic revision deals with the fossil history and phylogeny of the canines, the subfamily of dogs that include all living canids (wolves, foxes,



Plumbophyllite



coyotes, jackals, and hunting dogs) plus their fossil relatives going back to the late Eocene about 34 million years ago. This bulletin, 40 years in the making and initiated by the senior author at the American Museum, represents the last part of a three-volume monographic treatment of North American fossil canids.

- Tseng, Z.J., G.T. Takeuchi, and X. Wang.** 2009. The first upper dentition of the sabertoothed *Barbourofelis whitfordi* (Nimravidae, Carnivora). *Journal of Vertebrate Paleontology* 29(suppl. 3):192A.
- Tseng, Z.J., X. Wang, and J.D. Stewart.** 2009. A new immigrant mustelid (Carnivora, Mammalia) from the middle Miocene Temblor Formation of central California. *PaleoBios* 29(1):13–23.
- Wang, X., G.-p. Xie, and W. Dong.** 2009. A new species of crown-antlered deer *Stephanocemas* (Artiodactyla, Cervidae) from middle Miocene of Qaidam Basin, northern Tibetan Plateau, China, and a preliminary evaluation of its phylogeny. *Zoological Journal of the Linnean Society* 156:680–695.
- Wang, X., Z.-d. Qiu, Q. Li, Y. Tomida, Y. Kimura, Z.J. Tseng, and H.-j. Wang.** 2009. A new early to late Miocene fossiliferous region in central Nei Mongol: lithostratigraphy and biostratigraphy in Aorban strata. *Vertebrata Palasiatica* 47(2):111–134.
- Wetzer, R., J. W. Martin, and S. L. Boyce.** 2009. Evolutionary origins of the gall crabs (family Cryptochiridae) based on 16S rDNA sequence data. Pp. 479–490 *In:* Martin, J. W., K. A. Crandall, and D. L. Felder (editors). *Decapod Crustacean Phylogenetics. Crustacean Issues 18.* CRC Press, Taylor & Francis, Boca Raton, Florida. 616 pp.

Miscellaneous

Mammalogy

The American Society of Mammalogists appointed Collections Manager Jim Dines to chair the Society's Marine Mammal Committee. The committee is charged with keeping the Society's general membership informed on conservation and legislative issues pertaining to marine mammals, maintaining and encouraging interest in marine mammalogy, and spearheading resolutions and legislation involving marine mammals

History

In June, History Curator William Estrada's book *The Los Angeles Plaza: Sacred and Contested Space* (University of Texas Press, 2008) received the California Book Award's Gold Medal for Californiana by the Commonwealth Club of San Francisco. The Commonwealth Club's Annual California Book Awards, among the most prestigious literary awards in the state of California, have honored the exceptional literary merit of California writers and publishers since 1931. *Congratulations, Bill!*



Dr. Estrada and his family at the San Francisco awards ceremony in June 2009.

Museum Archives

Construction documentation

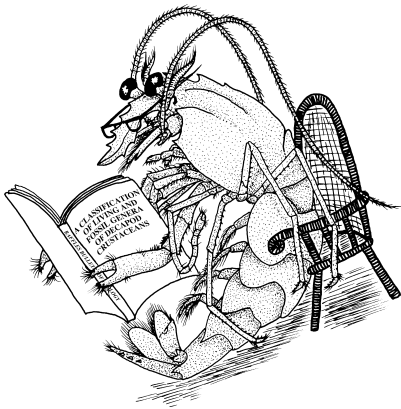
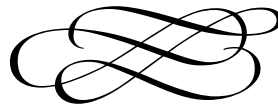
Museum Archivist Cathy McNassor continues to document the building construction that is transforming our galleries, the museum's façade, and the surrounding landscape.



South face, April 29, 2009.



South face, June 10, 2009.



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.

Editor: Dr. Joel W. Martin, Curator of Crustacea and Chief of the Division of Invertebrate Studies.

Layout: N. Dean Pentcheff, Research Associate, Crustacea.

All issues of the newsletter may be found at:
<http://collections.nhm.org/newsletters>