

Research & Collections Newsletter



May 2011

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

History

The Chinese Historical Society of Southern California (CHSSC) generously donated a suite of artifacts from L.A.'s Old Chinatown, which from 1870-1938 was located at the present site of Union Station. During construction of the Metro Red Line from 1989-1991, material from Old Chinatown was excavated and placed under the care of the CHSSC. In April, Los Angeles Exhibit team members William Estrada and Kristen Hayashi worked with CHSSC Board Member Eugene Moy to curate a selection of utilitarian items, some of which date back to the late 19th century. Among the selected artifacts are glass medicine vials, "Go" game pieces, a soy sauce jar, porcelain spoons, a porcelain rice bowl, and a wooden toothbrush. The artifacts will be used to tell the story of Los Angeles's early Chinese American community in NHM's upcoming Los Angeles history exhibition, scheduled to open in 2012.



Mammalogy

The spring months often bring an increase in the number of marine mammals that wash ashore dead along our nearby coast, but this year has been particularly busy for Mammalogy's Marine Mammal Program. Twenty four dolphins stranded in Los Angeles and Orange counties during the month of April, about as many as typically strand in an entire one year period. As part of our investigation into why these dolphins stranded and died, complete necropsies

were performed on each carcass and various tissue samples were collected and archived for analysis. Samples tested by colleagues in Dr. David Caron's lab at USC showed that these dolphins had highly elevated amounts of domoic acid in their bodies. Domoic acid is a naturally occurring biotoxin produced by certain plankton associated with Harmful Algal Blooms. The poisonous domoic acid accumulates in the food chain when the plankton are consumed by schooling fish such as anchovies and sardines, which are in turn eaten by predators like pelicans, sea lions and dolphins. Domoic acid causes neurological damage in dolphins and other marine vertebrates, typically leading to seizures and death. In addition to the dolphin deaths we have been investigating, more than 100 California sea lions have died as a result of domoic acid poisoning during the same time in the same geographic region.

Meetings, Workshops, and Presentations

Vertebrate Paleontology

In mid-April, Xiaoming Wang gave an invited lecture at General Shale Brick Natural History Museum of East Tennessee State University about the origin of the megafauna of Tibet. The on-site museum, where the Gray Fossil Site is located, is the second collection to have North American fossil red pandas (for a long time ours was the first and only museum to possess a panda fossil from a North American locality). Xiaoming took this opportunity to work on collaborative projects on fossil pandas and badgers. Shown above is a complete skull of a fossil badger, *Arctomeles dimolodontus*, from the Gray Fossil Site.



This badger is a distant relative of the living hog badger (*Arctonyx*) of southeast Asia and South China, evidence of the paleobiogeographic link between eastern North America (where the fossil was discovered) and southeast Asia during the Miocene and Pliocene (4 to 7 million years ago).

Malacology

Lindsey Groves and Jim McLean attended the 15th annual gathering of SCUM (Southern California Unified Malacologists), which was held on Saturday, March 5th, at SCCWRP (Southern California Coastal Water Research Project) headquarters in Costa Mesa, California. SCUM is an annual gathering of professional, student, and amateur Malacologists, Conchologists, and Molluscan Paleontologists to exchange ideas about research interests. Malacology associates Ángel Valdés, Lance Gilbertson, and Pat LaFollette and volunteers Robert Moore and Shawn Wiedrick also attended the gathering.

History

On Tuesday, March 29th, History Department Collections Manager Beth Werling gave a talk at the William S. Hart Museum on location filming in the Santa Clarita and San Fernando Valleys to the District Representatives for the

State Assemblymen of those regions. John Cahoon, Collections Manager in the Seaver Center, attended the annual general meeting of the Society of California Archivists held in San Jose from April 28 – April 30.

Crustacea

On March 24, Dr. Jody Martin, Curator and Division Chief, was the invited Pascal Society Lecturer at Westmont University in Santa Barbara, where he spoke on the interaction of science and faith through history and on current trends in the acceptance of evolutionary biology by the U.S. public.

Anthropology



Anthropology and History Division Chief, Dr. Margaret Hardin was asked to present a paper in a symposium at a meeting of the Society for the Anthropology of Religion in Santa Fe, New Mexico, April 28th - May 1st, 2011. The symposium title was *Sacred Commodities: Religious Materialism in Contemporary Markets* and Dr. Hardin presented a paper entitled *Zuni Fetish Carving Market in the Late 20th Century*. Zuni fetishes have been Dr. Hardin's primary research focus of late and at this museum she has a lot of material to draw from since the Anthropology collection boasts the largest collection of Zuni fetishes in the world!

External Funding

Marine Biodiversity Center

Emma Freeman received a \$1000 grant to attend the Society for the Preservation of Natural History Collections (SPNHC) 26th Annual Meeting to be held at the California Academy of Sciences in San Francisco, May 23-28. The theme this year is "Sustainable Museums – Sustaining Collections." Her award was based on the quality of her oral presentation submission. We are delighted Emma will be representing the NHM.

Public Outreach

Marine Biodiversity Center

Kathy Omura and Emma Freeman, along with Kimball Garrett (Ornithology), led three 15-minute tours for the March First Fridays. The tours highlighted the gorgonian, or soft coral, case in the *What on Earth?* exhibit. The "question" side of the case features a beautiful large purple sea plume (*Pseudopterogorgia* sp.) from Florida. The "answer" side features a smaller orange sea whip (*Psammogorgia* sp.). Kathy and Emma discussed what makes these corals animals (rather than plants or minerals), as well as their lifestyle, habitat, and structure.



Malacology, Invertebrate Paleontology, Entomology, Marine Biodiversity Center, & Scholarly Publications

Science Festival 2011: R&C once again participated in the Science Festival at the Paramount Ranch portion of the Santa Monica Mountains National Recreation Area. Kathy Omura and Emma Freeman (Marine Biodiversity Center) exhibited intertidal invertebrates and explained the various intertidal habitats commonly seen in southern California. Vertebrate and invertebrate fossils found on the NPS property and throughout the Santa Monica Mountains were exhibited by Mary Stecheson (Invertebrate Paleontology). Brian Brown (Entomology) exhibited common insect species of the area, and Entomology volunteers Janet Kempf and Anna Holden conducted a spider survey of the area. Two bird walks were conducted by Kimball Garrett (Ornithology), who also exhibited mounted specimens of a number of Santa Monica Mountains bird species. Entomological publications were offered for sale by Vicky Brown (Scholarly Publications) including the newest museum booklet *Flower Flies of Los Angeles County* by Brian Brown, James Hogue, and F. Christian Thompson. Invasive and native terrestrial and freshwater mollusks were exhibited by



Lindsey Groves (Malacology) with an emphasis on the New Zealand Mudsail [*Potamopyrgus antipodarum* (Gray, 1853)], which has invaded the Malibu Creek watershed.

Left: IP: Mary Stecheson describing fossils exhibited at the Science Festival to a young visitor.

Right: MBC: Kathy Omura & Emma Freeman discussing intertidal invertebrates with Science Festival participants.



Left: Malacology: Budding biologist at the Science

Festival examines the invasive New Zealand Mudsails.



Below: R&C participants in the Science Festival [l to r], Back row: Emma Freeman (MBC), Lindsey Groves (Malacology), Kimball Garrett (Ornithology), Brian Brown (Entomology). Front Row: Kathy Omura (MBC), Mary Stecheson (Invertebrate Paleontology), Kristen Metzger (Education & Exhibits), Brayden Moore (E&E). Not in photo: Vicky Brown (Publications), Anna Holden, and Janet Kempf (Entomology)



History

On March 8th, the Library of Congress sent a team of photographers to shoot motion picture costumes in the History Department's collection for a book on silent film star and

United Artists founder Mary Pickford. The book is scheduled to be published in 2012, and will include an essay by Collections Manager Beth Werling about Mary Pickford's use of costume.

The History Department is continuing its successful First Fridays behind-the-scenes tour of its automotive collection in Gardena. Tours are currently sold out through September.

The History Department lent artifacts to Los Angeles's newest museum, *LA Plaza de Cultura y Artes*, which opened on April 16th. Artifacts include goblets once used at the Pico House, a cowbell, and a branding iron. The Seaver Center also provided photographs for the exhibit and for the invitational program.

The Seaver Center also provided eleven historic photograph reproductions for the lobby exhibit at the Atwater Village Theatre's world premiere theatrical production of *The Chinese Massacre (Annotated)*. The play is based on a true incident in L.A. in 1871, and the photographs provide a glimpse back into what Los Angeles and Chinatown looked like during the time. The playwright happens to be NHM's very own Tom Jacobson, Senior Vice President of Advancement. Tom is a prolific writer whose body of work has had more than 50 productions locally and around the country. The History Department as well as the collections housed in the Seaver Center served as important resources for Tom's research on the history of Los Angeles and the massacre.



Atwater Village Theatre lobby exhibit of Seaver Center photo reproductions.



On opening night April 22nd of The Chinese Massacre (Annotated); pictured is Tom Jacobson (center) with Seaver Center collections managers Betty Uyeda (left) and Brent Riggs (right).

Vertebrate Studies

Cal State Long Beach students taking Dr. David Huckaby's course in Vertebrate Zoology visited the Museum in April for an up-close look at the animals they studied in class. Collection tours and presentations were given by Nefti Camacho (Herpetology), Jeff Seigel (Ichthyology), Jim Dines (Mammalogy) and Vanessa Rhue (Vertebrate Paleontology).

Crustacea

On Saturday March 5, Dr. Jody Martin (Curator and Division Chief) spoke at a Museum Collector's Circle Salon (a special event for Museum Fellows) at the beautiful home of Tom and Angie Thornbury in the famed Bird Street section of the Hollywood Hills.

Mammalogy

Collections Manager Jim Dines gave collection tours to two university classes in March, first to a group of students from USC taking Dr. Amy Parish's class on Darwin studies and later in the month to Dr. Gwen Goodmanlowe's marine biology students from Cal State Long Beach.

Mineral Sciences

On March 12th, the Minerals Sciences staff and 10 volunteers from the Gem and Mineral Council participated in *Art+Science: Gems and Minerals*. This event focused in on the “hidden worlds” of microscopic minerals and microscopic inclusions in gemstones. Alyssa Morgan displayed some spectacular specimens from the Museum’s vast collection of micromounts. Council gemologists showed museum guests the tools used to see and identify inclusions in quartz, sapphires and diamonds. Microscopic fun was had by all!



Alyssa Morgan, Stuart Mills and Tony Kampf participated in a Curator’s Cupboard on March 19th (see photo at left). The event, called *The Evolution of Minerals*, focused on presenting a history of our planet using rocks and minerals formed at critical stages of development from the time of planetary formation through the origins of life to the present day. Specimens displayed spanned approximately 4.5 billion years and included the oldest solar system minerals in chondritic meteorites. A popular piece was a beautiful 2 billion year old marine sedimentary rock that records the emergence of algae blooms that

created earth’s oxygen rich atmosphere. Also shown were ancient diamond and zircon crystals and Hawaiian lavas that erupted... practically yesterday!

Vertebrate Paleontology

On March 4, Vanessa Rhue, Curatorial Assistant, presented a paleontology lecture to an assembly of 6th to 8th grade students at Stevenson Middle School in East Los Angeles. A student from the Advancement Via Individual Determination (A.V.I.D.) program had written to our Museum requesting that a paleontologist speak to her class. The A.V.I.D. program is an elective class that focuses on preparing students for the rigors of a college curriculum. The students were able to touch real fossils from our Vertebrate Paleontology collections, and learn about how to pursue a career in paleontology.

On 16 April Niko Heyning (at right) visited Vertebrate Paleontology seeking the identity of a fossil fish (held by VP Laboratory Supervisor Howell Thomas, on left) that he had collected from the Palos Verdes Peninsula.

Rancho La Brea

On March 9th all the R&C staff of the Page Museum along with the Marketing and Communications staff greeted over 40 reporters at the Project 23 compound. After initial remarks by Dr. John Harris and Shelley Cox the reporters were invited up into the tree boxes to see the fossils *in situ* and to interview staff. They then headed up to the lab in the Museum to continue interviews and see some of the new finds after they have been curated. The Associated Press story, which ran early that morning, reached over 230 media outlets including local, national and international newspapers including the *LA Times* as well as national and international websites and blogs. The initial list of broadcast coverage included ABC, Univision, NBC, Fox, KNX, NRP and KPFK.



Rancho La Brea was also featured on *InTheMO*, which is an online video-based local search guide to the “Best of” lists and recommended spots in different cities. Trevor Valle’s interview can be found at: <http://www.inthemo.com/spots/ca/los-angeles/la-brea-tar-pits---page-museum>

More Vertebrate Paleontology

On 25 March Museum Trustees Diane Naegele (at left) and Elizabeth Troy (center) visited the Vertebrate Paleontology Department for a behind-the-scenes tour to see methods that we used in the presentation of specimens that are exhibited in the Age of Mammals hall. Here Xiaoming Wang shows original specimens and replicas of the paleoparadoxiid exhibited in the hall. The fossil represents a new species, being named by Lawrence Barnes. Diane is an organizer of the Dinosaur Ball, and the common name of the giant extinct cat, *Felis atrox*, “Naegele’s giant jaguar” recognizes her contributions to our programs.

On 30 March, Museum Fellow Monica Shaffer toured the Department of Vertebrate Paleontology with her daughter Claire, and her parents.



Los Angeles Festival of Books

The LA Festival of Books, held this year for the first time on the campus of the University of Southern California, featured a booth from the Museum, the first year of an anticipated long-term relationship. R&C authors John Long (Vice President of R&C) and Jody Martin (Invertebrate Studies / Crustacea) were on hand on Saturday to sign copies of their books and interact with the public.

Student Mentoring and Research

Entomology

Lívia Rodrigues Pinheiro, a Ph.D. candidate at the Laboratório de Sistemática de Lepidoptera, Museu de Zoologia, Universidade de São Paulo, Brazil, spent four days in late April studying our collection of ctenuchine tiger moths. Los Angeles was her first stop on a five-week tour of the major U.S. institutions that have significant collections of these colorful yet taxonomically challenging moths. Although her thesis project is a revision of the genus *Heliura*, thanks to her knowledge of the Neotropical fauna she was able to identify a significant number of our “U.F.O.s.”



Volunteers and Research Associates

Anthropology

The Anthropology Department is proud to congratulate Anna Campomanes on receiving a Certificate of Outstanding Achievement for the amazing work she has done as a volunteer. Her award was presented at the Volunteer Recognition Event at the Page Museum on April 14, 2011. Anna certainly deserved her award; we calculated that as of Wednesday, April 27, Anna had already amassed over 300 hours working with our department! Within her 300 hours Anna has helped the Anthropology Department measure, photograph and re-house approximately 450 historic archaeological objects from the North Campus construction site, 795 artifacts from ancient cave sites in the American Southwest and captured about 1180 legacy data records from accession sheets for the Cherry African material. She has entered all of this information into our KE Emu database. Her projects also have included making over 60 boxes and house mounts for artifacts on her own and helping us clean the *Visible Vault* exhibit furniture and artifacts that were dusty from nearby construction.



The Anthropology Department also assisted graduate student researcher Ina Celaya from the Department Information Studies at UCLA in her efforts to try to define the reasoning behind how our museum's African collection was divided when LACMA opened in 1965. Her visits always sparked very interesting discussions because at least for Anthropology, the decisions for what stayed here at NHM and what went to LACMA were generally based on the opinions of what constituted "art" at that time, opinions which have and will always change over the course of time and with the cultural perceptions that they reflect. While she was here, Ina pored over our department's archival files from that time and talked with Curator Emeritus Charles Rozaire, who shared his memories of the split.



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Vertebrate Paleontology

At the Museum's Volunteer Recognition Event, held on 14 April at the Page Museum, the 2011 Volunteer of the Year Award for Vertebrate Paleontology was presented to Hiromi Gibbs (shown here painting a replica fossil skeleton), in recognition of the splendid work that she did sculpting and painting specimens for the *Age of Mammals* hall, as well as for other work that she has done for the Department. Several specimens in the *Age of Mammals* bear her work. Also recognized that evening for their many years of volunteer service to the Department of Vertebrate Paleontology were Debora Lee and Donna Dameron.

Rancho La Brea

On April 14th, the Annual Volunteer Recognition Night was held at the Page Museum. The event was very successful due to the hard work by the VRN Committee; Margi Bertram, Ayesha Salvatore, Julie McAdam and Shelley Cox. After a delicious dinner, the formal part of the evening began with remarks by Dr. Jane Pisano and Dr. John Harris. This was followed by a PowerPoint presentation by Excavator Laura Tewksbury about the new discoveries from Project 23. Trevor Valle was MC for the awards. Page R&C staff celebrated Harry Williams' service. Harry (at a spry 89 1/2 years old) has been volunteering in the Fishbowl since December of 1987. The Lab and Excavation Staff held a "show and tell" with some of the tools and items that Harry has made over the years (from stools and tool boxes for Pit 91, to Smilodon-inspired salad tongs) while he was being honored. In a twist, the Lab and Excavation staff kept it as a surprise: Harry did not know he was the Honoree until he read his name in the program. The Page Staff are honored and spoiled by having such wonderful volunteers work with us.



Shelley Cox presents volunteer Harry Williams with his volunteer of the year award.

On April 11th, Fishbowl lab volunteer Dixie Swift was celebrated as the Page Museum's Adult Honoree at the 2011 Volunteer Recognition and Awards Luncheon for Los Angeles County at the Dorothy Chandler Pavilion. After having a nice lunch with members of the R&C Staff and her family, Dixie received her Honoree's Certificate, signed by members of the County Board of Supervisors. In just over two years, Dixie has donated well over 1,000 hours of volunteer service. She takes on any project given to her with passion and pride in her work. The R&C Staff of the Page feels truly honored to have such an amazing volunteer.



Distinguished Visitors

Anthropology

On March 8, Anthropology Collections Manager KT Hajeian provided a tour for actress Chloe Moretz, her mother Terri, and brother Brandon (in picture). The visit was organized by KT's mother, Laura Torrance, who works with Chloe as her Studio Teacher and is her education provider and on set labor guardian. Some may recognize Chloe from her recent films *Kickass* (2010) and *Let Me In* (2010), both films that showcase her versatile acting abilities and sometimes gritty "tom-boyish" charm. She is certainly on her way to becoming a household name given the big projects she's been working on. In 2010 she finished working in London with director Martin Scorsese for the upcoming 3-D film *Hugo Cabret*, she is currently working in North Carolina on film called *Hick*, and as soon as she is finished there she is scheduled to travel back to London to work on director Tim Burton's next project, *Dark Shadows*.

Malacology

Research Associate Ángel Valdés visited Malacology with grad students Jackson Lam and Jen Speed to use the SEM facility and examine the nudibranch collection. Kaustuv Roy (University of California San Diego) examined the malacology holdings of the bivalves *Mytilus californianus* and *Donax gouldii* for research purposes. California State University Los Angeles anthropology grad student Amira Ainis used the Malacology collection to compare Recent specimens with specimens found in middens on the Channel Islands. Naturalist Leslie Gray (California State Parks) brought in specimens of terrestrial snails from the Baldwin Hills Scenic Overlook for identification. As expected, two were the introduced species *Helix aspersa* (Müller, 1774) and *Otalia lactea* (Müller, 1774), and surprisingly one was the native species *Succinea avara* (Say, 1824).

Vertebrate Paleontology

On 9 March, Dr. Oscar Carranza (photo at right), of the Universidad Nacional Autonoma de Mexico in Mexico City, visited to study fossil land mammals. Dr. Carranza has a long relationship with our Museum, and his doctoral research included many of our specimens, especially those from Mexico in the CalTech acquisition.

On 15 March, the late Harley Garbani, long-time associate of our Museum and member of many Museum expeditions in the western United States and Mexico, visited accompanied by family and friends. Here Mr. Garbani, (photo below, seated center), his wife Mary, Vertebrate Paleontology Collection Manager Samuel McLeod, and two of Harley's friends, pose in the Museum Foyer with the *Tyrannosaurus* and *Triceratops* skeletons which Harley found and collected.



The week of 11–18 April, Dr. Bruce J. Welton visited to conduct research and to help curate some of our fossil sharks. From December 1977 to mid-1980 Dr. Welton was Assistant Curator of Vertebrate Paleontology in charge of our fossil fish collections.

From 11 to 17 April, Dr. Jonathan Geisler, professor at the New York College of Osteopathic Medicine, visited to study our collections of fossil dolphins with Curator Emeritus Lawrence Barnes. Dr. Geisler is culminating his studies of the evolutionary history of the Delphinida (dolphins, porpoises, belugas, etc.) with support from an NSF grant on which Barnes is a research collaborator.

In the photo below right, visitors Dr. Jonathan Geisler and Dr. Bruce

J. Welton discuss with Lawrence Barnes specimens of the extinct whale family Aetiocetidae, early tooth-bearing relatives of modern baleen whales. Dr. Welton collected the larger dark-colored skull on the left, which was named in his honor by Barnes, *Aetiocetus weltoni*, in the 1995 issue of *Island Arc*, which Barnes edited, a copy of which lies on the table. Dr. Geisler has also studied the relationships of this same group of whales.



Rancho La Brea

Dr. Virginia Naples from the Department of Biological Sciences at Northern Illinois University and her graduate student Lindsey Koper visited the collections at Rancho La Brea in March for 9 days. Dr. Naples was continuing her research on saber-toothed cat limb morphology and preparing for her upcoming book release *The Other Saber-tooths* this summer. Lindsey is using the dire wolf collection for her Master's thesis on reconstruction of dire wolf limb morphology.

Dr. Michael Storrie-Lombardi, executive director of the Kinohi Institute, sampled material from the current Project 23 excavations in connection with a project for detecting indications of life on Mars.

Dr. Melanie Fillios of the Australian Center for Microscopy and Microanalysis at the University of Sydney visited the Page Museum collections to contrast the taphonomy of the Rancho La Brea assemblages with that of the late Pleistocene Cuddie Springs fauna of New South Wales.



Graduate student Lindsey Koper from NIU measuring a dire wolf scapula.

The RLB department hosted Drs. Eloise Gaillou (Smithsonian Institution) and Stuart Mills, who each visited the collections and excavations as part of the interview process in the search for the Associate Curator, Mineral Sciences, position.

Members of the Tunnel Advisory Committee of the Metropolitan Transit Authority and geotechnical consultants Mactech met with RLB staff to help plan mitigation of fossil resources that may be impacted by the construction of the Wilshire/Fairfax and Wilshire/La Brea stations for the proposed Westside Subway Extension down the Wilshire Corridor.

Recent Publications

Housley, R. M., **Kampf, A. R., Mills, S. J.**, Marty, J., and Thorne, B. (2011) The remarkable occurrence of rare secondary tellurium minerals at Otto Mountain near Baker, California — including seven new species. *Rocks and Minerals* 86, 132-142.

Kampf, A. R., Mills, S. J., Rossman, G. R., Steele, I. M., Pluth, J. J., and Favreau, G. (2011) Afmite, $\text{Al}_3(\text{OH})_4(\text{H}_2\text{O})_3(\text{PO}_4)(\text{PO}_3\text{OH})\cdot\text{H}_2\text{O}$, a new mineral from Fumade, Tarn, France: description and crystal structure. *European Journal of Mineralogy* 23, 269-277.

Landau, B.M. & **Groves, L.T.** 2011. Cypraeidae (Mollusca: Gastropoda) from the early Miocene Cantaure Formation of northern Venezuela. *Novapex* 12(1-2):1-38, figs. 1-172, text figs. 1-13.
This paper includes descriptions of 11 new fossil cowry species.

Mills, S. J., Rumsey, M. S., Favreau, G., Spratt, J., Raudsepp, M., and Dini, M. (2011) Bariopharmacolumite, a new mineral species from Cap Garonne, France and Mina Grande, Chile. *Mineralogical Magazine* 75, 135-144.

Tseng, Z. J., J. L. McNitt-Gray, H. Flashner, **X. Wang**, and R. Enciso. 2011. Model sensitivity and use of the comparative finite element method in mammalian jaw mechanics: mandible performance in the gray wolf. *PLoS ONE*, 6(4):e19171.

Uno, K. T., T. E. Cerling, **J. M. Harris**, Y. Kunimatsu, M. G. Leakey, M. Nakatsukasa, and H. Nakaya. 2011. Late Miocene to Pliocene carbon isotope record of differential diet change among East African herbivores. *Proceedings of the National Academy of Sciences*, 108(16):6509-6514.

Stable isotopes preserved in the teeth of fossil mammals from the northern Rift Valley of Kenya document the sequential transition from browsing to grazing in horses (first), rhinos, elephants, hippos, antelopes, pigs, and short-necked giraffes (last) as C₄ grasses radiated towards the end of the Miocene.

Wang, X., and P. Li. 2011. A new fossil site with a re-worked Paleogene assemblage at Baogeda Ula, central Nei Mongol. *Vertebrata Palasiatica*, 49:114-122.

Staff Departures and New Staff

We are saddened to record the retirement of four stalwart members of the Research and Collections Branch—Chris Shaw, Tony Kampf, Larry Barnes, and Jeff Seigel.

Christopher A. Shaw joined Los Angeles County service in 1977 as a curatorial assistant at the George C. Page Museum at the La Brea Tar Pits, where he was promoted to Collections Manager in 1987. He helped mount the skeletons displayed in the Page Museum and those for the travelling exhibit “Treasures of the Tar Pits” that celebrated the 75th anniversary of the County’s Natural History Museum and toured nationally and internationally for over a decade. He oversaw the excavation of Pit 91, which doubled the number of animal and plant species known from the La Brea tar pits, training the excavators in techniques peculiar to asphaltic fossil deposits, serving as an authority for similar excavations in Venezuela and elsewhere, and sharing his expertise with museum staff, docents, students, and professional colleagues. He has managed the collections of the world’s richest Ice Age fossil site, the type locality of the Rancholabrean North American Land Mammal Age, making these available to the international scientific community and earning the 2009 Morris F. Skinner Award from the Society of Vertebrate Paleontology for outstanding and sustained contributions to scientific knowledge through the making of important collections of fossil vertebrates.

Dr. Anthony R. Kampf has had a similarly lengthy career with the museum, joining its staff as Assistant Curator of Mineralogy in 1977 and being promoted to Associate Curator in 1978 and to Curator in 1980. He helped build the museum’s collection of gems and minerals from 20,000 specimens in 1977 to 150,000 specimens in 2010 and it now constitutes the best overall mineralogical collection in the western United States. His investigations of mineral chemistry and crystallography has led to over two hundred scientific papers, in which



he has named over sixty new mineral species. He played a major role in the creation of the museum's world-renowned Gem and Mineral Hall in 1978 and also the Deutsch Gallery of Gem and Mineral Formation in 1985. He was instrumental in creating the Gem and Mineral Council in 1985 for support of the museum's mineral programs, and during his service with the museum has provided many public lectures and field trips both for museum programs and for those of the Gem and Mineral Council. His international recognition includes participation in the International Mineralogical Association Commission on New Minerals, Nomenclature and Classification, election to the Board of Directors of the Society of Mineral Museum Professionals (Vice President 1985-89, President 1989-91 and 2001-03), the 1986 American Federation of Mineralogical Societies Scholarship Foundation award for Distinguished Service in the Earth Sciences. He serves on the editorial boards of *Mineralogical Record*, *Gems and Gemology*, and *Rocks and Minerals*.

Dr. Lawrence G. Barnes has had an even longer association with the museum, participating in its programs while still in high school, joining its staff as Associate Curator of Vertebrate Paleontology in 1972, rising to Curator in 1975, and periodically serving as section head of Vertebrate Paleontology. His fieldwork and research with an international circle of colleagues significantly enhanced the museum's collection of fossil marine mammals, resulting in over 300 publications on whales, dolphins, seals, sea lions, walruses, sea cows, desmostylians and beach bears in which he named more than 40 new species plus 26 new genera, 12 new subfamilies, 4 new families and 2 superfamilies of marine mammals. He has actively participated in the museum's public programs, serving as instructor to science workshops and docent training programs, providing public lectures and seminars, publishing in the museum's *Terra* magazine, contributing to a variety of travelling exhibits and providing major input to permanent museum exhibits including the *California Fossil Hall*, the *Hildegard Howard Hall* and, most recently, the *Age of Mammals Hall*. He is a charter member of the Society for Marine Mammalogy, a member of the Society of Vertebrate Paleontology, the Mexican Paleontological Society and the Mexican Marine Mammal Society. A visiting professor at the state universities in Ensenada and La Paz and at the marine institute of CICIMA in La Paz, he has served on the committees of more than a dozen graduate students, and has been actively involved with resource management and mitigation and in constructing policies for the protection of fossil resources.

Chris continues his association with the museum as a Research Associate. Tony and Larry will each be continuing his museum-based research as a Curator Emeritus. So they won't be going away and you should expect to see them around for a long time!

Jeff Seigel, Collection Manager of Ichthyology, is retiring on May 5th after 31 years of honorable service to the Museum and moving on to a new job. Jeff is extremely knowledgeable about fishes and a fun person to work with, a combination always displayed during his many tours of the collections to school groups and employees alike. During his time at the Museum, Jeff not only processed loans, assisted visiting researchers, and participated in many outreach activities, but also was a part of many major collection projects. He helped move the entire fish collection twice, and the Costa Rican Herpetology material, and was part of the collection data digitization for both



sections, as well as the fungus decontamination and skeleton rehousing. He is known for his work with sharks and anglerfishes, and has also become quite an authority on freshwater fishes including mosquitofish and Mojave Tui chub. Jeff always kept us laughing throughout the day and will be missed sorely. Good luck Jeff in your new career!

Vertebrate Paleontology

Dr. Michael Williams, who was an employee on the Age of Mammals exhibit project, has been hired to assist the Museum with reorganization of oversized specimen storage for the Vertebrate Paleontology Department collections.



Miscellaneous

In Memoriam

The Passing of Mr. Harley J. Garbani on 21 April 2011

By Samuel A. McLeod, Collections Manager, Department of Vertebrate Paleontology

Harley J. Garbani, long time Museum supporter, volunteer, associate, and employee, passed away on 21 April 2011.

At an early age Harley discovered and began collecting fossils and artifacts, and he remained an avid prospector and collector of archaeological objects and paleontological specimens for the rest of his life.

Harley began his association with our Museum in 1953, when he met the young Curator of Vertebrate Paleontology, Dr. Theodore Downs, and donated some camel and pronghorn antelope fossils that he had collected from the Pliocene Mt. Eden Formation near his home in San Jacinto in Riverside County. In January of 1954 Harley joined a field trip to the Anza-Borrego Desert, led by Ted Downs, collecting many vertebrate fossils from the Pliocene and Pleistocene deposits there, including two specimens of fossil tortoise that have been published in the scientific literature. Harley continued to accompany Ted Downs on expeditions to the Anza-Borrego region for the next three decades, collecting almost 2,500 fossils.

After Ted Downs was appointed Earth Sciences Division Chief, and Dr. J. Reid Macdonald was hired as Curator of Vertebrate Paleontology, Harley in 1964 began accompanying Reid Macdonald on summer field trips to the early Miocene deposits of South Dakota.

Beginning the next summer, in 1965, Harley also undertook the first of five expeditions to the Hell Creek Formation in Montana to collect dinosaur fossils for the Museum under the sponsorship of Mr. and Mrs. William T. Sesnon, Jr. Mr. Sesnon served on the Museum Board of Governors from 1949 until 1967, and served as President of the Board from 1951 through 1966. Among the nearly 600 specimens that were collected by Harley from the Hell Creek Formation, nearly 40 have been published in the scientific literature, including specimens of fishes, turtles, crocodiles, mammals, and birds, in addition to the classic dinosaurs. Among the dinosaur specimens collected by Harley are the fighting dinosaurs in the Museum Foyer, and the *Tyrannosaurus rex* growth series and *Triceratops* skeleton that will

be featured in the new *Dinosaur Hall* opening in July of 2011. Although Harley did not live to see the opening of the new *Dinosaur Hall*, we were able to give him a sneak preview in March when some of the specimens he collected were already installed.

In 1971 Harley accompanied Dr. William J. Morris of Occidental College on expeditions to collect dinosaurs and Cenozoic marine fossils for the Museum from various deposits in Baja California. Harley took along Christopher A. Shaw, now retired as Page Museum Collection Manager, to collect fossils from the early Pleistocene El Golfo deposits in Sonora, Mexico in 1979. Harley also collected vertebrate fossils for the Museum from late Cenozoic deposits in Guanajuato, Nyarit, and Sonora in Mexico.

Although he had no formal academic training, Harley possessed a natural talent for discovering vertebrate fossils that surpassed that of most professional paleontologists. He was one of the avocational paleontologists who make great contributions to the scientific discipline without conducting any research. Recognizing his contributions, the Society of Vertebrate Paleontology in 1990 honored Harley as the first recipient of the Morris F. Skinner Award for “outstanding and sustained contributions to scientific knowledge through the making of important collections of fossil vertebrates”. We are proud to have had Harley Garbani as an Associate of our Museum for over 50 years, and we will miss him greatly.

The photo below shows an elated Harley J. Garbani in Montana, in 1966, holding the lower jaw of the *Tyrannosaurus rex* skeleton that is now displayed in our Museum Foyer.



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