

Research & Collections Newsletter



January 2012

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

Ornithology

Two collection visitors made use of the collection's extensive series of songbird specimens during their late December visits. On 9 December Russell Greenberg from the Smithsonian Institution's Migratory Bird Research Center took measurements of some 200 Song Sparrows (*Melospiza melodia*), including our important series of extinct subspecies from Santa Barbara I., San Clemente I., and Los Coronados Is. Jay McEntee of the Museum of Vertebrate Zoology spent 28 and 29 December taking data on nearly 200 African sunbirds of the Eastern Double-collared Sunbird species complex in the genus *Cinnyris*.

On 15 December, a local biologist and snipe-hunter, Erick Burres, brought in a snipe he had recently shot in the San Jacinto Valley of Riverside County; his suspicions that the bird was a Eurasian Common Snipe (*Gallinago gallinago*) rather than the North American Wilson's Snipe (*G. delicata*) were confirmed by close comparison with specimens in our collection; this establishes the first record of this species from California, or anywhere in North America away from western Alaska and Labrador. A tissue sample was preserved, and we are hoping that the specimen – to be prepared as a taxidermy mount – will eventually be donated to the museum. The photograph (above) shows one of the key identifying characters of this cryptic species – a relatively broad white trailing edge to the secondary feathers of the wing (compare with the Wilson's Snipe at right).



Ichthyology

Fred Binkowski donated some juvenile lake sturgeon (right) that were raised from eggs at the University of Wisconsin Great Lakes Water Institute.

Experience the Science!

“Experience the Science” on December 2, offering a hands-on role in ongoing research and collections care at the Museum, was a great success! Three invertebrate sections — Polychaetes, Crustacea, and the Marine Biodiversity Center — benefited from 16 Education and Exhibits, Advancement, and Events and Filming staff volunteers.

Volunteers rehousing polychaetes gained insights into the necessity of curation — all the while getting glimpses into the vast diversity of marine worms, from worms with intimidating jaws to sand-grain tubes held together with worm slime. Topping-off ethanol preserved collections in the Crustacea Collection room offered a peek at crustaceans large and small — juicy and edible or small and best enjoyed as science. Approximately 700 jars were topped off in Crustacea in just one afternoon! Reorganizing scientific publication reprints was most productive too. Thousands of reprints were assessed, and duplicates were culled, organized, and curated. Hurrah for creating space.

In a single afternoon, R&C staff benefited from 24 man-hours of volunteer time while offering an opportunity to get into the bowels of the Museum — behind the scenes, contributing to the much needed work of collection care and meeting some of the Museum collection staff. Hopefully those who participated had fun and met new Museum staff they had not previously had occasion to meet except as a name on the NHM phone list.

We are most grateful to all who participated for giving back to our valued Collections and their overworked collection staff! Kudos and thank you go to Jared, Emi, Brayden, Vanessa, Mariana, Desiree, Katie, Danielle, Mike, Jason, Lindsay, Nicole, Gina, Kristina, Molly, and Chris. If you didn't have a chance to get behind the scenes this time, no need to worry. Look for another “Experience the Science!” event later in the year.

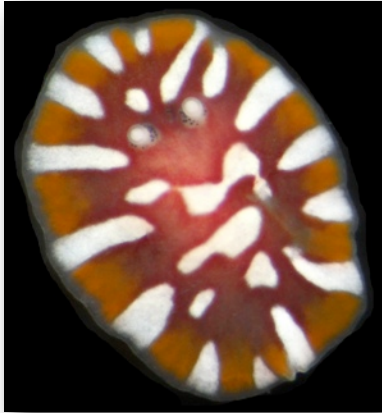
Polychaetes

After two years of recuration and data acquisition, our polychaete type collection and its associated catalogue has been completely renovated. Types are our most valuable specimens, each type representing the standard to which all specimens bearing the same name must match. Our collection is second in size and significance only to the Smithsonian in the U.S. and ranks among in the top tier world-wide. Since 1988, when the Allan Hancock Foundation polychaete collection with its 1485 type lots was incorporated into the NHMLAC holdings, the number of our types has nearly doubled. Leslie Harris, with the help of Kathy Omura (Marine Biodiversity Center), has recurated the types by double-vialing each lot (an exacting process followed by few museums: the specimens are put into a small vial, which, along with the labels, is then placed into a larger vial in order to protect them from pressure damage), documented the historic labels, placed everything into highest museum-grade glassware with new labels, and fully annotated their collecting information. The types were then placed into innovative foam block holders which will prevent the jars from striking each other or falling during earthquakes.



The catalogue will be one of the first data sets to be entered into the Marine Invertebrate Section's new Specify database when it debuts later this year.

Also in Polychaetes, as a result of her three-week collecting trip in Vostok Bay, Russia, Leslie has brought back 250 lots of worms for our collection. They were identified in collaboration with Russian experts, carefully relaxed in magnesium chloride prior to fixation to prevent distortion, and preserved in 95% ethanol. This will allow them to be



A pretty little (1.5 mm long) flatworm (undescribed?) with clusters of eyes at the base of its sensory tentacles.

used for both morphological and genetic studies. Many of the worms and other specimens were photographed to document their living color. There's not much information available for the Russian general public on marine inverts so Leslie and her Russian colleagues are planning to produce a guide to the local fauna which will incorporate some of these images.



A small amphipod crustacean, Pleustes incarinatus.



An unusual polychaete worm, Diplocirrus nicolaji, showing the mouth, gills, and feeding palps.

Research Library

The NHM Research Library was visited by Richard Huffine, U.S. Geological Survey national library director. He also had a tour of the Mineral Sciences department



(pictured at left) where Alyssa Morgan showed off some of the collection. Looking on (from left to right) are Research Library graduate student volunteers Melanie Tran (UCLA), Seth Porter (SJSU) and Carol Srivongse (SJSU).

Some renovations have continued in the Research Library with a new library office built and a separate collection processing area created (some of which is shown in the photo at right). It is anticipated that these areas will be occupied by mid-

January 2012. While this physical change is underway, a new electronic library management system was licensed and is currently undergoing testing and planned to be made available to Museum staff soon.



Echinoderms

Two important new echinoderm acquisitions

Dr. Jeffrey Bozanic, a Museum Research Associate collaborating with Gordon Hendler (Curator of Echinoderms), contributed two important collections at the close of 2011. In November, Gordon secured permits from Florida Keys National Marine Sanctuary, authorizing Jeff to gather, photograph, and preserve nearly 300 specimens of brittle stars from the Sanctuary, including several poorly known species of tropical brittle stars that were originally collected from the Keys in the 18th century. The fresh material that Jeff obtained will allow Gordon to compare individuals from the Floridian “type locality” with specimens from other Caribbean sites. In December, Jeff was invited to participate in a diving expedition to South Georgia Island, a forbidding land mass between the tip of South America and the Antarctic Peninsula, with high biodiversity but freezing temperatures. Fortunately, the Executive Officer of the Government of South Georgia and the South Sandwich Islands kindly issued the necessary



Portrait of Jeff Bozanic gathering a sample of Antarctic sea stars from a frigid kelp bed off the coast of South Georgia Island.



collecting and export permits in response to our last-minute request. Thanks to generous help provided by the Shallow Marine Surveys Group of the Falkland Islands and by the Oceanwide Expeditions ship *MV Plancius*, albeit with very limited cooperation from the local weather, Jeff was able to make 9 dives up to 60 ft., and collected almost 100 samples of antarctic sea stars and numerous other marine invertebrates.

A 9-armed sea star that Jeff collected broods its young, like many Antarctic echinoderms, rather than broadcasting its eggs into the plankton. Jeff's close-up photo of an inverted star reveals the multi-rayed juveniles that are clumped together beneath the mouth of their mother.

Field Work

Entomology

In December, Brian Brown and Giar-Ann Kung traveled to Rondonia, in the southern Amazonian part of Brazil. There, they caught up with their Brazilian colleagues Dalton Amorim, Danilo Ament, and Paula Riccardi, and engaged in two weeks of fieldwork. They were in two main sites: Monte Negro, about 250 km south of Puerto Velho, and directly across the Rio Madeira from Porto Velho. Based on other groups of organisms, the Rio Madeira is a major biogeographical barrier, so we were interested to see whether there were obvious species changes on either side (we don't know anything for sure yet). Many new specimens were collected, and new observations made on ant decapitating flies. Much of the trip was documented on Brian's blog, www.flyobsession.net.



A tropical cactus fly on Brian's hand.

Vertebrate Paleontology

Xiaoming Wang spent a week in mid-December in the San Jose del Cabo Basin at the southern tip of Baja California Sur, Mexico, joining vertebrate paleontologist Oscar Carranza-Castañeda and geologist Jorge Aranda-Gomez from Universidad Nacional Autónoma de Mexico. The San Jose del Cabo Basin is a rift basin that formed during the opening of the Gulf of California during late Miocene and Pliocene time, and sediments in the basin contain a mixture of marine invertebrates and terrestrial vertebrates. The objective of the field work was to document the sedimentary history and chronology as revealed by fossils.



A handful of fossil shells from the Rancho Algodonis locality, Refugio Formation, San Jose del Cabo Basin, Baja California Sur.

Polychaetes

Leslie Harris spent most of October at Vostok Station, a marine research facility near a tiny village with the unlikely name of “Avant-garde” (translated from the Russian), reached by a three hour drive over dusty country roads from Vladivostok, Russia. The setting (right)



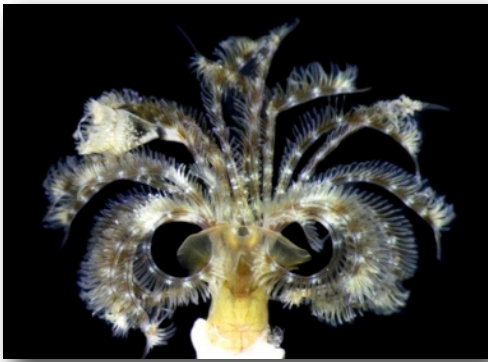
was reminiscent of New England — quite a contrast to the more tropical areas where she usually works.

The event was a Rapid Assessment Survey for invasive species sponsored by the North Pacific Marine Science Organization (PICES), a consortium made up of representatives from the US, Canada, Russia, Korea, China, and Japan. This particular survey focused on three groups of marine organisms — polychaetes, crustaceans, and seaweed. Survey organizer Dr. Vasily Radashevsky (A.V. Zhirmunsky Institute of Marine Biology) — a frequent visitor to the NHMLAC’s polychaete section — was joined by 19 taxonomists and 1 administrator. Leslie was delighted to find herself one of seven polychaete specialists hailing from Japan, Korea, Russia, and the US. The



highlight of the one-week survey was the constant flow of information between the participants as they collected and identified their beloved critters. Some of the Russians found the experience so invaluable that they stayed on for an extra two weeks to continue the exchange with Leslie and her collecting buddy, crustacean and invasive species expert Dr. John Chapman (University of Oregon).

Other notable events included being presented with a live 40-pound Giant Pacific Octopus (*Enteroctopus dofleini*) while visiting a seaweed farm,



finding many worm species that also occur in California (*Hydroides ezoensis*, left), and the survey's concluding banquet where that same octopus played a starring role (it was delicious).

John and Leslie's last three days were spent at the Zhirmunsky Institute, working on identifications, gathering literature to take home,

doing presentations and discussing mutual interests with colleagues such as Drs. Alexander Zvyagintsev, head of the institute's division of Invasive Species Research, Inna Alalykina (polychaetes), & Marina Nekrasova (polychaetes).

Leslie, Inna, and Marina, flashing the "Worms are Wonderful" hand sign in front of the Zhirmunsky Institute.



Crustacea and Marine Biodiversity Center



Adam Wall, Phyllis Sun, and Regina Wetzer surveyed vernal pools in San Diego with Fish and Wildlife Service personnel for specimens of the endangered fairy shrimp *Branchinecta sandiegonensis*. These amazing animals, representatives of an odd group of freshwater crustaceans, live their entire short life cycle of just a few weeks in vernal pools. These small, short lived pools form only after particularly heavy winter rains and then evaporate away. As soon as the pool fills, the fairy shrimp, other crustaceans, and some insects hatch in great numbers. Sometimes fairy shrimp will appear in small pools just a few inches deep by the thousands, seemingly overnight, hatching from desiccation-resistant eggs laid the

last time the pool held rain water, be that last year or many years ago. Just like mythical fairies these remarkable shrimp really do seem to appear out of nowhere! This survey is a first step in a habitat restoration project intended to restore back to a functional state this now rare vernal pool habitat in the midst of an urban housing development. This is badly needed to ensure the future of these amazing but sadly endangered creatures.

Echinoderms

A series of unfortunate events

Gordon Hendler (Curator of Echinoderms) is shown enroute to count and measure surviving purple sea urchins (*Strongylocentrotus purpuratus*) at the edge of Malibu Lagoon Reef. During this fall he resumed a study of sea urchin mortality, which he had initiated in 2010. Once again this year a multitude of dead urchins washed onto nearby Surfrider Beach immediately after the season's first rainstorm. The number killed in 2011 (about 2,000) was only about one-tenth the number exterminated during last year's extraordinary event, but the repeated mass mortalities clearly call for further investigation.



Meetings, Workshops, and Presentations

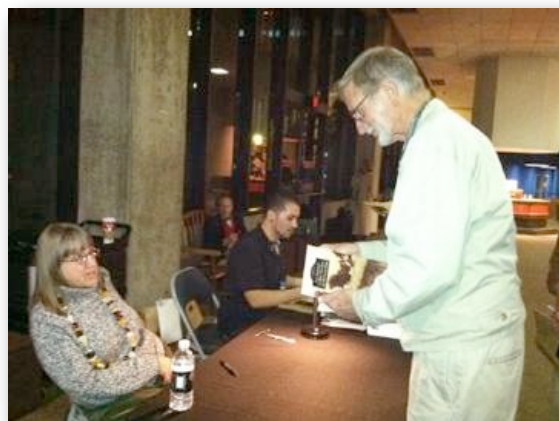
Dr. John Long Awarded Research Medal of the Royal Society of Victoria

John Long had a quick trip back to Australia in December to receive the research medal of the Royal Society of Victoria, an annual award given by the society for peer-reviewed research based on past 5 years outputs. He delivered his lecture to about 120 people on “Pragmatic Paleontology,” outlining recent cutting edge applications of paleontology and some possible future directions for the discipline. John launched his new book *Frozen in Time — Prehistoric Life in Antarctica* at the Melbourne Aquarium on December 10th, then spent a week working in the Research School of Earth Sciences at the Australian National University in Canberra completing two research papers, one announcing the world’s oldest tetrapod fossils from a site in SE Australia, the other on a new Gogo acanthodian fish.

At right: John receives the Royal Society of Victoria annual research medal from the President, Prof Lynn Selwood, December 8, 2011. The Royal Society of Victoria, formed in 1854, is one of Australia’s oldest scientific societies.

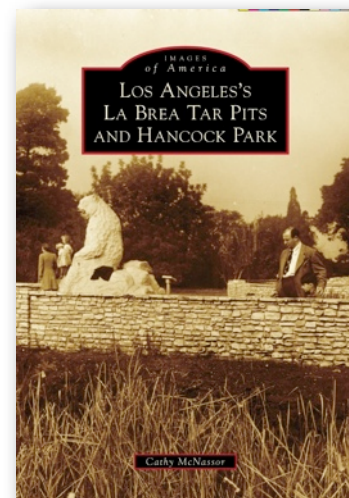


History



On the evening of December 15th, Cathy McNassor presented her talk, “An Eclectic History of Hancock Park” at the George C. Page Museum and afterwards participated in a book signing. The presentation was in conjunction with the publication of her book, *Los Angeles’s La Brea Tar Pits and Hancock Park*. The book is in the “Images of America” series of local history books produced by Arcadia Publishing and features 213 historic photographs of La Brea.

Ms. Cathy McNassor, along with another Arcadia Publishing author, E.J. Stephens, was interviewed by Patt Morrison on her radio program on December 26th. The segment was aired live and featured discussion of the La Brea Tar Pits and of Griffith Park.



Vertebrate Paleontology

The 71st annual meeting of the Society of Vertebrate Paleontology was held from 2 to 5 November in Las Vegas, Nevada. Attending from the Department of Vertebrate Paleontology were John M. Harris, Xiaoming Wang, Lawrence Barnes, Samuel A. McLeod, and Vanessa R. Rhue. Xiaoming presented a paper, co-authored with Jack Tseng and Gary Takeuchi, titled, "Did the megafauna originate from Tibet? Cold-adapted Pliocene fauna from Zanda Basin suggests origin of Ice Age megaherbivores in high plateau". Vanessa presented a poster titled, "The making of the Age of Mammals: A behind the scenes look at exhibit preparation and display". Vanessa also volunteered at the preparators table to answer questions about preparation and to share a slide show of fossils as they were being prepared for our Age of Mammals exhibit in our preparation lab. Oscar Carranza-Castañeda (Research Associate), Xiaoming Wang, and Jorge Aranda-Gomez also delivered a poster entitled "Importance of the Juchipila Fauna (late early Hemphillian, HH2), state of Zacatecas, in the biostratigraphic correlation of the Hemphillian faunas of central Mexico".

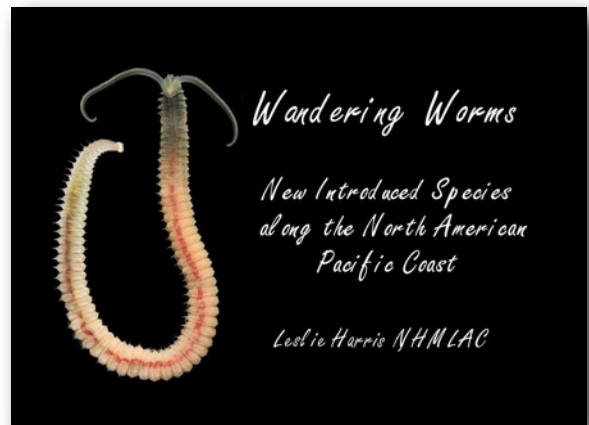
In late November Xiaoming Wang was invited to give a keynote speech on "Neogene biostratigraphy and geochronology of Asia" at the World Conference on Paleontology and Stratigraphy in Nakhon Ratchasima, northeastern Thailand. This conference was held to celebrate the 84th birthday of His Majesty King Bhumibol Adulyadej, a monarch beloved by the people of Thailand. Xiaoming presented a cast of a *Smilodon fatalis* skull and jaw as an official gift to the crown princess, Her Royal Highness Maha Chakri Sirindhorn, who presided over the opening ceremony of the meeting.

Polychaetes

In September Leslie Harris was an invited speaker at the 3rd Biennial Mexican Polychaete Symposium in Chetumal, Mexico. The first of her two talks was on the history of the Allan Hancock Foundation (USC) and its formative contribution to the NHMLAC's polychaete section. (In fact, the AHF collections make up a major part of our marine invertebrate holdings, not just polychaetes.)

Her second talk was on an introduced worm species new to the US Pacific coast.

After the conference was over she stayed on a few more days to work with colleagues and students. A month later in October, Leslie presented a talk during her visit to the A.V. Zhirmunsky Institute of Marine Biology on the relevance of international collaboration and museums to the taxonomy of marine biodiversity surveys.



Research Library



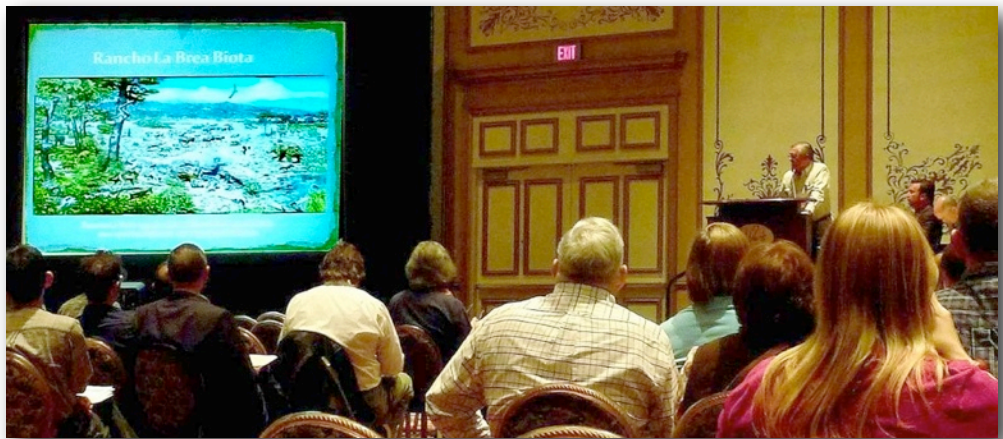
Chief librarian Richard Hulser participated in the Biodiversity Heritage Library (BHL) conference held at The Field Museum in Chicago in November 2011. During that meeting he had an opportunity to have discussions on possible projects and potential subscription licensing collaborations with museum library colleagues from across the United States including (left to right in picture) Rebecca Morin — California Academy of Science, Wendy Wasserman — Cleveland Museum of Natural History, and Christine Giannoni — The Field Museum and also the BHL conference site host.

Rancho La Brea

The 71st Annual Meeting of the Society of Vertebrate Paleontology was held in Paris, Las Vegas from November 2nd-5th 2011. Rancho La Brea staff who attended the meeting were Dr. John Harris, Shelley Cox, Aisling Farrell, Carrie Howard, Gary Takeuchi, and retired Collections Manager Christopher Shaw. Dr. John Harris presented (with Aisling Farrell, Carrie Howard, Kim Scott, and Christopher Shaw) a talk titled *Contributions from Project 23 to our understanding of the Rancho La Brea biota*, and Gary Takeuchi was co-presenter (with Evgeny Popov) on a poster *Miocene — early Pliocene chimaeroid fishes (Holocephali, Chimaeroidei) from California and a review of the global Neogene chimaeroid diversity and distribution*.

Eight other talks or posters were presented by other researchers on specimens from the Rancho La Brea collections during this year's meeting.

Dr. John Harris presenting a talk at the 71st Annual Meeting of the Society of Vertebrate Paleontology at Paris, Las Vegas.



External Funding

Echinoderms

A \$10,000 contract for taxonomic identification of arctic echinoderms was awarded to Gordon Hendler (Curator of Echinoderms). The support will be provided by the University of Alaska Fairbanks through a grant from the National Polar Research Board. The contract, arranged in collaboration with Dr. Bodil Bluhm, a biological oceanographer at UAF, will fund our 2-year study of specimens that were collected in the 1970's by Dr. Andrew Carey (Oregon State University), and acquired by the museum in 1999. The forthcoming investigation is part of a larger project intended to acquire data on the fauna of the Beaufort Sea, a region that is under intensive scrutiny to gauge the effects of climate change. Our identifications will help provide a baseline for the 1970's that can be compared with current surveys and used to assess biological response to changes and stresses in the environment.

Public Outreach

Ornithology

Ornithology Collections Manager Kimball Garrett provided background quotes for two Los Angeles Times articles about recent bird events. One reported on an Asiatic songbird called the Red-flanked Bluetail (*Tarsiger cyanurus*), which was found by biologists on San Clemente I. on 6 December for only the second North American record away from western Alaska; the bird was later captured and impaled by a shrike — with the recovered

remains going to the San Diego Natural History Museum. See:

<http://www.latimes.com/news/local/la-me-bluetail-20111210,0,7864168.story>

A second story reported briefly on a mortality event in Utah involving Eared Grebes, small diving birds that are sometimes driven aground while migrating in inclement weather.

Rancho La Brea

On November 21st Cathy Gilbert, great granddaughter of J.Z. Gilbert, visited the Page Museum. J.Z. Gilbert, a pioneer in recognizing the importance of the asphalt deposits at Rancho La Brea was a zoology teacher at Los Angeles High School in the early 1900's. He was the first person to create local interest and monetary support for the excavations at Rancho La Brea through the Southern California Academy of Sciences and the Los Angeles County Board of Supervisors. Beginning in 1907, he periodically brought a work force of students to collect fossils and in 1910 he directed the excavation of a large "Academy Pit". This excavation served as the nucleus of the fossil vertebrate collections at the Natural History Museum of Los Angeles County.

Cathy Gilbert, great granddaughter of J.Z. Gilbert, in the Fishbowl Lab at the Page Museum



Herpetology

The field zoology class from El Camino City College came in to tour the Herpetology Collection to view mostly local southern California species along with some exotics.

Rancho La Brea



Dr. Ken Campbell presenting an overview of Rancho La Brea birds for the Page Museum docents.

R&C staff Dr. Ken Campbell and Dr. John Harris recently gave brown bag lunch time talks to the Page Museum docent and volunteers' to further their professional development. On November 17th Dr. Ken Campbell presented an overview of the bird fauna from Rancho La Brea and some of his recent research. On December 8th Dr. John Harris gave an update on some recent findings from Project 23. Based on the positive responses and the success of these talks organized by Anna Holden in Education, more are being planned for the New Year.

Ichthyology

Bob Grove's Ocean Science class from the Art Center College of Design of Pasadena toured the Fish Collection in November to gain insight into collections and their role in the study of biology. Also, David Huckaby brought his Vertebrate Zoology class from the California State University at Long Beach in November to look at various groups of fishes, including lungfishes, sharks, gulper eels and anglerfishes.

History

Holidays at the Hart

To get into the Holiday Season, the William S. Hart Museum decked its halls with decorations for all visitors to enjoy! Hart Museum Staff and Volunteers wrapped exhibit rails with garlands and placed boughs of holly to get all in the festive spirit. Additionally, the History staff members Ayesha Saletore and John Cahoon teamed with Hart Museum staff to exhibit one of Hart's formal jackets and vests for the holidays as well as a special display of historic holiday cards. Take note that the holiday cards are not those that one would purchase at the local market. The custom holiday cards were created by a few of Hart's friends who happen to be famous artists!

Pictured is a Christmas greeting from Joe DeYong who was a contemporary of Charles M. Russell. DeYong was a famed artist as well as a movie consultant for films such as Shane. (Image courtesy of the William S. Hart Collection, Los Angeles County Museum of Natural History)



Mineral Sciences

On December 7th, approximately ninety 3rd and 4th grade students from the UCLA Lab School visited Mineral Sciences for a special workshop. The students were learning about rocks and minerals and came to the museum armed with some very sophisticated questions. Discussions covered techniques of mineral identification, uses of minerals in society, chemical compositions and molecular structures! This was a fun and amazing experience for staff and students alike.

Rose Parade First!



Vertebrate Paleontology

On 31 December Samuel A. McLeod (left) and Vanessa R. Rhue volunteered to help decorate the City of Los Angeles Rose Parade float, which featured the façade of the 1913 building with representations of the dinosaurs *Triceratops*, *Tyrannosaurus* and *Mamenchisaurus*, all of which can be seen in the Museum.

Research Library

Other Research & Collections folks also helped decorate the City of Los Angeles Tournament of Roses Parade float. At right, Chief librarian Richard Hulser is shown applying a seaweed cover on the *T-Rex* toenail.



Echinoderms

Return of the Haunted Museum!

The Echinoderms Laboratory showcased twinkling “stars” at the Halloween program. The display featured a brilliant video of luminescent brittle stars that was recorded on the Belizean Barrier Reef. The underwater movie, which Martin Dohrn (Ammonite Films) and Prof. Jim Morin (Cornell University) permitted us to premier, was released later in November in a National Geographic program called “*Hunt for the Giant Squid.*” Gordon Hendler and Helena Bowman, shown here in the Haunted Museum, are illuminated by a glowing sea urchin lamp (lower left corner) and observed by the herd of Caribou behind them.



Student Mentoring and Research

Vertebrate Paleontology

On 18 November Xiaoming Wang served as an “examineur” in the Ph.D. dissertation committee of Camille Grohé at the Université de Poitiers in southern France. Camille successfully defended a wide-ranging dissertation entitled “*Les Hyænodontida de l’Eocène libyen et les Carnivora du Miocène moyen d’Asie du Sud-Est: Systématique et implications paléobiogéographiques.*” In the future Camille intends to pursue postdoctoral opportunities in the U.S., possibly including some time at our Museum.

Volunteers and Research Associates

Anthropology



Please welcome Hilo Sugita who joined us as a volunteer on November 18, 2011. Currently she is a student at Pasadena City College where she is studying Anthropology and has completed an archaeological field school program on Menorca Island, Spain, this past summer. This fall she expects to transfer to a four year college to complete a degree in Anthropology. During November and December, Hilo has been busy vacuuming textiles and making house mounts for our collections.

Ichthyology

Steven Harris volunteered in the Fish Section and helped complete the curation of a California freshwater fish collection that was donated by the California Department of Fish and Game.

Research Library

The Research Library continues to get a number of volunteers this year from a variety of graduate library school programs. Seth Porter (seen here on the left with Richard Huffine from U.S. Geological Survey in the temporary Research Library office) is a graduate student in the San Jose State University library school program. He travels once a week from Huntington Beach where he is also a volunteer computer coach program coordinator at the Huntington Beach Public Library.



Distinguished Visitors

Ichthyology

Riley Buehler from the Department of Anthropology at San Diego State University visited the Fish Collection to look at skeletons of California sheephead and lingcod.

History

On November 21 the History Department hosted a tour and luncheon for Joanne Flores, Senior Program Manager, Smithsonian Under Secretary for History, Art and Culture. Ms. Flores walked around the museum with William Estrada and was very interested and pleased to learn more about our History collections and NHM's new exhibit halls. She also had an opportunity to meet Simon Adlam, Director of Exhibit Production, and was particularly pleased to learn about our ongoing progress with the Los Angeles exhibit.

Crustacea

In December, the Crustacea lab once again hosted a meeting of SCAMIT (the Southern California Association of Marine Invertebrate Taxonomists), this time featuring amphipod specialist Dr. Jim Thomas.

Anthropology

On November 1, 2011, the Anthropology Department received a visit from Vince Collison, a Haida from Old Massett, Haida Gwaii, a Northwest coast island of British Columbia. Mr. Collison has been a researcher of museum Haida collections for over 15 years as



part of an international research network that seeks to understand and improve access to historic indigenous collections for source communities. As Mr. Collison put it, "...the Haida feel that we need to embed a Haida voice wherever we find Haida collections in the world..." While he was here, we used the database to review our small but interesting

Haida collection and provided him with a CD holding the images and collection data for all of our Northwest coast items. As always, gathering the images and data in preparation for the visit proved a fun and fulfilling task, particularly because the Northwest coast style of carving is a unique and wonderful aesthetic to admire.

Malacology

Doug Eernisse and graduate student Candice Aguirre (Calif. St. Univ., Fullerton) visited Malacology to examine limpets and fissurellid gastropods. Daniel Muhs (USGS, Denver) visited to deliver samples of the Pleistocene (ca. 110-140 ka) Waimanalo Formation, O'ahu, Hawai'i for processing and fauna identification. Roger Clark (Eagle Mountain, UT) spent time in Malacology to discuss Alaskan faunas and research with Jim McLean. Caribbean turrid gastropod specialist Peggy Williams (Tallevast, FL) examined the Malacology holdings of this complex group and re-identified some lots. Associate Lance Gilbertson (Newport Beach, CA) delivered type material for a new species of helcid gastropod and examined the collection holdings of this group. Research Associate Ángel Valdés (Cal Poly Pomona) visited Malacology to examine nudibranchs for phylogenetic studies and to use the SEM facilities.

Vertebrate Paleontology

On 7 November John Denton, a post-doc at the American Museum of Natural History, visited to study some of our fossil myctophid fishes.

Rancho La Brea

Neffra Matthews, Bureau of Land Management (Branch of Resource Technology), visited the Page Museum collections on November 10th to photograph the cast of the Carson City



sloth trackway for photogrammetry. Photogrammetry is the science of obtaining precise mathematical measurements and three-dimensional data from two or more photographs. As a Geographer the majority of her work focuses on producing and integrating three-dimensional digital data with imagery for enhanced visualization and analysis.



Neffra Matthews photographing the Carson City sloth trackways at the Page Museum.

On November 9th postdoctoral student Laura Saila from the University of Helsinki, also visited the Page Museum collections in order to measure Columbian mammoth teeth. The measurements obtained will contribute towards a Proboscidean tooth wear project.

Laura Saila from the University of Helsinki measuring the angle of wear patterns on Columbian mammoth molars in the collections at the Page Museum

Research Library

Susan Hildreth, director of the Institute for Museum and Library Services (IMLS), and Los Angeles County Librarian Margaret Donnellan Todd, had a peek of the Research Library's revitalization progress during their tour of the new exhibit halls at the Natural History Museum in November 2011.

Polychaetes

Michael Reuscher, a Ph.D. student at Texas A & M under Dr. Thomas Shirley, spent most of December with us. Michael is doing a phylogenetic revision of the polychaete family Paraonidae and needed to review our type material. Our collection has 85 lots of paraonid types, many with multiple specimens & far too much to send out on loan at one time so Michael cleared his schedule to examine them here. We were able to take advantage of his expertise to host a workshop on the group for west coast polychaete taxonomists and to annotate our type catalogue.

Recent Publications

Brown, B.V. 2011. Taxonomic status of *Macrocerides* Borgmeier (Diptera: Phoridae). *The Canadian Entomologist* 143: 697-705.

Hendler, G. 2011. New light on the nomenclature, taxonomy, and biology of *Hemipholis* species (Echinodermata: Ophiuroidea: Ophiactidae). *Zootaxa* 3048: 44-52.

The unmistakable "blood brittle star," which has hemoglobin-filled red blood cells, has been saddled with the wrong scientific name since 1825, but this publication provides a solution to the pervasive error.

Kampf, A. R., Downs, R. T., Housley, R. M., Jenkins, R. A., and Hyršl, J. (2011) Anorpiment, As_2S_3 , the triclinic dimorph of orpiment. *Mineralogical Magazine* 75, 2857-2867.

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Long, J.A. 2012. Evolution, missing links and climate change: recent advances in understanding transformational macroevolution. Pp. 23-36 in "Pragmatic Evolution – Applications of Evolutionary Theory". A. Poiani (ed.), Cambridge University Press, New York.

Long, J.A. 2011. Case Studies of Intangible Natural Heritage from Museum Collections. Pp 43-55, in *Intangible Natural Heritage: New Perspectives on Natural Objects*, E. Dorfman (ed.), Routledge Press, New York +192pp.

Rakovan, J., Schmidt, G. R., Gunter, M., Nash, B., Marty, J., **Kampf, A. R.**, and Wise, W. S. (2011) Hughesite, $Na_3Al(V_{10}O_{28}) \cdot 22H_2O$, a new member of the pascoite family of minerals from the Sunday mine, San Miguel County, Colorado. *Canadian Mineralogist* 49, 1253-1265.

Stilwell, J.D. & **Long, J.A.** 2011. *Frozen in Time- Prehistoric Life in Antarctica*. CSIRO Publishing, Melbourne, HB, +238pp.

For an image of the cover or to order book, see <http://www.publish.csiro.au/pid/6431.htm>

Toshihiko Fujita, T., O. Kawase and **G. Hendler**. 2011. Rediscovery and redescription of a rare Japanese brittle star, *Amphiura multispina* (Echinodermata, Ophiuroidea, Amphiuridae). *Bulletin of the National Museum of Natural Science*, Ser. A 37: 209-215.

A brittle star species known from only a single specimen for over 130 years was rediscovered in 2010, but the new-found population may have been obliterated by a disastrous Japanese tsunami in 2011.

Staff Departures and New Staff

Invertebrate Paleontology

Please join Mary Stecheson's colleagues in congratulating her on her promotion to Invertebrate Paleontology Collection Manager. Mary has an undergraduate degree in English from U.C. Berkeley, a MLS degree from UCLA, and a MS in Geology from Cal State Northridge. She writes well, is very organized, and oversees one of our largest collections here at the Museum containing ~1,000 primary types and ~17 million non-type specimens mostly housed at the South Grand Facility.

Miscellaneous

History

Congratulations to Dr. William Estrada!

Dr. William Estrada, Chair of the History Department, and his groundbreaking 2008 book *The Los Angeles Plaza: Sacred and Contested Space*, has been included in "Reading L.A.," Los Angeles Times architecture critic Christopher Hawthorne's recently completed year-long examination of the 27 best books "that grasp the city in all its urban and architectural complexity." The book joins other works that include Louis Adamic's 1927 *The Truth About Los Angeles*; Carey McWilliams' 1946 classic *Southern California: As Island on the Land*; Reyner Banham's 1971 *Los Angeles: The Architecture of Four Ecologies*; and Mike Davis' 1990 work *City of Quartz*. Dr. Estrada, described by KCET as a 20th century historian for a 21st century Los Angeles, has provided the city with clearer definition of its origins and of the phrase "history is alive" through his work.



R & C Holiday Party Another Smashing Success

Special thanks to Terri Togia, Maria Ponce, and Salena Small who worked so diligently (along with many other volunteers from among the R&C staff) to bring it all off. At right: Cathy McNassor, research associate and former NHM librarian Kathy Donahue, and Cathy and Lindsey Groves are pictured enjoying the festivities at the R&C holiday party.

Happy New Year to all of you from the Research & Collections Staff!

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.

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

