

Research & Collections News

The Occasional Newsletter of the Research and Collections Staff
Natural History Museum of Los Angeles County

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.

January 2009

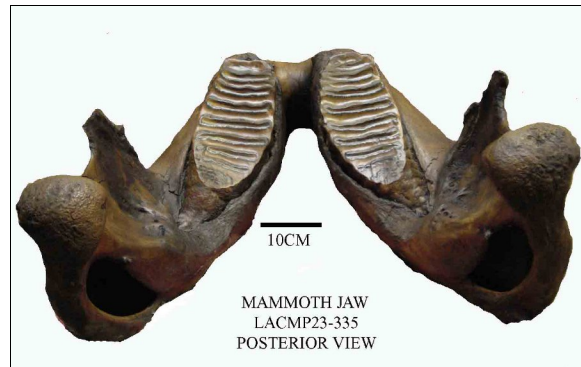
(covering the months of November and December, 2008)

Collection News

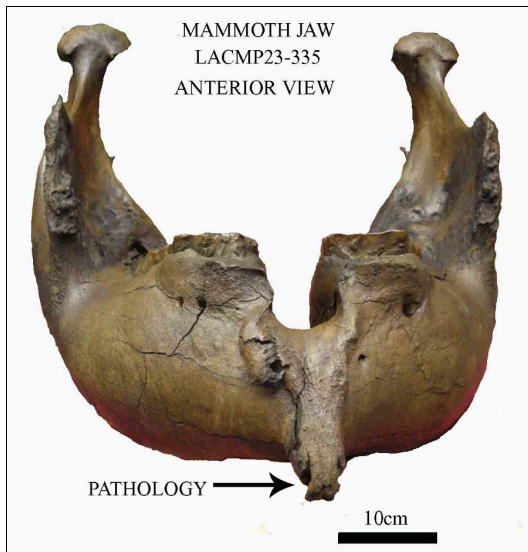
Rancho La Brea

Previously undocumented clavicle specimens recently unearthed at the Page Museum have lead biology professor Adam Hartstone-Rose, from Penn State Altoona, and excavator Ryan Long to begin a collaborative study on the clavicles of the Felidae of Rancho La Brea.

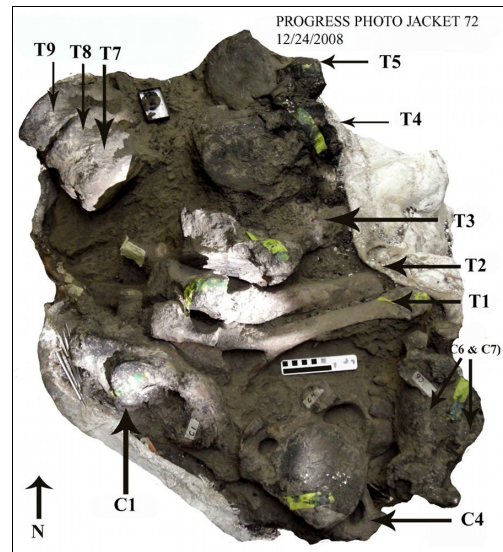
In the fishbowl lab, preparation of our prized mammoth, now affectionately known as Zed, is in full swing. Staff and volunteers have almost completed preparation of the lower jaw. By examining tooth wear pattern, estimates suggest that Zed was about 48 years old when it died. This method of aging mammoths is based on African elephant teeth due to the extensive data available. The method is known as AEY or African Elephant Years. Interesting pathologies are surfacing during preparation, including a large bony growth on the front of the jaw.



Zed's lower jaw in posterior view showing tooth wear.



Zed's lower jaw in anterior view showing pathology.



Plaster jacket of Zed's vertebrae. C = cervical vertebrae, T = thoracic vertebrae. North orientation from quarry map.

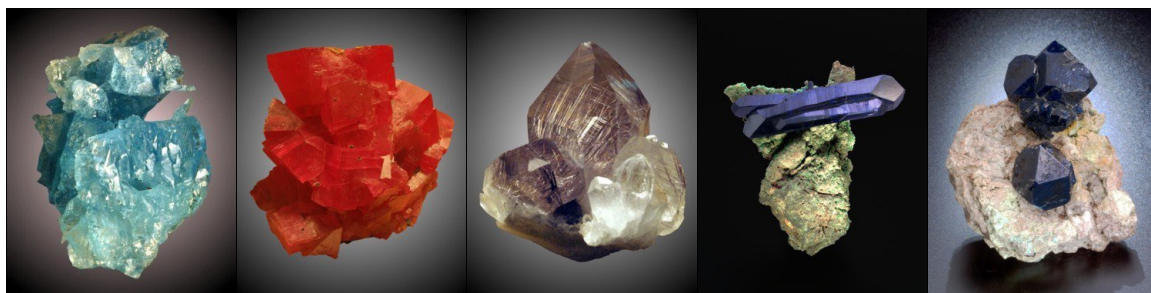
Preparation has also begun on another one of the large jackets, which contains 6 cervical and 9 thoracic semi-articulated vertebrae of Zed thus far.

Research Library

A temporary closure of the Research Library is estimated to last from December 2008 through April 2009, in connection with an extensive seismic remediation of the museum's south wall. The Library is now a construction site, and its holdings are inaccessible. In December, nearly one-third of the collection's publications and shelving were consolidated and transferred to the north side of the room. Stored materials and equipment were draped in plastic to protect them from dust and possible asbestos contamination generated during upcoming demolition work (above). In the interim, limited library services and access to new journals will be available to staff through the Acting Assistant Librarian, Lowell Herbrandson. The Research & Collections Library Committee contacted Dr. Pisano in December regarding its recommendation to fill a vacancy created by the retirement of the former Chief Librarian in February, 2008. Recent events, connected with the Library closure and the accidental flooding of the Library just before Thanksgiving, have underscored the urgency of hiring a librarian.



Mineral Sciences



Aquamarine
Pedra Azul,
Minas Gerais, Brazil
Savinar Collection

Rhodochrosite
Sweet Home mine,
Alma, Colorado
Savinar Collection

Rutile in Quartz
Diamantina,
Minas Gerais, Brazil
Savinar Collection

Azurite
Tsumeb,
Namibia
Eidahl Collection

Boleite
Santa Rosalia,
Baja California Sur,
Mexico
Eidahl Collection

The Mineral Sciences collections were enriched by significant end-of-year donations from three regular donors. Beverly Savinar donated three more specimens from the collection she and her late husband Hyman built. Duane and Charlotte Eidahl donated two specimens from the exceptional collection of their late son David. Kay Robertson donated 141 specimens from the extensive collection that she has willed in its entirety to the Museum. The Savinar and Eidahl specimens are already on display in the “Collections” display in the Hall of Gems and Minerals.

Special jewel exhibit from the Kazanjian Foundation

Through the end of January the world’s most storied red diamond, the “Kazanjian Red,” will be on display in the Museum’s Hall of Gems and Minerals. Though there are many diamonds with a pink hue, true blood-red diamonds are the rarest of gems — only three large stones are known to exist. And of that trio, none has as fascinating and exciting a history as the Kazanjian Red (right). Discovered in South Africa eight decades ago, the diamond was stolen by the Nazis from its hiding place in the Netherlands and later recovered by Allied forces from a salt mine in Bavaria.



Also on loan from the Kazanjian

Foundation is a sparkling cache that has been dubbed the Hollywood Jewels Collection. It includes treasures from old and new Hollywood: an emerald and diamond brooch once owned by Faye Dunaway; a bejeweled compact given to Carole Lombard by Clark Gable; the Edwardian

era (ca. 1910) tiara worn by Madonna (left above) in her wedding to Guy Ritchie

(beautiful, but perhaps not the best good luck charm), and a gold and diamond collar necklace given to actress Terry Moore by Cary Grant, who once said that Grant gave her the gift in appreciation for letting him cry on her shoulder during his divorce.

History



Brent Riggs, Seaver Center Project Database Manager, has been overseeing the digitization, cataloging, and re-housing of thousands of negatives from the Carroll Photo Service collection. These images, shot between 1924 and 1947, capture a diverse range of local newsworthy events, such as this photograph of Franklin Delano Roosevelt on his first visit to Los Angeles as President of the United States on October 1, 1935 (at left). In the photograph, the President is delivering a speech to

70,000 people from the playing field of the Los Angeles Memorial Coliseum. He is seated in the backseat of Cecil B. DeMille's convertible sedan, along with the First Lady Eleanor and Los Angeles Mayor Frank Shaw.

Field Work

Dinosaur Institute

In early September a small team spent 10 days in the Petrified Forest National Park prospecting for fossils of late Triassic tetrapods. The upper Chinle exposures in the park are well known to contain abundant vertebrate fossils, such as those of phytosaurs, large crocodile-like reptiles, and metoposaurs, large amphibians, among many others. This short expedition was successful in collecting a variety of material to augment the DI's Triassic collection, as well as identifying promising localities to explore next year.



Luis Chiappe and Doug Goodreau traveled to South America in November for 10 days of quarrying of a 100-million-year-old site in central Argentina. This expedition resulted in the discovery of a new ensemble of Cretaceous fish, insects, and plants. It also helped to strengthen collaborations with researchers from the Universidad Nacional de San Luis.

Rancho La Brea

Page staff and volunteers joined their collaborating team from Yuma, Arizona, in November and headed back down to the Pleistocene badlands near the small village of El Golfo de Santa Clara in Sonora, Mexico. This short trip included a return visit to a tapir skull site to screen for more material, to prospect in new canyons for potential sites and to collect microfossils. The crew dry screened about 900 lbs of bulk matrix from a previously known microfossil site in order to bring concentrated matrix back to the museum for detailed screening and sorting. They also surface collected about 300 specimens at the site including a dozen or so lower jaws and teeth of rodents, one of which is certainly a new species of *Cricetine*. Larger fossils include specimens of bird, proboscidean, horse, tapir, camel, deer and antelope.



Rancho La Brea activities in Mexico. Clockwise: view from the micro site, selection of microfossils, screening at tapir site, crew, sandstorm.

Meetings, Workshops, and Presentations

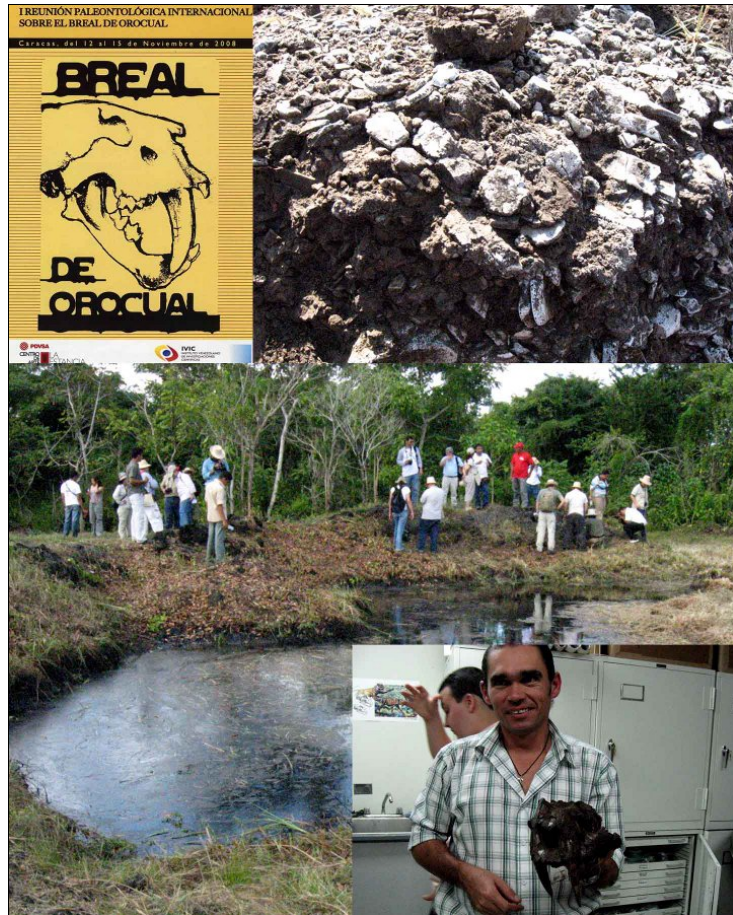
Vertebrate Paleontology

Vertebrate Paleontology Curator Xiaoming Wang participated in the annual meeting of the American Geophysical Union, held in San Francisco, from 15-19 November 2008. Xiaoming and his colleagues presented a poster on the oxygen and carbon isotopes from fossil mammals and fishes in the high altitude Kunlun Pass Basin in the Tibetan Plateau and their paleoenvironmental implications.

Rancho La Brea

In November, Collections Manager Chris Shaw traveled to Caracas, Venezuela, to present at the '1 Reunion Paleontologica Internacional Sobre el Breal de Orocuai,' an international meeting of paleontologists, government officials and locals to evaluate a recently discovered late Pliocene/early Pleistocene asphalt deposit site. This meeting was promoted by Dr. Ascanio Rincon of the Venezuelan Institute for Scientific research (IVIC) in Caracas in collaboration with the Institute of Cultural Heritage (CPI). Ascanio, a native of Venezuela, was a former volunteer excavator at the Page Museum and is a PhD. graduate from UT Austin.

Chris presented on the importance of asphalt preserved biota including some of the similarities and differences between RLB and the new site, as well as consulted on 'where to go from here' regarding, excavation, preparation, curation and storage of the specimens. Discussions also included the protection and preservation of the site as an important cultural resource, as well as the scientific significance of the specimens. Currently, there is enough money to build a facility which has been provided by government mandates on oil companies to surrender 20% of their profits to cultural resources in all of Venezuela. With collaboration efforts and agreements, a proportion of these funds will go to this amazing and very important fossil locality, which may include a visitor center onsite. Presentations were followed by a visit to the site by small aircraft, which is located outside the town of Orocuai in the State of Monagas. Conservative estimates of the number of fossils at this locality are up to 50 million!



Meeting agenda, concentration of fossils dug up from a trench during prior mining at the site (white objects are bones bleached by the sun), part of the site, Ascanio Rincon (PI and coordinator of the project).

History

In December, History Curator William “Bill” Estrada attended the American Historical Association’s 23rd Annual Meeting in New York City. His recent book, *The Los Angeles Plaza: Sacred and Contested Space*, was also reviewed in the December 2008 issue of the AHA’s quarterly, *Journal of American History*.

Public Outreach

Ornithology and “Meet A Scientist”

Ornithology Curator Ken Campbell and Collections Manager Kimball Garrett brought specimens from the collections into the Marine Hall for the special “Meet A Scientist” table that augmented the soon-to-be-closed exhibits during the busy week between Christmas and New Year. Skins and skeletons of penguins, albatrosses and shearwaters helped illustrate some of the adaptations shown by marine birds, including their nasal/supraorbital salt glands as well as their wing shapes variously adapted for underwater locomotion or long-distance foraging or migratory flights.

Rancho La Brea

The Education Division had their quarterly professional development meeting at the Page in December. This included a presentation and tour of the new project by lab assistant supervisor Trevor Valle.

Ornithology again

Ornithology Collections Manager Kimball Garrett also led a field trip to western Cuba in early November for Western Field Ornithologists. The purpose of the trip, which was arranged through the Cuba Bird Studies Program of the Caribbean Conservation Trust and licensed by the U. S. Treasury Department, was to continue a data-collection program on the status and distribution of North American migrant birds on the island; a major bonus was a chance to observe most of the 30+ avian species endemic to Cuba, including the Cuban Tody (of the family Todidae, endemic to the Greater Antilles; see photo). The trip was co- led by Cuban ornithologist and avian paleontologist William Suarez, and participants included Ornithology Research Associate Kathy Molina, Ornithology section volunteers Johanna Dawes and Susan Kaveggia, and former museum staff members Julian and Kathy Donahue.



Cuban Tody, *Todus multicolor*, Guanahacabibes Peninsula, Pinar del Río Prov., Cuba (5 November 2008). Photo by Kimball L. Garrett.

History

This fall and winter, History staff worked with the NHM Education department on a collaborative project with Cienega Elementary School, Page Museum staff, 826 L.A., and artist Jacqueline Dreager as part of the Education Initiatives and Partnership program. In addition to providing a behind-the-scenes tour of collections storage and participating in classroom activities, the History division also provided the class with reproductions of maps from the Seaver Center collection. The results of the students' research and reflection will be presented in an exhibition about their neighborhood landmarks and history, *Claiming Our Space*, in the Inter/Act gallery starting on January 24.



In November, History curator Sojin Kim served on a panel reviewing application for the *Living Cultures Grants Program* of the Alliance for California Traditional Arts. Based out of offices in Fresno and San Francisco, this organization provides programs and services to support the state's diverse living cultural heritage.

Echinoderms

Gordon Hendler (Curator of Echinoderms) gave a public presentation on sea stars, sea urchins, and related animals as the first of the museum's end-of-year Holiday Programming events. On December 26th, Gordon offered 90 minute, extemporaneous commentary on a display of preserved specimens that he had selected from the echinoderms collection. His audience was the very large throng of visitors that inundated the Marine Hall that



afternoon, and that peppered Gordon with questions about topics ranging from sea cucumber cookery and sea urchin toxins, to taxonomic classification and the effects of global warming on coral reefs. The event represented a collaboration between Research & Collections, Education, and Public Programs staff. It coincided with the imminent closure the Marine Hall, which was opened in 1977 and will be dismantled beginning in January, 2009. Photo by Patrick Tanaka, Education.

Student Mentoring and Research

Dinosaur Institute



Luis Chiappe and graduate student-in-residence Jingmai O'Connor examine recent fossil discoveries in China.

Collaboration between the Earth Sciences department of USC and the Dinosaur Institute led to the creation of the *Center for Chinese Fossil Discoveries*, a program aimed at enhancing awareness of the Chinese fossil resources and creating opportunities for student and professional mentoring. The center will be presented in mid January at the NHM with the launching of a website and the presentation of lectures given by participating researchers. Ongoing collaborations with Chinese institutions—museums in Beijing and Dalian—will now be framed within this new joint Center. During this year,

these collaborations resulted in the study of several dinosaur-like birds that lived in China during the Mesozoic Era. To learn more please visit the Center's website at <http://chinafossils.nhm.org>.

History

This past fall and winter, History curator Sojin Kim participated as a reviewer for an Otis College of Art and Design environmental studio, "Reclaiming the Oil Fields," which involved a partnership with the Baldwin Hills Conservancy and the conceptualization of design interventions for the Baldwin Hills Park.

Volunteers and Research Associates

Dinosaur Institute

The Dinosaur Institute welcomes Fulbright Scholar Dr. Jesus Marugan-Lobon, a post doctorate researcher who specializes in geometric morphometrics and theoretical morphology as applied to vertebrate fossils. Dr. Marugan-Lobon obtained his PhD from the Universidad Autonoma de Madrid (Spain) with a dissertation focused on the

“Disparity and integration in the archosaur skull—macroevolutionary applications of theoretical morphology and geometric morphometrics.” He has worked with Luis Chiappe on the morphometrics of Chinese Cretaceous birds, and the goal of his postdoc is to expand this work to other Chinese dino-bird taxa. He currently teaches at the UAM in Madrid. His research at the NHM is funded by the Fulbright Scholarship Program for 18 months beginning in May 2009.

Distinguished Visitors

Entomology



In December, Dr. Rob Plowes from the University of Texas (Austin) visited the Entomology Section to work on our world’s best collection of parasitic phorid flies. Plowes is head of the laboratory that imports and assesses the impact of parasitic phorids against the imported red fire ant, but he is also interested in parasitoids of other species of fire ants, including native ones. He has discovered a few new species of the genus *Pseudacteon* in Texas and Mexico, which he brought to compare with our holdings. Plowes found all of his new species abundantly represented in our 3,000 or so unsorted *Pseudacteon*, including many specimens from Ecuador, Colombia, and Costa Rica. He was unable to look at everything during his short, three-day visit, and so he is planning to return soon.

Polychaete Worms

Dr. Sergio Salazar-Vallejo, from El Colegio de la Frontera Sur (Chetumal, Mexico), stayed with us for 2 weeks in November to make use of our collections. During the last few years Sergio has been working on a major revision of the polychaete family Flabelligeridae. We have a small but choice collection of specimens from this coast and other regions of the world. Many of them were acquired through recent biodiversity field work by Leslie Harris (Polychaetes Collection Manager). Several of the specimens proved to be undescribed species. Sergio has named one in honor of Leslie for her help and her contributions to the study of polychaetes. *Flabelliderma ockeri* (right) is named for her husband David Ocker in gratitude for his hospitality to Sergio and other researchers staying at their home during museum visits.



Malacology

While at the Museum to work with the collections and staff in Polychaetes, Emilia Gonzalez (ECOSUR = El Colegio de la Frontera Sur, Chetumal, Mexico) also visited Malacology to examine the holdings of *Crepidula* gastropods. Additionally, Malacology associate Lance Gilbertson made two visits in December to examine helminthoglyptid land snails and use the SEM.

Recent Publications

Huizing, T. E., and **A.R. Kampf**. 2008. A Namibian diamond adventure. *Rocks & Minerals* **83**, 486-500.

Wang, Y., **X. Wang**, Y. Xu, C. Zhang, Q. Wu, **Z. J. Tseng**, **G. T. Takeuchi**, and T. Deng. 2008. Stable isotopes in fossil mammals, fish and shells from Kunlun Basin, Tibetan Plateau: Paleoclimatic and paleoelevation implications. *American Geophysical Union Joint Assembly Abstract* 2008: PP21A-08.

Ornithology Collections Manager **Kimball Garrett** served on a team that developed the “Los Angeles County Sensitive Bird Species” list just published by the Los Angeles Audubon Society in its January/February 2009 newsletter (see: <http://tinyurl.com/6tvdo9>). Based in part on distributional data generated by the Los Angeles County Breeding Bird Atlas, of which NHM was a co-sponsor, and trend data from several Christmas Bird Counts conducted in Los Angeles County, the list identifies bird taxa or populations whose continued existence in the County appears to be threatened by habitat modification, human disturbance, or other factors. The list, intended to be a pro-active conservation tool, includes 70 taxa, 32 of which are not already listed by Federal or State agencies. Several meetings to develop the Sensitive Species List were hosted by the ornithology section at the museum.

Staff Departures and New Staff

Crustacea

The Crustacea Lab was sorry to lose George E. Davis, former Collections Manager of Crustacea, who resigned in November after 12 years at the Natural History Museum to pursue other interests. An avid photographer and paleontologist who enjoyed working with the public, George will continue in that role as he teaches at Cal. State Northridge. We wish him all the best in his new endeavors.

Library

Retired Chief Librarian Donald W. McNamee passed away peacefully at his home on November 2nd after a long illness. A native of Southern California and lifelong resident, Don was a man of many interests and talents. He had served as President of both the Wedgwood and Gilbert & Sullivan Societies and was an accomplished philatelist. His lifelong passions included antiques, books, art, and music.

Don was an alumnus of Loyola High School, received his B.A. in Zoology from USC, and conducted research at Scripps Institute before his Army service in Utah. Upon leaving the military, he returned to USC and earned his Master's degree in Library Science, which led to his career of 40 plus years as a librarian. Don retired this year after 20 years as Chief Librarian at the Natural History Museum of Los Angeles County, which followed more than 20 years as a librarian for Cal Tech.

Don is dearly missed by all whose lives he touched and enriched. Donations can be made in Don's memory to the Pasadena Humane Society. There will be a memorial celebration in his honor in January.

Miscellaneous

Crustacea

In December, Curator of Crustacea Jody Martin testified at the Long Beach Superior Court in the ongoing murder investigation of a former Denver morning show DJ, whose body was found floating off Catalina Island in the summer of 2006. Martin's testimony, concerning the size and age of barnacles found attached to the victim's shoes, is part of a case being built by the Los Angeles County Sheriff's Department against the alleged murderer (see the [May 2008 R & C Newsletter](#)).

Ornithology

Ornithology Collection Manager Kimball Garrett's discovery of a Barrow's Goldeneye (*Bucephala islandica*) on Quail Lake in northwestern Los Angeles County on 28 November brought the county's "official" list of modern bird species to 500. Our county continues to boast the highest species list of any county in the United States, and is the first to reach the 500 species level.



Barrow's Goldeneye (front), Los Angeles County's 500th bird species. Photo by Kimball L. Garrett.

Museum Archives

In December, Museum Archivist Cathy McNassor oversaw the removal of Mary Butler's mural of the Mayan Temple of Tikal painted for the Ancient Latin American Hall in 1966. The mural was removed by Mike Alvarez, Sean McNichol, and the Crafts Services staff.



Left: Mary Butler, 1966

The R & C Newsletter is issued 5 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. Currently the Newsletter is compiled and edited by Dr. Joel W. Martin, Curator of Crustacea and Chief of the Division of Invertebrate Studies. All issues of the Newsletter can be found on the web at: <http://collections.nhm.org/newsletters>.

