

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.

November, 2006

(covering the months of September and October, 2006)

Collection News

Polychaete Worms

Leslie Harris spent four days on the island of Oahu working with Scott Godwin, former Collections Manager at the Bishop Museum of Natural History and now an employee of the Hawaii Institute of Marine Biology. Leslie and Scott worked on arranging for the eventual exchange of specimens of crustaceans and polychaete worms resulting from the recent expedition to French Frigate Shoals (see below under Field Work).

Ichthyology and Herpetology

Ichthyology and Herpetology continue to mitigate their aspergillus fungus infestation in the skeleton collections. The decontamination is complete, and curatorial assistant Nefty Camacho has completed the recataloguing and reboxing of all of the infected skeletons, as well as 80% of the total fishes skeleton collection and 5% of the herpetology skeleton collection. Many of the herpetology skeletons are part of the Jay Savage Costa Rica collection, which we are also cataloguing and computerizing in preparation for our participation in the multi-institutional herpetological database project HerpNet. Workstudy students from USC have completed roughly half of the cataloguing and tagging of specimens, and this work will continue in the upcoming school year. We have also hired Rebecca Lybrand on the HerpNet grant, a technician specializing in GIS georeferencing as well as cataloguing and databasing. Rebecca will be responsible for georeferencing Southern California localities as well as the remainder of the Costa Rican collections.

Ichthyology again

The 15-foot oarfish captured on Catalina Island (see the September 2006 R & C Newsletter) is safely ensconced in NHM's freezer, awaiting completion of preparations for fixing, preparing and hopefully exhibiting this specimen. Because of its size, the fish will require some new collection facilities, specifically a new large tank, for proper preparation. In recent years, Ichthyology and Herpetology have been focusing on upgrades to our large specimen storage, including installation of two 6' steel tanks, retrieval of large specimens from the Marine Mammal Warehouse, and rehousing of our two coelacanth specimens.

Field Work

Vertebrate Paleontology

Associate Curator Xiaoming Wang, curatorial assistant Gary Takeuchi, and graduate student Jack Tseng, along with a number of Chinese colleagues, were back to the Tibetan Plateau again in August through September, supported by grants from the National Science Foundation and the Chinese National Natural Science Foundation. This year proved to be the busiest in terms of areas covered—we traveled to four major fossil producing regions in three basins, and there were too many days when we were crammed in field vehicles enduring what seemed to be an endless bone-jarring ride. Jack brought with him a cheap guitar that helped to alleviate some of the boredom and won him companions.



The long trips were worth it. In addition to Qaidam and Kunlun basins, where we have collected fossils extensively before, we managed to finally make it to what arguably is the most remote late Cenozoic basin in Tibet. The Zhada Basin, elevation 3,700 to 4,500 m above sea level, is at the northern foothill of the mighty Himalayas and just across the border from India in the southwestern corner of Tibet. In addition to magnificent exposures (mostly lake sediments) that produce vertebrate fossils of Pliocene age, Zhada is also the location of the ancient Guge Kingdom founded by a 10th century Tibetan King Lang Darma. We had the rare opportunity to visit the ruins of the Kingdom sitting precariously on an impossibly steep, isolated peak, as if King Lang Darma thought Tibet itself was not high enough and the air not thin enough (see photo next page).



A lacustrine (lake) bed in central Zhada Basin. Exposures like this are very common due to the rapid down-cutting by local rivers.

Among significant discoveries this year were a new species of a crown-antlered basal deer, *Stephanocemas*, collected by Jack and Gary, more heavily ossified fishes with their bizarre armor-like skeletons (see January 06 issue of this newsletter), previously unknown fossil dog and cat from the high altitude Kunlun Basin, and a raccoon dog jaw from Zhada Basin. Most of the newly collected fossils are undergoing preparation in our lab.



Ruins of the ancient Guge Kingdom reputed to be built by one of the three sons of a 10th century Tibetan king. For several centuries the Guge Dynasty played an important role in shaping the Buddhist traditions in western Tibet.

Ornithology

Field work by Collections Manager Kimball Garrett and Research Associate Kathy Molina for the Salton Sea West Nile Virus and shorebird diet study (funded by the Sonny Bono Salton Sea National Wildlife Refuge) was completed in mid-September. The 172 field-collected bird specimens have been prepared, blood samples have been shipped to the National Wildlife Health Center in Madison WI, and cloacal swabs taken to test for avian influenza are being tested by UCLA researchers. Diet analysis is ongoing.

Invertebrate Studies

Leslie Harris and Jody Martin represented the Division of Invertebrate Studies on the recent Census of Marine Life expedition to French Frigate Shoals (at right, photo by J. Watt), Northwestern Hawaiian Islands, aboard the NOAA Research Vessel *Oscar Elton Sette*. This collaborative and interdisciplinary expedition involved scientists and/or support from the National Oceanographic and Atmospheric Administration, US Fish and Wildlife Service, US



National Park Service, Northwestern Hawaiian Islands Marine National Monument, State of Hawaii, University of Florida, University of Hawaii, Hawaii Institute of Marine Biology, University of Puerto Rico, Institute del Mar Brazil, and of course the Natural History Museum. The three-week expedition resulted in hundreds of new records and new species of marine invertebrates and algae. Media interest and coverage was higher than is usual for such expeditions, with video clips, interviews, and articles carried by CBS, NBC, ABC, Fox, and a variety of newspapers and web sites in the US, Japan, France, Spain, and Denmark to date. More information on the expedition is available at <http://www.creefs.org>.

The Northwest Hawaiian Islands – Another Perspective (by Leslie Harris)



In his “Postcards from the Field,” Jody Martin sent back some details of our recent trip (see above) aboard the R/V *Oscar Elton Sette* (at left, on one of our few rainy days). As I was only mentioned in the context of our mutual tendency towards sea sickness, I feel compelled to add a few more details.

It was a very exciting and fulfilling trip for both of us. I went with three main goals in mind: to be a fully functioning participant despite the expected *mal de mer*, to collect as many specimens as possible of polychaetes and other small invertebrates for the museum, and to make contacts leading to future work in the Indo-Pacific. All three were met. My work days routinely lasted until 10 pm up to 2 am, I collected 800 lots consisting of approximately 2500 individuals, and I ended up with invitations to do field work and workshops in Saipan (Northern Mariana Islands) next year plus future surveys in Hawaii. As a bonus, it turns out low-level nausea isn’t necessarily a bad thing and can be considered a very effective weight-loss program.

Unlike Jody, who alternated dive days with lab days and participated in the on-board sampling operations, I rarely strayed from my microscope and camera. My typical schedule was skip breakfast (6:30 am was way too early for food) in favor of lab work until 11:30 am then lunch, lab work until dinner at 5 pm (also way too early!), and more lab work until I was too tired to focus. Sound boring? Not at all, given the wonderful variety of critters that passed through the lab (at right, with Cory Pittman on the left). We were never short of specimens to process and often despaired of keeping up with all the animals moving through the lab. Mornings when most everyone else was out sampling were the best. I could work on my beloved small critters without verbal abuse (“Hey, that’s not a crab, you should photograph some crabs instead of those stupid worms!”) while playing my favorite music without hearing “Hey, that’s not Eric Clapton, play some Eric Clapton” for the 100th time from a certain highly biased division chief. *[Editor's note: I have no idea what she means here...]* It was easy to forget I was on a boat while working inside, but every time I went on deck, whether it was brilliantly sunny or raining, I thought again how lucky I was to participate in this wonderful cruise.



A few snapshots from the trip:



Clockwise from left: 1. Another late night for me, Jody, and Eric Clapton. 2. Rain or shine, it’s always beautiful when you have crabs! 3. Hey, where’re the worms? These darn crabs better not have eaten them! 4. Jody and friend (a large slipper lobster we photographed and released).

Malacology

In October, Ángel Valdés traveled to Vanuatu, in the south Pacific, to participate in the international expedition Santo 2006. The objective of this expedition was to document the fauna and flora, both marine and non-marine, of the island of the island of Espiritu Santo. Over 100 participants from some 15 countries will be involved in the field work. Special attention will be given to capacity building, and repatriation of information for sustainable development and environmental education.



Ángel Valdés was in charge of collecting opisthobranch mollusks in collaboration with a small group of colleagues from Costa Rica, Spain and the US. The expedition was very productive, and numerous new species of sea slugs were discovered (such as the beautiful species of *Tambja*, at left), including a very rare freshwater species (genus *Strubelia*, above).

See the expedition web site at: <http://www.ird.fr/recherche/santo2006/english> .

Malacology again

While vacationing in the Pacific Northwest, Lindsey and Cathy Groves visited the Vancouver Island Paleontology Museum in Qualicum Beach, Vancouver, British Columbia, Canada. The VIPM is part of the Qualicum Beach Historical Society Museum complex and is a small regional museum staffed entirely by volunteers. It features mostly local fossils from Vancouver Island that range from Permian through Pleistocene age. Director/volunteer Graham Beard has lent numerous fossil specimens to Lindsey and to IP Research Associates Richard Squires and LouElla Saul for research purposes and generously donated type material when new species were described and/or figured.

Meetings, Workshops, and Presentations

Ornithology

Kimball Garrett and Research Associate Kathy Molina were among some 2,000 ornithologists who attended the 4th North American Ornithological Conference in Veracruz, Mexico, from 3 to 7 October. They and co-authors presented two posters:

“Where to Skim: Seasonal and Interannual Movements of Salton Sea Hatched Black Skimmers”, and “Monitoring Tern and Skimmer Colonies in Southern California and Northwestern Mexico: A Binational Approach to Regional Conservation.”

Vertebrate Paleontology

Associate Curator Xiaoming Wang and graduate student Jack Tseng jointly presented two talks during the 66th Annual Meeting of the Society of Vertebrate Paleontology in Ottawa, Canada, on the late Pliocene Kunlun Mountain Pass fauna of Tibetan Plateau and on the first occurrence of *Hyaenictitherium* (Hyaenidae) from the late Miocene of Inner Mongolia. The presentations were titled "A new vertebrate fauna in the late Pliocene of Kunlun Mountain Pass, northern Tibetan Plateau, and its paleoenvironmental implications" and "Paleobiogeography of the genus *Hyaenictitherium kretzoi* (Carnivora, Hyaenidae) and the first record of *H. hyaenoides* Zdansky in Inner Mongolia." Abstracts of the talks have been published in the *Journal of Vertebrate Paleontology*.

More Vertebrate Paleontology

Larry Barnes, Curator of Vertebrate Paleontology, participated in a symposium about whale evolution at the October Annual Meeting of the Society of Vertebrate Paleontology at Ottawa, Canada. Symposium participants included researchers from all over the world who study living and fossil whales. Twelve of the 17 presentations involved specimens from our Museum collections or included work that was done in our Museum facilities.

Dr. Barnes made a presentation about the evolution of the strange little tooth-bearing baleen whale relatives that are known as the family Aetiocetidae. Our Museum holds many of the principle specimens of this group, and the story of aetiocetid evolution centers largely on our specimens.

Larry was also a co-presenter of another presentation, with Stephen Godfrey of the Calvert Marine Museum in Maryland and David Bohaska of the Smithsonian, about their discoveries in the North Atlantic and the North Pacific of the world's earliest known members of the dolphin family Platanistidae. This dolphin family today includes only the highly endangered freshwater Ganges River Dolphin of Southeast Asia, but in the past it was very widespread in the world's oceans. The image at right is the skull of a fossil platanistid from Oregon.



External Funding

Ichthyology and Herpetology

The Ichthyology and Herpetology section received an NSF subcontract grant for \$32,171 from The University of Kansas Center for Research, Inc. It was awarded September 1st. Dr. Christine Thacker is the PI, and the funded project is the HerpNet Community Informatics Project, a multi-institutional project that targets the integration and databasing of the major herpetological collections in the United States.

Public Outreach

Haunted Museum

Again this year as in all previous years, R & C staff and their collections were heavily involved with the Haunted Museum. Involved were curatorial staff



from Polychaetes, Mammals, Fishes, Vertebrate Paleontology, Birds, Archaeology, and the Marine Biodiversity Processing Center,



combining their efforts to guarantee another very haunting event. Above: Dr. Kirk Fitzhugh, in pirate garb, and some fascinated attendees at the worm table. At left, Kathy Omura gleefully terrifies youngsters at the MBPC table.

Mineral Sciences: Gem and Mineral Tours to Exotic Places

The Gem & Mineral Council's tour to Sri Lanka (Sept. 2 through 17) was a rousing success.

For highlights, including a short gem mining video, go to: <http://www.nhm.org/gmc/srilanka.htm>

Tours planned in 2007 include Brazil (June 26 to July 10) and Namibia (Sept. 29 to Oct. 13).



Malacology

Once again Lindsey Groves co-led *Fossil hunting in Silverado Canyon* with LouElla Saul (Invertebrate Paleontology Research Associate) and the Education Division on October 21st. 62 participants, including 2 scout troops, collected Late Cretaceous (Turonian) mollusk fossils from the Baker Canyon and Holz Shale members of the Ladd Formation in Silverado Canyon, Santa Ana Mountains, Orange County. Expert field assistance was provided by Grace Cabrera (Education), Cathy Groves (Echinoderms), and John Alderson (IP Research Associate).



Participants and LACM staff on outcrop of Ladd Formation along Silverado Creek.



John Alderson and LouElla Saul identifying fossil specimens with participants.



LACM staff participants (L to R): Cathy Groves (Echinoderms), LouElla Saul (Invertebrate Paleontology), Lindsey Groves (Malacology), Grace Cabrera (Education), and John Alderson (IP Research Associate).

Vertebrate Paleontology

This year our annual Red Rock Canyon membership trip was from` September 28 through October 1, organized by Xiaoming Wang, David Whistler (curator emeritus), Gary Takeuchi, Jack Tseng, and educational staff Grace Cabrera, Carl Selkin, and Nelle Molitor. Beside record number of participants (since 2003, when the trip was revived), this trip boasts the collection of a large gomphothere (a primitive elephant with teeth that look like those of the Pleistocene mastodont) tusk, one of the largest from the Dove Spring Formation. The process of collecting, jacketing, and preparing such a large specimen has become an excellent educational tool to engage the public (see our new web site that shows the process (thanks to Gary Takeuchi for designing the site): http://www.nhm.org/expeditions/rrc/Gomphothere_prep.html).



At left: The gomphothere tusk is fully exposed, hardened with glues, and ready to be jacketed. The sandstones and conglomerates in which the tusk is entombed are very hard, and it took a crew of five people better than half a day of chiseling to get this far. David Whistler is standing up (upper left) and Gary Takeuchi acts as a scale squatting down.

Entomology

Brian Brown hosted 4 groups of entomological enthusiasts (75 people in total) visiting the collection 23 September on a Scavenger Safari day. Larger, colorful insects were the main attraction, although he also demonstrated specimens from and explained the background and some results of the Los Angeles Spider Survey.

Echinoderms

Gordon Hendler, Curator of Echinoderms, spent part of hurricane season in Central America with a producer for Dutch public television and a photographer from Bonaire, who are making a series on “nature and engineering” for the Discovery Channel. In one of the forthcoming documentaries, Gordon will explain how he discovered that some of



his Belizean brittle star friends change color, and why he thinks that they each have thousands of crystalline eyes on their arms.



When Gordon planned this last minute trip for 26 September to 6 October, the producer was dubious that filming brittle stars would take more than a few days, but shooting filled daylight hours, all day, every day, and spilled over into night dives. Happily, Gordon was able to stay up later than the film crew to do science, and made a few after-hours discoveries that alone would have made the trip worthwhile. Fortunately, one of the fellow islanders on Carrie Bow Cay was a

Smithsonian dive officer and a talented photographer, Laurie Penland, who took the pictures above, and others that can be viewed at: <http://www.si.edu/dive/carriebow> .

Museum Project/1913 Building Renovation Preparations

In preparation for the seismic retrofit and renovation of the 1913 building, R&C staff has been planning collections moves and protective measures for the past several years. The 1913 Collections Committee, and especially Tania Collas, Susan Oshima, Darienne Hetherman, Leslie Harris, Kathy Omura, Darolyn Striley, Jim Dines, Chris Coleman, Sam McCleod, Lisa Escovedo, Weiping Xie, Harry Filkorn, and Dorothy Etensohn, has been hard at work working with staff throughout R&C at every stage preparing for this project. Grants and contracts administrator Salena Small is doing a wonderful job administering the R&C budget for the entire project. With construction expected to begin in December, several exhibit de-installations and collections moves have begun.

Anthropology (Archaeology & Ethnology Sections) completed de-installation of the Times-Mirror Hall of Native American Cultures and re-housed the more than 600 objects that had been on display since the early 1990's. Beginning last January, Collections Manager Chris Coleman had been preparing for the de-installation by crating and moving portions of stored collections to make as much room as possible for the Native American hall collections. With that accomplished, the de-installation began in early August. The intensive effort was planned and led by Chris Coleman with the support of Chief Registrar Susan Oshima and others. The de-installation team, in addition to Chris and Susan, included Associate Registrar Darienne Hetherman, Collections Technicians Kristin Hayashi and Kathleen Olsen, with assistance from curator Scott Van Kueren.

Former Collections Manager Allyson Lazar, now of the Orinda Group, returned to play a key role in the project, and consulting Conservator Claire Dean (who had helped install the exhibit) completed the team. The Native American collections are now well housed on-site.

The Scanning Electron Microscope (SEM) was moved from its old location in the basement of the 1913 building to a space off the east end of the Marine Hall. SEM technician Giar-Ann Kung planned, coordinated and orchestrated the whole move, which

was done by Operations/General Services (thanks!) and outside contractors. The new space was modified by outside contractors supervised by Operations/Crafts (thanks!). Look for an announcement of a little open house from SEM lab director Ángel Valdés and Giar-Ann when the move is finalized and everything is fully operational in the new lab site.

Portions of the Museum Archives, overseen by Collections Manager Cathy McNassor and formerly stored in the former field room of the 1913 building, were moved by Operations/General Services to a new space in the “Plywood Palace” (Exotic Mammal Hall on the 2nd floor) that was prepared by outside contractors supervised by Operations/Crafts. Our thanks once again to Operations, General Services, and Crafts! Vicky Brown and her Scholarly Publications offices have moved to the third floor office across from the elevator, thanks once again to Operations/General Services. The staff of the Dinosaur Institute (Curator Luis Chiappe, Preparator Doug Goudreau and Curatorial Assistant Aisling Farrell) began the de-installation of the portion of the Mesozoic (Dinosaur) Hall that sits in the 1913 building. Assuming that plans for a new dinosaur hall move forward, the dinosaur specimens will be cleaned and in many cases remounted for exhibit in the next few years.

Sam McCleod, Collections Manager, and staff from Vertebrate Paleontology including Howell Thomas and Gary Takeuchi are moving and re-housing portions of the oversized Vertebrate Paleontology collections housed in the basement of the 1913 building to clear space for construction work scheduled to begin early next year. This and all of our other work would not have been possible without the ongoing help, support and hard work of everyone in Operations, as well as support from Intercon and Diamond. We also thank Public Programs and Education staff and everyone else around the museum who’s been involved in any way.

Many more 1913 related activities are ongoing and planned. Look for further updates in future R&C newsletters

Distinguished Visitors

Vertebrate Paleontology

In late October through mid December, the Department of Vertebrate Paleontology welcomed Professor Zhuding Qiu, director emeritus of the Institute of Vertebrate Paleontology and Paleoanthropology (IVPP, Beijing), Chinese Academy of Sciences, and Dr. Qiang Li, assistant professor of the same institution. Prof. Qiu and Dr. Li are specialists on small mammals and are experts in the rodents and lagomorphs of Eurasia. They are here to do a collaborative project with Associate Curator Xiaoming Wang on the mammalian evolution of the Tibetan Plateau, supported by a grant from the NSF, and to examine our own excellent small mammal collections.

Student Mentoring

Crustacea

Congratulations to Todd Zimmerman, whom many of you will remember for the years that he spent working as a graduate student under Jody Martin (here at the museum) and Dave Jacobs (UCLA) and then as a Research Assistant in the Crustacea lab on the Guana Island marine biodiversity project. Todd returned to Los Angeles in the late summer / early fall and successfully completed the requirements for his Ph.D. degree through UCLA. Todd is currently an Assistant Professor at New York's Long Island University, C. W. Post campus.

Vertebrate Paleontology

Nicholas D. Pyenson, a Graduate Student at UC Berkeley, spent a week here in September and in November working with our major collections from the Middle Miocene age (about 15 million-year-old) Sharktooth Hill Bonebed in Kern County, California. For part of his Doctoral Thesis, Nick has been surveying the dolphin and whale specimens that were obtained during quarries that we made with a grant from the National Science Foundation to L. Barnes and Research Associate Edward Mitchell.

Entomology

Mr. Matthew Van Dam, who has been working in the Entomology Section with Brian Brown for the last year, has been accepted (and has already started) as a graduate student at UC Berkeley. During his period at the Museum, Van Dam has worked on several projects, including preliminary work for his PhD on *Rhaphiomidas* fly systematics and the biology of other sand dune insects. During his time here he published the following papers:

Van Dam, M., and A. Van Dam. 2006. Description of the larva of *Pseudocotalpa sonora* Hardy (Scarabaeidae: Rutelinae: Rutelini) with notes on life history. *Coleopterists Bulletin*. 60: 31-36.

Van Dam, M., A. Van Dam, and M. D. Wilcox. 2006. Description of the third instar larva and adult male of *Megasoma sleeperi* Hardy (Scarabaeidae: Dynastinae). *Coleopterists Bulletin*. 60: 59-67.

Recent Publications

Campbell, K. E., C. D. Frailey, and L. Romero-Pittman. 2006. The Pan-Amazonian Ucayali Penepplain, late Neogene sedimentation in Amazonia, and the birth of the modern Amazon River system. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 239: 166-219.

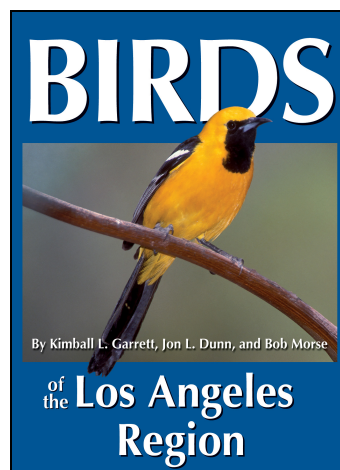
DeVries, T.J., Groves, L.T., & Urbina, M. 2006. A new early Miocene *Muracypraea* Woodring, 1957 (Gastropoda: Cypraeidae) from the Pisco Basin of southern Peru. *The Nautilus* 120(3):101-105, figs. 1-5.

A new fossil cowry, Muracypraea ormenoi, is the first cypraeid species reported from southern Peru and represents the southernmost record (14°34'S) for this usually tropical genus.

Fitzhugh, K. Response from Fitzhugh. *BioScience* 56: 711.

Fitzhugh, K. The "requirement of total evidence" and its role in phylogenetic systematics. *Biology & Philosophy* 21: 309-351.

Garrett, K, J. L. Dunn, and B. Morse. 2006. Birds of the Los Angeles Region (see book cover at right)
"Birds of the Los Angeles Region" by Kimball Garrett and co-authors Jon Dunn and Bob Morse was published in October. This photographic guide to the regularly-occurring birds of the region follows a user-friendly format that Morse developed in three previous guides for the Pacific Northwest.



Snelling, R. 2006. Taxonomy of the *Camponotus festinatus* complex in the United States of America (Hymenoptera: Formicidae). *Myrmecologische Nachrichten* 8:83-97.

Thacker, C. E., F. Pezold and R. Sutkuss. 2006. Redescription of the dwarf neotropical eleotrid genus *Leptophilypnus* (Teleostei: Gobioidae), including a new species and comments on *Microphilypnus*. *Copeia* 2006(3): 489-499.

Photo-Atlas of Minerals (see below under Miscellaneous)

Staff Departures and New Staff

History

Two members of the History Department left the museum in September for other opportunities in their field. Lisa Escovedo, who had spent the last fourteen years at the Natural History Museum, first as Assistant Registrar and then as Collections Manager in the Material Culture Section, accepted the position as Associate Registrar at the Norton Simon Museum in Pasadena. Jackie Morin, Collections Manager in the Seaver Center for Western History Research for the last eight years, moved across the street to the USC Doheny Library, where she is now a Curator in several special collections centers. We miss them both and wish them well in their new ventures.

Miscellaneous

Ornithology: Birding Bragging Rights

You may be surprised to learn that with a couple of well-documented recent "first records" [Ruddy Ground-Dove (*Columbina talpacoti*), Upland Sandpiper (*Bartramia*

longicauda), and “Dark-rumped” Petrel (*Pterodroma phaeopygia* species complex)], Los Angeles County’s bird list of 496 species has now surpassed San Diego County’s list for the highest species total of any county in the entire United States! “Official” Los Angeles County bird records, seasonal reports, and documentation for unusual records are archived here in the Ornithology section.

Mineral Sciences: The Photo-Atlas of Minerals

The Museum’s Gem & Mineral Council is pleased to announce the release of *The Photo-Atlas of Minerals* – Version 2 (DVD). This computer software for Windows, developed by Dr. Anthony Kampf and Dr. George Gerhold, is the successor to the very popular CD-ROM version, first released in 1998. *The Photo-Atlas of Minerals* is available to the public at the special introductory price of \$49.95 through the end of 2006. Museum staff, volunteers and Gem & Mineral Council members pay only \$39.95 (plus tax). Contact Jean Brandt at 213-763-3328 or jbrandt@nhm.org – or stop by the Mineral Sciences Office on Tuesdays or Thursdays. For additional information, go to: <http://www.nhm.org/pam> .



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Because this is the last R & C Newsletter for calendar year 2006, the staff of Research & Collections takes this opportunity to wish all of you a safe and joyous holiday season.

