# 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.

# September, 2005

(covering the months of May, June, July, and August, 2005)

### **Collection News**

## Anthropology

The Anthropology Department recently mounted on the Museum web site a searchable photo gallery of over 700 textiles from the American Southwest and Mesoamerica as part of a larger Ethnic Arts Council of Los Angeles grant funded initiative to make our collection more readily accessible to the public and interested researchers. This project was



spearheaded by **Chris Coleman** and **Bill Wood** in Anthropology, **Daniel Watson** (Project Photographer), **Stefka Hristova** (former Museum Webmaster), and a host of volunteers, work-study students, and interns.

Please visit the Anthropology Department collections webpage at <a href="http://www.nhm.org/research/anthropology/Pages/collections\_online.html">http://www.nhm.org/research/anthropology/Pages/collections\_online.html</a> and follow the "Textiles- U.S. Southwest, Mexico, and Central America" link to search or browse this important resource.

Photograph: Zapotec Textile (Accession #F.P.4.2003-23) from Oaxaca, Mexico.

### Crustacea

Just when you thought it was safe to go back into the Hancock Building....

Although the vast majority of former Alan Hancock collections of crustaceans have long since been removed from the USC campus to their home here in the Museum, we were surprised and delighted to find a previously-unknown collection of dried crustaceans in a basement cabinet (thanks in large part to **Lindsey Groves**). The collection includes rare and poorly known crabs from Wake Island, Central Pacific, and other Pacific localities collected mostly by Pat and Jean Kauanui in the late 1950s and finally brought over to the Museum by **Kathy Omura** and **Darolyn Striley** in August of this year. Some of the crabs are shown below (all photographs by **George Davis**).



Daldorfia horrida (from Guam)



Charybdis erythrodactyla (Wake Island)



Camposcia retusa (Guam), a decorator crab



Calappa calappa (locality unknown)



Ocypode ceratophthalma (Wake Island) (Check out the eyes!)



Lophozozymous incisus (Wake Island)

### **Mineral Sciences**

The acquisition of the micromount mineral collection of Julius Weber and Louis Perloff in January is already beginning to pay big returns to science. The collection, numbering well over 50,000 specimens, includes more than 2,200 diamond crystals. More than 10% of these (including the one shown at right) have been lent to the Gemological Institute of America for a major diamond



research project exploring the causes and effects of strain-induced surface fluorescence. *Malacology* 

Malacology Collections Manager **Lindsey Groves** recently visited collections at Bakersfield College and the Kern County Museum to examine their fossil holdings for research purposes.

### Invertebrate Paleontology

From May through August, **Mary Stecheson** and her team cataloged 103,205 specimens in 1095 lots, bringing the total of cataloged fossils in the IP database to almost 730,000 in 29,000 lots.

### Field Work

### Polychaete Worms

Leslie Harris (Collection Manager, Polychaetes) spent a month conducting field work in Central America (at right). The first two weeks were spent collecting and photographing worms and crustaceans during a taxonomic workshop at the Smithsonian Tropical Research Institute's station at Bocas del Toro, Panama. After that, Leslie moved on to Costa Rica.

The main reason for her visit is an on-going collaboration with Dr. Ingo Wehrtmann (University of Costa Rica) on a digital catalogue of the marine biodiversity of the Caribbean and Pacific coasts of Costa Rica. In addition to their field work she presented a talk on "Los Maravillosos Invertebrados del Caribe" to the School of Biology and began verifying the identities of polychaetes held by the UCR Zoological Museum.



### Vertebrate Paleontology

Dr. Lawrence Barnes, Curator of Vertebrate Paleontology, made a trip in June to the Smithsonian and the Calvert Marine Museum (Maryland) to pursue collaborative studies on fossil marine mammals with Daryl Domning and Irina Koretsky (Howard University), David Bohaska (Smithsonian), Alton Dooley (Virginia Museum of Natural History), and Stephen Godfrey (Calvert Marine Museum). Barnes and Godfrey have just submitted for publication a manuscript about a new kind of diminutive pontoporiid dolphin, the first record of this group in the North Atlantic, whose closest living relative is a highly endangered little coastal dolphin of Brazil, Uruguay, and Argentina.

More *Vertebrate Paleontology:* This summer, our vertebrate paleontologists from the Dinosaur Institute (**Luis Chiappe** and **Doug Goodreau**) led the 2005 Thornbury Dinosaur Expedition to beautiful Ekalaka, southeastern Montana. Fieldwork was conducted to further collect the remains of the *Tyrannosaurus rex* nicknamed "Thomas."

The expedition was a great success as a large number of teeth and bones of this animal





were excavated: 18 teeth, several skull and lower jaw bones, some toe bones, a shoulder blade, part of the hip, and a number of vertebrae and ribs among other bones. More incomplete remains from a *Triceratops*, a duck-billed dinosaur, and another *T. rex* were also collected. These will be used to further support interpretive preparation (Gallery Interpreters supervised by Doug Goodreau) in public areas.

### Crustacea

In July, Dr. **Regina Wetzer**, Research Scientist and Director of our Marine Biodiversity Processing Center, collected isopod crustaceans in Scotland as part of her NSF-funded research on isopods. The collecting was made in conjunction with the 2005 meetings of the International Crustacean Congress. Shown at right is Eilean Donan Castle, one of several isopod collecting sites in Scotland.

Also in July, **Jody Martin** went searching once again in the local



mountains for signs of the supposedly extinct "Pasadena Shrimp" (*Syncaris pasadenae*), the subject of his grant proposal to the National Geographic Society. Still no luck.

### Mineralogy

From June 25 to July 12, **Tony Kampf** led another gem & mineral tour to the Brazilian state of Minas Gerais. This was the 12<sup>th</sup> Brazilian tour that Tony has led through the Museum's Gem & Mineral Council. Images showing highlights of this year's tour can be viewed on the Council's Website at <a href="www.nhm.org/gmc/brazil2005.htm">www.nhm.org/gmc/brazil2005.htm</a>. The next tour is scheduled for May 2006. (see also under Public Outreach)

# Meetings, Workshops, and Presentations

### Vertebrate Paleontology

In May, Curator of Vertebrate Paleontology **Lawrence Barnes** attended and participated in the Fourth Triannual Conference on Evolution of Aquatic Tetrapods, which was held in Akron, Ohio, and was sponsored by the Northeastern Ohio Universities College of Medicine.



The conference was attended by 110 researchers and students from all parts of the world. Barnes made a platform presentation about evolutionary patterns among sea lions and walruses. He was also a coauthor on another presentation about implications for sea cow evolution based upon remnant isotopes in fossil bones and teeth, and was co-author with Vertebrate

Paleontology's **Sam McLeod** on another presentation about the assemblage of fossil whales and dolphins from Sharktooth Hill in central California, a locality for which our Museum holds the major collections.

Our Museum's Vertebrate Paleontology and Mammalogy collections of marine mammals were acknowledged as the sources of specimens and information for at least 21 of the 54 conference presentations, very impressive considering that this was such a diverse international symposium.

The image shown above is our exquisite mounted skeleton of the extinct sea lion *Allodesmus* from California, the best such fossil skeleton in the world and a pivotal part of Dr. Barnes' presentation at the Akron, Ohio, conference on marine mammal evolution. This skeleton was assembled in our Vertebrate Paleontology Laboratory under the direction of **Howell W. Thomas**, and can now be viewed in Japan.

### Malacology

Malacology staff members **Ángel Valdés** and **Jim McLean** attended the 38<sup>th</sup> annual meeting of the Western Society of Malacologists at the Asilomar Conference Center, Pacific Grove, CA, June 26<sup>th</sup> -30<sup>th</sup>, which was combined with the 71<sup>st</sup> annual meeting of the American Malacological Society. Ángel co-authored two abstracts with his student Alvin Alejandrino entitled *Crossing the pond: Dorid nudibranch strategies for transatlantic dispersal* and *Phylogeny and biogeography of the Atlantic and eastern Pacific* Hypselodoris *Stimpson, 1855 (Nudibranchia, Chromodorididae) with the description of a new species from the Caribbean Sea.* Jim presented an abstract entitled *Dichostasiidae Yochelson, 1956, Permian to Recent, defined on opercular and shell* 

characters (Vetigastropoda: Trochoidea).

### Vertebrate Paleontology (more!)

On June 11, Dr. Barnes gave a public lecture and participated in a press conference about baleen whale evolution at the Calvert Marine Museum in Solomons, Maryland. The date coincided with Oceans Day and the unveiling of a new fossil whale exhibit at Calvert Marine Museum. The occasion also provided Barnes with the opportunity to work for several days with their Paleontology Curator, Dr. Stephen Godfrey, on several collaborative studies of fossil dolphins and whales.

At right: Our sequence of whale skulls showing the transition from the archaic whales, through early toothed "baleen" whales, to baleen whales. Such a sequence cannot be assembled anywhere else in the world.



### Invertebrate Paleontology

In June, **Harry Filkorn**, Collections Manager, participated in the meeting and field trips of the Seventh International Congress on Rudists, held in Austin, Texas. Harry was a member of the organizing committee for this meeting and was co-editor for the abstracts and field trip guidebook volume.

### Ornithology

Ornithology Collections Manager **Kimball Garrett** attended the annual meeting of the American Ornithologists' Union in Santa Barbara 23-27 August. He and co-author Karen Mabb presented a paper on the range expansion of Yellow-chevroned Parakeets in southern California, and he also attended workshops on ornithological data sharing (particularly with respect to the NSF-funded OrNIS project, in which NHMLAC is a participant) and on USDA and USFWS import/export permit issues.

### Crustacea

Curator of Crustacea **Jody Martin** gave an invited talk at the Scripps Institution of Oceanography entitled *Global Marine Biodiversity: What's Left to Discover?* in May, and a presentation at the ICC6 (Sixth International Crustacean Congress) in Glasgow, Scotland, entitled *A Synopsis of Decapod Crustaceans from Hydrothermal Vents and Cold Seeps*, in July. **Regina Wetzer** presented a poster at the same meetings entitled *Looking for Isopods in All the Right Places: Sphaeromatid Systematics Worldwide*.

### Registrar

Chief Registrar Vicki Gambill attended the Society for Preservation of Natural History Collections (SPNHC) meeting in June in London, England. Celebrating SPNHC's twentieth anniversary, this was the first time the annual meeting had been held outside of the United States or Canada. The conference, emphasizing collection standards, was

attended by over 200 delegates from around the world. Vicki's presentation, *Outgoing Exhibition Loans: When You Need More Than a Specimen Invoice Receipt*, was well received. This paper will become part of George Washington University's NEH funded Collections Care Distance Learning Program this fall.

# **External Funding**

### Entomology

The National Science Foundation recently awarded two grants to staff of the Entomology Section. **Brian Brown**, along with Co-PI Paul Smith of California State University, Bakersfield, has been awarded \$487,111 for a study entitled "Basal Lineages of the Phoridae." This project is a morphological and molecular analysis of the so-called primitive phorid flies, including about 80 genera found worldwide. Many are associated with ants and termites, and one of the goals of this project is to investigate how these associations have evolved. Research will involve travel to New Zealand, Thailand, Chile and Slovakia for obtaining fresh specimens, as well as the cooperation of three collaborators in Africa. Besides Brown, other NHM staff involved will be Research Assistant **Giar-Ann Kung**, part-time preparator **Vladimir Berezovskiy**, and part-time illustrator **Brian Koehler**.

A second grant totaling \$342, 561 was awarded to Dr. James Wetterer of Florida Atlantic University and Co-PI **Roy Snelling**, who is our emeritus Collection Manager. This project is called "Ants of the Caribbean" and will involve much travel and sampling throughout the region. Specimens from the project will supplement our already extensive and world-class holdings of ants, which number about 1 million specimens.

### Crustacea

Another major National Science Foundation grant has been awarded to the Crustacea Section. **Jody Martin**, in collaboration with researchers at Brigham Young University, the University of Louisiana at Lafayette, and Kent State University, received just over \$2.8 million (of which \$555,524 was awarded to Martin's lab) for an "Assembling the Tree of Life" grant, the first of its kind ever received by the Museum. Nationwide, only 5 such grants were awarded in all of 2003 and only 8 were awarded in 2004. The project involves the use of extensive molecular, morphological, and paleontological datasets to reconstruct the evolutionary relationships of decapod crustaceans (crabs, shrimps, lobsters, and their relatives). Jody will be traveling a lot over the next few years to collaborate with colleagues at other institutions and to collect fresh specimens.

### **Public Outreach**

### Entomology

The Spider Survey website (www.phorid.net/spiders) has a new function, entitled "Find out the identity of the spiders you submitted." Clicking here, users will be able to search our database and find out the species of spider that they submitted to the project. Eventually, we will want to link these names with photos of the various species.

### Malacology

Curator of Malacology **Ángel Valdés** traveled to Alaska in June with a group of Museum Fellows. This was primarily a fundraising trip that also included staff from the Advancement Department. **Lindsey Groves** co-led *Fossil hunting in Silverado Canyon* with **LouElla Saul** (Invertebrate Paleontology Research Associate) and the Education Division on May 21<sup>st</sup>. Forty participants 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. Field assistance was provided by **Lorelei Sells** (Education) and **Mary Stecheson** (IP).

### **Mineral Sciences**

From June 25 to July 12, **Tony Kampf** led another gem & mineral tour to the Brazilian state of Minas Gerais. This was the 12<sup>th</sup> Brazilian tour that Tony has led through the Museum's Gem & Mineral Council. Images showing highlights of this year's tour can be viewed on the Council's Website at <a href="www.nhm.org/gmc/brazil2005.htm">www.nhm.org/gmc/brazil2005.htm</a>. The next tour is scheduled for May 2006.

### Invertebrate Paleontology

Invertebrate Paleontology hosted two *Adventures in Nature* classes in August. Heather Saunders brought her "Sea Sensation Adventure" students to the collections to examine marine invertebrate fossils and make plaster casts of ammonites and bivalves from IP's latex molds. Students in Patrick Tanaka's "How Do Scientists Do It?" class toured the collections and lab and enjoyed a treasure hunt through the collections.

**Mary Stecheson** talked to 5<sup>th</sup> grade students at 10<sup>th</sup> Street Elementary School in Los Angeles about working at the Museum and careers in paleontology.

### Crustacea

Yet another *Adventures in Nature* program involved the dissection of blue crabs in front of the Museum under **Jody Martin**'s direction, somewhat reminiscent of the "Harry Potter" scenes with Professor Sprout in the greenhouse ("*Now class, everyone take your crab and rip the top off....*") A good time was had by all, with the possible exception of the crabs. The students then met **Regina Wetzer** at Cabrillo Beach for tidepooling and beach cleanup.

### Vertebrate Zoology

In late May, more than 120 UCLA undergraduates visited the Ornithology, Mammalogy, and Vertebrate Paleontology collections for behind-the-scenes tours as part of their Vertebrate Biology course.

### Vertebrate Paleontology

Curator of Vertebrate Paleontology **Lawrence Barnes** was an invited keynote speaker at the Calvert Marine Museum's (Maryland) Oceans Day festivities on June 11. This coincided with the opening of that Museum's impressive new fossil whale exhibit. Dr. Barnes' lecture topic was the origin and evolution of the baleen whales.

Additionally, this summer Dr. Barnes worked with staff of the Los Angeles Zoo to produce an article about sea lion evolution for the publication "Zoo Views."

Also during the summer, Larry continued to plan with faculty of the Universidad Autonoma de Baja California, La Paz, a course that he will be presenting there in the Autumn about the evolution of marine mammals. His student in La Paz, Gabriel Aguirre, continued his preparation of his thesis describing a false killer whale-like dolphin that was discovered on a Museum Travel Program expedition in the Gulf of California.

### Mammalogy

Adventures in Nature brought several groups of enthusiastic kids through the mammal collections for special tours and presentations. As usual, the students were eager to share what they already knew—but we're still wondering how the "hot springs where people are allowed to go around naked" ever got into the conversation about bats.

# **Student Mentoring and Research (new category!)**

### Research and Collections 2005 Undergraduate Internships

Research and Collections' Research Experiences for Undergraduates (REU) summer program came to a close in August. The museum recruited eight undergraduate students from local universities and colleges to conduct research alongside curators and collections staff. This three-year program is fully funded by National Science Foundation and allows our institution to join other natural history museums and universities nationwide who offer REU internships to undergraduate students. The mission is to provide students from underrepresented groups in science the opportunity to design and conduct their own research projects.

The 10-week program paired students with curators in Archaeology, Ichthyology, Echinoderms, Vertebrate Paleontology, and Malacology. In addition to their research projects, REU students also participated in field trips, workshops, and a seminar series. During the final week of the program the students presented 20-minute conference-style papers on their research. The 2005 summer interns and their presentation titles are listed below.

Christopher Duffy (Archaeology) A Long Time Ago in a Watershed Far Far Away....

Deana Welker (Echinoderms) Ophiuroids of the Caribbean: Diversity, Body

Size, and Population Density, Part I Steven Kong (Echinoderms)

Ophiuroids of the Caribbean: Diversity, Body Size, and Population Density, Part II

Dawn Roje (Ichthyology)

Using Microsatellites to Gain Insight into the Population Structure of the Reef Goby Gnatholepis (Teleostei: Perciformes)

Emily Shaw (Ichthyology)

Using Microsatellites to Gain Insight into a Fishloving Shrimp and Two Innocent Undergraduates (list continued on next page)



Caitlin Croall (Archaeology)

Digging for Answers: Aggregation and Abandonment at 14th Century Sites in Eastcentral Arizona

Tony Harper (Vertebrate Paleontology)

Adventures in Ekalaka

Brian C. Owens (Malacology)

The Search for the Stolen Stingers: A Phylogeny of Aeolids

Both the teamwork of Research and Collections staff and participation of other Museum departments made the 2005 REU program a great success. Many thanks to everyone involved in the internship program.

# **Distinguished Visitors**

### Malacology

**Shireen Fahey** (University of Queensland & California Academy of Sciences) and **Mary Jane Adams** (Arcadia, CA) visited the Malacology collection in May and June for continued nudibranch research. Malacology research associate **Al Lopez** has returned to Los Angeles from Managua, Nicaragua, for several months of molluscan research and priestly duties at St. Thomas the Apostle parish in Los Angeles.

### Mammalogy

Several researchers came through the Mammalogy collections over the summer, including two of particular note. Dr. **Robert Voss**, Curator of Mammals at the American Museum of Natural History, spent time examining and re-identifying some of our Neotropical marsupials and rodents—his particular specialties. Dr. **J. G. M. Thewissen**, an authority on the evolutionary history of marine mammals, visited the Marine Mammal Lab to study our collection of cetacean embryos. LACM has the largest such collection in the world.

### Vertebrate Paleontology

Dr. **Jonathan Geisler** of Georgia Southern University visited the Museum in May to make observations on our fossil dolphin skulls as part of his phylogenetic revision of dolphin systematics. Miss **Amy Leska** of Santa Maria, California, surveyed our Pleistocene Mojave Desert cave collections in search of a strange green pigment that she believes was being applied by paleo-indians to animal and artifactual material. She gave a preliminary report on such occurrences at the Spring 2005 Desert Symposium, and would like to hear from anyone who has observed similar phenomena.

Mr. Nicholas D. Pyenson, Ph.D. candidate at the University of California at Berkeley, visited the Museum in May and again in August to study fossil sperm whales, and whales and dolphins from the Sharktooth Hill bonebed in Kern County with Larry Barnes and Sam McLeod. The three prepared a manuscript refining the identities of two North Pacific fossil sperm whales. Mr. Erich Fitzgerald, graduate student with Museum Victoria, Australia, visited in May to study early mysticete ("baleen") whales. Of particular interest to Erich was our Museum's collection of the archaic tooth-bearing

ancestors of the baleen whales, which is the most comprehensive such collection in the world.

### **Recent Publications**

- **Barnes**, L. G. 2005. Evolutionary patterns among the otarioid pinnipeds (Mammalia: Carnivora). Abstracts of the Fourth Triannual Convention on Evolution of Aquatic Tetrapods, Akron, Ohio, 16-20 May 2005, Mark D. Uhen, editor, Cranbrook Institute of Science Miscellaneous Publications, Volume 1, p. 5.
- Barnes, L. G., N. D. Pyenson, and S. A. McLeod. 2005. Middle Miocene marine ecosystems and cetacean diversity as exemplified by the Sharktooth Hill Bonebed, California, USA. Abstracts of the Fourth Triannual Convention on Evolution of Aquatic Tetrapods, Akron, Ohio, 16-20 May 2005, Mark D. Uhen, editor, Cranbrook Institute of Science Miscellaneous Publications, Volume 1, p. 6.
- **Brown**, B. V. 2005. A new Baltic amber *Triphleba* Rondani with greatly enlarged palpi (Diptera: Phoridae). Studia Dipterologica. 11: 549-552.
- This paper is one of a series in which Brown is describing the interesting, 40 million year old fauna of phorid flies found in European Baltic amber.
- Clementz, M., P. Koch, D. P. Domning, L. G. **Barnes**, and B. L. Beatty. 2005. Stable isotope evidence of dietary diversification, specialization, and stasis within the Sirenia. Abstracts of the Fourth Triannual Convention on Evolution of Aquatic Tetrapods, Akron, Ohio, 16-20 May 2005, Mark D. Uhen, editor, Cranbrook Institute of Science Miscellaneous Publications, Volume 1, p. 16.
- **Filkorn**, H. F., C. C. Johnson, A. Molineux, and R. W. Scott, eds. 2005. Seventh International Congress on Rudists, Abstracts and Post-Congress Field Guide, Austin, Texas, June 5-11, 2005, 197 p.
- **Filkorn**, H. F. 2005. First report of *Praebarrettia sparcilirata* (Whitfield, 1897) from the Late Cretaceous Pacific Coast of North America. *In* H. F. Filkorn, et al., eds., Seventh International Congress on Rudists, Abstracts and Post-Congress Field Guide, Austin, Texas, June 5-11, 2005, p. 30-31.
- **Filkorn**, H. F., M. A. Coutiño José, and G. Carbot. 2005. Extensive buildup of *Sauvagesia macroplicata* (Whitfield, 1897) in the Maastrichtian Angostura Formation, Chiapas, Mexico. *In* H. F. Filkorn, et al., eds., Seventh International Congress on Rudists, Abstracts and Post-Congress Field Guide, Austin, Texas, June 5-11, 2005, p. 32-33.
- **Filkorn**, H. F., and R. W. Scott. 2005. Field trip stop 5: Segovia rudist biostromes, Real County. *In* H. F. Filkorn, et al., eds., Seventh International Congress on Rudists, Abstracts and Post-Congress Field Guide, Austin, Texas, June 5-11, 2005, p. 167-173.

- **Groves**, L. 2005. SCUM IX: Southern California Unified Malacologists. American Malacologist 33(1):28-29, 1 fig.
- A summary of the recent SCUM meeting in San Diego, CA.
- **Groves**, L. 2005. Jean McCreery Cate (1917-2001) a biographical sketch and malacological publications in The Festivus 37(5):53-58, fig. 1.
- Jean Cate was an active amateur conchologist/malacologist who published descriptions of 11 species and one subspecies of mitrid mollusks (mitre shells). She was also a research associate of the Malacology Section.
- **Kung**, G. and B. V. **Brown**. 2005. Three unusually divergent new genera of phorid flies (Diptera: Phoridae) from Costa Rica. Zootaxa. 1019: 43-52.
- The LACM has the largest collection of New World tropical phorid flies in the world, and among the specimens in our holdings are some real oddities. Three of these are described in this paper, but we have many more that await time and researcher effort.
- Martin, J. W. 2004 (just appeared in 2005). Preface. In: Hendrickx, M. E. (editor), Contributions to the Study of East Pacific Crustaceans, Volume 3. Unidad Académica Mazatlán, Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México.
- **Martin,** J. W., K. Wishner, and J. R. Graff. 2005. Caridean and sergestid shrimp from the Kick'em Jenny submarine volcano, southeastern Caribbean Sea. Crustaceana 78(2): 215-221.
- See comments about this work below under the Wishner et al. (2005) paper.
- Pantoja Alor, J., and H. F. **Filkorn**. 2005. Rudist and foraminiferal assemblages with megalodontids, El Cajón Formation (lower Aptian), Michoacán, México. *In* H. F. Filkorn, et al., eds., Seventh International Congress on Rudists, Abstracts and Post-Congress Field Guide, Austin, Texas, June 5-11, 2005, p. 61-62.
- **Saul**, L. R. and C. J. Stadum. 2005. Fossil argonauts (Mollusca: Cephalopoda: Octopodida) from late Miocene siltstones of the Los Angeles Basin, California. Journal of Paleontology, 79(3):520-531.
- Scott, R. W., and H. F. **Filkorn**. 2005. Barremian Albian rudist zones, U.S. Gulf Coast. *In* H. F. Filkorn, et al., eds., Seventh International Congress on Rudists, Abstracts and Post-Congress Field Guide, Austin, Texas, June 5-11, 2005, p. 82-83.
- Valdés, A. & Barwick, K. 2005. First record of *Akera* Müller, 1776 from the eastern Pacific, with the description of a new species. *The Nautilus*, 119: 43-49. *This paper describes a rare new species from Southern California and constitutes the first record of this family for the Eastern Pacific Ocean.*
- **Valdés,** A. 2005. A new species of *Aeolidiella* Bergh, 1867 (Mollusca: Nudibranchia: Aeolidiidae) from the Florida Keys, USA. *The Veliger*, 47: 218-223.

A common species from the Florida Keys that is commercialized as a control for aquarium pest anemones is described. This is species has been previously misidentified with a Mediterranean species.

Valdés, A. & Bouchet, P. 2005. Cephalaspidea, Thecosomata, Gymnosomata, Aplysiomorpha, Umbraculida, Acochlidiacea, Sacoglossa, Cylindobullida, Nudipleura. In: Bouchet, P. & Rocroi, J.-P. (eds.), Classification and Nomenclator of Gastropod Families. Malacologia, 47: 1-397.

This is a chapter of a large monograph compiling the valid names and correct publication dates of all families of gastropods providing an up-to-date classification.

**Valdés,** A. 2005. Subclass Opisthobranchia s.l. In: Rolán, E. (ed.) *Malacological Fauna from the Cape Verde Archipelago*, pp. 201-248, figs. 922-962, 968-1070. ConchBooks, Hackenheim, Germany.

Another chapter in a monograph of the molluscan fauna of Cape Verde, an archipelago off the coast of east Africa.

Wishner, K. F., J. R. Graff, J. W. **Martin**, S. Carey, H. Sigurdsson, and B. A. Seibel. 2005. Are midwater shrimp trapped in the craters of submarine volcanoes by hydrothermal venting? Deep-Sea Research I, 52: 1528-1535.

The above two papers (Martin et al., 2005, and Wisher et al., 2005) document the first known case of midwater shrimp being trapped and killed during their diurnal migrations by the toxic chemicals issuing from underwater volcanoes. Because of the surprisingly large number of active submarine volcanoes, we hypothesize that this happens more frequently than is currently recognized.

Zala, K., N. D. Pentcheff, and R. **Wetzer.** 2005. Laser-printed labels in wet collections: Are they holding up? Collection Forum 19(1/2): 49-56.

A 14 year quantitative study of the durability of laser printed labels with several commonly used museum quality papers. PDF is available.

### New book!

Camacho-García, Y., Gosliner, T. M. & Valdés, A. 2005.

Guía de Campo de las Babosas Marinas del
Pacífico Este Tropical / Field Guide to the Sea
Slugs of the Tropical Eastern Pacific. California
Academy of Sciences, San Francisco, 130
pages.

This is a bilingual field-guide to the opisthobranch mollusks from the tropical Eastern Pacific and the culmination of more than 8 years of collaboration between the Malacology Department of INBio in Costa Rica, the California Academy of Sciences, and our institution.

# Babosas Marinas del Pacífico Este Tropical Field Guide to the Sea Slugs of the Tropical Eastern Pacific Yolanda Camacho-Garcia, Terrence M. Gosliner, Ángel Valdés California Academy of Sciences

Guía de Campo de las

# **Scholarly Publications Office**

### Publications Migrating to PDF Format

To make our publications available to a wider audience back issues of Contributions in Science are being scanned and downloaded as PDF files on the Scholarly Publications website, <a href="www.nhm.org/research/publications">www.nhm.org/research/publications</a> So far, there are 95 issues available, but work is continuing at a steady pace. This site is under construction and I am grateful for any comments or queries you may have. (Vicky Brown, Managing Editor)

# **Staff Departures**

### Malacology

Multi-talented Malacology digital graphics technician **Michelle Schwengel** relocated to the bluer waters of 'Oahu, Hawai'i in late June to pursue other endeavors while husband Peary Regala establishes his medical practice. She will be greatly missed by all who had the pleasure of working with her.

### Miscellaneous

### Mineralogy Research

A new mineral described by Curator of Mineralogy **Tony Kampf** has just been approved by the Commission on New Minerals and Mineral Names (International Mineralogical Association). The mineral, named phosphohedyphane (shown



at right), is closely related to apatite. The new mineral's chemical formula, Ca<sub>2</sub>Pb<sub>3</sub>(PO<sub>4</sub>)<sub>3</sub>Cl, is very similar to that of apatite, Ca<sub>5</sub>(PO<sub>4</sub>)<sub>3</sub>Cl. In the atomic structure of apatite, calcium occupies two different sites, but in phosphohedyphane lead takes the place of

calcium in one of these sites. Tony named the new mineral phosphohedyphane because it is the phosphate analog of hedyphane, another mineral in the apatite group, which has the chemical formula Ca<sub>2</sub>Pb<sub>3</sub>(AsO<sub>4</sub>)<sub>3</sub>Cl. Phosphohedyphane was first found at the Capitana mine, Copiapo, Chile. Since submitting the new mineral for approval, Tony has identified it also on specimens from several mines in Nevada.

### Mammalogy

**Dave Janiger** maintains the section's digital library of marine mammal literature, a resource that is actually used by grateful researchers from all over the world. The subscriber base now exceeds 1,850 users—including scientists in such remote outposts as the Maldives, the Falkland Islands and Antarctica.

### Congratulations!

Malacology curator **Ángel Valdés** wed Stephanie Knowles on July 29<sup>th</sup> and then spent two weeks on their honeymoon in Peru. MANY congratulations to Ángel and Stephanie!

\* \* \* End \* \* \*