Giant Crab Joins Crustacea Collection

The March 30 Office of Exhibits Central (OEC) weblog http://oecexhibits.si.edu featured a photo of Rafael Lemaitre taking a sample from a giant Japanese spider crab (Macrocheira kaempferi). These deepwater crabs (found at 670 m or more) are rare and can grow up to 3.5 to 4 meters long with their front legs and claws outstretched. The specimen pictured is 2.5 meters long, which is still a considerable size. It was donated to OEC by Izo Chuo Aqua Trading Co., Ltd. OEC modelmaker Vince Rossi located it while searching for a large, intact specimen to use as the model for a reproduction to hang in the new Ocean Hall, which opens next year.

NMNH scientists are excited about the donation. IZ has only one dry specimen of this species in its collection, and it is in poor condition. Rafael and Karen Reed took tissue samples of the crab (which arrived frozen) for molecular DNA studies. After OEC has finished using the specimen to make a model, it will be preserved in ethanol.

IZ Crayfish in Japanese Exhibit

While NMNH prepares to exhibit the giant crab described above, specimens from the IZ crustacean collection will be on display in Japan. Crayfish on loan from IZ are currently featured in a summer special exhibition “Zarigani-World” at the Nagoya City Science Museum, Japan. The two Cambaroides japonicus were originally found at “Hakodata Japan Market” in 1906. They are pictured on page 2 of the Science Museum’s colorful spring publication for 2007. Tetsuro Ojio, a curator at the museum, is presently an intern in the NMNH Education Department and involved with the exhibit.
NO BONES – AN INTERMISSION

This is the last issue of No Bones for the near future. The editor will retire on September 30 and No Bones will take an “intermission.” At present, remaining staff are fully occupied with their usual duties and the move of our alcohol collections from NMNH to larger storage facilities at MSC. Until then, keep abreast of IZ doings in the NMNH Weekly Update and Forecast and the Natural History Newsletter.

It has been a pleasure to present IZ news in the newsletter format. I appreciate the cooperation of all contributors to the newsletter and wish to especially thank assistant editor, Rose Gulledge, and Molly Ryan for their valuable help.

Elizabeth Nelson, Editor

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IN THE MEDIA

Steve Cairns was quoted in Science regarding a kind of coral that the United States wants listed as “threatened” at next month’s meeting of the Convention on International Trade in Endangered Species in the Hague. In the item “Red Coral in the Red” by Christopher Pala (May 25, 2007:1113), Cairns said red coral is “more valuable and depleted than any others,” such as the already listed black coral and hard coral. “Threatened” status would require importers and exporters of 27 species of Corallium to seek approval for each transaction and allow conservationists to learn more about the trade. The listing would also bring more focus on destructive methods used to gather this coral prized by jewelers.

Jon Norenburg reported a recent example of the difficulty of communicating with the popular press. Jay Garbose, a diver and photographer, posted video of a seven-foot long nemertean worm misidentified as a sea cucumber on his website. Dave Pawson was contacted, correctly surmised it was a nemertean and forwarded the video link to Jon, who contacted Garbose. Jon informed the diver-photographer that it is a nemertean but could not determine the family or if it is a described species because critical details were not visible on the video. So now it has been reported as a “sea serpent” that “not even the Smithsonian knows what to call it…” For details visit http://www.wptv.com/mediacenter/local.aspx – just search on “sea serpent.” (Editor’s note: It is a wonderful video if you’ve never seen a large nemertean swimming!)

Dave Pawson was the featured guest on WAMU-FM’s popular talk show, The Kojo Nnamdi Show, on Monday, April 9. Dave discussed ocean exploration, the Smithsonian Ocean Initiative and the Ocean Hall, and addressed questions from Kojo and callers.

Klaus Ruetzler reported that Belize Telecommunications Limited (BTL), the nation’s largest telephone company, chose to use a spectacular photograph of Carrie Bow Caye and the NMNH’s Marine Field Station for the cover of its 2007 Telephone Directory. The photograph was taken by Tony Rath, once a volunteer station manager and photographer for Caribbean Coral Reef Ecosystems (CCRE). He now runs a successful Web-design and photography business in Dangriga, Belize and is married to one of Carrie Bow Caye’s owners, Therese Bowman Rath. The photograph is not a PhotoShop creation, but a surface level view taken by digital camera with 10 mm wide-angle lens in an underwater housing.

Carrie Bow Caye and NMNH’s Marine Field Station
Photo: Tony Rath

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From May 18–June 4 Ellen Strong participated in the Aurora 2007 Philippine Deep Sea Cruise – a Census of Marine Life survey of the deep-water benthic fauna of the North Eastern Pacific seaboard off the coast of the Philippine provinces Aurora and Quezon. The cruise was organized by Philippe Bouchet, Senior Professor at the Muséum National d’Histoire Naturelle, Paris, and is part of a five-year program sponsored jointly by the MNHN, the Philippine National Museum, and the NMNH. This year’s cruise was funded through a grant to the MNHN by the Lounsbery Foundation; next year’s cruise will be funded through a grant to the NMNH by the Marisla Foundation. During the 16-day cruise, over 30 scientists representing France, the Philippines, United States, Taiwan, Singapore, Spain, Germany, Sweden, Japan and New Caledonia, used dredges, beam trawls and otter trawls to explore the fauna from depths of ~80 to more than 2,500 meters. The cruise yielded ~1900 lots of mollusks preserved in alcohol for DNA sequencing and ~70 lots prepared for morphological studies. Coming to the NMNH Invertebrate Zoology collections will be the mollusk anatomical material, ~800 lots of cnidarians and sponges, as well as echinoderms and hermit crabs.

PHOTOGRAPHY

Cover: Ellen Strong

Sorting the catch – Aurora 2007 Philippine Deep Sea Cruise

Photo: Ellen Strong
In April Rafael Lemaitre worked at the Paris Museum with several of his colleagues from around the world who specialize in anomalans. They all assembled to work as a team on the extraordinary anomalan collections obtained by French expeditions to the western Pacific region. This unique gathering is worth noting as it is unlikely it will happen again. The group met with host extraordinaire, Alain Crosnier, in his famous attic lab of the Paris Museum.

From left to right: Keiji Baba (Japan), Alain Crosnier (France), Pat McLaughlin (USA), Rafael Lemaitre, Joseph Poupin (France), Jean-François Dejouannet (France), Enrique Macpherson (Spain), Dwi Listyo “Yoyo” Rahayu (Indonesia).

From June 20–30 Allen Collins attended the Sixth Workshop of the Hydrozoan Society at the Marine Biological Laboratory in Plymouth, UK. Allen delivered a talk entitled Phylogenetics of Trachylina. The workshop allowed for some collecting time, and among the specimens he found (with help) was the unusual cnidarian Protohydra leuckarti, which creeps through marine mud.

Clyde Roper spent the week of May 7–11 at Mote Marine Laboratory, Sarasota, Florida studying, dissecting and identifying an unusual deep sea squid found off Key West. The specimen was over 2 meters long, but had the two long feeding tentacles been present, the total length could have been 7-8 meters. This squid belongs to an uncommon western Pacific species, Aspyroteuthis acanthoderma, known only from eight smaller specimens. Just one other specimen of this species has been identified from the Atlantic Ocean, and it was from a photograph.

On May 3 Mike Vecchione presented a paper, Abundance and Diversity of Cephalopods in the Vicinity of the Antarctic Peninsula, at the Systematics and Biology of Polar Organisms session of the “Smithsonian at the Poles: Contributions to the International Polar Year Science Symposium” held May 3 and 4. Rafael Lemaitre chaired the session as well as serving on the Symposium Committee as part of the pan-Smithsonian IPY symposium.
VISITORS

Carlos Alvarez Silva, Universidad Autonoma Metropolitana Iztapalapa, Mexico; worked in the copepod collection, examined pelagic tunicates, and used the Wilson Copepod Library (04/18-04/20/2007 and 05/02-05/05/2007). Sponsor: Frank Ferrari

Jonathan Amith, Gettysburg College, Gettysburg, Pennsylvania; consulted with Schotte about terrestrial isopods (05/07/2007). Sponsor: Marilyn Schotte

Elizabeth Baird, North Carolina Museum of Natural Sciences, Raleigh, North Carolina; toured USNM IZ collections, discussed past and future collaborations and a museum's role in education (06/27/2007). Sponsor: Martha Nizinski

Kathrin Bolstad, Earth & Ocean Sciences Research Institute, New Zealand; examined cephalopod collections, and collaborated with Roper (06/04-06/08/2007). Sponsor: Clyde Roper

Mary Catherine Boyett, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; consulted with Bright about collection management in IZ, consulted with Ahearn about echinoderm collection, taxonomy and arrangement (06/11-06/12/2007). Sponsors: Cheryl Bright, Cindy Ahearn

Heather Bracken, University of Louisiana at Lafayette, Louisiana; examined and extracted tissue from caridean shrimp for molecular and morphological studies for doctoral research (06/18-06/25/2007). Sponsor: Rafael Lemaitre

Mercer Brugler, University of Louisiana at Lafayette, Louisiana; examined antipatharia collection; consulted with Opresko and Cairns (06/18-06/22/2007). Sponsor: Steve Cairns

Joseph Carter, University of North Carolina, Chapel Hill, North Carolina; studied taxonomy of bivalves, and photographed valve ligaments (06/15/2007). Sponsor: Jerry Harasewych

Carolyn Chamarande, Falls Church Animal Hospital, Virginia; toured USNM IZ collections (04/12/2007). Sponsor: Cheryl Bright

Tracey Cones, Smithsonian Institution-NMNH, Office of the Director; hosted behind-the-scenes tours for SI New Employee Orientation provided by Nickens and Ahearn (05/07/2007). Sponsor: Cindy Ahearn

Mea Cook, WHOI, Woods Hole, Massachusetts; examined deep-water coral collection for isotopic evaluation of interglacial era (06/21-06/22/2007). Sponsor: Steve Cairns

Simon Coppard, Natural History Museum, London, United Kingdom; examined USNM collections of Encope sp. sand dollars (05/08-05/11/2007). Sponsor: Dave Pawson

Harlan Dean, Suffolk University, Boston, Massachusetts; examined USNM collection of cirratulid polychaetes, especially Monticellina (05/11/2007). Sponsor: Kristian Fauchald

Elizabeth Diamond, Bryn Mawr College, Bryn Mawr, Pennsylvania; studied ostracods (June 4-August 15, 2007) Sponsor: Lou Kornicker.

Maria Cristina Diaz, Museo Marino de Margarita, Margarita Island, Venezuela; studied USNM sponge collections and literature, and consulted with Ruetzler (04/18-04/27/2007). Sponsor: Klaus Ruetzler

Continued on page 6

SEMINARS


Christopher Meyer (University of California, Berkeley). June 15, Emerging Patterns in Marine Diversity and the Role of Integrative Taxonomy.


Elizabeth Borda (City University of New York & American Museum of Natural History). June 18, Systematics and Biodiversity of Arhynchobdellida (Oligochaeta: Hirudinida) with a focus on the evolutionary history of bloodfeeding terrestrial leeches.
Doug Eernisse, Duke University, Durham, North Carolina; examined and photographed limpet and chiton types (05/15/2007). Sponsor: Jerry Harasewych

Diana Fernandez, Lake Worth, Florida; studied USNM Polymita land snail collection at MSC (04/02/2007). Sponsor: Bob Hershler

Breea Govenar, WHOI, Woods Hole, Massachusetts; developed Mollusca dissecting techniques (06/27–06/29/2007). Sponsor: Ellen Strong


Amy Hamilton, Space Savers, Maryland; discussed with Bright shelving design for Copepod Library at MSC (04/09/2007). Sponsor: Cheryl Bright

Beth Horvath, Westmont College, Santa Barbara, California; examined west coast octocorals, and consulted with Cairns (06/25–06/29/2020). Sponsor: Steve Cairns


Alfredo LaGuarda-Figueras, Instituto de Ciencias del Mar y Limnologia, UNAM, Mexico; worked on various holothurian (Echinodermata) research projects (06/10–06/23/2007). Sponsor: Cindy Ahearn

Caitlin Markey, McGill University, Montreal, Canada; summer intern, worked in Wilson Copepod Library archiving reprints, scanning old books, and conducted other database management projects (05/10–08/31/2007). Sponsor: Chad Walter

Douglas Miller, University of Delaware Marine Laboratory, Lewes, Delaware; toured USNM IZ collections with graduate class students (05/12/2007). Sponsor: Kristian Fauchald

Ron Mollick, Christopher Newport University, Newport News, Virginia; with IZ class went on a behind-the-scenes tour of USNM IZ collections provided by Fauchald, Ahearn, Nickens, Greenhall, Villacampa, Coffer, and Reed (04/12/2007). Sponsor: Cindy Ahearn

Dennis Opresko, Research Associate, Oak Ridge, Tennessee; studied antipatharian collection (06/18–06/22/2007). Sponsor: Steve Cairns

E. Taisoo Park, professor emeritus; presented a talk at Smithsonian IPY Symposium, and consulted with Ferrari (05/02–05/04/2007). Sponsor: Frank Ferrari

John Pearse, University of California-Santa Cruz, California; conducted echinoderm research (05/02–05/18/2007). Sponsor: Dave Pawson

Pactricia Salazar-Silva, ECOSUR, Mexico; examined selected polychaetes in the collections, and used the NMNH-IZ library (06/03–06/30/2007). Sponsor: Kristian Fauchald


Francisco Solis-Marin, Instituto de Ciencias del Mar y Limnologia, UNAM Mexico; worked on various holothurian (Echinodermata) research projects (06/10–06/23/2007). Sponsor: Cindy Ahearn

Alexei Tchesunov, Moscow State University, Russia; examined USNM nematode collections (04/21–05/21/2007). Sponsor: Duane Hope

Wesley Thorsson, Hawaiian Malacological Society, Honolulu, Hawaii; photographed secondary type specimens of Columbellidae (06/07–06/15/2007). Sponsor: Jerry Harasewych

Katrine Vinita, Eckerd College, St. Petersburg, Florida; summer intern, digitally archived crustacean/decapod publications: scanned reprints and created PDF files. (05/29–08/17/2007). Sponsor: Rafael Lemaître

Kevin Ward, National Office Systems, Maryland; discussed with Bright shelving design for Copepod Library at MSC (04/16/2007). Sponsor: Cheryl Bright
IZ Tours Attract More Students—Students from Christopher Newport University toured IZ on April 12. Tour leader Cindy Ahearn introduced the group to staff in many different specialties before ending the tour with a visit to the Echinoderm collection. Providing information about their collections were Kristian Fauchald (Worms), Tyjuana Nickens and Yolanda Villacampa (Mollusks), Tim Coffer (Coelenterates), and Karen Reed (Crustacea).
OUTREACH

On April 4 and 5 Clyde Roper worked in the NMNH cephalopod lab with the media producer and film crew from the American Museum of Natural History (AMNH) on a video that will be a part of an AMNH traveling exhibit called "Mythic Creatures." Clyde discussed the ancient mythology that surrounded the giant squid, as well as the reality and growing understanding of the giant squid in modern times. The exhibit will travel in the US, Canada and Australia. Clyde also reported publication of a coffee table book, one that has considerable textual meat to it, based on contributions from deep sea biologists around the world: The Deep, The Extraordinary Creatures of the Abyss, by Claire Nouvian, 2007, The University of Chicago Press, Chicago, London. The volume is rather spectacular, made so principally by the photographs. Clyde’s contribution is entitled "From Myth to Reality; Monsters of the Deep" (pages 120–125).

On April 24 Chris Mah was one of three NMNH scientists who provided tours of the collections for 20 undergraduate science students whose research project was selected for presentation to members of Congress and others on Capitol Hill as part of the Council on Undergraduate Research - "Posters on the Hill." The students were sponsored by the NMNH Research Training Program. Photos and additional details available at http://www.nmnh.si.edu/rtp/

On May 11 Smithsonian Institution Libraries and NMNH staff welcomed about 30 visitors from this year’s Catholic University of America’s Institute for Federal Library Resources. This year the theme was “Art in a Science Museum” and Marilyn Schotte gave one of two half-hour presentations on art and science.

Farewell, and good luck!!

It is with mixed feelings that IZ contemplates the retirement of two dedicated staff members, Barbara Littman, and Elizabeth Harrison-Nelson. After 28 years of dedicated and exemplary service to IZ and the Museum, Barbara will officially retire on September 1, and Elizabeth on Sept 30. We are grateful for their friendship and collegiality, and are saddened to see them leave, although happy that they will now find the well-deserved calm and peacefulness of their retirement years. We do hope to see them around here visiting as often as they can, and wish them well. A farewell ceremony will take place this fall to thank them.

WHAT’S IN A NAME?

Anthropologist Dr. Jaime Amith, SI Research Associate and Director of the Mexico-North Program on Indigenous Languages Research (affiliated with Gettysburg College in Pennsylvania) is documenting Nahuatl terminology about the natural environment, including indigenous names for the flora and fauna. Nahuatl (NAH watl) is an indigenous language related to Classical Aztec that many people in central Mexico still speak. According to Dr. Amith there is a Nahuatl name for the terrestrial isopod: “tlalpitlōyotl,” literally “earth piglet”.

This is an interesting coincidence since one English name for these isopods is “sow bug.” In 1947 an American biologist, W. H. Hatch, proposed that sow bugs are so named because of their habit of crowding together as little pigs do. (Thanks to Dr. Joan Jass of the Milwaukee Public Museum for this reference.) The Spanish word for isopod is “cochinilla” or “little pig,” another common name acknowledging this behavior.

And for all you trivia buffs, “sow bug” refers to those isopods which cannot roll up into a ball. Those which can are called “pill bugs” or “roly-polys.” The English term “woodlice” refers to any of these little crustaceans, all in the suborder Oniscidea. Marilyn Schotte
Elizabeth Diamond, Bryn Mawr College, Bryn Mawr, Pennsylvania (June 4–August 15, 2007)

I am a rising senior biology major with a keen interest in marine science, particularly in any of the Crustacea, and field work is one of the most enjoyable aspects of my studies. My college mentor, Dr. Stephen Gardiner, trained me in transmission electron microscopy, as well as in the identification of various polychaete species—he’s better at it than I am.

Since arriving at the Smithsonian I have been describing a new species of ostracod from New Caledonia with the guidance of my sponsor, Dr. Louis Kornicker. At right I am pictured with an SEM photo of this interesting animal.

I really appreciate the opportunity to work on the amazing collections at NMNH and I hope to return in the future.

Marielos ‘Cris’ Salas, Eastern Kentucky University, Richmond, Kentucky (June 18–August 18)

I am an intern with Molly Ryan, working on the project ‘Scanning and organizing scientific illustrations of crustacean species’ which involves scanning fine and elaborate illustrations of invertebrates, correctly naming the files, and burning the image files onto CD’s. A senior graduating in December, I realized that I needed some work experience before I finished my degrees (I will receive a BA in Anthropology and in Art) and decided on a museum internship. I found the Smithsonian’s website, and discovered an internship project that interested me and applied. I have a great desire to work in a museum and am exploring which type of museum and department fits my interests best. Next, I’d like to work in an art museum. I’m enjoying my stay in Washington, D.C, and I greatly appreciate the opportunity to work at the Smithsonian’s NMNH. Special thanks to Molly Ryan for being such a great supervisor!

Warren “Butch” Carter Blow 19 October 1943 - 11 June 2007

An avid collector of marine fossils on the Atlantic Coastal Plain since boyhood, Warren began his paleontological career in 1967 when he was selected for a position at NMNH. He was responsible for the management of an enormous collection of fossil mollusks, and also provided invaluable research assistance through land and underwater field work.

A founding member of The Crustacean Society and an honorary ‘Crustacean,’ Warren was a familiar face at lunches in the Rathbun Library. Some of his publications were co-authored with the late Ray Manning and this collaboration brought him on frequent visits to the department. His generous soul, wonderful humor and loyalty to his friends will be missed by all who knew him.

A celebration of his life was held at NMNH on August 8.

(Some items condensed from information provided by Dr. Thomas Waller, Paleobiology)
We were saddened to learn of the death of Mary Pawson (on June 13), but would like to remember a happier time when she was pictured with Dave as he proudly displayed an invisible holothurian. Now, thanks to the magic of Photoshop and the talents of Scientific Illustrator Molly Ryan, the creature has been revealed.

In celebration of this event, Dave was recently honored with the newly named Bowman Science (BS) Award, successor to the famed Smithsonian Order of the Lobster Award, an award of a large lobster claw presented to a member of IZ for performance of an action of “outstanding insignificance.”

The BS award is named for the late Tom Bowman who for quite a few years formed a committee of two with Lou Kornicker to present the award at the annual holiday party.


I was fortunate in having sponsored Lindsey Ragsdale, a senior at Madeira School, for the school’s program for 2006–2007. During the academic year Lindsey arrived faithfully every Wednesday and worked from 9:30–3:00. She managed to accomplish a remarkable amount of work in the time she was here. Familiar with many computer programs, she assisted by preparing electronic figure plates, and helping with manuscript and library work. She also found time to perform many curatorial tasks. Her enthusiasm brightened the day and lightened my workload. I hope other IZ staff may find a Madeira intern during the coming school year.

Katrine “Kiki” Vinita, Eckerd College, St. Petersburg, Florida (May 29 – August 17)

Kiki is a summer intern with Rafael Lemaitre working on the project, ‘Digitally Archiving Crustacea Publications’ which involves scanning selected reprints using flat bed or self-feeding scanners, editing files as needed, and converting them to PDF files in archival format. An independent worker and fast learner, Kiki mastered scanning techniques and file management skills quickly and completed Rafael’s publications in a short amount of time. She is now working to complete Ray Manning’s 200+ publications. A rising senior and biology major, her special interests lie in shark research. Kiki was drawn to our internship program because the Smithsonian is one of the country’s oldest research establishments. All her hard and careful work will be appreciated whenever a colleague or student requests a ‘copy’ of one of Rafael’s or Ray’s publications.

Caitlin Markey, McGill University, Montreal, Canada (May 10–August 31)

I am a junior from Bethesda, Maryland studying International Development at McGill University in Montreal. I applied to intern at the Smithsonian because I am interested in museum and archival studies. I’ve been working in the Wilson Copepod library with Chad Walter on various projects, including placing the contents of the library in archival envelopes with new labels, labeling slides and specimens, updating the database and scanning and Photoshop editing some of the older delicate texts (such as “Pelagic Copepods” by Giesbrecht, 1892) in order to try to make them available online to researchers in a searchable format.

Lindsey Ragsdale

Katrine “Kiki” Vinita